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The world this week

Politics

Dec 9th 2021

Olaf Scholz was sworn in as chancellor of Germany, ending the 16-year tenure of Angela Merkel. Mr Scholz, a Social Democrat, leads a three-party coalition, Germany's first since the 1950s, which includes the Greens and the pro-enterprise Free Democrats. The parties have approved a detailed plan for governing, which includes a higher minimum wage and building more homes. First, however, they must contend with a fourth wave of covid-19.

Austria's chancellor, Alexander Schallenberg, resigned after less than two months in the job. The new chancellor, Karl Nehammer, now has the job of enforcing a controversial vaccine mandate that covers all Austrians.

Look back in anger

Pandemic restrictions were tightened in England as Omicron infections surged. The government advised people to work from home and ordered them to wear masks in more circumstances. Proof of vaccination or a negative covid test will be required to enter large venues. Meanwhile, the government struggled to explain why staffers held a party at 10 Downing Street in December 2020, when the rules stopped ordinary folk from meeting up.

Joe Biden and Vladimir Putin held a two-hour video conference to discuss a huge build-up of Russian troops on the border with Ukraine. Mr Biden vowed to impose robust economic sanctions if Russia were to invade Ukraine again. These might include blocking Russia's Nord Stream 2 gas pipeline. Mr Biden is highly unlikely to send American troops to defend Ukraine, but may offer more cash, arms and training. Mr Putin has hinted that he thinks Ukraine should be part of Russia.

Pedro Castillo, the new left-wing president of Peru, avoided impeachment, after Congress voted against a motion to proceed. Mr Castillo's supporters, of whom there are a diminishing number in the country, called the impeachment proposal a right-wing coup attempt. Protesters, both for and against Mr Castillo, took to the streets.

Chile became the latest country in Latin America to legalise gay marriage. This came two weeks before a presidential election, in which one of the front-runners has argued that "society works best with heterosexual couples".

A military court in Myanmar found Aung San Suu Kyi guilty of violating covid restrictions (she held a campaign rally) and disturbing public order (her party's Facebook page objected to the military coup against her in February). For these ridiculous charges, she faces two years in prison. For others yet to be heard, she faces a life behind bars. Her party won election by a landslide in 2020, but is now largely in hiding.

Rohingya refugees filed a class-action lawsuit against Facebook's parent company, Meta, in the United States. They are seeking $150bn in compensation, alleging that the company did not do enough to stop others from using its platform to incite violence against Rohingyas in Myanmar, where they have been so brutally persecuted that hundreds of thousands have fled. If successful, the suit would be unprecedented.

Bipin Rawat, India’s chief of defence staff, was killed in a helicopter crash. Foul play is not suspected.

Najib Razak, Malaysia’s former prime minister, lost an appeal against a 12-year jail term for corruption. American authorities say more than $1bn has passed through Mr Najib’s bank accounts. Mr Najib, who still hopes to return to mainstream politics, can make one more appeal in Malaysia’s federal court.

Western officials sounded pessimistic as talks over the future of the nuclear deal signed between Iran and six world powers resumed in Vienna. America accused Iran of reneging on compromises it had agreed to in previous rounds of talks. Iran has accelerated its nuclear programme in violation of the deal.

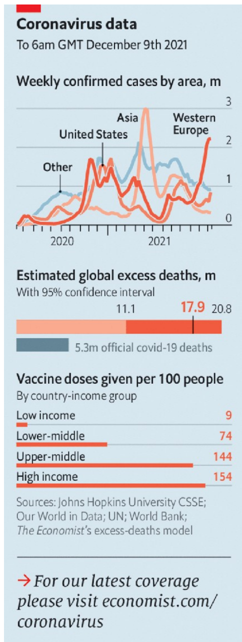
Houthi rebels in Yemen attacked Saudi Arabia with several missiles and 25 armed drones. The Saudi-led coalition fighting the Houthis responded by bombing the Yemeni capital, Sana’a, and other cities. Fighting has intensified, despite international efforts to broker a ceasefire.

The United Arab Emirates is to cut the public-sector work week to four and a half days and move the weekend to Saturday-Sunday. It will thus become the only Gulf state not to have a Friday-Saturday weekend, aligning its economy with non-Arab markets.

Seven UN peacekeepers were killed when a bomb struck their convoy in central Mali; over 230 blue helmets have been killed in Mali since 2013.

Adama Barrow was elected to a second term as president of the Gambia in the first vote in decades that was not dominated by Yahya Jammeh, the former coup-leader who ruled from 1994 until his defeat at the polls by Mr Barrow in 2016.

Ethiopia said government forces recaptured Dessie and Kombolcha, two strategic towns north of the capital, Addis Ababa. The fall of the towns to rebels from the northern region of Tigray in October had sparked fears that the capital itself might fall and prompted several Western governments to tell their citizens to leave the country.



The Economist

America decided not to send its officials to [the Winter Olympics in Beijing](#) in February 2022, citing "egregious" human-rights abuses in Xinjiang. (American athletes will still compete.) Some other countries, including Australia, Britain and Canada, announced that their officials would also stay away.

Happy new year

Bill de Blasio, who will soon leave office as mayor of New York, introduced a vaccine mandate for the private sector that will come into force on December 27th. The mandate is stricter than the federal government's, which is due to begin on January 4th. It applies to all businesses, rather than just firms with 100 employees or more. Even tiny corner stores will have to exclude unvaccinated customers. For shoppers, proof of a negative covid test will be no substitute.

Business

Dec 9th 2021

The share prices of some of China’s leading tech companies fell sharply following the news that Didi Global would delist from the New York Stock Exchange, about six months after its initial public offering there. Didi’s flotation, the biggest by a Chinese firm in America since Alibaba’s in 2014, angered the Chinese government, which started an investigation of the ride-hailing company’s practices and stopped it from signing up new users. Didi will relist its shares in Hong Kong.

A slap for spac s

Grab’s share price struggled to recover from the hammering it took on its first day of trading on the Nasdaq exchange. The Singaporean “super-app”, which offers a wide range of services on its platform across South-East Asia, listed by merging with a special-purpose acquisition company (SPAC), a process that avoids the rigours of a regular IPO. Grab’s stockmarket debut had been one of the most eagerly awaited flotations of 2021.

The uncertainty surrounding Chinese tech was a factor pulling down Weibo's share price on its first day of trading on the Hong Kong exchange. The internet company's stock fell by 7% in the secondary listing; it also has shares trading on the Nasdaq market.

Samsung Electronics overhauled its senior management team and is to merge its smartphone business with its hitherto separate and wider consumer-electronics division. Combining the two will boost Samsung's ability to provide customers with joined-up services across devices, similar to Apple.

Concern grew about the Russian state's intentions for social media when a complex set of deals involving subsidiaries linked to Gazprom gave the state-owned gas company voting control of VKontakte, Russia's largest social network. Its chief executive stepped down. Russian media speculated that his replacement might be a senior executive at the state telecoms group, who is also the son of Vladimir Putin's deputy chief of staff.

Faced with an annual inflation rate running close to 11%, Brazil's central bank raised its benchmark interest rate for the seventh time in 2021, by a hefty 1.5 percentage points to 9.25%, and indicated there will be more to come in 2022.

Productivity among American workers in the third quarter declined by 5.2% from the previous quarter (on an annualised basis), the steepest such fall since 1960. The number of hours worked rose by 7.4%, far outpacing a 1.8% jump in output. The supply-chain crunch may have been a factor.

The takeover of Arm, a British chip designer, by Nvidia, an American company which designs and sells computer chips, came closer to collapse. America's Federal Trade Commission sued to block the deal, arguing that it will harm competition. British and EU regulators are also investigating the takeover, though the EU has paused its inquiry. The takeover was announced more than a year ago.

Uber's business in London took another knock when the High Court ruled that it cannot act as the agent between the passenger and driver, meaning Uber, and not the driver, is liable for any mishaps affecting car journeys.

Uber had sought a clarification of the law after the British Supreme Court decided in February that its drivers are workers, not contractors. This week's ruling will apply to all private-hire car firms in the capital. London is one of Uber's biggest urban markets.

Gridlocked

Hours lost in traffic congestion

Global, top ten cities, 2021

Average per driver

	City	Hours		City	Hours
1	London	148	6	Rome	107
2	Paris	140	7	Chicago	104
3	Brussels	134	8=	Lyon	102
4	Palermo	109	8=	New York	102
5	Moscow	108	10	Bucharest	98

Source: INRIX 2021

The Economist

A report from INRIX, a trans port analytics firm, found that London had become the world's most congested city, with motorists spending an average of 148 hours in traffic jams during 2021. The report (which omits cities such as Cairo and Lagos where Inrix lacks data) said that congestion in London was almost back to pre-pandemic levels, even though trips to central London were still down on those of 2019. In New York the overall number of hours lost to traffic delays was 27% below those of 2019 and in Los Angeles, 40%. In Paris it was 15%.

At a gathering of global oil executives in Houston, the chief executive of Saudi Aramco warned that the rapid transition towards economies with net-zero emissions is based on "highly unrealistic scenarios and assumptions", and that some people find it hard to admit that fossil fuels will be around for some time. Amin Nasser said the high cost of switching to net zero could cause social unrest.

Always looking to improve efficiency with new technology, management has found a way to extend Zoom’s usefulness beyond wasteful meetings: mass redundancies. The CEO of Better.com, a mortgage firm, told the 900 staff who had joined a video call that their employment was “terminated, effective immediately”, because of changing market conditions. The boss later apologised for the way he handled the lay-offs.

The world this week

KAL’s cartoon

Dec 11th 2021

Dig deeper into the subject of this week’s cartoon:

- Beijing’s Winter Olympics may hasten China’s break with the West
- America worries about China’s military ambitions in Africa
- China still steals commercial secrets for its own firms’ profit

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

Leaders

What would America fight for?

If the United States pulls back, the world will become more dangerous

Other democracies must start preparing

Dec 11th 2021

EIGHTY YEARS ago Japan bombed Pearl Harbour. It was a grave error, bringing the world's mightiest country into the war and dooming the Japanese empire to oblivion. A clear-sighted Japanese admiral supposedly lamented: "I fear all we have done is to awaken a sleeping giant and fill him with a terrible resolve."

Today Japan is peaceable, rich and innovative. It was the Japanese who rebuilt their country, but their task was made easier by the superpower that defeated them. Not only was America midwife to a liberal, capitalist democracy in Japan; it also created a world order in which Japan was free to trade and grow. This order was not perfect, and did not apply everywhere. But it was better than anything that had come before.

Unlike previous great powers, America did not use its military dominance to win commercial advantage at the expense of its smaller allies. On the contrary, it allowed itself to be bound, most of the time, by common rules. And that rules-based system allowed much of the world to avoid war and grow prosperous.

Unfortunately, America is tiring of its role as guarantor of the liberal order. The giant has not exactly fallen asleep again, but its resolve is faltering and its enemies are testing it. Vladimir Putin is massing troops on the border with Ukraine and could soon invade. China is buzzing Taiwan's airspace with fighter jets, using mock-ups of American aircraft-carriers for target practice and trying out hypersonic weapons. Iran has taken such a maximalist stance at nuclear talks that many observers expect them to collapse. Thus, two autocratic powers threaten to seize land currently under democratic control, and a third threatens to violate the Non-Proliferation Treaty by building a nuclear bomb. How far would America go to prevent such reckless acts?

Joe Biden can sound forceful, at times. On December 7th he warned Mr Putin of severe consequences if Russia were to launch another attack on Ukraine. He has maintained sanctions on Iran. And in October he said that America had a "commitment" to defend Taiwan, though aides insisted policy has not changed. (America has long refused to say whether it would send forces to repel a Chinese invasion, so as not to encourage any Taiwanese action that might provoke one.) China was left wondering whether Mr Biden misspoke or was craftily hinting at a more robust stance. On December 7th America's House of Representatives passed a big boost to the defence budget. Also this week Mr Biden was to hold a "Summit for Democracy", to encourage countries that respect the rules to club together.

And yet, as our Briefing explains, America has become reluctant to use hard power across much of the world. A coalition of hawks and doves in Washington is calling for "restraint". The doves say that by attempting to police the world, America inevitably gets sucked into needless conflicts abroad that it cannot win. The hawks say that America must not be distracted from the only task that counts: standing up to China.

Either of these two visions would entail a partial, destabilising American retreat, leaving the world more dangerous and uncertain. Mr Biden's debacle in withdrawing from Afghanistan led some to doubt America's willingness to defend its friends or deter its foes, and many to worry about the competence of its planning. The president's loose words about Amer ica's nuclear umbrella have undermined faith among allies that it still protects them. And though Mr Biden does not insult allies as Donald Trump did, he often fails to consult them, eroding the bonds of trust that have long multiplied American power.

Just as important as the instincts of any one president is the mood of the country that elects them. America is no longer the confident hegemon of the 1990s. Its relative power has waned, even if it remains unmatched. After Iraq and Afghanistan, voters have grown weary of foreign adventures. Partisan politics, which once stopped at the water's edge, paralyses most aspects of policy. Over 90 ambassadorial posts remain vacant, blocked by Congress. America has refused to join a trade pact that would have complemented its military ties in Asia with economic ones. The relentless drama of politics, including over such things as disputed elections and mask-wearing, makes America seem too divided at home to show sustained purpose abroad.

It would be a mistake to assume that the old, engaged America will come back—after all, Mr Trump may be re-elected in 2024. If the liberal order is to be preserved, other powers will have to do their bit, both to prepare for a world in which they have less help, but also to keep America engaged. There are some signs of this. Japan and Australia have signalled that they would help defend Taiwan. Britain has joined America in sharing nuclear-submarine propulsion technology with Australia. A new German government is hinting at a tougher line against Russia.

More adaptation to a world with less Amer ica will be required. Democracies, especially in Europe, should spend more on defence. Those, such as Taiwan and Ukraine, at risk of being attacked should make themselves indigestible, for example by beefing up their capacity for asymmetric warfare. The better prepared they are, the less likely their foes are to attack them.

Fans of the rules-based order should share more intelligence with each other. They should bury old quarrels, such as the futile spats between Japan and South Korea over history. They should forge deeper and broader alliances, formally or informally. India, out of self-interest, should relinquish the vestiges of non-alignment and draw closer to the Quad, with Australia, Japan and America. NATO cannot admit Ukraine, since the rules say an attack on one is an attack on all, and Russia has already occupied Ukrainian territory. But NATO members can offer Ukraine more arms, cash and training to help it defend itself.

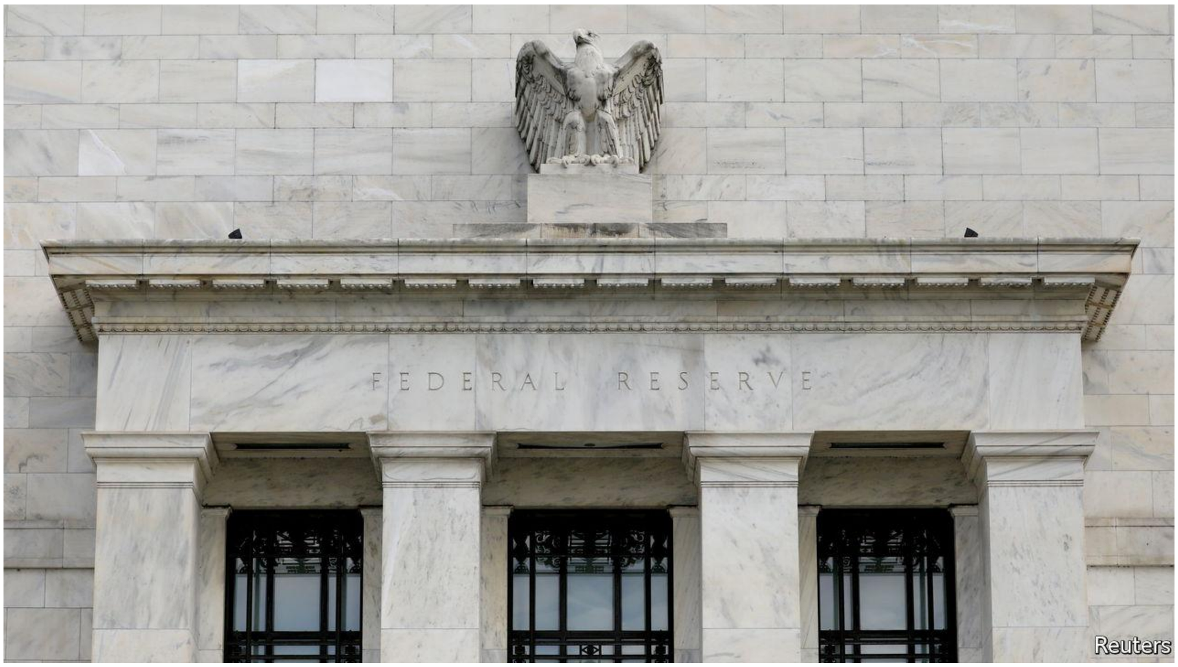
If the liberal order breaks down, America's allies will suffer grievously. Once it is gone, Americans themselves may be surprised to discover how much they benefited from it. Yet all is not lost. A determined and united effort by democracies could preserve at least some of the rules-based system, and prevent the world from sliding back towards the dismal historical norm, in which the strong prey unchecked on the weak. Few tasks are more important, or harder. ■

Power off the money printer

America’s economy needs tighter monetary policy

Why the Fed should raise interest rates soon

Dec 8th 2021



THE FEDERAL RESERVE has spent most of 2021 saying that high inflation would be temporary. And yet price rises have persistently overshot forecasts, reaching 5% in October, on the Fed’s preferred measure, even as employment remains about 4m short of its pre-pandemic level. On December 15th the Fed will decide whether to tighten monetary policy, probably by accelerating the pace at which it “tapers” its monthly purchases of assets, mostly government bonds, which are currently running at $90bn per month. It should go ahead and take action. Though uncertainty is high, the Fed must rapidly respond to the data it has today and then adjust as necessary as conditions evolve. Those data indicate that it has already fallen behind.

The rise in prices cannot be explained by a few shortages, such as of second-hand cars. In October the median item in the consumer-price index was 3.1% more expensive than a year earlier. Clothes prices were up 4.3%, shelter (such as rent) was 3.5% dearer, and transport cost 4.5% more. In the third quarter private-sector wages and salaries grew at an annualised rate of 6.5%—too fast to be compatible with the Fed's 2% inflation target without incredible productivity growth.

It is true that temporary factors have driven up inflation. The $1.9trn fiscal stimulus President Joe Biden signed in March will not be repeated (the outlay proposed in the Democrats' social-spending bill is more spread out and partly offset by tax rises). During the pandemic, consumers have binged on goods. Supply chains have been bunged up, especially as the world's factories have faced lockdowns and staff absences. Despite an abnormal number of Americans out of work, firms have struggled to fill vacancies.

However, predicting when these pandemic-related forces will ease is a fool's errand, especially now that the Omicron variant is spreading. For as long as inflation remains high, there is a growing danger that it will become entrenched. The New York Fed estimates that the median consumer expects prices to rise at an annual pace of 4.2% over the next three years, up from 3% in January 2021, suggesting they may demand higher wages. Rising inflation expectations also reduce the effective cost of credit, because inflation makes debts easier to repay. The real interest rate over five years on government bonds is about -1.6%, lower than in almost all of 2020, when the economy was far weaker.

The latest argument from some doves is that nominal GDP, or total cash spending in the economy, is merely on its pre-crisis trend. This proves that pandemic-related distortions, not excessive demand, have driven up prices, they say. Yet though this argument held in the third quarter, it may already be out of date. Nominal GDP is expected to grow at annual rates of over 10% in the fourth quarter, compared with the trend rate of just 4%. America is seeing an unusual surge in demand, not just constrained supply.

Tighter monetary policy is therefore justified. But if you believe the Fed's theory of how its asset purchases work, every bond it buys adds fresh stimulus to the economy. It follows that merely tapering the pace of purchases is not tightening. So why not raise interest rates instead? The answer is that the Fed is bound by its past guidance that it would stop buying bonds before raising rates, and that it would avoid ending purchases abruptly. Abandoning that framework would lead investors to question the central bank's trustworthiness and to expect an excessive number of additional interest-rate increases in 2022.

The good news is that the Fed can taper fast enough to let it raise interest rates in March. If between now and then the pandemic greatly worsens, consumers slash their spending on goods or many missing workers return to the labour force, monetary policymakers can change course again. But they must give themselves scope to raise rates soon. In an ideal world it is an option that would already be on the table. ■

For more expert analysis of the biggest stories in economics, business and markets, sign up to Money Talks, our weekly newsletter.

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.

Ageing creatively

What the world can learn from Japan

The oldest big country has lessons for those that will soon age and shrink

Dec 11th 2021

TWO TALES are often told about Japan. The first is of a nation in decline, with a shrinking and ageing population, sapped of its vitality. The second is of an alluring, hyper-functional, somewhat eccentric society—a nice place to eat sushi or explore strange subcultures, but of little wider relevance to the outside world. Both tales lead people to dismiss Japan. That is a mistake.

As our special report this week argues, Japan is not an outlier—it is a harbinger. Many of the challenges it faces already affect other countries, or soon will, including rapid ageing, secular stagnation, the risk of natural disasters, and the peril of being caught between China and America. The fact that some of these problems hit Japan early makes it a useful laboratory for observing their effects and working out how to respond.

One lesson is that societies must learn to live with risk. As the climate changes and natural hazards proliferate, countries must be able to bounce back from shocks. Painful experience has led Japan to invest in resilience. Bridges and buildings are retro fitted to make them earthquake-proof. After a big quake hit Kobe in 1995, leaving many without water, the city built an underground system to store 12 days' supply for residents.

Many Japanese people understand that responding to disasters is everyone's problem, not just the state's. That has helped during the pandemic: mask-wearing has been virtually universal. Among G7 countries, Japan has the lowest death rate from covid-19 and the highest rate of double-vaccination.

Another lesson is that demography matters. Most societies will ultimately age and shrink like Japan. By 2050, one in six people in the world will be over 65 years old, up from one in 11 in 2019. The populations of 55 countries, including China, are projected to decline between now and 2050. Recent data suggest India will shrink sooner than expected.

Like climate change, the demographic sort is vast, gradual and seems abstract—until it is not. And like climate change, it will demand a transformation both of institutions and of individual behaviour. Remaining active for longer is essential. The Japanese government urges firms to keep staff until they are 70. Many stay on: 33% of 70- to 74 -year-olds now have jobs, up from 23% a decade ago.

Demographic change brings big economic challenges. Japan owes its sluggish growth in large measure to its shrinking population. If you look at the well-being of indi vidual Japanese people, however, the picture is far rosier. In the decade from 2010 to 2019, Japan enjoyed the third-highest average rate of GDP growth per head in the G7, behind only Germany and America.

Japan is a major creditor and the third-largest economy at current exchange rates. Its people live longer than the citizens of any other country. It is home to the biggest technology investor on the planet, a pioneering 5 G firm, and a host of global brands, from Uniqlo to Nintendo. Expertise in robots and sensors will help its firms make money from a wide range of new industrial technologies. Geopolitically, Japan plays a pivotal role between China, its largest trading partner, and America, its key security partner. It should not, in short, be a global afterthought.

Japan’s mistakes offer another set of lessons. Living with lots of risk makes setting priorities harder. In the face of so many potential hazards, Japan took its eye off climate change, the greatest ongoing disaster of all. In 2020 it at last pledged to reach net-zero carbon emissions by 2050, but the details are sketchy. Politicians pin their hopes on restarting nuclear plants mothballed after the Fukushima meltdown in 2011; this is unlikely as long as the public overestimates the dangers of nuclear power. Many bureaucrats, meanwhile, remain stubbornly sceptical of renewable energy. So Japan keeps burning coal, the filthiest fuel.

One way to cope with a shrinking population is to get the most out of people. Japan will never live up to its potential while so many of its highly educated citizens are denied the chance to live up to theirs. Seniority-based promotion at traditional companies, combined with excessive defer ence to grey hairs, silences young voices and stifles innovation. That is why many of the brightest new graduates prefer to work for startups. Japan has done a good job of getting more women into the workforce in recent years, but they still have too few chances to rise. A dual-track labour system traps young people and women in precarious part-time jobs (which, among other things, makes them less keen to have children).

Politicians tolerate all this in part because they feel little pressure to do otherwise. The Liberal Democratic Party has remained in power almost uninterrupted since 1955, thanks to a pathetically weak opposition. Senior figures, typically old men from political dynasties, are more conservative than the public they supposedly represent. For the public, in turn, today’s comfort dulls the impulse to press for a brighter tomorrow. Japan’s final lesson is about the danger of complacency. ■

Global finance

China courts global capital, on its own terms

It is looking to reduce its dependency on the West, while increasing the West’s dependency on it

Dec 11th 2021

EVER SINCE the start of the trade war between America and China, investors, politicians and businesses have been trying to gauge how far and how fast the world’s two biggest economies will decouple from each other. The pattern in finance is becoming clearer with the news that Didi Global, a Chinese ride-hailing firm, plans to delist its shares from New York, just six months after an initial public offering (IPO) there.

It is likely that all the $2.1trn of other mainland Chinese firms’ shares traded in the Big Apple will eventually follow suit, with the approval of the Chinese Communist Party. Yet do not imagine that China’s rulers seek financial isolation. For at the same time, they are busy welcoming Wall Street firms into the mainland’s financial system. China is pursuing a strategy of asymmetric decoupling: reducing its dependence on the West even as it seeks to increase the West’s dependence on China. Didi will not be the last example of this approach.

For decades China's government tolerated and sometimes encouraged companies to raise capital in distant markets. When the first Chinese firm went public in New York in 1993, cross-border listings were endorsed by authorities, which acknowledged that American markets offered a lower cost of capital, more sophisticated investors and better corporate governance. Mainland regulators even turned a blind eye to fiddly legal work arounds, known as variable interest entities (VIEs), that allowed ambitious Chinese tech firms to circumvent arcane mainland restrictions on foreign ownership.

Over the past two years the mood has shifted. In 2019 Alibaba, the most valuable Chinese firm listed in New York, sought an additional listing in Hong Kong: in effect, a financial plan B. Now Didi will go further by leaving New York altogether. It is said to be under pressure from the Cyberspace Administration of China to shift its listing, probably to Hong Kong, which is increasingly under the direct supervision of the mainland government. Meanwhile, it seems likely that new VIEs will be banned.

One reason for the shift is an American law, targeted at Chinese firms, which requires foreign companies to reveal the gory details of their audits or be forced off American exchanges. Do not mistake this as a defeat for China. It is not severing links with global finance. Instead it is opening up the mainland markets and coaxing Western banks, insurers and fund managers to enter and play by its rules. Many Wall Street firms are being given new licences and are expanding their operations in China. JPMorgan Chase's cross-border exposure to the country has risen by 9% since 2019. Foreign portfolio investors' holdings of stocks and bonds have almost doubled over the past three years, to $1.1trn. Even as Xi Jinping, China's president, unleashed a war on big tech and tycoons under the banner of "common prosperity", more than $100bn flowed into mainland markets in the first nine months of 2021.

China hopes it can have the best of both worlds—access to global funds and know-how, but under its direct supervision. There are obvious risks, from a Chinese perspective. China's domestic markets are still unfamiliar territory in some ways, and foreign investors may not commit as much capital because they are worried about currency controls, unfair treatment at the hands of regulators and the risk of expropriation. Yet ultimately the vast size of China’s market and depth of its corporate scene mean they find it hard to say no.

Asymmetric decoupling raises two questions. One is whether America’s approach is effective. The more it punishes Chinese firms, whether those listed in America or those that buy American high-tech components, the more China develops its own capabilities, undermining American pre-eminence and creating alternatives for third countries to use. That could leave America with less global influence, not more.

The other question is where else China will apply its asymmetric strategy. It can already be seen in the commodities industry, with more trading happening on the mainland, and in tech, where China is trying to develop home-grown semiconductors. But the most glaring dependence of all that China has is on America’s currency, which is used for most cross-border payments and which exposes it to sanctions and the threat of exclusion. If Mr Xi cannot tolerate a ride-hailing firm being listed in New York, it is a good bet that he is even less keen on China being subordinate to the greenback. He is surely doing everything within his powers to develop an alternative. ■

Plugging the gap

The tricky business of charging electric cars

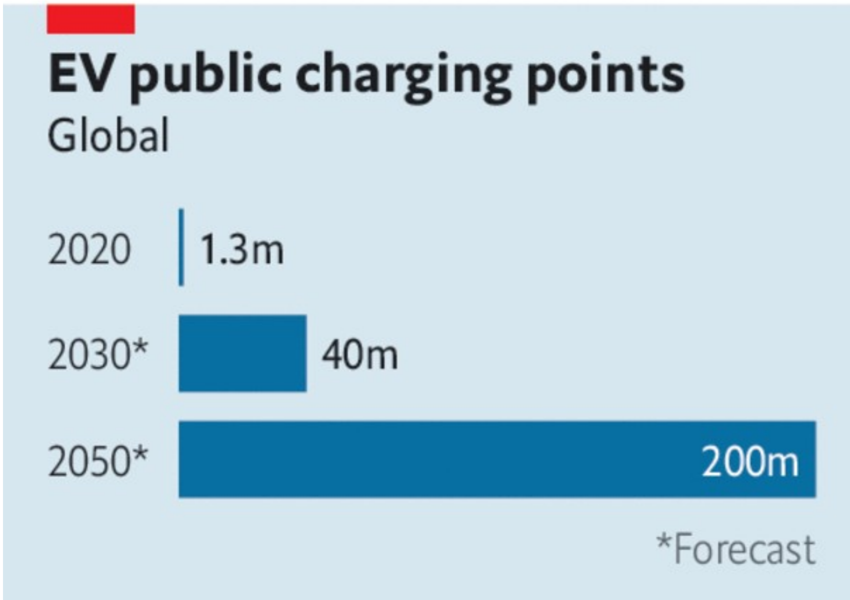
Building public networks will require business and government to work together

Dec 11th 2021

TAKE THE wheel of an electric vehicle (EV) and prepare to be astounded. The smooth, instant acceleration of battery power makes driving easy and exciting. The latest technology is there, with tablet-like screens instead of old-fashioned switches. Add falling prices which make owning and running many EVs as cheap as fossil-fuel alternatives, and the open road beckons.

Except when you look under those sleek exteriors. The tangle of cables in the boot is a reminder of the need to plug in and recharge cars roughly every 250 miles (400km). And when you do find a public charging point, it is sometimes damaged or inaccessible. Little wonder that one of the main reasons drivers give for not buying an EV is “range anxiety”.

A society-wide switch from hydrocarbons to electrons is required if the world is to stand a chance of reaching its net-zero emissions targets. However as EVs become more common, the charging problem will become more severe. Today’s mostly wealthy owners can often plug in their EV at home or at work. But many less-well-off EV drivers will not have a drive in front of their house or a space in the executive car park.



The Economist

By 2040 around 60% of all charging will need to take place away from home, requiring a vast public network of charging stations. At the end of 2020 the world had just 1.3m of these public chargers. By some estimates, to meet net- zero emissions goals by 2050 will require 200m of the things.

Who might install them? Drivers will need a mix of fast "long-distance" chargers installed near motorways that can rapidly add hundreds of miles to battery ranges and slower "top-up" chargers available at kerbsides or in the car parks of shopping centres, restaurants and so on. The private sector, sensing an opportunity to make some money from surging EV ownership, is already showing an interest. Dedicated charging firms and carmakers are investing in infrastructure. Oil companies, with Shell to the fore, are putting chargers in petrol stations and buying charging companies. Utilities, which have plenty of electricity to sell, are also starting to sniff around.

Yet the charging business suffers from big problems. One is how to co-ordinate between the owners of charging points, the owners of the sites where they will be installed, planning authorities and grid firms. Another is the cost. According to one estimate, the bill for the chargers needed to reach net-zero by 2050 will be $1.6trn. To start with, profits may be elusive because the networks will not at first be heavily used. A related risk is that the coverage will have gaps. California is a choice spot for installing chargers, but is anyone keen on investing in Nebraska? And then there is the question of competing networks. Drivers should be able to switch from one to the other without the hassle of having to sign up to them all.

What to do? Governments are experimenting. As well as subsidising EV sales many are throwing cash at public chargers. America's infrastructure law sets aside $7.5bn to create 500,000 public stations by 2030. Britain plans to require new buildings to install chargers. Yet the sums are puny and the problems of co-ordination, coverage and convenience will remain.

Governments should learn from telecoms. Most countries auction or issue a limited number of licences or spectrum rights to firms to run regional and national mobile networks. In return the firms have to build networks according to a schedule, offer universal coverage and compete with each other. Regulators set rules to allow roaming between them.

This approach has its flaws. Poorly designed auctions in Eur ope left firms with too much debt, and competition has become less intense in America. But in the past two decades the world has marshalled over $4trn of spending on telecoms infrastructure. And the mobile phone has turned from a shiny object for rich people into something in everyone's pocket. The bright sparks running climate policy should take note. ■

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

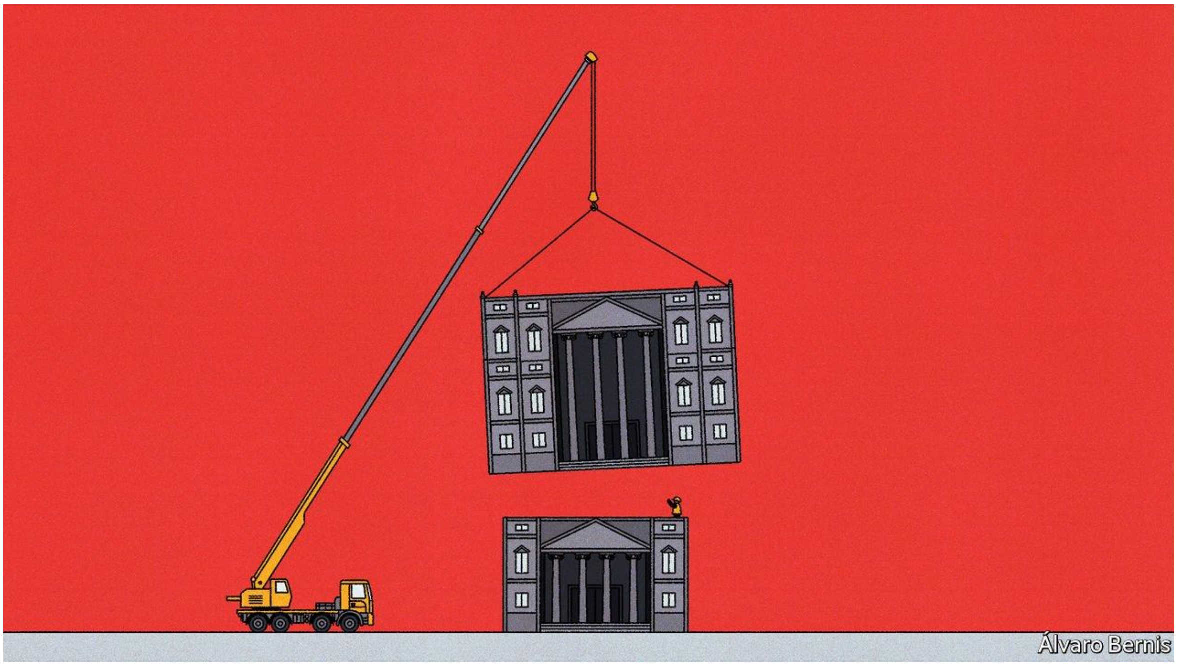
Letters

On the size of government, nuclear power, chess, Afghanistan, past tenses

Letters to the editor

A selection of correspondence

Dec 11th 2021



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

Curtailing the state

Your briefing on the ever-expanding state ("The great embiggening", November 20th) generously cited a proposal by one of us to partially privatise migration policy in order to limit the growth of government. Since then we have worked together to leverage ideas from that line of thinking paired with blockchain technology to explore the decentralised provision of public goods. One promising experiment has been Gitcoin's use of matching funds to support a democratised crowdfunding platform in the Ethereum ecosystem, directing tens of millions of dollars so far with a minimal team.

Experiments like this illustrate how fiscally big government need not imply administratively big government. Thus the need for greater public good as technology advances need not imply the growth of the administrative state.

VITALIK BUTERIN
Founder
Ethereum
The Ether

E. GLEN WEYL
Founder
RadicalxChange Foundation
Kirkland, Washington

A focus on state size as measured by government spending and taxation ignores the many ways in which the British state grew dramatically during the 1980s. The central government was more than willing to increase its power to engage in its own brand of social engineering. Local authorities had their control over education weakened by the introduction of the national curriculum. Their control over social housing was curtailed by right-to-buy legislation. Local budgets were increasingly subject to central-government control. Councils' efforts to fight homophobia were crushed by the infamous Section 28.

For the most economically marginalised in society, the state became a despotic Leviathan. In 1989 Paddy Ashdown wrote "Citizen's Britain", which discussed the paradox of a government that was supposedly committed to rolling back the frontiers of the state spending ever larger sums on social controls: police, prisons, punishment and surveillance. Ashdown saw the compulsory conscription of the poor into "training" or low-paid jobs as akin to the very methods that the Soviet Union was trying to move away from.

Jo Grimond, in the foreword of Ashdown's book, argued that Margaret Thatcher's cabinet did not actually believe in small government, lower taxation, less regulation, the spread of wealth and power or competition. Thatcherism was little more than another form of corporatism.

WILLIAM FRANCIS
London

Nuclear's waste problem

As a low-carbon, reliable and generally safe baseload power source, nuclear energy may have a role in the transition away from fossil fuels ("The discreet charm of nuclear power", November 13th). But let us not forget the main motivations for the current energy transition, namely climate change and depleting finite resources. This argument is entrenched in the Brundtland Commission's definition of sustainable development from the 1980s, which is in effect not to oblige future generations to clean up our mess. This is precisely where nuclear power falls short. The long-term legacy waste issue is a negative environmental externality with potential economic and social consequences for our descendants of the same magnitude as climate change. The fact that these impacts, unlike climate change, are largely not yet felt today does not mean we should replace one problem with another.

I am neither for nor against nuclear power, but I do strongly agree with you that all energy sources have their drawbacks and we must have the full picture in view when considering alternatives. Ernst Schumacher, on the other hand, was a strong opponent and would surely not approve of your misuse of his "small is beautiful".

PROFESSOR RUSSELL MCKENNA
Chair in energy transition
University of Aberdeen

Just operating most existing reactors costs more than energy efficiency or new renewables, which in 2020 became the cheapest bulk power source in 90% of the world. Existing American subsidies already rivalled nuclear construction costs. More billions or tens of billions of dollars in current new subsidies to distressed (or even to all) reactors only compounds the misallocation. It diverts even greater resources from more-climate-effective competitors that can't contest market space or access grid capacity hogged by taxpayer-funded zombie reactors.

AMORY B. LOVINS
Adjunct professor of civil and environmental engineering
Stanford University
Stanford, California

Chess queens

There is a similar gender imbalance in chess to the lack of women in top e-sports ("Console sisters", November 27th). Jennifer Shahade wrote about this in “Chess Bitch”. Published in 2005 it offered a counter-example. In Georgia there are many strong female chess players, attributed to a culture in that country that encourages women to play the game.

NELSON MINAR
Grass Valley, California

Aiding Afghanistan

Your call for the West to hold its nose, deal with the Taliban and ensure that the Afghan people do not starve this winter is absolutely correct (“War, drought, famine”, November 13th). If we have to abandon temporary hopes of human development, we can at least ensure that people survive to change things in the future. As for hypothecating aid to development, that weapon would be better directed at Pakistan.

Once Britain’s and America’s single largest recipient of aid, this nuclear-armed state supported the Taliban over many years then directed the subversion of the Afghan government. Its actions should not be consequence-free and we should either remove all aid to Pakistan or demand the reasonable behaviour of the Taliban, Islamabad’s client in Kabul, as the condition for continuing aid. Either way, it is not the people of Afghanistan who should suffer.

SIMON DIGGINS
Defence attaché, Kabul 2008-10
Rickmansworth, Hertfordshire

Double trouble

Johnson was wrong to accuse users of the past tense "pled" of being in error (November 13th). It is, in fact, a dialectal variant, like the spelt/spelled variation that he discussed. If Johnson were to give himself the pleasure of reading Scottish law reports, he would find that "pled" is the long-established past tense of "plead" north of the River Tweed.

ALAN SIMCOCK
London

After I cut the weeds in my lawn with my Weedeater I asked my family what I had just done. "Weedeatered" didn't sound right. Betsy said I "Weedate" it. Bert said that sounded pretentious; I "Weedeated". My spell check rejected all those words. Elizabeth said I "ate weed".

J.K. COWARD
Sylva, North Carolina

Johnson should be cautious about merging the past tenses “hanged” and “hung” into one word. There is a big difference between being well-hanged and well-hung.

PETER KENDALL
London

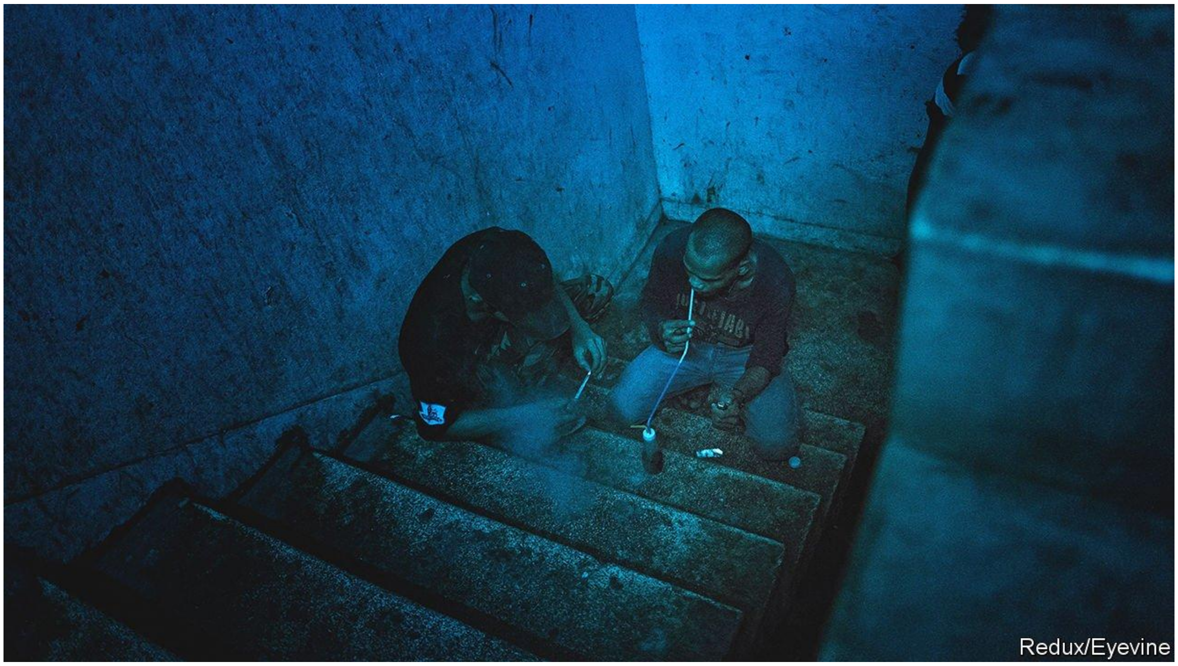
Asia

On a high

South-East Asia is awash in drugs

The coup in Myanmar has helped cartels ramp up production

Dec 11th 2021 | BANGKOK


Redux/Eyevine

OCTOBER WAS a stellar month for the Lao police. On the 27th an officer in Bokeo, a northern province, waved down a truck packed with Lao Brewery beer crates. Contained inside them were 55.6m methamphetamine pills and over 1.5 tonnes of crystal meth, a more potent version of the drug. It was Asia's largest drug bust ever, according to the UN. Just the week before, the police had seized 16m amphetamine tablets during two operations in the same area.

Law-enforcement agencies in South-East Asia have grown accustomed to breaking records. In almost every year between 2011 and 2020, the authorities seized more meth, as the drug is commonly known, than they had the year before. Between 2015 and 2019, the only other region to impound as much of the stuff as East and South-East Asia (which the UN groups together) was North America—though the overall volume of drugs flowing through Asia is probably greater, because authorities there are more corrupt and less well-equipped to intercept traffickers, says Jeremy Douglas of the

United Nations Office on Drugs and Crime (UNODC), an UN agency. And recorded seizures are likely to be just the tip of the iceberg.

Most such hauls occur in Indochina. Even though it is home to just 10% of the population of East and South-East Asia, it accounts for nearly three-quarters of the meth detected in the region. The meth labs that feed Asia's habit are found in Shan state, a lawless patch of eastern Myanmar. Even before Myanmar's military coup in February, it was a big centre of meth production. But the putsch has distracted already negligent authorities, making the area even more enticing to drug cartels. In neighbouring countries, seizures this year are once again breaking records—six times more meth has been seized in Laos in 2021 than in 2020. "It's been a mess since February, especially the last few months," says Mr Douglas. "It's pretty clear the post-coup breakdown in governance and security in drug-production areas has had an impact."

Cartels sell their product as far afield as Japan and Australia, where richer consumers can afford to pay a premium. But they are increasingly targeting customers closer to home, too, where the population dwarfs that of Asia's richest countries. Syndicates appear to have tailored their business model accordingly. Over the past decade the price of meth has plummeted across the region. That suggests that whereas once cartels tried to maintain prices at a certain point, now their strategy is to flood the region and build up sales by increasing levels of drug use.

The strategy of jacking up demand by increasing supply seems to work. Data are sketchy—few people will admit to being a drug user or addict—but suggest there is enormous appetite for meth. In 2019, according to UNODC numbers, 0.61% of East and South-East Asians aged between 15 and 64 used amphetamine-like substances, including meth, at least once a year, compared with a global average of 0.54%.

That translates to 10m people, making it the biggest market for meth in the world. Recent household surveys show that roughly 1m people in each of Indonesia, the Philippines and Thailand tried meth at least once in the past year. Between 2016 and 2019, the number of people who used meth at least once annually grew eight-fold in Vietnam and ten-fold in Thailand. In 2019 the UN reckoned that the regional market was worth $60bn.

Meth appeals to users for several reasons. It is often the easiest drug to get—there is very little cocaine in the region—and is in plentiful supply. Suchart (not his real name), a Thai user, says that meth is even easier to procure in Bangkok today than it was two decades ago, and back then "people were giving it away". Many prefer it to heroin, which was South-East Asia's drug of concern until it was supplanted by meth about a decade ago. Heroin's numbing effects "blank you out", says Suchart. "Meth makes me more active, gives me more strength to do things."

That appeals to people who work long hours, like Somchai (a pseudonym), who was a truck driver when he first started popping *yaba*, tablets containing four parts caffeine to one part meth. Meth use was once confined to the working class but since crystal meth, the quality of which is higher than *yaba*, started flooding the market about seven years ago, it has attracted a well-heeled crowd. Stronger and purer than *yaba*, crystal is often used by those who want more energy to party.

Dealers can count on their customers coming back to them. About one in ten meth users will develop a dependency. That number rises to one in five for regular users of crystal meth. It is hard to get a clear picture of the number of meth abusers in South-East Asia because the only metrics of drug dependency in the region are unreliable. Drug-treatment admissions are inflated by involuntary referrals while the number of drug arrests may be fuelled by arrest quotas.

Even so, indicators in most countries are trending up. In the five years to 2020 the number of known meth users in Vietnam increased eight-fold. In Thailand admissions for treatment doubled in the three years to 2018. In Malaysia the number of crystal-meth users who had contact with the authorities increased six-fold between 2016 and 2019.

This is taking its toll on public health. Meth kindles feelings of euphoria, often spurring users to engage in risky behaviour, such as having unprotected sex at "chemsex" parties. The urge to strengthen the rush leads some users to inject meth, which increases the chance of transmitting diseases like HIV.

Once the high wears off, some suffer from anxiety and paranoia. Over a third of recreational users will acquire meth-induced psychosis, which is akin to schizophrenia. A hospital in Thailand discovered that six years after the completion in 2010 of a study of patients diagnosed with meth-induced psychosis, 8.2% had died—a share that is ten times greater than Thailand's overall mortality rate. The top three causes of death were accidents, suicide and AIDS. (Meth users tend to have higher rates of sexually transmitted diseases.) Apinun Aramrattana, a professor of medicine at Chiang Mai University in Thailand, says that the country's "meth epidemic" is fuelling growing rates of mental illness. Hospitals, he says, have struggled to accommodate the number of patients with meth-induced psychosis.

The response of South-East Asian governments has not helped. Too often, the authorities punish users, locking them up or throwing them into "compulsory treatment" centres, where the only treatment provided is abstinence and labour. This punitive response "has simply failed to work", says Ann Fordham of the International Drug Policy Consortium, an advocacy group based in London, pointing to the rocketing number of users.

The UN argues that addicts should be treated like patients rather than rounded up as criminals. Many governments are starting to come around to that idea. But until they divert funding for drug treatment from law enforcement to health agencies, the number of addicts will continue to grow—much to the satisfaction of the cartels that supply them. ■

Algorithms and the law

Can Facebook be blamed for pogroms against Rohingyas in Myanmar?

Lawsuits in America and Britain seek billions of dollars in damages

Dec 9th 2021

THAT FACEBOOK was used to spread rhetoric that incited carnage in Myanmar is hardly up for debate. According to the lead author of a UN report published in 2018 the firm's platform played a "determining role" in the violence inflicted on Rohingya Muslims by marauding Buddhists. Facebook acknowledges that it did not do enough to prevent its services from being abused. But whether it is liable for what happened is a trickier question.

It may soon be answered. A legal campaign is under way on both sides of the Atlantic. It claims that Facebook, now renamed Meta, should be held liable for allowing users to spread such content during the Rohingya genocide. A letter delivered to Facebook's London offices on December 6th gave the firm notice of intent to sue it in the High Court. That suit will be on behalf of Rohingyas living everywhere in the world outside America, including Bangladesh, where 1m or so dwell as refugees.

The American complaint, filed on the same day in California, is a class action on behalf of Rohingyas living in America. It is seeking "at least" $150bn in compensation for "wrongful death, personal injury, pain and suffering, emotional distress and loss of property". Although American internet companies typically are shielded from liability for content that is disseminated through their platforms, the suit argues that the court must apply Burmese law for harms done in Myanmar. American courts can theoretically apply foreign laws in this way, though there is little precedent for it.

Meta did not comment on the lawsuit when asked, but said that it was "appalled by the crimes committed against the Rohingya people". It added that it has improved its capacity to moderate Burmese content.

The allegations fall into two categories. The first is that since 2010 Facebook failed actively and effectively to moderate content on its network that was contributing to the incitement of genocide in Myanmar, despite being aware of what was happening. The second is that Facebook's own content-recommendation algorithms amplified the spread of this content. (Meta has been approached for comment.)

No precedent exists for such a case, at least when it comes to social-media companies. One distant parallel is with Radio Mille Collines, a Rwandan radio station that was instrumental in inciting the Rwandan genocide of 1994, in which perhaps 500,000 people, mostly Tutsis, were killed. Some of those who ran the station were convicted of incitement to genocide. The difference is that that was Radio Mille Collines's main purpose. (Its former chairman is also accused of financing the import of machetes.) International courts went after those who urged the killing, not the manufacturers of the radio equipment.

The current lawsuits argue that Facebook is both manufacturer and, to some extent, messenger: its algorithms decide what people see. Whether and how the firm is liable for what its algorithms do will now be tested. ■

Sunflower state

Many North Korean women outearn their husbands, but still do the chores

Women trade; men do badly paid state jobs

Dec 9th 2021 | SEOUL

BEFORE SHE fled south six years ago, Kim Eun Kyoung spent her days in one of North Korea's many informal markets. She sold household goods and illicit South Korean TV dramas. In the evening, she did the housework and looked after her daughter. She says her husband worked just a few hours a day at his state-mandated factory job and spent the rest of his time gambling and drinking. They hardly ever saw each other. "I would have liked it if he'd helped with the housework, but we lived totally separate lives," says Ms Kim (not her real name). "The only thing we ever discussed honestly was our economic situation."

Ms Kim's story is increasingly common among North Korean women, judging from surveys of those who have fled to the South over the past two decades. After the collapse of the North's planned economy and public-distribution system in the 1990s, the state grew more relaxed about enforcing labour requirements for women. The regime continues to compel most men to work for the state, but pays most of them very little or nothing altogether. Women, who are both freer than men to spend time working in the markets and compelled to do so in order to feed their families, have therefore acquired some economic power.

In many North Korean families, women now appear to be the main breadwinners. In 2020 the Database Centre for North Korean Human Rights (NKDB), an NGO in Seoul, the South's capital, asked 60 refugees from Hyesan, a city on North Korea's border with China, about their married lives back home. Fully 47% said the wife brought home the kimchi, 37% said it was the husband and 17% said both contributed equally. Hyesan, an unusually open border town, may not be representative, cautions Hanna Song of NKDB. But testimonies of refugees from other parts of the country suggest similar trends.

Women's extra earnings have yet to change expectations about what they do at home, however. Traditional views of family life remain common, notes Ms Song. Among those surveyed by NKDB, both men and women considered child care and housework to be women's work. "Of course women should look after children, they're much better at it," says Jeong Jin, a 30-something woman from Hyesan who came to Seoul in 2015. "My husband always looked really unnatural holding our baby." She acknowledges that many women complain about the double burden, but says the fault lies with the system that forces the men to work without much pay.

Even when people blame the state, the gap between expectations and reality has begun to cause conflict. Some overburdened wives demand help with chores or a say in family decisions. Many husbands insist on being respected and obeyed, regardless of how much they contribute. Common insults for useless husbands include *haebaragi* ("sunflowers" who sit pretty waiting for their wives to come home), *natjeondeung* ("day lamps", as useful as a lamp turned on in the sunshine) or *bul pyeon* ("inconvenience", a play on *nam pyeon*, the Korean word for husband).

The most successful marriages appear to be those that combine a woman's economic activities with a man's political influence. Ms Jeong says her marriage to a high-ranking police officer was a happy one even though they lived mostly off what she and her mother earned as smugglers. "My husband had little money, but a lot of power," she explains. Men suffer through years of badly paid army or police jobs to rise through the ranks, at which point they can bring both higher salaries and opportunities to top them up by extracting bribes from smugglers or by earning bonuses by catching them—as well as the ability to protect their wives' grey-market activities.

The state is unlikely to offer women more rights or men better jobs. After a brief period of championing female fighter pilots and engineers, Kim Jong Un, the North's dictator, has recently reverted to promoting a traditional approach to family life, urging women to look pretty for their husbands and to care for their children. For North Korea's harried married women, Mr Kim is about as useful as a *natjeondeung*. ■

Tragedy in the Nilgiris

Bipin Rawat, India’s chief of defence staff, is killed in a helicopter crash

He had been tasked with reforming the country’s archaic armed forces

Dec 8th 2021 | DELHI

IT WAS A short daytime flight, ferrying a grandee from an airbase to a nearby defence college. But the Mi-17 V5 carrying General Bipin Rawat, India’s chief of defence staff, and 12 others including his wife, did not make it. The Russian-built helicopter slammed into a wooded slope just a few minutes short of the Defence Services Staff College at Wellington in the Nilgiri Hills, a tea-growing region in southern India. The general himself had studied at the all-services officer training institute, and was due to give a lecture that afternoon. Only one passenger, a decorated fighter pilot, appears to have survived the crash.

General Rawat was no ordinary serviceman. The 63-year-old was India’s highest-ranking uniformed officer and the first to serve as a joint chief of its three military services. The role was created in 2019 as part of reforms intended to modernise and streamline one of the world’s biggest and most tradition-bound armed forces. Part of General Rawat’s mission was to break down the divisions among the army, navy and air force and create instead a cohesive central command. That, in turn, was to oversee regional commands comprising all three services, to allow a more co-ordinated response to the threats India faces. This change, long demanded by civilian planners, has grown more urgent as India's customary preoccupation with Pakistan is superseded by the rise of a much mightier and increasingly aggressive China.

Despite inevitable speculation, the crash appears to have been accidental. The Indian army operates more than a hundred such aircraft, often in trickier circumstances. The payload, weather conditions and terrain posed no special challenges. "It is natural to look for causes," says Ajai Shukla, a defence analyst, "but very often a crash can happen within full compliance."

General Rawat will be quickly replaced, most likely by the most senior of the current service heads, army chief of staff General Manoj Mukund Naravane. Tough and blunt, the deceased chief was widely admired in the armed forces and broadly popular with the public. But he was at times controversial. In 2016 Narendra Modi, the prime minister, selected him as army chief over the heads of two more senior generals. His subsequent appointment as overall commander was seen by some as a reward for breaking with a strong tradition of strictly insulating the army from politics by occasionally voicing views supportive of Mr Modi's Hindu-nationalist policies. In 2017 he awarded a commendation for "personal initiative" to an officer whose unit kidnapped a passerby in the restive region of Kashmir and strapped him to the bonnet of an army jeep in order to discourage stone-throwing.

Only a few days before the fatal crash, Indian soldiers again invited criticism for human-rights offences. According to army spokesmen, commandos in the far north-eastern state of Nagaland had received reports that guerrillas were using a road not far from the border with Myanmar. When a pickup carrying a group of men approached the soldiers on December 4th, they claim they warned it to stop, opening fire when it failed to do so. Survivors insist that there was no warning and that the eight people riddled with bullets were coal miners returning to their village. Subsequent clashes between soldiers and angry villagers left seven more civilians dead.

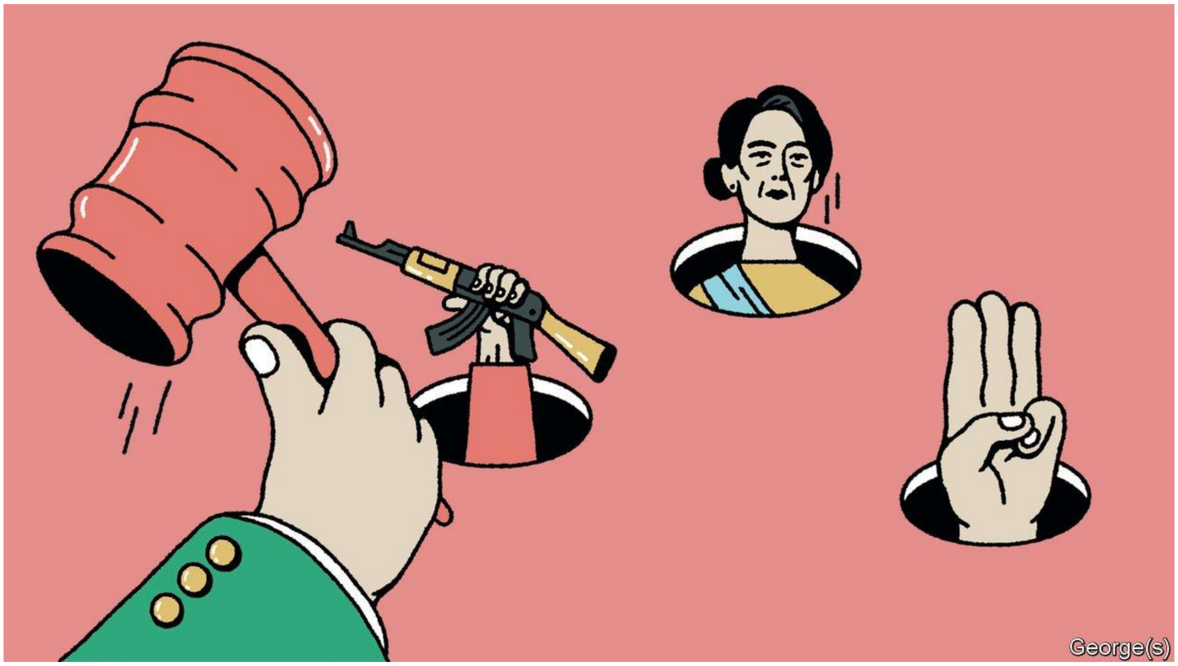
Indian politicians and pundits are in general very protective of the armed forces. Even so, General Rawat's successor will face mounting pressure both to complete structural reforms and to improve performance—including respect for the rights of other Indians. At the same time, and despite growing external threats, the army will continue to face what may be its oldest and most intractable foe: stingy budgets. General Rawat's tragic death may not have been due to old or faulty equipment, but much of India's other kit—including 1960s-era MiG and Jaguar fighter jets—is woefully outdated. And with China's GDP outstripping India's by a factor of five, the northern giant is now spending over three times more than India on its army. ■

Banyan

Myanmar’s generals want Aung San Suu Kyi locked up forever

Yet the opposition to their regime has grown far beyond its figurehead

Dec 11th 2021



THE GUILTY verdicts that a court in Naypyidaw, Myanmar’s capital, handed down to Aung San Suu Kyi on December 6th were both cruel and farcical. One charge had to do with Ms Suu Kyi breaching coronavirus restrictions at a campaign rally last year. Sentence: two years in prison. The second charge—for which, a further two years—was that Ms Suu Kyi disturbed public order. As evidence, prosecutors cited statements on her party’s Facebook page. Win Myint, a former president, was also sentenced to four years in prison.

Never mind that the posts were made after the Tatmadaw, as Myanmar’s army is known, had launched its coup in February against Ms Suu Kyi, then the country’s de facto leader, and her democratically elected government, during which she and other civilian leaders were bundled off incommunicado. To compound the farce, following the verdicts the coup leader, General Min Aung Hlaing, issued a partial pardon and magnanimously cut Ms Suu Kyi's outrageous four-year sentence in half.

The gesture will have fooled no one. A raft of further charges still hangs over Ms Suu Kyi. They range from smuggling unlicensed walkie-talkies into the country for her bodyguards to benefiting from a government helicopter. The charges are to ensure, at a minimum, that she cannot take part in the election which the ruling junta promises for 2023. It is probably also to ensure that the 76-year-old, who spent 15 lonely years under house arrest for advocating democracy, never walks free again. "They want her to die in prison," as Dr Sasa, a spokesman for the shadow government, told the BBC.

If he is right, the verdicts may well bring to a close the extraordinary public life of Ms Suu Kyi. Daughter of Burma's founding father, General Aung San, before 1988 she never expected to become an icon of democracy and eventual leader. That year a popular uprising against the military regime that had ruled since 1962 thrust her into prominence. Put under house arrest in 1989 before her National League for Democracy (NLD) swept elections that the Tatmadaw could not accept, her moral authority only grew. In 2010 the junta lifted her house arrest, and then ceded political power. The NLD won elections in 2015 and again last year by landslides. It proved more than General Min Aung Hlaing could bear.

Yet by the time of this year's coup, Ms Suu Kyi's own flaws had come more plainly into view. She had done little to refresh the NLD's leadership with younger, more technocratic Burmese. Even among the old guard she reigned as a micromanaging monarch. So the government struggled to promote social and economic change.

Popular in the heartlands of the ethnic-Bamar majority, she failed to win the trust of Myanmar's other ethnicities, some of whom have been in conflict with the centre for decades; they viewed her as just another Bamar chauvinist. Worst of all, she cosseted the army which her father had once led. Following its appalling pogroms against Muslim Rohingyas, her defence of the Tatmadaw at The Hague in 2019 led to calls for her Nobel peace prize to be rescinded. Ms Suu Kyi's high-handedness represented a national tragedy. Her reimprisonment fuses that tragedy with a personal one —her coddling of the generals has come to naught.

Yet so too, already, has General Min Aung Hlaing's calculation that in cancelling the nation's democratic icon he turns back time. With extraordinary speed, the opposition has moved out from under Ms Suu Kyi's shadow, even as she remains widely revered. Where the NLD was Bamar-centric, the shadow National Unity Government (NUG), operating underground or from abroad, is far more representative of Myanmar's ethnic diversity. The NUG acknowledges the rights of Rohingyas, whom Ms Suu Kyi disparaged as alien "Bengalis" without a claim to citizenship. Its cabinet is filled with women, where Ms Suu Kyi's tolerated only one—herself.

Opposition to the coup has also moved away from Ms Suu Kyi's doctrine of non-violence. To be sure, passive resistance remains a feature. But the democratic opposition is also forging ties with many of the country's ethnic armies to create a coalescing armed resistance to the junta. The Tatmadaw certainly retains the advantage. But its brutalities, which include the recent burning of eight mountain villages in Chin state, sap what remains of its moral authority. As the army struggles for control, General Min Aung Hlaing may be doing more to forge a powerful opposition than Ms Suu Kyi ever managed.

Read more from Banyan, our columnist on Asia:
Chinese influence is spurring violence in the Solomon Islands (Dec 4th 2021)
Malaysia's sleaziest ex-prime minister, Najib Razak, is back (Nov 27th 2021)
Russia moves with a new swagger in South-East Asia (Nov 20th 2021)

China

Harbouring no malice?

America worries about China’s military ambitions in Africa

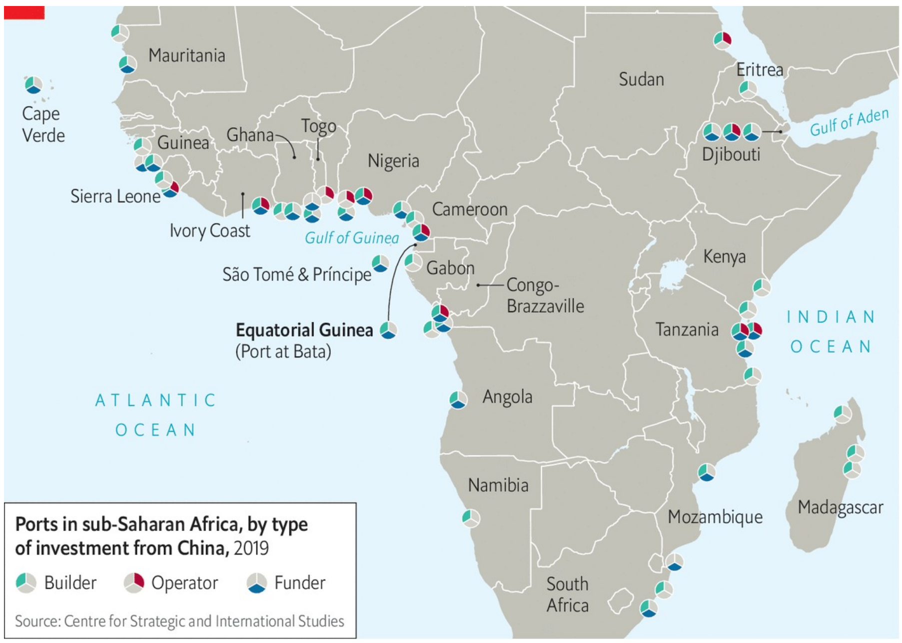
China’s navy is eyeing the use of ports abroad, including on the Atlantic

Dec 9th 2021 | NEW YORK

WHEN CHINA began building its first overseas naval base in 2016, in Djibouti on the Horn of Africa, Chinese officials tried to allay Western anxiety about their country’s expanded military footprint. They said the outpost (pictured) was only for supporting multinational anti-piracy efforts, helping to secure vital shipping lanes and enabling China to protect its citizens in the region. Five years later, the facility in Djibouti remains the Chinese armed forces’ only foreign bastion.

But Chinese officials are quietly looking at the possibility of building more. In November the Pentagon’s annual report on China’s military power identified 13 countries where, it believes, China has probably considered locating other bases. They range from Tajikistan in Central Asia to Angola on the Atlantic coast of Africa. American officials believe China has made secret basing or port-access agreements with several of them, including Cambodia and the United Arab Emirates.

It may help China that there are nearly 100 civilian ports overseas in which it has some sway as an investor or operator. The Centre for Strategic and International Studies (CSIS), a think-tank in Washington, has identified nearly 50 ports in sub-Saharan Africa where China is involved, sometimes just in building work. CSIS says China may use them "to increase its military and political reach" (see map). Chinese navy ships have visited some.



The Economist

On December 5th the *Wall Street Journal* said China wanted a naval presence in Equatorial Guinea, citing American intelligence reports. A base there would give China's navy its first permanent foothold on the Atlantic side of Africa. It would be nearly 10,000km from Washington, but officials there still worry. In October the American government was spooked enough to send Jon Finer, the deputy national security adviser, to visit the tiny oil-producing country of 1.4m people and advise its leaders to resist China's overtures. Mr Finer is believed to have told officials in Equatorial Guinea that allowing China to open a base would raise national-security concerns in America.

China is becoming a more adventurous naval power. It has dramatically beefed up its fleet this century, amassing more ships (though not more tonnage) than America's navy. But most of these vessels keep to Indo-

Pacific waters. It is unclear whether China has military ambitions farther afield. The Chinese navy cannot hope to sustain an Atlantic-facing armada that would rival that of America and its allies, whose ships, bases and supply lines dominate the central and north Atlantic.

It may be that China's reason for wanting more access to ports for its navy is much as it described its motives in Djibouti : securing shipping lanes for Chinese trade, fighting piracy and protecting Chinese citizens abroad. The navy began to feel a more pressing need for far-flung bases in 2011, when it helped conduct an emergency evacuation of 30,000 Chinese citizens from Libya as that country descended into civil war.

Safety first

In the past decade China's growing demand for imports ranging from oil to copper, and the expansion of its commercial activity abroad, have increased its concerns about keeping trade routes safe. Until the pandemic struck it had 1.5m workers in foreign countries. Chinese military white papers stress a need for the navy to protect such "overseas interests".

But there may be other considerations. Chinese military analysts openly advocate pushing into waters far from home to divert American attention and resources from Chinese waters, writes Ryan Martinson of the US Naval War College. He notes a book by Hu Bo of Peking University, in which the author acknowledges that China's navy could not compete with America for supremacy of faraway seas, but suggests it could "pin down" some American forces that might otherwise be sent to East Asia. Mr Martinson also cites Liu Zhe, the captain of China's first aircraft-carrier, the *Liaoning*, who wrote in a well-publicised essay in 2017 that "the farther away we are from our territorial sea, the more secure will be the motherland behind us." Establishing bases facing the Atlantic would certainly get America's attention.

But Isaac Kardon, a colleague of Mr Martinson's at the Naval War College, notes China's leaders have not parroted blustery rhetoric about tying down American ships. They would prefer to set up bases without antagonising America. As it happens, most countries are reluctant to rile the United States by hosting Chinese forces. Agreeing to a Chinese base would be a transactional arrangement, doing little to improve the security of the host. Unlike America, China disapproves of alliances and abhors the use of its forces in any combat role in other countries' conflicts.

The Gulf of Guinea would be a logical place to look for a base. Piracy is a scourge there, as it is in the Gulf of Aden off Djibouti, so China could plausibly argue that its help is needed. A Chinese company has built a deepwater commercial port at Bata in Equatorial Guinea. It could adapt that for Chinese warships. And the family-run dictatorship in Equatorial Guinea happens to be the sort that China is well-practised at doing business with in Africa: brutal, corrupt and in a financial shambles. The International Monetary Fund approved a bail-out in 2019.

It was an unexpected reversal of fortune for Teodoro Nguema Obiang Mangue, the vice-president who is also the president's son, to receive Mr Finer in October. In recent years America and its allies have confiscated allegedly ill-gotten luxury assets from him (America says it is using the proceeds to fund covid-19 vaccines and other medical aid for the country). The vice-president posted a video clip of the meeting on social media, and another in which he expressed gratitude for a diplomatic gift he had received in connection with the visit: a silver platter with a presidential seal.

A Chinese base at Bata would probably pose little serious threat to America, says Mr Kardon, unless it were to include a facility for Chinese submarines. But building one would be virtually impossible to conceal. Equatorial Guinea would be unlikely to risk America's anger by letting China do so. No clear evidence has come to light that China has any such intention.

A week after Mr Finer's visit, China's president, Xi Jinping, talked by phone to his counterpart, Teodoro Obiang Nguema Mbasogo. Chinese officials said Mr Obiang described China as Equatorial Guinea's "most important strategic partner". On December 7th his son, the vice-president, tweeted a response to the *Journal*'s story about the base. "China is a model of a friendly country and a strategic partner but, for now, there is no such agreement," he wrote. He quickly added: "Remember also that Equatorial Guinea is a sovereign and independent country and can sign co-operation agreements with any friendly country." American officials may want to schedule a follow-up trip. ■

The chips are down

China wants Macau to break its gambling addiction

Officials are trying to stop the mainland's high rollers from visiting

Dec 9th 2021 | HONG KONG

STAKES IN PUNTO BANCO, a popular version of the card game baccarat, have often risen to well over $100,000 in Macau's VIP suites. The high-rollers have usually come from the Chinese mainland. Even before flying into the gambling haven they would commonly agree to bet upwards of $1m during their stays. Those who have arrived short of cash because of the mainland's strict capital controls have easily found lenders of Macanese patacas.

The flow of super-rich punters from the mainland has been enabled by "junket" agents and promoters. In 2019 SJM Holdings, which owns a huge French Renaissance-style casino in Macau, brought in almost all of its VIP customers through such middlemen. The share of non- VIP gambling in the city has been rising in recent years. But before the pandemic, VIPs still accounted for about a third of the territory's gross revenues from gaming.

Covid-19 has been a blow to the industry. So, too, have stepped-up efforts by China’s government to curb the junket business. Betting is illegal on the mainland. In March China said assisting cross-border gambling was also against the law. On November 26th police in the coastal city of Wenzhou issued an arrest warrant for Alvin Chau, the head of SunCity, Macau’s biggest junket firm. He was later seized in Macau. Officials there claimed this was unrelated to the mainland’s warrant, but many in his business felt a deep chill.

The charges against Mr Chau hint at the scope of the junket industry in Macau. Wenzhou’s police say he had 12,000 agents serving 80,000 customers on the mainland. SunCity allegedly arranged underground banking services to help them evade capital controls. Junkets are legal in Macau. But the mainland’s laws appear to have trumped local ones.

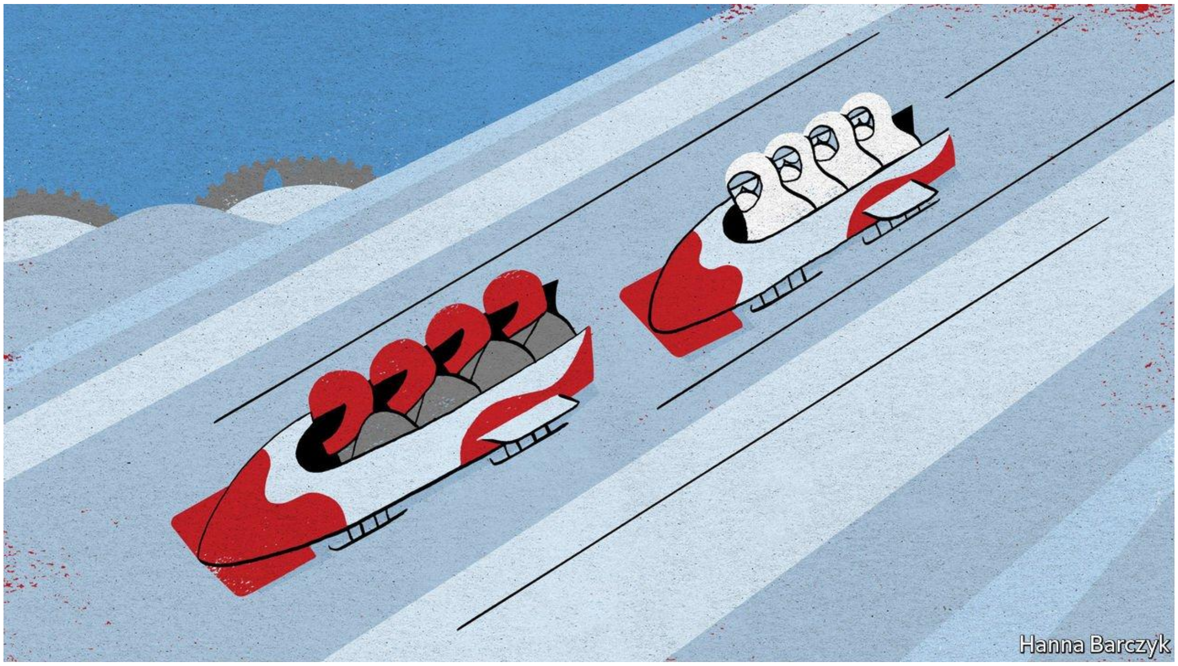
How will Macau survive? China wants to see it transformed from a city of vice into a regional entertainment centre and tech hub. This has proved difficult because most of its available land has been used to build casinos. Macau’s government hopes a new development zone will help. It is on nearby Hengqin, an island three times Macau’s size. It belongs to the mainland and has been leased in part to Macau. Hengqin will have theme parks, family attractions and a high-speed rail link with China’s interior. The former Portuguese enclave will become even more like a mainland city. ■

Chaguan

Beijing's Winter Olympics may hasten China's break with the West

Diplomatic boycotts over human rights, plus draconian covid controls, spell trouble

Dec 11th 2021



TO A GREAT number of Chinese, their country has never been as impressive as it is today. They see it as self-evident that China—their increasingly strong, modern motherland—is a worthy host of uplifting global events such as the Winter Olympics, which are set to open in Beijing on February 4th.

At the very same moment, an opposite consensus is forming in the West. In many free societies, China's rulers are increasingly seen as capable but cruel. They are credited with prodigious feats, whether that means girdling the nation with high-speed railways or sending rockets to the Moon. But they are seen as unbearably repressive, too, notably towards ethnic and religious minorities in such regions as Xinjiang. To Western sceptics, it is grotesque to allow the pageantry of the Olympics to be co-opted by such a regime.

That view has supporters in high places. In announcing that America will not send its customary delegation of grandees to cheer on Team USA at the winter games, the White House press secretary, Jen Psaki, restated the Biden administration's position that China's iron-fisted rule over Xinjiang—where as many as a million Muslims have passed through re-education camps—amounts to genocide. As a result, she declared, America should not help China pull off a triumphant Olympics. To use her words: "We will not be contributing to the fanfare of the games." A day later, Australia announced its own diplomatic boycott of the games, citing both China's record on human rights and its use of economic coercion to punish Australia for such offences as seeking an independent inquiry into the origins of the covid-19 pandemic. Others, from Britain to Canada and New Zealand, are declining to send government ministers or high-ranking officials.

China has responded with scorn, anger and censorship. The Olympics are a party "by invitation only" to which American politicians had not been asked, the foreign ministry's spokeswoman, Hua Chunying tweeted, though in reality each national Olympic committee issues its own invitations. Ms Hua's pugnacious deputy, Zhao Lijian, went further, warning of unspecified "firm countermeasures". "Speaking of genocide," Mr Zhao growled from a foreign ministry podium, "the US fits this label better than anyone else for the evil crimes they committed against Native Americans." Online, censors blocked most discussion of the boycotts.

Some commentators call these exchanges an empty war of words. They note that Western countries are still sending their athletes to the games, and they detect no new Chinese sanctions on America. Their insouciance is a mistake, twice over. First, these seemingly arcane official boycotts are a glimpse of a real-world diplomatic crisis. America's government uses the gravest of terms, including crimes against humanity, to describe China's behaviour in Xinjiang, where the party and its security agents have demolished mosques, jailed Muslims for such crimes as owning a Koran or praying in public, sent the children of detainees for patriotic education in orphanages and subjected millions more to high-technology surveillance. Such language generates its own logic. Ms Psaki is surely right when she says that America's ties with China can no longer be "business as usual".

That stance is morally coherent. Even if China's own policy papers and work reports, public procurement documents and official speeches are the only evidence taken into account, its government is indisputably committing horrors in Xinjiang. But saying so makes it hard to have anything approaching normal relations, for all that the Biden administration insists that it has no beef with the Chinese public at large. At a time when many ordinary Chinese have rarely been so proud of their country, Western governments are telling them that they live in a form of pariah state.

Second, China's management of the games is itself likely to provoke mutual incomprehension between the publics of China and the West. The reason is covid. China has spent almost two years trying to eradicate the virus with ferocious testing and tracing regimes, by locking down whole towns when a handful of cases emerge, and by tightly controlling international borders.

Soon, many thousands will arrive from a world that is living with covid—though not foreign spectators, who are barred. China plans to manage this threat by sealing games venues inside secure bubbles. But it is inevitable that some participants will test positive or have fevers on arrival. Under China's rules, they will be hauled off to quarantine hospitals, and team-mates in close contact will be isolated in hotel rooms. In Beijing foreign embassies are anxiously sharing tales from a Luge World Cup staged as a test event last month. The sporting facilities were stunningly advanced but pandemic controls were a shock, from the moment a charter flight with over 200 athletes and sports officials landed in Beijing. Because two athletes were flagged as suspect on arrival, their plane-mates were held on airport buses for hours, forcing some to pee in bottles. On November 16th, diplomats relate, a German athlete was grabbed from the luge track by staff in hazmat suits after what turned out to be a false positive test, and isolated for two days before being declared safe. A Polish competitor injured by a faulty barrier on the luge track reportedly had to wait for a negative covid test before doctors would touch his shattered leg.

Some gulfs are too wide to bridge

China's controlling ways will extend to the press. A Western diplomat predicts "journalists will be kept like monkeys in a cage", denied free access to athletes. Yet if foreigners complain about a sinister "autocratic Olympics" many Chinese will be livid. They will see proof that Westerners are too irresponsible to control covid: witness the grumbling about being kept safe in Beijing. Outsiders will sound all the more ungrateful because 100,000 Chinese volunteers and staff working in the Olympic bubbles face 21 days of quarantine, away from home, at the end. Two worldviews are about to collide. The effects may be felt long after the final race. ■

Read more from Chaguan, our columnist on China:
China says it is more democratic than America (Dec 4th 2021)
What Peng Shuai reveals about one-party rule (Nov 27th 2021)
Talks between Xi Jinping and Joe Biden do not herald a thaw (Nov 20th 2021)

United States

Money for something

What Congressional funding reveals about America's military priorities

Members are happy to fund hardware, but reluctant to let the Department of Defence make cuts

Dec 11th 2021 | WASHINGTON, DC


Getty Images

ANYONE WHO has observed Congress over the past decade will be familiar with 11th-hour, slapdash policymaking. The National Defence Authorisation Act (NDAA)—the annual defence-policy bill and one of the few routine, bipartisan pieces of legislation—has followed a familiar pattern. After months of delays in which one of the largest budget categories, was pushed to the back burner in favour of other Democratic priorities, the Senate seemed to abandon efforts to pass the $768bn defence bill (which includes $147bn to buy new hardware) for the 2022 fiscal year. Leaders from both parties eventually compromised and the law passed the House this week. Amid the scramble it was easy to overlook what members of Congress think the mammoth defence budget should actually be for. Following the money reveals where lawmakers think America's defence priorities lie.

From a distance, the budget appears to be guided by a strengthening bipartisan consensus that America must confront China and spend more to do so. Look closer, and disagreements abound. Exactly how the country should compete with its Pacific rival divides both parties. Even as America embarks on a new contest in Asia, lawmakers do not agree with one another, or with President Joe Biden, over how to address other pressing issues, most prominently a revanchist Russia. Nor have they proved capable of either ending the war on terror or voting to continue it.

The current Congress's free-spending habits are bipartisan when it comes to security. Mr Biden's proposed defence budget, released in May, entailed only a modest increase, an attempt to placate doves on his left flank. But the rest of the legislature was not pleased. Both chambers added $25bn to the president's proposal. The total package is now the largest in a decade, the result of a rising anxiety on both sides of the aisle in Congress that America is losing its military advantage, particularly on the high seas.

For America's armed forces, matching their Chinese competitors requires shedding older weapons platforms in favour of those at the cutting-edge, such as unmanned ships. Lawmakers have long been sceptical of this move to "divest to invest", in Pentagon jargon. Bryan Clark of the Hudson Institute, a think-tank, suggests this scepticism is reasonable. "They feel the military has gone down this road multiple times of saying the next thing is so much better, but then it never arrives."

Following that logic, Congress is handing the Pentagon substantially more money to buy proven designs and strengthen America's presence in the Pacific. Besides securing 13 new ships, including three Arleigh Burke-class destroyers and two Virginia-class submarines, the law would authorise procurement of 347 aircraft, well above the Pentagon's initial request for 290. This builds on a clear preference for the navy and air force dating to the end of the Obama administration, with spending on the former growing by 62% since the 2015 fiscal year. That, paired with $7bn for the Pacific Deterrence Initiative, a fund to bolster regional allies, is a measure of Congress's interest in a robust military response to rising Chinese power in Asia.

Beneath this consensus, however, lie disagreements. Increased defence spending is opposed by the progressive left and libertarian right, which favour diplomacy, echoing the inclination toward restraint in foreign policy that is finding wider purchase in Washington. The US Innovation and Competition Act, an industrial-policy bill framed in anti-China terms and championed by the Senate majority leader, Chuck Schumer, was kept separate from the defence bill after opposition from some Republicans, who spied a new form of corporate welfare. An effort to prohibit trade in goods made from slave labour in China's Xinjiang region was met with quiet resistance from the White House and helped derail negotiations in the Senate, only to be left out of the compromise bill.

And while Congress is keen to spend money on new kit, members are less enthusiastic about making the difficult decisions necessary to rebalance the armed forces and put them on a sound fiscal footing. Seamus Daniels of the Centre for Strategic and International Studies, a think-tank, finds that personnel costs account for nearly a third of the Pentagon's budget, a figure that keeps rising despite America fielding the fewest troops in decades. These obligations to current and retired warriors (who cost more due to health-care expenses) crowd out funds for new weapons and research, but Congress is loath to tackle such a politically sensitive issue. Even as lawmakers push funding towards new systems, they show little appetite to give up on ageing ones, such as the Ticonderoga-class cruisers, creating an ongoing drain on scarce resources. "If Congress were to let divestments happen, the air force could acquire everything they wanted without increasing the budget at all," says Travis Sharp of the Centre for Strategic and Budgetary Assessments.

Though Mr Biden would like to concentrate on China, Congress has other ideas. While the president attempts to both reassure European allies and cool tensions with Russia, lawmakers have taken a more maximalist approach. The defence bill allocates $4bn for European defence, as well as $300m for Ukraine's armed forces, both greater sums than the president requested. While many legislators in both parties have supported sanctions on firms affiliated with Russia's Nord Stream 2 pipeline, Republicans proposed an amendment that would have overridden Mr Biden's waiver of current sanctions, forcing Democrats to take a difficult vote. The measure did not make the final text.

Politics also complicates efforts to tackle the lingering costs of the war on terror. The bill would require the air force to continue acquisitions of the MQ-9 Reaper, a drone platform used for counter-terrorism operations but derided by the air force brass as expensive and vulnerable in a great-power conflict. Despite America's withdrawal from Afghanistan and reduced footprint in the Middle East, Congress has kept funding for the army largely intact. Though a broad bipartisan group of senators promoted a repeal of the redundant 2002 Authorisation for the Use of Military Force against Iraq, the measure was left out. The bill also reaffirms the long-standing provision barring the president from transferring Guantánamo detainees to courts on the American mainland, ensuring the prison will remain open.

Despite, or perhaps because of, the broad support for defence spending, hundreds of amendments were offered in both chambers of Congress, including many with only a tangential relationship to defence. "It's becoming a vehicle for everyone's legislation," says Mr Clark. After passing the bill, Congress still needs to appropriate the funds it has authorised in the NDAA. The secretary of defence, Lloyd Austin, warned lawmakers in a public statement that a failure to do so promptly would be catastrophic. Having run up a big bill, Congress still has to settle it. ■

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SPAC-handed

Donald Trump’s media SPAC is the zeitgeist wrapped in a complex financial instrument

It is also, fittingly, under the investigation of the SEC

Dec 11th 2021 | WASHINGTON, DC

Doug Mills/The New York Times/Redux/Eyevine

IT READS LIKE the punchline to a joke. What do you get if you cross Wall Street’s new financial plaything with Donald Trump’s attempt to launch a social media company? A Securities and Exchange Commission investigation.

On December 6th Digital World Acquisition Corp, the special purpose acquisition company (SPAC) which struck a deal to merge with Trump Media & Technology Group, the media company founded by Mr Trump, revealed in a regulatory filing that the SEC, Wall Street’s main regulator, and the Financial Industry Regulatory Authority, an exchange watchdog, had made inquiries into the firms’ dealings. At issue is whether or not Digital World and Trump Media had agreed to merge prior to Digital World raising money from investors.

A SPAC, also called a blank-cheque company, is a special kind of financial vehicle. It is a shell company that raises money from investors by going public, and then seeks out a private company to merge with. There are fewer disclosure requirements for firms which end up public via merger, rather than making their debut via initial public offering. This offers firms picked by SPAC bosses an easier path to going public.

It is important that the SPAC is independently created and chooses the firm, and not vice versa. A freshly minted SPAC boss ought to seek out the best possible firm it can to usher into public markets. But a firm that seeks out or encourages the creation of a SPAC for the purpose of taking it public is trying to pull off pure regulatory arbitrage. This tends to irk regulators.

There are two reasons to suspect that Digital World and Trump Media may have pre-arranged their merger. The first is just how quickly it came to pass. Most SPACs hunt for months, sometimes more than a year, to find a target. Digital World raised $288m on September 8th and announced the merger with Trump Media six short weeks later, on October 20th.

The second is that Patrick Orlando, now the boss of Digital World, was apparently talking to Mr Trump's representatives about a deal as early as April, according to the *New York Times*. In papers filed with the SEC on May 25th, Digital World said it had neither picked nor "initiated any substantive discussions" with a merger target. Around July, before Digital World's fundraising, a Trump Media executive said the firm was in an "exclusive agreement" to merge with an unidentified SPAC.

At the time Mr Orlando was the boss of numerous SPACs. He could have been representing any one of them on the call with Mr Trump's representatives. And even if he did mislead investors in his regulatory filings, they have hardly been shafted. Shares in Digital World jumped from $10 to $109 on news of the Trump Media deal (though they have since traded between $40 and $70, which would value the merged firm at about $5bn-10bn). Indeed, investors clamoured for more. On December 4th Digital World raised a further $1bn from unnamed institutional investors.

That will be little comfort to regulators, who may intervene. Allowing SPACs to be created as vehicles for specific firms is a great way to create a backdoor that lets the flimsiest ones into public markets. Trump Media is a manifestation of that idea. The scant information on Trump Media's website leaves it unclear who, if anyone, is working on building its social-media platforms. The only product discussed is TRUTH Social, seemingly a Trump-friendly version of Twitter. But the test version of the site is just a cut-and-paste of the open-source code for Mastodon, another social-media platform. The firm was apparently without a chief executive until December 6th when Devin Nunes, a particularly bovine member of Congress, announced he would step down to run the firm. *Caveat emptor* doesn't really cover it. ■

For more coverage of Joe Biden's presidency, visit our dedicated [hub](#) and follow along as we track shifts in his [approval rating](#). For exclusive insight and reading recommendations from our correspondents in America, [sign up to Checks and Balance](#), our weekly newsletter.

Church and chalk

The Supreme Court seems ready to poke a hole in the church-state wall

Government funding for religious schools gets a high-court hearing

Dec 9th 2021 | New York

PARENTS SEEKING government money to send their children to religious schools have won a string of victories at America's Supreme Court. The dollars began flowing in 2002, when the justices let states provide parents with vouchers for religious schooling. In 2017 the court said states may not exclude church-based preschools from grants for playground resurfacing. And in 2020, in *Espinoza v Montana Department of Revenue,* parents persuaded the high court that their state must provide tuition assistance for students to attend religious schools if they also offer these funds for secular private schools.

On December 8th the justices contemplated taking another brick out of the "wall of separation between church and state"—Thomas Jefferson's spin on the First Amendment's bar on laws "respecting an establishment of religion". The case, *Carson v Makin*, is a challenge from parents who say Maine is violating their religious liberty. About half of Maine's school districts have too few students to support a high school. The fix is a programme whereby students attend public schools in other districts or, using state funds, opt for private schools. But there is a catch: Maine's money may go only to schools whose curriculums are "nonsectarian".

Last year the First Circuit Court of Appeals upheld Maine's policy, citing a distinction in the *Espinoza* decision. That ruling said it is unconstitutional to rope religious schools out of state benefits based on their "status", or religious affiliation. But declining money for religious "use"—mandatory prayer, say—is another question, which *Espinoza* left open. Maine's nonsectarian rule addresses the character of curriculums, not whether schools have a religious identity, the First Circuit found, so did not violate the constitution.

The families' lawyer, Michael Bindas, scoffed at this distinction. It is "baseless" and contrary to "common sense", he told the justices, to bar one type of bias while permitting another. Limiting tuition payments to secular private schools is "discrimination based on religion". A secular-only rule violates the First Amendment's guarantee of religious free-exercise.

The six conservative justices signalled strong agreement. Many of their questions for Mr Bindas were aimed at allaying fears that striking down Maine's policy will open state coffers to all manner of church funding. Imagine a state wants to pay for facility improvements at public and private schools, Chief Justice John Roberts asked, but tells sectarian schools the money cannot be used to build a chapel. "Is that OK or not?" It's probably fine, Mr Bindas replied. A state may have a compelling interest in declining to give "direct institutional aid" for a religious project.

Justices Amy Coney Barrett and Brett Kavanaugh tried to degrease the slippery slope, too. "You're not arguing", Justice Kavanaugh asked, "that the mere funding of public schools would entitle the parents to funding for religious schools", right? "That is correct," Mr Bindas replied. "We are not arguing that there is a constitutional right to a publicly funded religious education, nor could we." The right to equal access to state support kicks in only when a state decides to fund private schools.

As in recent oral arguments on abortion and the right to bear arms, the three liberal justices were outnumbered. They tussled with Mr Bindas on several points. Justice Elena Kagan pressed a question of standing: since the schools involved have not said they will accept students who use state money, do the parents even have the legal right to sue? And Justices Kagan, Stephen Breyer and Sonia Sotomayor challenged Mr Bindas's framing of the case. Maine's policy serves "a very small number of students living in isolated areas", Justice Kagan noted. The benefit, Justice Sotomayor said, is "a free public secular education". All parents have the right to pay to send their child to a religious school but why, Justice Kagan asked, "does the state … have to subsidise the exercise of a right?"

Carson reignites a debate over what remains of Jefferson's wall of separation. The partition no longer means, as the court held in 1947, that "no tax in any amount, large or small, can be levied to support any religious activities or institutions, whatever they may be called." More recent rulings have afforded states some sway to avert strife by avoiding entanglements with religious institutions. "Other people won't understand", Justice Kagan said, "why in the world their taxpayer dollars are going to discriminatory schools." Yet that seems to be what the court is about to require in Maine and beyond. ■

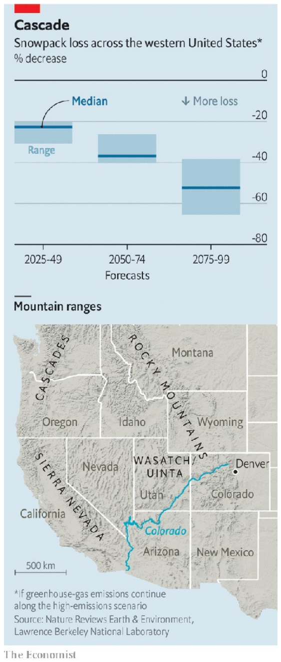
Man it does show signs of stopping

Late snowfall in the American West is part of pattern

By mid-century, the Pacific states could lose much of their snowpack

Dec 11th 2021 | DENVER

EVERY DECEMBER residents of Denver, Colorado hang holiday lights and decorate trees—and the occasional cactus—in their front yards. But this year one thing is missing from the festive picture: snow. As of December 8th, Denverites had yet to see any snow land on their yellowing lawns, making it the latest first snowfall since records began in 1882. And Colorado's capital is not alone, for the white stuff is scarce this year across the American West. A new study suggests future winters might not bring much either.



The snow that builds up in mountain ranges over the winter, called snowpack, is a natural reservoir. In the spring, when it melts, its waters replenish rivers, man-made reservoirs and soil. The amount of water that makes it into reservoirs each year depends on temperatures, evaporation and run-off, or how much soaks into the ground. But warmer winters in the western states, one consequence of climate change, have led to a decline in average snowpack. One study published in 2018 found that annual snowpack in the region had decreased by 15-30% since 1915.

The future looks bleaker still. A new paper by researchers at the Lawrence Berkeley National Laboratory in California found that mountain snowpack in the West could decline by an average of 25% by 2050. The rate varies across four mountain ranges studied. The Sierras and the Cascades could see a 45% decline in snowpack by mid-century, compared with 20-30% declines for the Rockies and the Wasatch/Uinta. So a snowless future seems more imminent in California and the Pacific Northwest than further inland.

The West has had bouts of “snow drought” before. But they look set to become more common. Researchers suggest that California could experience persistent “low-to-no snow” by the 2050s with the Rocky Mountain states following in the 2070s. Many places are already preparing for a drier future. California’s Department of Water Resources recently warned that next year the State Water Project, a storage and delivery system that runs through the middle of the state, will initially only provide water for "health and safety" needs. Arizona is readying for cuts to its allotment of the Colorado River, which supplies water to 40m people across the south-west. ■

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Sunset clauses and budgeting

The Democrats use a loophole to mask the cost of Joe Biden’s big bill

They are following a Republican precedent but making it even messier

Dec 11th 2021 | Washington, DC

IN THE 1970s American scholars alighted on an idea to prevent government sprawl. Sunset legislation, as it was called, would have an expiry date, upon which politicians could decide whether to renew it. In theory, useless laws would vanish. In practice, sunsets have morphed into a legislative device that serves almost the exact opposite purpose: a way to mask policy costs. The Build Back Better bill, Joe Biden’s signature social-spending package, is the latest and most egregious case.

The headline cost of the bill, which passed the House on November 19th but faces a bumpy path in the Senate, is roughly $2trn over a decade. That is less than 1% of GDP per year, which may not sound like much. However, ample use of sunsets means the real cost could be twice as large. The Committee for a Responsible Federal Budget, a nonpartisan organisation, thinks it would cost $4.8trn if all temporary measures (expensive family-related policies in the main) were extended.

Longer-term implications would be starker. The White House says that Build Back Better will not add to America's debt. By contrast, the Penn Wharton Budget Model, an academic initiative, calculates it would raise debts by 25% by 2050 if sunsets are made permanent. Such precise projections should be taken with a pinch of salt. But the message is clear: Build Back Better is likely to cost far more than advertised.

For Democrats today, as for previous Republican administrations, that is the point. By setting early expirations, they are putting a cap on the costs that are assessed by the Congressional Budget Office (CBO), a non-partisan agency which is a crucial scorekeeper. The CBO only assesses what is in bills as written. So, for example, the child tax credit, a payment to families with young children, would cost $190bn in the one year that it is slated to last in the Build Back Better bill. Were it to become permanent—the objective of progressive Democrats—its cost could rocket to more than $1trn over the next decade.

Why bother with the budgetary tricks if they are so transparent? For the George W. Bush, the first president to make extensive use of sunsets, the idea was to make sure that his tax cuts complied with a Senate rule against increasing deficits beyond a ten-year window. Setting the expiry date just before the ten-year mark was a loophole. Donald Trump followed a similar template with his tax cuts in 2017. Those crafting the sunsets hope that when expiry arrives, the measures will be popular enough that lawmakers will keep them. There is precedent for this. The vast majority of Mr Bush's tax cuts were indeed made permanent under Barack Obama.

In the case of Build Back Better, the Democrats are using sunsets in the hopes of bridging an intra-party split. Joe Manchin and Kyrsten Sinema, senators from West Virginia and Arizona, respectively, whose votes are needed for the bill to pass, both balked at an initial $3.5trn proposal as too expensive. Rather than jettison some of their cherished plans, their fellow Democrats scaled back their duration, crossing their fingers that, once on the books, they will ultimately be extended.

Yet in the process, they have created a jumble of expiry dates. Tax credits for low-income workers and children would last for just one year. A top-up for health insurance would run for four, while funding for child care and pre-kindergarten would for six. The fiscal ramifications only get more complicated because Mr Trump's eight-year sunsets enacted in 2017 would overlap with the new ones, says Kent Smetters of Penn Wharton. The expiration of a Trump-era child tax credit would nearly double the annual cost of Mr Biden's version.

Another concern is what the sunsets cover. Applying expiry dates to pieces of the tax code is bad enough, sowing uncertainty in the economy. In Build Back Better, entire programmes will be at stake. "With universal pre-kindergarten, you're finding buildings, hiring teachers and enrolling families. And then with sunset provisions, the federal funding may just go away," says Lori Esposito Murray of the Committee for Economic Development of the Conference Board, a public-policy organisation. Sunsets may seem a clever way to get pet programmes through a divided congress. But they are also setting them up for failure. ■

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To rent or not to rent

How landlords thwart America's attempts to house poor people

It is one thing to receive a housing voucher and quite another to successfully use it

Dec 11th 2021 | DENVER

Ricardo Hubbs/Netflix

"WHY THE fuck does this county even offer Section 8 if it's a mythical unicorn that nobody ever gets?" asks Alex, the main character in Netflix's new series "Maid". The show, based on Stephanie Land's book "Maid: Hard Work, Low Pay, and a Mother's Will to Survive", is a portrait of poverty and domestic work in Washington State. Section 8, now known as the Housing Choice Voucher Programme (HCVP), is a federal housing-assistance scheme that subsidises rent for 2.3m poor American households lucky enough to get their hands on a voucher. Others can spend years on waiting lists, hoping to be chosen.

Housing-policy wonks often refer to the voucher programme as a kind of lottery: win and your life may fundamentally change. When towering public-housing projects were demolished in the 1990s, the Department of Housing and Urban Development (HUD) used vouchers as a way to house

America's poor through the private market. With a voucher, tenants put 30% of their monthly income towards rent and the federal government covers the rest. Many people on voucher waiting lists are homeless or living with their families. Nearly half of all voucher-holders are black, 70% are racial minorities and about a third earn less than $10,000 a year.

Vouchers are not just about housing: cheaper rent means more money for expenses such as food, bills or school. Because vouchers theoretically allow tenants to rent a home anywhere, they can help poor families move to wealthier, safer neighbourhoods. Many researchers view them as a way to increase social mobility.

But not everyone wins the lottery. Many cities have had to close their waiting lists. A new study from the Housing Initiative at Penn, a research outfit at the University of Pennsylvania, estimates that 10.4m households would be eligible for a voucher under HUD's criteria, four times as many families as there are vouchers for. By comparing the gap between existing and needed vouchers with local renter populations, researchers found that Orlando, Charlotte and Phoenix would benefit most from a policy where vouchers were given to all who qualify.

When the Democrats unveiled their mammoth $3.5trn Build Back Better bill, it included $75bn for housing vouchers. In the version that the House of Representatives passed in November, that was winnowed to about 300,000 new vouchers costing $24bn. Yet receiving a voucher and successfully leasing a unit with it are two very different things. The Penn researchers found that only about one in five households who were eligible for a voucher successfully obtained and used one in 2019. It is tricky to find a home to rent at all in a tight market. But poor renters face extra barriers. The HCVP only gives voucher-holders two months to sign a lease before they need an extension; security deposits can be pricey; and voucher-holders may not have access to a car or a computer to help with their search.

The biggest barrier to using a voucher may be the outsize role that landlords play in choosing whom to rent to. Eva Rosen, of the McCourt School of Public Policy at Georgetown University, says landlords exist on a spectrum. On one end, there are property-owners in poor neighbourhoods who seek out voucher-holders because they like the security of knowing that the government will pay some of their tenants' rent each month. On the other side are landlords who refuse to rent to families with vouchers because they don't want to deal with the paperwork and extra inspections that come with the subsidy—or because of outright discrimination.

A study published in 2018 by researchers at the Urban Institute, a think-tank, documents just how hard it is for voucher-holders to sign a lease. Researchers screened 341,000 rental advertisements and called landlords in five cities over 16 months. The authors found that they had to look at 39 adverts, on average, to find one potential home. When they called landlords to check whether they would accept a housing voucher, more than 75% of property-owners in Fort Worth and Los Angeles immediately declined. Denial rates were lower in Newark (31%) and Washington, DC (15%), in part because both cities have laws protecting families with vouchers from discrimination. Los Angeles passed such a law after the study was published.

It is not yet clear how the covid-19 pandemic has affected the HCVP. Stefanie DeLuca of Johns Hopkins University says extra rental assistance might have helped some small landlords struggling with their mortgages. For others, the lengthy eviction moratoriums may have eroded trust between property-owners and the government. While the Democrats' Build Back Better bill focuses on increasing the number of vouchers, it also includes $230m in incentive programmes to entice more landlords to accept them.

Other adjustments could make the programme more effective. The maximum amount of money a landlord can get from the government is based on the average rent for an entire metropolitan area. Some landlords in poor neighbourhoods covet voucher-holders because they can charge much more for a unit than it would otherwise fetch. Ms Rosen argues that switching to a system where maximum rent varies by zip code will shut down such predatory tactics. And no federal law exists protecting voucher-holders from discrimination. Only 15 states and Washington, DC, can boast of such a measure. Several cities have followed suit. Still, landlords can skirt around these protections by failing inspections or setting rent just above market rates. "No one has paid any attention to landlords since the 1970s," says Ms DeLuca. It might be time to start. ■

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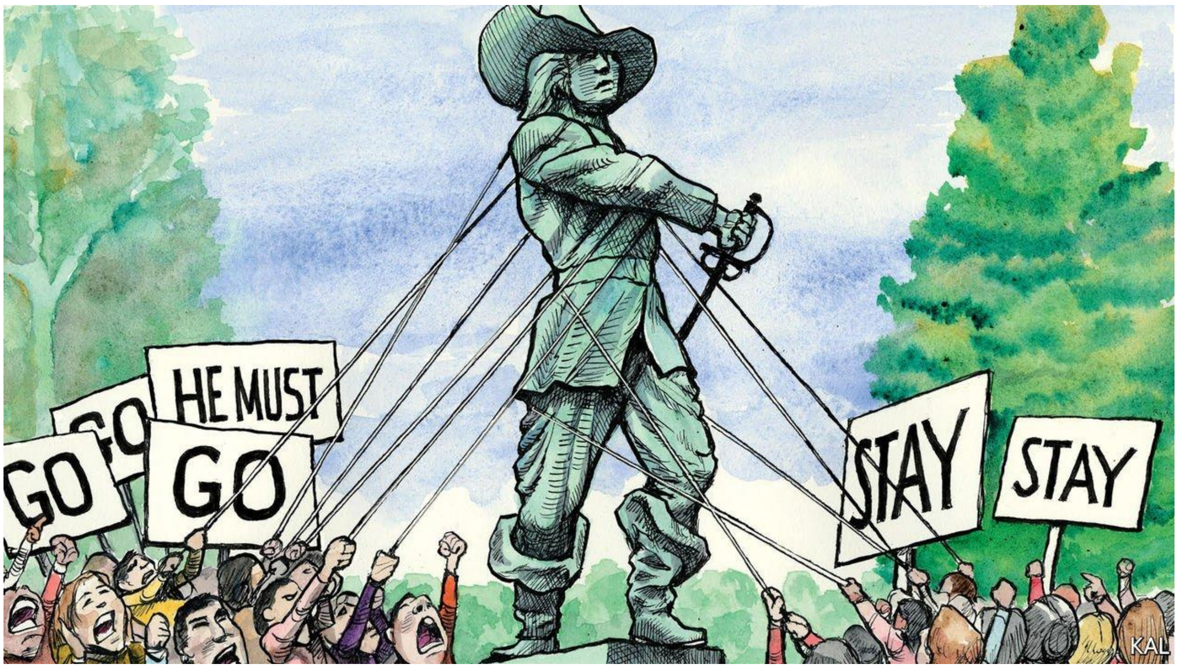
Lexington

How the culture wars can show what's right with America

The arguments over statues matter more than the statues themselves

Dec 11th 2021



A COUNTRY WHOSE national representatives can scarcely agree to pay the government's salaries or cover its debts is a poor candidate for exploring how to tell its national story. And America is not failing to disappoint. At the national level, the debates over American history are as unsatisfying as the other culture wars between leftist inquisitors and Trumpist berserkers, who thrill to each other's excesses while exhausting everyone else.

The struggle is more edifying at the local level. There, the debates are not about broad-brush claims of lionising bigotry or erasing history—not, in other words, about abstract representations of representations—but about the bronze or stone symbols themselves. Should that statue in the town square stay or go? One such debate is under way in Hartford, Connecticut, over the marble statue of an Englishman that has glowered from the north façade of the state capitol for more than 100 years.

In the 17th century, John Mason was a deputy governor and acting governor of Connecticut who helped write the charter giving the colony unusual autonomy from the British crown. But he became a hero to the first settlers and their descendants as a soldier, in what is known as the Pequot war. One history from the middle of the last century, for example, credits Mason with saving the embryonic colony from extinction by "the Red Threat". "The Pequot menace was removed from the valley for ever," it reads, in an account typical of the victors.

Mason accomplished this through an atrocity: on May 26th 1637, he led soldiers in setting fire to a Pequot fort and then killing the more than 400 people inside, whether warrior, woman or child. It was a decisive moment in entrenching the English colonists and in setting a standard for their treatment of natives. On the capitol, Mason is depicted in battle dress, sword in hand.

"There is no doubt Mason engaged in what we now call genocide," Rodney Butler, the tribal chairman of the Mashantucket Pequot Tribal Nation, said last month, in a recorded message, during a hearing of the state commission that is supposed to recommend the statue's fate on December 14th. "I ask you, is this a man we should celebrate in this great state of Connecticut?"

There is no moral way to answer yes, even if the thumbnail description of the attack oversimplifies matters that historians and archaeologists are still piecing together. That period in the Connecticut River Valley was a time of precarity, terror and shifting alliances among natives and English and Dutch settlers. The Pequots had recently besieged settlers in Saybrook, killing and wounding 20, and then attacked the village of Wethersfield, killing nine men and two women and abducting two girls. At the time there were maybe 250 able-bodied Englishmen in all Connecticut. Mason's 76 soldiers were backed up by some 300 allies from the Narragansett and Mohegan tribes, who were eager to expel the dominant Pequots from the region.

"We were wholly unprepared for the brutality that ensued," Marilyn Malerba, chief of the Mohegan Tribe, told the commission, while arguing for the statue's removal. "It was not our form of conflict." She spoke, like others, as though the battle happened just a few years ago. Listening to the speakers, including a descendant of Mason out to defend the family name, it was easy to understand the observation of Kevin McBride, an anthropologist, that “the Pequot war is still being fought in many communities.”

Walter Woodward, the state historian, argued that if the statue stayed in place it could serve not to celebrate but to educate, about the real nature of history and its actors. Connecticut’s past, he said, “is filled with injustice, pain, inequity and violence”. He noted that while past legislators had placed a dozen statues of early leaders in the capitol’s alcoves, they had long since stopped trying to tell Connecticut’s story, leaving eight alcoves vacant. Why not provide a truer, grittier account, “rather than continue to think that we’re going to make the state capitol a multi-century cathedral of secular saints?”

Built in the 1870s, the capitol, with its kaleidoscopic interior, is more like a cathedral crossed with a genie’s lamp. It is a monument itself, not just to democracy but to an exuberant era when not only settler cruelty but also Yankee ingenuity made Hartford wealthy and cultured, a city that counted Mark Twain among its residents and Charles Dickens among its visitors. The Colt Armoury, which churned-out patented revolvers, was for a while the largest private weapons manufacturer in the world.

The Mason line

Hartford, like much of Connecticut, is more ragged today. Yet the pride of the speakers in their state was refreshing and not without grounds, including the success of some native tribes. The day before the hearing, Mr Butler announced the opening of the Mashantucket Pequots’ latest casino, in Puerto Rico; several days later, the Mohegans completed a $1.55bn round of financing for the resort they are building on Yeongjong island in Incheon, South Korea. There is a lot to celebrate as well as to dispute, as there always is. It is high time for the people of Connecticut and other states to also start disagreeing about what statues they should be creating.

This is not the first time Americans have argued over their symbols; it is not even the first time the people of Connecticut have argued over a John Mason statue. They tend to have these disputes once a generation, then forget again. The forgetting is the problem. The American mind, wrote Henry Adams, a historian, “stands alone in history for its ignorance of the past”. Whether a given statue stays or goes, a continuing argument among citizens would be the best representation of American striving. Without that, the statues will just fall mute again. As Daniel Menihan junior, another leader of the Mashantucket Pequots, put it, the Mason statue "has been there for a very long time, and it hasn't educated many people at all". ■

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Middle East & Africa

The Gulf states offer citizenship to a select group of foreigners

Give us your doctors, your inventors, your huddled scientists

Dec 9th 2021 | DUBAI AND MANAMA

ONE DAY soon Kamal will have to leave. The Indian expat has done office jobs in Bahrain since the 1990s. They paid well enough to put his kids through school and provide a modest nest-egg. Retirement beckons. Yet he finds the prospect unsettling. It means a one-way ticket back to a place where he has not lived in decades. “I’ll leave a place with all my memories for a country I don’t recognise,” he says.

Such stories are common in the Gulf. Of the 59m people who live in the six-member Gulf Co-operation Council (GCC), about half are foreigners. Some stay for a few years; others spend entire careers. Almost all, however, arrive with the understanding that they must eventually depart.

Gulf states have long bristled at the idea of offering citizenship to expats. Locals fear it would change their national identity. Governments are not keen to extend costly benefits to foreigners. For most foreigners, life in the

Gulf involves a string of short-term work visas: cease to be productive, and you cease to be a resident.

This is slowly changing. In January the United Arab Emirates (UAE) announced that certain foreigners, such as doctors, inventors and scientists, could be nominated for citizenship. Saudi Arabia said in November that it had naturalised an undisclosed number of expats. Most Gulf states now offer long-term residence visas that do not require work. A new scheme in the UAE allows expats to retire in the country instead of returning home.

None of this is a "path to citizenship" as many liberal democracies would define it. Only an elite group is eligible: a talented scientist could become an Emirati citizen, but not the janitor who cleans his lab. The numbers are tiny. The UAE will naturalise only around 1,000 people a year, or 0.01% of its population. Long-term visas are tied to wealth, with requirements for income or investment that exclude most workers.

Still, even these small steps break a long-held taboo. In 2013 Sultan al-Qassemi, a member of the ruling family in Sharjah, part of the UAE, published an op-ed urging the state to naturalise talented foreigners. It caused an uproar. On social media many Emiratis replied with a hashtag that translates as "this writer does not represent me".

The steps raise complicated questions about citizenship and identity in the GCC. Even for native-born *khaleejis* (Gulf Arabs), citizenship is not a right enjoyed equally. If a Bahraini man marries a foreign woman, his wife may apply for his nationality and his kids automatically receive it. Reverse the sexes, though, and no such rights exist. When a Gulf woman marries a foreigner, their children are typically treated as foreigners. Mothers in Bahrain may sponsor them as dependants until they are 18, renewing their papers every two years; after that, children must secure their own residency or leave. "You can imagine, this issue leads to a lot of complaints," says Ali al-Dirazi, the head of Bahrain's state-run human-rights agency.

The UAE's new citizenship scheme has prompted a rare debate about such things. Jawaher al-Qassemi, the wife of Sharjah's ruler, posted a short comment on Twitter: "Naturalisation for the children of female citizens. That's a demand," she wrote. Other Emiratis voiced similar feelings.

Several Gulf states also have populations of so-called *bidoon* (people "without" papers), who did not register as citizens at independence. Kuwait has at least 100,000 of them. They are broadly excluded from good jobs and social services. Newly minted citizens will receive rights denied to natives for half a century.

Foreigners naturalised in the UAE will be free to live and work in a rich country, and to travel on a passport that ranks as one of the world's most useful. The government is vague as to whether they will enjoy other privileges. Native-born Emiratis receive everything from cheaper mobile-phone plans to interest-free housing loans. Some receive grants of up to 70,000 dirhams ($19,000) when they get married.

If rights are unclear, so are responsibilities. Since 2014 Emirati men have been required to perform military service. The law does not say if naturalised citizens (or their descendants) face the same burden—though perhaps not, since there seems to be no requirement that they know Arabic. They will be allowed to keep their original nationality, whereas native-born Emiratis cannot hold a second passport. Some fret the government has created a two-tier model of citizenship.

The citizenship law is part of a head-spinning package of reforms implemented by the UAE over the past year. Unmarried couples may now legally live together. Muslims may drink. In November Abu Dhabi, the capital, decided to allow civil marriages for non-Muslims. On December 7th the UAE announced that it would shift the public sector to a Monday-to-Friday work week, from Sunday-to-Thursday, bringing it in sync with most of the world (but out of step with many Arab countries).

Much of this simply legalises reality: there are lots of cohabiting singletons and carousing Muslims in Dubai. Yet the changes have come with little public debate in a country where space for criticism is almost non-existent.

The same goes for naturalisation schemes. Even before the oil boom, the Gulf's coastal towns and pilgrimage routes were melting pots. Today their citizenry includes sizeable populations of *ajam*, whose ancestors hail from Persia, and Afro-Arabs, descendants of East Africans brought to the region as slaves. Diversity was, and is, one of the region's strengths. To varying degrees, though, locals live apart from foreigners in their midst. Their dress is distinct and they work mostly in the public sector. No one is sure how new citizens will fit into this milieu.

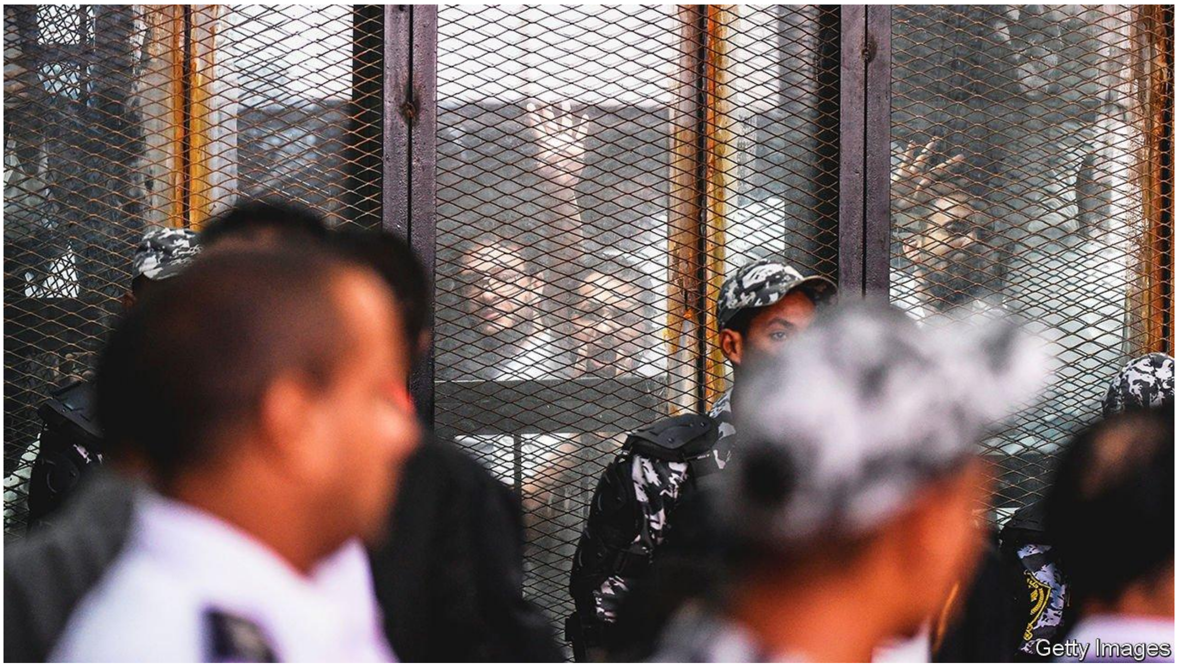
Though they have broken a taboo, Gulf rulers have not changed a social compact that treats citizenship as a gift bestowed on worthy subjects. They have just expanded the pool of worthy subjects in order to attract and retain talented foreigners—part of a broader scramble to diversify oily economies. For most foreigners, and for many locals, the path to citizenship will remain blocked. ■

Fratricidal tendencies

The Muslim Brotherhood is tearing itself apart

Two leaders vie for control of the oldest Islamist movement

Dec 9th 2021 | AMMAN



WHEN HASSAN AL-BANNA founded the Muslim Brotherhood in Egypt nearly a century ago he implored his followers to seek "self-sacrifice, not personal advantage". Today, though, they are struggling to comply. The oldest and once-powerful Islamist movement has been tearing itself apart. Leaders in Istanbul and London exchange insults, accuse each other of corruption or, worse, serving foreign spy agencies. "Instead of sacrificing themselves they are sacrificing the movement," says Osama Gaweesh, a former Brother who lives in Britain.

There have been arguments within the Brotherhood over strategy and tactics ever since its creation. But the discord worsened after Abdel-Fattah al-Sisi, then a general, toppled Egypt's first democratically elected government, led by the Brotherhood, in 2013. Mr Sisi, who is now president, imprisoned many of the group's members. Others went into hiding or fled abroad. Disagreements sprang up over how to respond to the repression. An "old guard" prioritised the Brotherhood's survival and advocated a pragmatic approach in dealing with the Egyptian state. Others favoured a more confrontational stance. Some members turned to violence.

Today the priority for the rank and file, according to several members, is getting the Egyptian detainees (some of whom are pictured) out of prison. But their efforts have been stymied because a new rift has emerged between members of the old guard over who should lead the Brotherhood. On one side is Ibrahim Mounir, who succeeded Mahmoud Ezzat as acting supreme guide (or leader) after the latter was captured in Egypt last year. On the other is Mahmoud Hussein, the former secretary-general, whom Mr Mounir suspended in October, along with five other prominent members, over alleged corruption. After rejecting that decision, Mr Hussein and the five members sent out a statement dismissing Mr Mounir from his post.

Mr Mounir, who lives in London, oversees the Brotherhood's international network and has good relations with foreign governments. But Mr Hussein, who lives in Istanbul, controls the Brother hood's website and its bank accounts, and has the keys to its Istanbul-based television network, Watan. Critics accuse him of ousting rivals and cutting payments to the families of detainees. "He treats the Brotherhood as his possession," says Azzam Tamimi, an Islamist thinker in Jordan.

The unusually public dispute, involving smear campaigns on both sides, has thrown the Brotherhood into turmoil at a time when Sunni Islamists are struggling across the Arab world. Elections in Iraq and Morocco swept them out of government, while strongmen in Tunisia and Sudan pushed them from power. Qatar and Islamist-led Turkey have offered exiled Brothers refuge and supported the group as a way to project influence. But these countries now have other priorities. Both are seeking reconciliation with anti-Islamist neighbours, such as Egypt and the United Arab Emirates. Qatar has asked Brotherhood activists to leave. Turkey has put pressure on Islamist satellite-TV stations to dial down their invective. "The global movement is no more," says Mr Tamimi.

The Brotherhood has bounced back from waves of repression in the past. But it is not clear how it will heal itself, as normally it falls to its leaders to settle internal disputes. Members are split over whom to follow. Moreover, many of them are disillusioned. Some say their leaders have not tried hard enough to reach an amnesty deal with Mr Sisi. Younger members complain about the lack of fresh faces at the top. Mr Mounir has at least appointed a young spokesman called Sohaib Abdel-Maqsoud. “We need our own Arab spring if we want a renaissance,” says Mr Maqsoud.

All the president's promises

Congo's president has not kept his word

From free schools to peace in the east, Félix Tshisekedi has failed to deliver

Dec 9th 2021 | KINSHASA


Getty Images

LOUIS BAHATI, a teacher at a primary school in Goma, a city in the east of the Democratic Republic of Congo, has not been paid for more than two years. Struggling to feed his family and on strike for a second time, he took up a job painting a neighbour's house. When a passing pupil spotted him, he was humiliated. "My class mocked me," he says. "The student told them that he had seen their teacher, covered in dirt, doing this painting work."

Although Mr Bahati has been a teacher at a state school for six years, he has not yet been added to the government payroll. This meant that when President Félix Tshisekedi (pictured) announced that primary education would be free from September 2019—which was one of his main election promises—Mr Bahati stopped receiving any pay. Like thousands of other teachers who were not on the books, he relied on fees from parents. After the president's announcement, they stopped paying.

The snag with the president's pledge was that his government does not have enough money to pay teachers' wages. Even some of those who were on the payroll had their salaries chopped in half, to $140 a month in most cities and $90 in villages. When teachers went on strike for two weeks in October, schoolchildren stormed parliament chanting, "We want to study," and "If we do not study we will end up on the streets taking drugs."

The Economist

To make matters worse, scores of fake teachers working at non-existent schools have somehow made their way onto the payroll, according to a report by the Inspectorate General of Finance. It revealed that some $31m earmarked for education had been embezzled. This prompted the World Bank to suspend its first payment of the $800m it had committed in support of Mr Tshisekedi's free-schooling programme. The government has since told teachers that they will be paid in January, which encouraged some to go back into their classrooms. But many, including Mr Bahati, do not believe the government and are still on strike.

The fiasco highlights a wider problem: Mr Tshisekedi's tendency to promise the moon. As well as his pledge of free primary schooling, he also campaigned on a vow to bring peace to the east of the country and to stamp out corruption. The electorate seems to have placed little faith in these undertakings. In presidential elections in 2018 he came a distant second, with about 19% of the vote, according to an independent tally by the Catholic church. It said the poll had been won by Martin Fayulu, a charismatic anti-corruption campaigner. Mr Tshisekedi nonetheless claimed victory and came to power, seemingly after a back-room deal with the outgoing president, Joseph Kabila, whereby he is alleged to have promised to leave the unpopular Mr Kabila in control of much of the state.

Since then, however, Mr Tshisekedi has cunningly managed to distance himself from his predecessor, form a new coalition and consolidate his grip on power. He has even managed to fire some of Mr Kabila's closest allies, including the chairman of Gécamines, the national mining company and piggy-bank to Mr Kabila's friends. Its former chairman, Albert Yuma Mulimbi, has been accused of diverting more than $8bn in revenue from copper and cobalt mining. Even so, the president can hardly claim to have stamped out graft. Since he came to office Congo has slipped by nine places to 170th out of 180 in a ranking compiled by Transparency International, an anti-corruption watchdog.

The president has also made little progress in honouring his pledge to restore security and defeat the armed groups that have terrorised eastern Congo for 25 years. More than 5.5m people who have been forced from their homes are still unable to return. Many live in miserable camps that are sometimes attacked by rebels. In November a militia stormed one in Ituri province, killing 44 people. Soon after that an armed group kidnapped two aid workers near Goma. In a bid to restore order Mr Tshisekedi imposed martial law on two of the bloodiest eastern provinces in May, though to little effect. In November he allowed troops from neighbouring Uganda to cross the border to attack one of the more dangerous groups, the Allied Democratic Forces (ADF), a militia that has links to Islamic State, after it detonated bombs in Kampala, Uganda's capital. But this has not made locals feel any safer. Many fret that the Ugandan troops will outstay their welcome and plunder the region's minerals, as they did during Congo's second civil war, which raged from 1998 to 2003.

To be fair, Congo is not an easy place to run. "Tshisekedi has the hardest job in Africa," says Piers Zvegintzov, a security adviser based in the capital, Kinshasa. It entails "managing an impossible coalition of adversaries while desperately trying to build a real power base, drive through reforms and not get assassinated.” Trying to win a fair contest in the next presidential election in 2023 must now be added to that list. Some worry that because Mr Tshise kedi has failed to honour any of his campaign pledges, he may simply try to rig the vote. “There are two ways to stay in power,” says a ruling-coalition MP who asked not to be named. “One is to become popular by doing the work you promised—another is to be strategic.” By “strategic” he means cheating, adding that “Tshisekedi has gone for the latter.”

Lawmakers have appointed one of his allies, Denis Kadima, as the head of the electoral commission. The constitutional court, which would have the final say if the vote were contested, is being stacked with Mr Tshisekedi’s loyalists. The Catholic and Protestant churches, which are among the few respected institutions in Congo, have criticised Mr Kadima’s appointment. So have opposition parties, which say it will erode trust in the election. “We will intensify our protests until they depoliticise the electoral commission,” says Mr Fayulu. But the protesting has not gone well. When a sit-in was organised outside the electoral commission in November, truckloads of heavily armed police blocked the road leading to it. At another rally there were clashes between protesters and Mr Tshisekedi’s supporters, some of whom the president has allegedly shipped in from his home region, the Kasai provinces.

As for those living under Mr Tshise kedi’s rule? “Life is unmanageable, we are even struggling to eat,” says Mr Bahati. “I do not see any change with this regime.” It is unfortunate, then, that the regime seems set on staying. ■

Taking the helm

Africans are winning top jobs at international institutions

Until recently, the continent had been largely sidelined

Dec 11th 2021 | DAKAR

THE WORLD'S big multilateral institutions are always keen to trumpet their global outlook. Art from far-flung corners of the world adorns their headquarters—and should a visitor ever need to consult a massive map of the world, one is rarely far away. Yet in one area their global credentials have not always matched up: leadership. Most of the bosses of multilateral institutions have been white men. Sub-Saharan Africans, especially, have been overlooked. Until 2017 only one had led a big multilateral organisation: Kofi Annan, who ran the UN, which rotates its top job by region, from 1997 to 2006.

Today Africans lead several global institutions. Tedros Adhanom Ghebreyesus, an Ethiopian, has steered the World Health Organisation (WHO) through the pandemic. Ngozi Okonjo-Iweala, a Nigerian, heads the World Trade Organisation (WTO). Makh tar Diop, a Senegalese, presides over an investment portfolio worth about $64bn at the International Finance

Corporation (IFC), the semi-independent arm of the World Bank that invests in private firms. A stitch-up gives the top jobs at the World Bank and IMF to America and Europe. But for just the second time a sub-Saharan African, Antoinette Sayeh of Liberia, is a deputy managing director of the IMF.

Each is highly qualified. Ms Okonjo-Iweala, Mr Diop and Ms Sayeh were all finance ministers and had all worked at the World Bank. Dr Tedros was health minister and then foreign minister. That they all have big jobs at once is partly by chance. But there are signs that governments have deliberately sought Africans to lead big institutions. "There was a lot of feeling that it was Africa's turn—and that it was the turn for a woman," says Keith Rockwell, the WTO's spokesman, of the mood before Ms Okonjo-Iweala's appointment.

This reflects a realisation that the focus of many of these institutions is shifting to sub-Saharan Africa, which has more than two-thirds of the world's poor and where the average life expectancy is about 61 years, compared with 80 years in rich countries. Although Africa accounts for a small part of global commerce, it has the most to gain from trade. It will probably make up a growing share of the IMF's work, too. Lending to sub-Saharan countries is 13 times higher since the pandemic struck.

One thing the new bosses may offer is a "special ear" for issues on the continent, says Ms Sayeh. At the very least their leadership is bringing greater attention to Africa. "I don't think anyone in the WTO set out to ignore the concerns of Africa," says Ms Okonjo-Iweala. Nonetheless, she adds, "Africa has not benefited as much from trade integration…as it should have." In theory many African countries get lower tariffs in richer countries through trade deals allowed under the WTO's rules. Yet this does not work well in practice. "We really need to look at some of those agreements and make it easier for African countries," says Ms Okonjo-Iweala. Mr Diop says the IFC has not neglected Africa in the past. Still, it plans to double annual investments on the continent to $10bn in the next few years.

Personal experience inevitably shapes leaders' priorities. Dr Tedros lost his brother, who was about four, to what was probably measles. He made similar curable diseases the focus of his campaign to run the WHO, and has prioritised them during his term. When Ebola struck the Democratic

Republic of Congo, Dr Tedros visited 14 times, despite the threat from rebels.

Having Africans in charge of wonk-filled institutions can also provide role models and help overcome racist stereotypes. “It’s important for people to see an African leading an institution in the economic sphere,” says Ms Okonjo-Iweala.

Dr Tedros was recently nominated unopposed to lead the WHO for a second term. Ms Okonjo-Iweala and Mr Diop doubtless aspire to similar endorsements of their work. Trailblazers sometimes feel extra pressure to succeed, and may be held to an unfairly high standard. Yet not all leaders of global institutions excel. The real sign that Africans have broken through the glass ceiling in international organisations will be when run-of-the-mill leadership by an African generates no more comment than the tepid tenure of a bigwig from Asia, Europe or the Americas. ■

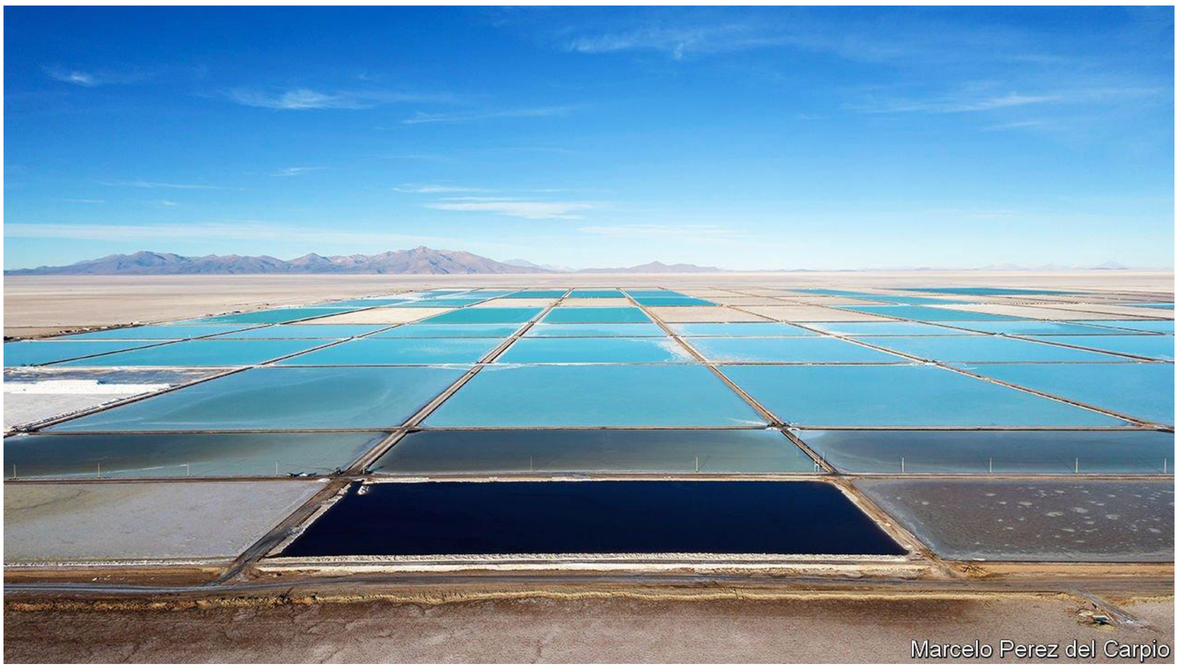
The Americas

A salt and batteries

How Bolivian lithium could help fight climate change

But the country with the world’s largest resources is still struggling to extract them

Dec 8th 2021 | Río Grande


Marcelo Perez del Carpio

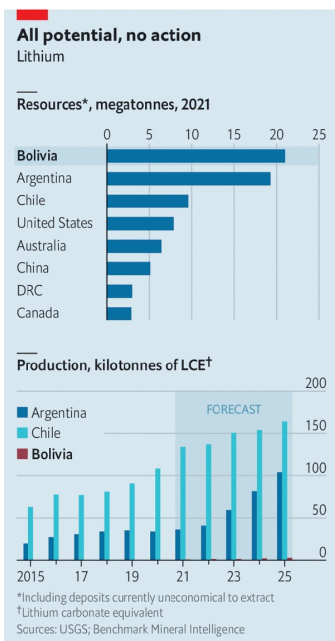
THE SALAR DE UYUNI, a salt flat in southern Bolivia, is so vast and so white you can see it from the moon. It spans 10,000 km {+2} (4,000 square miles), roughly the area of Kosovo. The top layer consists of salt hexagons, thick enough to withstand the weight of Jeeps and igloo-like buildings made of blocks of salt. Underneath, a layer of brine holds the world’s largest deposits of lithium, a light and volatile metal used in batteries for smartphones, computers and electric vehicles.

Such staples of modernity are scarce in the countryside around the Salar. Río Grande, a dusty village founded by quinoa farmers and llama herders, sits near its southern edge, 25km from a pilot plant for lithium carbonate (a processed form of the metal) that opened in 2013. Over the past decade, the village’s 2,000 or so residents have invested in lorries to serve the plant and built simple hotels for workers they expect to flock to the area any day now.

But although Chile has been extracting lithium since the 1980s and Argentina is set to rival its production by the end of the decade, Bolivia’s pilot plant will produce just 600 tonnes of lithium carbonate this year, generating less than $5m in sales (see chart). By contrast Chile and Argentina are expected to produce 134,000 and 36,000 tonnes this year, respectively. “We’re still waiting for the boom,” says Corina Alí Lupa, a union leader in Río Grande.

Still dreaming

Indeed, after years of unmet targets and cancelled deals, lithium experts nearly gave up on Bolivia. But recent pledges by carmakers such as General Motors and Ford, along with countries such as Britain and South Korea, to increase production of electric vehicles have led to a new scramble for the minerals used to make them, says Simon Moores of Benchmark Mineral Intelligence, a consultancy.



The Economist

Demand for lithium doubled between 2015 and 2020 to around 360,000 tonnes per year. Benchmark predicts it will soon outstrip supply by some 240,000 tonnes. The lithium market is highly speculative; past predictions of shortages have proven wrong, in part because people were slow to start buying electric cars. But the idea that sooner or later plug-in wheels will go mainstream has led to renewed interest in Bolivia. It has 21m tonnes of resources, according to the US Geological Survey. If it could extract more of them, it would noticeably increase the global supply.

It helps that, after nearly two years of political instability and an economic crisis, Bolivia has had a more business-friendly president since 2020. Luis Arce, a former finance minister, has signalled that he may be more open than his predecessors were to letting foreign firms dig for minerals in exchange for their know-how, financing and access to global markets.

During his campaign, Mr Arce hired Benchmark to help him develop a lithium plan. In April the government called for bids to help it develop a new technology called “direct lithium extraction” (DLE). In July it announced that nine companies would begin pilot tests in the Salar. All this could help the country turn a corner in its quest to industrialise lithium.

In many ways, extracting lithium in Bolivia is harder than in other countries. As in Argentina and Chile, Bolivia uses solar evaporation to extract the metal. The process consists of digging a series of huge pools, the biggest of which has a surface area of 30 hectares. As the lithium-rich brine is transferred from one pool to the next, evaporation helps isolate different salts. But according to Renan Soruco, a chemist at the Tomás Frías Autonomous University in Potosí, “every brine is unique.” And Bolivian brine has proved especially tricky thanks to its high level of magnesium (around 17 parts to every one of lithium, compared with 4:1 in Chile’s purer brine). Bolivia’s rainy season also slows down evaporation. The Uyuni plant is able to extract only 15-20% of the lithium in its brine, says David Rocha, the plant’s director. Chile’s efficiency rate is around 40%.

But a bigger problem is political. In Chile two multinationals, SQM and Albemarle, hold licences to extract lithium. Argentina’s 24 provinces are free to grant concessions (although only three have lithium projects); the latest went to Uranium One, a subsidiary of Russia’s state nuclear company. Bolivia, by contrast, is still dominated by Yacimientos de Litio Bolivianos (YLB), the state lithium company, which controls all of the extraction and processing at the Salar.

Protectionism in Bolivia, always strong, grew more so under Evo Morales, a socialist who was president from 2006 to 2019. Soon after Mr Morales took office, he renegotiated natural-gas contracts with foreign firms and instructed Mr Arce, then his finance minister, to design an economic policy to redistribute profits. A new constitution in 2009 expanded state control over natural resources. The previous year, a plan to industrialise lithium mandated that the state oversee 100% of extraction, with foreign partners allowed in only at later stages.

Another problem is that some of the deals Mr Morales was willing to strike with foreign firms have been unpopular with activists. In 2018 the government hired Maison Engineering and CMEC, two Chinese firms, to build an industrial-size lithium carbonate plant with a capacity to produce 15,000 tonnes each year. It also signed a deal with ACI Systems, a German firm, for a joint venture to manufacture lithium hydroxide (another compound used in batteries) from the brine left over after the evaporation process. Bolivia would control 51% of the company. ACI also agreed to help build an industrial-scale battery plant.

Some aspects of the contract struck many as unfair. It was to last 70 years, a long time for technology that is still experimental. Bolivia had preferential rights to just 17% of the lithium hydroxide produced. All sales in Europe would be handled by the joint firm, which meant that YLB could not negotiate its own deals and, if it failed to provide enough residual brine, ACI could sell some of its lithium carbonate. Activists in Potosí, the region in which the Salar salt flat is located, demanded higher royalties. “The government was deceiving the population,” says Marco Pumari, who carried out a week-long hunger strike in October 2019 against the deal. (The deal with ACI was eventually cancelled.)

Mr Morales was ousted in November 2019, after country-wide protests against an election perceived to be fraudulent. Lithium extraction was neglected under the inexperienced interim government of President Jeanine Áñez, while covid-19 imposed further delays on production. The YLB has had six presidents in the past two years. Juan Carlos Zuleta, a Bolivian lithium expert, was fired three weeks after getting the top job in 2020 because of protests by Río Grande residents, who believed rumours that his consulting work for the Chilean government meant that he was acting for Chile. “A country that is constantly in conflict can’t develop,” he sighs.

It looks like the future

This chequered past is visible in the present. At the YLB plant on a recent weekday at dawn, the smell of eggs wafted out of a turquoise pool, a sign of evaporating sulphates. Only 96 of 160 pools are currently in use; some are under repair, while others are empty due to a shortage of industrial-sized pumps for brine. Eight years after it opened, the lithium-carbonate pilot plant is still artisanal: one step requires a worker to pinch white powder between his fingers to test its consistency; another consists of two people rotating a huge metal tin of near-final product in front of a heater.

From two, to thousands

“We’re still stumbling a bit,” admits Mr Rocha, the director. He says he is under “a lot of pressure” to open the industrial-sized plant next year. It currently consists of little more than a steel shell. Experts warn that moving from small-scale to industrial production will require the development of new processes and the purchase of new machines. According to Benchmark, lithium factories take seven years on average to reach full capacity.

A lot of hope is riding on the tender for DLE. This method is quicker than solar evaporation and less water-intensive. That should make it more palatable to the people around the Salar, whose farms are already suffering from climate change. Franklin Molina Ortiz, the minister for energy, says that in the short term, Bolivia will pursue a hybrid strategy that will use both the evaporation plant and new DLE methods. But some are sceptical of a government plan, published earlier this year, that says the country will produce some 81,000 tonnes of lithium by 2025, 90% of which will come from DLE, a relatively untested technology. “This is impossible,” says Mr Zuleta.

Yet only a decade ago people thought it unlikely that electric cars would become popular, notes Thea Riofrancos, a political scientist who focuses on resource extraction at Providence College in Rhode Island. Demand for lithium is now so strong that Bolivia could make a big business out of extracting it, even if it puts nationalism before efficiency.

Industrial-scale battery production is much harder to imagine, for reasons largely beyond the government’s control. Bolivia is landlocked and has terrible roads. It would have to import many components and exporting the batteries would be costly, even hazardous. A better option, though currently far-fetched, would be for South America to develop regional electric-vehicle supply chains, which might perhaps include Bolivian batteries.

Much will depend on demand in the medium term. Benchmark does not expect large quantities of Bolivian lithium to hit markets until at least 2030, when DLE will be better developed.

Convincing Bolivia’s powerful *campesino* (peasant farmer) groups and unions to back a project also remains a challenge. Earlier this month mayors from around the Salar travelled to Germany to meet private companies interested in Bolivian lithium. This pleased residents of Río Grande, but irritated civic leaders in Potosí, who say they have been excluded from the government’s lithium plans.

It would help if a new law were drafted to regulate the lithium industry, possibly with some public consultation. This might set out rules for foreign involvement in extraction, which is currently banned, and change the royalty structure.

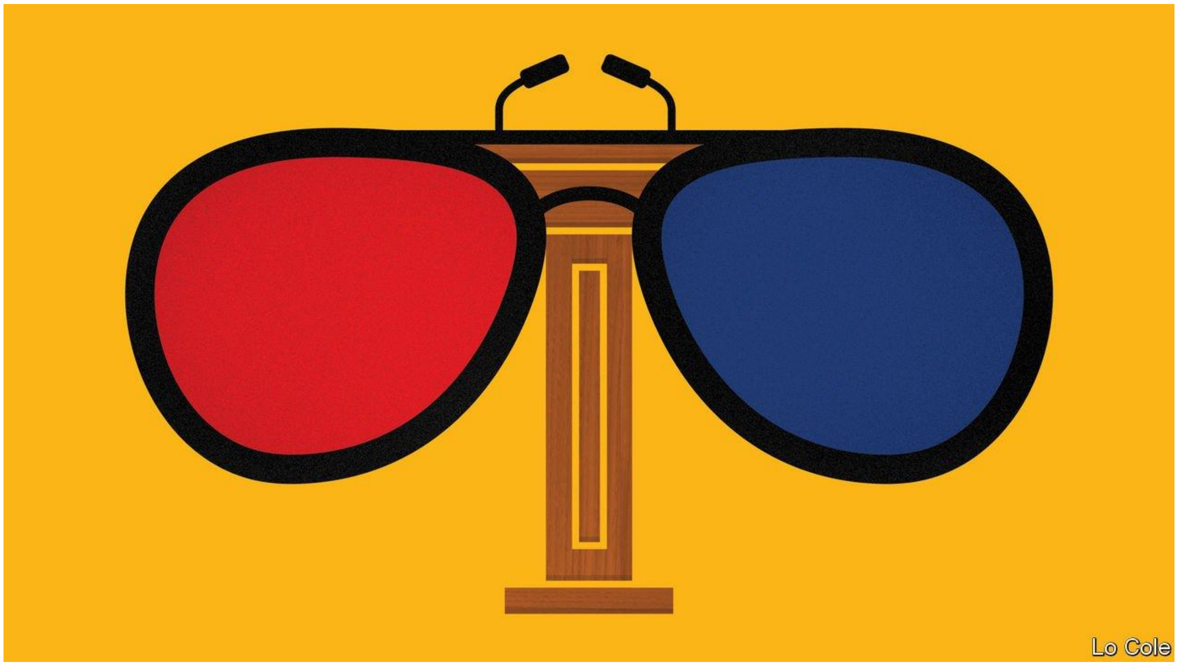
Ms Alí, the union leader, reckons that local mistrust of foreign investors is waning. Most residents support Mr Arce, she thinks. They hope that ramped-up production at the plant will boost infrastructure. Eventually, perhaps, a local university will open with degrees in science and technology, that will in turn lead to more skilled jobs. For now, she admits, these are dreams. "But we haven't given up hope." ■

Bello

Despite the polls, a centrist could win Colombia's election in May

Undecided voters may shun Gustavo Petro, a populist of the left

Dec 11th 2021



SEVERAL RECENT elections in Latin America have seen the collapse, or at least the defeat, of the moderate centre. It was true of Chile's presidential election last month, of Peru's earlier this year and of those in Brazil and Colombia in 2018. Will it be true of the next big election in the region, in Colombia in May? There are reasons to think that, in this case, a victory for the centre would not just be especially beneficial, but also that it might come about.

That is not the conventional forecast. Many analysts believe that next year's contest will be a repeat, in reverse, of the previous one. In a run-off in 2018 Iván Duque, a protégé of Álvaro Uribe, a former president of the populist right, defeated Gustavo Petro, a populist of the left, by 56% to 44%. In a poll of voting intentions by Invamer, published this week, Mr Petro is way out in front with 42%, ahead of Sergio Fajardo of the centre-left (with 19%) and a host of also-rans. Mr Petro would easily defeat any opponent in a run-off, the pollster thinks.

Mr Duque won in 2018 because of fear of Mr Petro, a former guerrilla who was a fan of Hugo Chávez in Venezuela. But he also benefited from Mr Uribe's campaign against a peace agreement in 2016 that ended half a century of war between the state and the FARC guerrillas. The centre was identified with the accord, which many Colombians thought too lenient. It was hurt, too, by a failure to unite behind a single candidate. That allowed Mr Petro to pip Mr Fajardo, an academic and innovative former mayor of Medellín, by just 250,000 votes (out of more than 19m) to reach the run-off.

This time Mr Petro looks stronger than in 2018. Mr Uribe is not the force he once was. Mr Duque's government has been mediocre and is unpopular, and was shaken by weeks of strikes and sometimes violent protests earlier this year. With no serious rivals on the hard left, Mr Petro has spent the past four years campaigning. A former senator and an undistinguished mayor of Bogotá, "he has very simplistic ideas but he works politically very, very hard," says Malcolm Deas, a British historian of Colombia. Several opportunistic political hustlers of the right have declared their support for his candidacy because they think he will win.

But it is early days. According to the Invamer poll's fine print, 43% of respondents have yet to declare a preference. Mr Petro still scares many middle-class voters. The centre looks more organised than in 2018. Mr Fajardo and five other candidates of the centre-left have formed a "Coalition of Hope" and agreed to face each other in a primary in conjunction with the legislative election in March. On the centre-right the "Coalition of Experience" unites five presidential hopefuls, including several former mayors, in a similar primary. Mr Uribe's nominee, Óscar Iván Zuluaga, who lost the 2014 election, may or may not join them. But he is a weaker candidate than Mr Duque was. Miguel Silva, a political consultant, reckons around 14m Colombians will choose to vote in one of the simultaneous primaries and expects these to be divided roughly equally between hard-left, centre-right and centre-left. That could change the momentum of the race.

The run-off is thus likely to pit Mr Petro against a candidate either of the centre-right or centre-left. This time the peace agreement is unlikely to be a big issue. “Colombians hate the FARC but they like peace,” says Mr Deas. “They want a new political agenda.” That could involve security against criminal gangs, better public education and a return to economic growth (something Mr Petro’s protectionism and his opposition to mining and oil are unlikely to achieve).

So the centre has an opportunity. To seize it requires not just a clear programme but a break with the unpopular status quo and connecting emotionally with Colombians. Mr Uribe mobilised fear of the guerrillas; Mr Petro channels the kind of rage against the establishment that was expressed in the protests.

In a recent book Mauricio García Villegas, a Colombian political philosopher, argues that his country’s long history of armed conflict has been driven by a political culture which exalted tribal emotions, of nation, party, class and religion, which turned adversaries into enemies and in which “we tend to disqualify too easily those who think differently.” In Colombia, he concludes, “the real contrast is not between the radicals of each extreme… but between these and the moderates.” To prevail, the centre will have to tap into more peaceful emotions—of unity, solidarity and hope for a better future.

Read more from Bello, our columnist on Latin America:

Politicians are sparring over colonial history in Latin America (*Dec 4th)*
Latin America waits for tourists to return *(Nov 27th 2021)*
Will electoral defeat favour moderation in Argentina? *(Nov 20th 2021)*

Briefing

- Joe Biden’s foreign policy: A weary superpower

A weary superpower

The world that the West built after Pearl Harbour is cracking

Not least because America is lukewarm about preserving it

Dec 8th 2021 | HONOLULU

A LINE OF white-painted moorings in Pearl Harbour—the old "Battleship Row"—maps America's trajectory in the second world war. At one end a memorial straddles the sunken remains of the *USS Arizona*, a battleship destroyed during Japan's surprise attack on December 7th 1941. Most of the 1,177 sailors who perished on board remain entombed in the wreck. At the other end, the *USS Arizona* looms above the treeline with imposing 16-inch guns. It was on her deck that General Douglas MacArthur accepted the formal surrender of imperial Japan, ending the war.

"The ships are the book-ends of the war," says James Neuman, the official historian of Pearl Harbour's naval base. "Their legacy is with us every single day." Families of deceased veterans still come to scatter their ashes in the water. Some 30 survivors of the attack attended a ceremony this week to mark its 80th anniversary.

The “date which will live in infamy”, as Franklin Roosevelt called it, transformed America’s place in the world. The country abandoned isolationism and, with “righteous might”, entered the war in the Pacific. Four days later Hitler declared war on America, ensuring that it would join the war in Europe, too. Victory in the global conflict, hastened by the use of nuclear weapons against Japan, established America as the world’s dominant power, which would go on to defeat the Soviet Union in the cold war.

New world disorder

These days the liberal global order that America and its allies built over decades is breaking down, not least because successive American presidents have lost faith in one or other of its tenets. Barack Obama drew a red line against Syria’s use of chemical weapons but did not enforce it. He withdrew from Iraq in 2011, only to return when jihadists filled the vacuum. Donald Trump embraced dictators, threatened to forsake allies and sought to dismantle international institutions and norms that America had long fostered. Joe Biden, after proclaiming “America is back”, chaotically left Afghanistan, barely consulting allies. His “foreign policy for the middle class” is Trump-like in its protectionism. What is more, Mr Trump still dominates the Republican Party and may be back in the White House in 2025. An America that once waged a global “war on terror” and sought to democratise the Muslim world is turning inward, if not retrenching.

Echoes of the interwar years are multiplying. Many countries are suffering from a pandemic, economic malaise and political discontent. In Europe a revanchist power, Russia rather than Nazi Germany, is massing troops and menacing a neighbour—Ukraine. In Asia a rising power, China rather than imperial Japan, is arming for a possible invasion—of Taiwan. It seeks to displace America in the name of Asia for Asians. And the idea of enforcing arms control as a means of preserving the peace is proving as difficult as it did in the 1930s, with Iran and North Korea resisting efforts to rein in their nuclear programmes.

Another reverberation from the past is the emergence of an American school of thought advocating “restraint” in foreign policy. This is not 1930s-style isolationism: today’s restrainers accept that America was right to fight the Axis powers, but they urge it to stop chasing “global supremacy”.

Admittedly, much is different from eight decades ago. The spread of nuclear weapons makes great-power conflict more terrifying and less likely. The configuration of global alliances has shifted: Japan and Germany are firmly in the American camp; China and Russia are moving closer together. And after decades of globalisation, the world is more interdependent economically. Even so, America's self-doubt, suspicion of globalisation, hyper-partisan politics and unpredictable policy-making prompt allies to question the reliability of American power. What is America still prepared to fight for?

Troubles in battalions

As the world's great power, America ends up having to deal with all its problems, from the war in Ethiopia to the instability in Latin America that is driving migrants to its southern border. However, it is the intensifying disputes with China, Russia and Iran that are likeliest to test Mr Biden's mettle. It is tempting to see them as signs of America's decline. Has the debacle in Afghanistan inspired the trio to challenge America's resolve? A senior White House official rejects the suggestion: all three are acting out of "fundamental dynamics" that predate Mr Biden's election. China and Russia are motivated by irredentism, fearing that Taiwan and Ukraine respectively are slipping away (largely because of their own bullying). Iran is exploiting the breach Mr Trump created when he abrogated Mr Obama's nuclear deal in 2018.

Mr Biden has been trying to quieten things through diplomacy. At a video-conference summit on December 7th, he warned Vladimir Putin, Russia's leader, against invading Ukraine. Last month, during a similar encounter with Xi Jinping, China's president, Mr Biden said it was essential to "ensure that the competition between our countries does not veer into conflict, whether intended or unintended". Meanwhile, in Vienna, American and Iranian diplomats have resumed nuclear negotiations after a five-month hiatus.

But America's ability to jaw-jaw depends, at least to an extent, on its stomach for war-war. Hawkish strategists have long believed that America must be able and willing to use force not just in one conflict at a time but in several at once. These days, however, mainstream foreign-policy thinkers increasingly argue that America can no longer try to do everything, everywhere, and must choose where to focus its political attention and finite resources. Restrainers go further: many of them think that none of the three looming crises is worth going to war over, and that any military build-up intended to ward them off might in fact make conflict more likely.

In “Tomorrow, the World”, Stephen Wertheim of the Carnegie Endowment for International Peace, a think-tank in Washington, argues that a transformation in America’s strategic thinking took place early in the second world war, between the fall of France in June 1940 and the attack on Pearl Harbour. Having previously believed that neutrality was necessary to protect American democracy, and that an open world order could be preserved by international institutions, America’s policymakers concluded that henceforth these would have to be upheld by armed might. Now, Mr Wertheim argues, the opposite is true. Primacy “makes America less safe”, he says. “It makes enemies of people, who then take action against the United States, which then takes action against them.” The Carter doctrine, proclaimed in 1980, is a case in point. It asserted that any attempt by outside powers to gain control of the oil-rich Persian Gulf would be regarded as an assault on American vital interests. America was thereafter drawn into the Middle East’s endless troubles. Too often, Mr Wertheim says, America has done the bidding of Israel and Arab allies.

The prime venue for such thinking is the Quincy Institute for Responsible Statecraft, a think-tank in Washington set up in 2019 with money from both Charles Koch, a generous funder of right-wing causes, and George Soros, a supporter of liberal internationalist groups. Quincy cheered the withdrawal from Afghanistan. “We were very much heartened by Biden’s decision,” says Andrew Bacevich, its president. He urges Mr Biden to leave the Middle East next. He also thinks America should, over time, withdraw from NATO and close many of its 750-odd military bases and depots around the globe (see map). Such ideas have deep roots. The think-tank takes its name from America’s sixth president, John Quincy Adams, who declared that America “goes not abroad, in search of monsters to destroy”. George Washington’s farewell address in 1796 enjoined the young nation to “to steer clear of permanent alliances with any portion of the foreign world”.

Yet the Quincy Institute's medicine is too strong for most politicians. Commentators chastise it for endangering global stability and America's security, and being soft on Chinese human-rights abuses. Public opinion is ambivalent. A poll for the Chicago Council on Global Affairs last summer found that Americans approved of the withdrawal from Afghanistan, but were far from ready to abandon American primacy in the world. For the first time, a majority favoured defending Taiwan.

Richard Fontaine, head of the Centre for a New American Security, a think-tank whose alumni occupy some prominent positions in the Biden administration, says opinion among foreign-policy experts is broadly split by generation: younger scholars, dejected by years of fruitless war in Iraq and Afghanistan, are often sympathetic to the idea of restraint. Any zeal to export democracy has abated. "There is a big disillusionment with the missionary role," he notes. "They say, 'after Trump, the Capitol riots and covid, are we really going to tout our model?'"

These ideas have been seeping into Washington's discourse—both among doves who want to reduce America's commitments globally, and among China hawks who want America to do less in the Middle East and Europe the better to direct attention and resources to Asia and the Pacific. What of Mr Biden himself? "On one side, he looks like our kind of guy," says Mr Bacevich. "On the other, defence spending is going up for no particular reason. And the administration seems to be leaning into the idea of a cold war with China. Right now, Biden is all over the map."

Several of the Biden administration's important national-security policies remain in gestation. It has not yet issued a national-security strategy, and its nuclear "posture" is under review. Matters are not helped by the fact that many important jobs in national security and the diplomatic corps remain empty.

China has more

Mr Biden's interim national-security guidance, issued in March, emphasises economic regeneration at home as the foundation of American power abroad. It is long on global menaces. Pandemics, climate change, cyber threats and more are regarded as "profound, and in some cases, existential dangers". It sees a global contest between democracies and autocracies, led by China (the only power it considers capable of displacing America) and Russia (which plays a disruptive role).

Mr Biden has sought to revitalise America's alliances and partnerships. This week he was due to rally America's friends to the defence of democracy at a big video summit of some 100 countries. The agenda was vague; action is largely being left to a follow-on gathering next year. Tellingly, the event was called a summit "for" democracy, not a meeting "of" democracies.

As for hard power, the guidance declares that "the use of military force should be a last resort, not the first; diplomacy, development and economic statecraft should be the leading instruments of American foreign policy." Roosevelt gave priority in the war effort to Europe over Asia, even after Pearl Harbour. By contrast, Mr Biden's priority is Asia, which means that he is eager both to devote less time and effort to Europe and also to get out of the Middle East and its "forever wars". Yet turning principles into policy can be hard. The Pentagon's review of military deployments, completed last month, left America's global footprint largely unchanged. For both restrainers and China hawks, that was a missed opportunity.

For Mr Biden, however, the unfinished business of Iran's nuclear programme makes it hard to pull out of the Middle East. During his election campaign, Mr Biden promised to restore and improve the nuclear deal with Iran signed by Mr Obama in 2015 and repudiated by Mr Trump three years later. The pact limited Iran's nuclear programme for a decade or more and subjected it to strong inspections thereafter, in return for a partial lifting of sanctions. Mr Biden has maintained sanctions that Mr Trump imposed to exert "maximum pressure" on Iran. But the clerical regime has responded by accelerating its nuclear programme, reducing the time it needs to make a bomb's-worth of fissile material from a year or so to a month or less.

Indirect talks between America and Iran resumed in Vienna in late November. But the process is already faltering as American officials accuse Iran of not negotiating seriously. Mr Biden has vowed that Iran will not obtain a nuclear weapon on his watch. Officials have warned they will soon pursue "other options". Would that include military action to destroy nuclear facilities? America has been reluctant to threaten it openly, as Israel has done. "Iran thinks the risks are minimal," says Ali Vaez of the International Crisis Group, a think-tank. "There is not much more the US can put under sanctions. Iran has witnessed America's withdrawal from Afghanistan. It knows there is no appetite in the US for military entanglement."

Even if Iran is right to doubt America's resolve, Israel may yet act alone, potentially dragging America into a war anyway. Mr Biden may want to leave the Middle East to its fate, but in foreign policy foreigners get a vote, too. His hand could be forced by either America's greatest regional enemy or its greatest regional ally.

In Europe, too, America may find itself drawn deeper into entanglements, even as Mr Biden would like his allies there to take more responsibility for their own security. Russia has been massing tens of thousands of troops near Ukraine's borders. A former Soviet republic, Ukraine has already lost part of its territory to Russia (which annexed Crimea in 2014) and its separatist proxies (who run a breakaway chunk of the east). American officials say Mr

Putin is making preparations to take another bite of Ukraine, but may not yet have decided whether to go through with this plan.

At their video meeting this week, Mr Biden delivered a stern warning to Mr Putin. If Russia invades it is likely to get bogged down in a long conflict; America and European countries will impose severe sanctions; NATO will be compelled to increase deployments close to Russia's borders and America will boost its delivery of arms to Ukraine. If he de-escalates, though, America and European allies are willing to offer Mr Putin a broad dialogue about security in Europe, though that may fall short of Mr Putin's demands, such as a guarantee that Ukraine will never join NATO.

Although Mr Biden is extremely unlikely to deploy troops to protect Ukraine, Kurt Volker of the Centre for European Policy Analysis, another think-tank, has no doubt that he would uphold America's commitment to defend NATO allies in Europe, including the Baltic republics, which like Ukraine were once part of the Soviet Union. Nonetheless, by continuing to torture Ukraine Mr Putin is trying to weaken NATO by seeding differences among its members about how forcefully to respond. And each fresh Russian provocation increases the feeling of vulnerability among NATO members on Russia's borders. In Mr Volker's view, America's other rivals will be watching Mr Biden's response: "Ukraine is Russia's Taiwan. Giving away Ukraine is the wrong signal to send China about Taiwan."

The dragon in the room

America's "intense competition" with China is widely seen as the defining foreign-policy challenge of the age. It is the one issue on which Democrats and Republicans can agree, more or less. At any rate, Mr Biden has retained most of Mr Trump's sanctions and tariffs on China.

Near the hill above Pearl Harbour that is home to America's Indo-Pacific Command the scene appears relaxing, even soothing. The admirals and generals overseeing military operations across half of the world's surface, from the coast of California to the Maldives, look out over a tourist paradise. F-22 stealth jets streak into the sky behind airliners bringing holidaymakers to Honolulu; silhouettes of destroyers at sea form the backdrop for surfers waiting for the next big wave on Waikiki.

But the speeches and reports by successive commanders paint a darkening picture. China, they say, is arming faster than most had predicted and has more warships than the American navy. It is developing the wherewithal to invade Taiwan, which it regards as its own territory, and to fend off any American forces that might come to its defence. At their summit, Mr Xi warned Mr Biden about meddling in Taiwan: “Whoever plays with fire will get burnt.” Chinese aircraft frequently challenge Taiwan’s air-defences. Satellites have spotted Chinese mock-ups of American aircraft-carriers (pictured) moved on rails in the Taklamakan desert, apparently used for target practice. The latest Pentagon report on China’s military power, issued last month, estimated that China will roughly quintuple its stockpile of nuclear weapons, to more than 1,000 warheads, by the end of the decade (America and Russia have about 4,000 warheads each). China’s testing of long-distance hypersonic weapons is also worrying American generals.

Strait-shooter

Military types tend to assume that Mr Xi has already taken the decision to recover Taiwan by force, but does not yet feel China is strong enough. On this measure, there is a sense of time running out: China may feel it has the firepower to risk a war in the second half of this decade. Analysts of Chinese politics, however, tend to believe the Chinese leader will be more cautious. They assume he will not want to endanger either his domestic reforms or his own power by launching a highly risky amphibious operation. “If Xi tries and fails to take Taiwan, he is history,” says Eric Sayers of the American Enterprise Institute, a think-tank. In his summit with Mr Biden Mr Xi said that China would be “patient” on Taiwan.

America’s stance, too, is uncertain. Since it initiated diplomatic relations with mainland China in 1979, it has followed a policy of “strategic ambiguity”, whereby it refuses to say whether it would come to Taiwan’s defence in the event of a Chinese invasion. The intention is both to discourage China from invading and Taiwan from formally declaring itself independent, which China would see as a provocation.

Mr Biden, however, has sounded more hawkish of late. On one recent occasion he declared that America had a “commitment” to defend Taiwan; on another he said the island was “independent”. Each time, officials have clarified that there was no change of policy. “Biden’s statements could not be better. It’s perfect. It’s ambiguous,” says David Stilwell, who worked on China policy in the Trump administration. A more explicit commitment to defend Taiwan, as some now advocate, would be counter-productive, he argues. “If you draw red lines the Chinese will test them. Red lines are good only if the threat to respond and impose costs is credible.”

Taiwan is a model democracy, a vital producer of advanced semiconductors and an important link in the “first island chain”, running from Japan to Indonesia, that girdles the Chinese mainland. Most pundits and officials think that, if Taiwan is attacked, Mr Biden will defend it. Because of this, many assume the Chinese will prefer tactics short of a full invasion—anything from cyber-attacks, to seizing outlying islands, to a naval blockade. That would put America in a quandary over whether to escalate, and risk a war that could lead to the use of nuclear weapons.

“The assumption is that it’s in America’s interest to have a forward presence and a shaping influence in Asia,” says Denny Roy of the East-West Centre, “But it’s going to be more expensive and more risky to sustain. We should at least ask…What would be the cost of retrenching?”

Some restrainers favour retaining a military presence in the Indo-Pacific to “balance” China. But Michael Swaine of the Quincy Institute says the cost of war would be enormous. America’s best hope of maintaining stability is not to embark on an arms race with China, but to seek an accommodation based on an American commitment not to allow Taiwanese independence. “You cannot have deterrence without some degree of reassurance,” he says.

For all the talk of a new cold war, the contest with China lacks the intense ideological competition that marked the rivalry with the Soviet Union. In another way the rivalry is fiercer: China is a more powerful economic force than the Soviet Union. Many countries that want to align with America on security matters are reluctant to forsake their trade with China.

Hard to sink

On a hopeful day senior American officials predict that Mr Biden's investment in America's infrastructure and technology, and China's internal problems of debt and ageing, will start working in America's favour in, say, five years' time. They also dream of one day breaking Russia away from China, in a mirror-image of Richard Nixon's trip to China in 1972, which helped to prise it away from the Soviet Union. But for now Mr Putin seems to need America more as an enemy than as a friend.

In the meantime, Mr Biden is trying to reinvigorate America's network of friends, partners and allies. Officials argue that Mr Biden's diplomatic outreach has already placed America in a better position than it was under Mr Trump. Echoing Roosevelt, they note that America has become the world's "vaccine arsenal", pledging more than a billion covid-19 doses with no strings attached. A global minimum tax on corporations has been agreed on. And America has helped push for progress in the fight to curb climate change.

Trade rows with the EU have mostly been set aside. In June NATO leaders said China's behaviour presented "systemic challenges" to the alliance. The EU has called for "a free and open Indo-Pacific", echoing an American catchphrase. This month it unveiled a plan to finance global infrastructure, as America has, too, in an admittedly half-baked attempt to rival China’s Belt and Road Initiative.

In Asia a deal known as AUKUS will provide American and British nuclear-propulsion submarine technology to Australia, which in turn is making it clear that it would help America in any war over Taiwan. Japan, despite its history of pacifism, has signalled that it would join in, too. The three countries, plus India, make up a “Quad” that is gaining geopolitical muscle.

But managing alliances is hard, even for an administration that believes in internationalism. AUKUS enraged France, whose contract to supply submarines was cancelled. Many of America’s closest allies are unnerved by its forthcoming “nuclear posture review”. Mr Biden has in the past said that the “sole purpose” of America’s nukes should be to deter, or retaliate against, nuclear attack. Allies argue that, if adopted, the shift would undermine America’s “extended deterrence”, which places allies under its nuclear umbrella and so protects them from superior conventional forces. Some may be driven to seek their own nukes. Another problem is Mr Biden’s aversion to free trade, notably the Trans-Pacific Partnership, an 11-country accord negotiated by Mr Obama and dropped by Mr Trump. By refusing to join the revised pact, Mr Biden is depriving America of a vital economic lever in its contest with China.

Nevertheless, for all America’s lurches in policy, it remains an attractive ally, especially as China, Russia and Iran become more assertive. On the day your correspondent visited Pearl Harbour, a pair of British patrol vessels were moored alongside American destroyers as part of a new, semi-permanent deployment to the region. A Japanese submarine was sailing out of port, with its crew lined up topside in white ceremonial uniform. If America retains its dominance in the world, it will be in no small part thanks to its ability to rally former foes and old friends alike. ■

Europe

Enter the quiet man

The challenges facing Olaf Scholz as Germany's chancellor

Managing a three-party coalition will test his powers of patience and persuasion

Dec 8th 2021 | BERLIN


dpa

Editor's note (December 8th 2021): This article has been updated.

TEN YEARS ago Christoph Holstein received a summons to the office of Olaf Scholz. Mr Scholz had just led the Social Democrats (SPD) to a stunning election win in the city-state of Hamburg, and Mr Holstein was to be his government spokesman. Mr Scholz offered two pieces of guidance: "We are never offended, and we are never hysterical." Mr Holstein, now on Hamburg's state council, found the advice so useful that it remains pinned up in his office under the words: "Scholz's first law". Germans and others who learned to appreciate the calm demeanour of Angela Merkel during her 16 years in office will find reassurance in Mr Scholz, who replaced her as German chancellor on December 8th.

Talk to those who have got to know the 63-year-old Mr Scholz throughout his career, and several leitmotifs emerge. Reliability is one. “He only ever promises things he can achieve,” says Dorothee Martin, an SPD MP from Hamburg. Campaigning for election this summer, he boiled down his offer to a handful of modest proposals, all of which are in the coalition deal agreed by the SPD with two smaller parties: lifting Germany’s hourly minimum wage to €12 ($13.50), maintaining the state pension and building 400,000 housing units a year. Other colleagues praise Mr Scholz’s Hanseatic work ethic and his pragmatism.

Another thread is impatience. Mr Scholz shares Mrs Merkel’s air of serenity and competence. Unlike her, he struggles to mask his disdain for those he considers ill-briefed, a trait that can infuriate antagonists. In Hamburg, his aides would shut down dissenters by exclaiming “ OWD”, short for *Olaf will das!* (“Olaf wants that”). Colleagues swear that Mr Scholz can be hilarious company. But his circuitous, convoluted style of public speaking will hardly satisfy those craving a more direct mode of communication from their chancellor. When challenged on his robotic persona earlier this year, Mr Scholz said he hoped to become chancellor, not a circus ring master. His press conferences are deathly.

Mr Scholz was raised in Hamburg, and trained as an employment lawyer. Like many of today’s ageing social democrats he dabbled in radical leftism before, in his words, “detoxifying” himself into moderate social democracy in his 20s. He bounced between party, city and federal politics for decades, suffering reverses (being booted from a senior SPD role in 2004, the G20 riots in Hamburg in 2017, losing a party leadership bid in 2019) as well as victories (two huge election wins in Hamburg, this year’s triumphant national campaign). In 2018 he pushed his reluctant party to support Mrs Merkel’s Christian Democrats in yet another “grand coalition”. He became her vice-chancellor and finance minister, a role that served as a finishing school for the office he has now achieved.

A prolific reader, Mr Scholz turned his finance ministry into a brains trust of sorts. His emphasis on “respect”, by which he means a society with equal regard for binmen and CEOs, is inspired by Michael Sandel, an American theorist sceptical of meritocracy. Too little of the stuff, Mr Scholz argues, breeds populism and illiberalism. “He is often portrayed as a social democrat in conservative clothes, but that’s wrong,” says a colleague.

Mr Scholz also imbibed a lesson offered by previous SPD election-winners: that Germans are a centrist bunch wary of visionaries. Unloved by SPD members who wanted more red meat in their politics, Mr Scholz nonetheless almost single-handedly led his comrades to an unexpected, if narrow, election win in September. If this hardly represented a great renaissance of the European left, it did wonders for a party that had long been in the doldrums.

The pandemic had a hand in Mr Scholz’s own recovery. He spent his first two years as finance minister dismaying those who hoped a Social Democrat might end Germany’s excessive fiscal prudence. But when covid-19 struck Mr Scholz cast aside Germany’s fiscal rules to splash hundreds of billions on furlough and corporate-support schemes. He helped design the EU’s €750bn ($845bn) recovery fund, and earlier this year helped push through an international corporate-tax deal.

Foreign and European policy will command much of Mr Scholz’s time. His domestic ambitions will focus on climate. He calls the transition to a carbon-free future Germany’s biggest industrial test in a century. It will be a political challenge, too. The coalition deal commits the new government to exacting targets, including an 80% share of renewables in electricity generation by 2030, but is vague on how to finance the required investments. That riddle could trigger rows between Mr Scholz’s governing partners, the tax-cutting Free Democrats and the left-leaning Greens.

Managing clashes inside his coalition will test Mr Scholz’s celebrated mediation skills. So could soothing the inevitable frustration of the Greens, some of whom emerged disappointed from the coalition negotiations, as well as potential restiveness in the SPD’s own ranks. To manage disputes Mr Scholz will rely on a handful of trusted aides, chief among them Wolfgang Schmidt, an ebullient figure whose reward for decades of service to Mr Scholz will be the job of running his chancellery.

Mr Scholz’s quiet bearing may belie serious ambitions for Germany. “He thinks that under Merkel Germany failed to live up to its potential, and now needs a progressive renewal," says Dominic Schwickert of Das Progressive Zentrum, a left-leaning think-tank in Berlin. Yet despite her original reform plans Mrs Merkel will be remembered mainly as Europe's crisis-manager-in-chief. Unexpected events will prove at least as testing for Mr Scholz. He takes office amid a brutal fourth wave of covid-19 and the prospect of renewed conflagration in Ukraine. For now, a surprisingly heady air of optimism surrounds his new, untested coalition government. *Olaf will das*. But the new chancellor may not always get what he wants. ■

Dame de fer

“Two-thirds Merkel, one-third Thatcher”: meet Valérie Pécresse

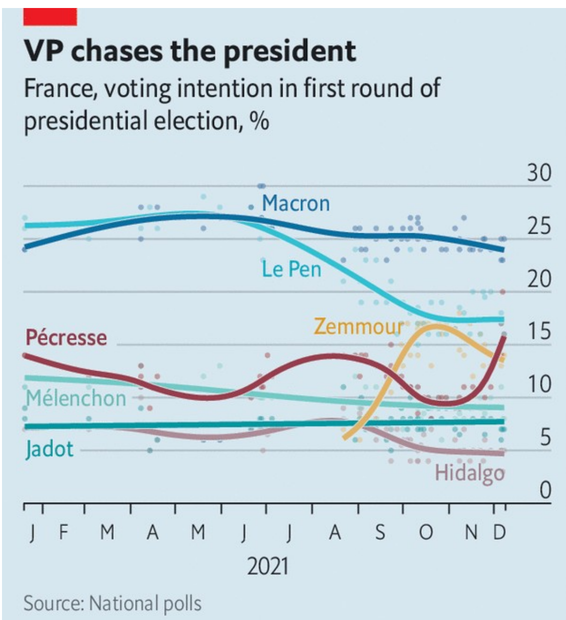
The French Republican nominee could beat Emmanuel Macron

Dec 9th 2021 | PARIS

COULD THE French for the first time elect *une présidente* when they go to the polls next April? Ségolène Royal nearly got there as the Socialists’ candidate, in 2007, but was defeated by Nicolas Sarkozy. Ten years later Marine Le Pen, a populist-nationalist, was soundly beaten by the centrist Emmanuel Macron. Now the Gaullist political party is taking its turn. On December 4th the Republicans picked Valérie Pécresse, head of the Ile-de-France region around Paris, as their presidential candidate.

In a run-off primary vote among party members, Ms Pécresse trounced Eric Ciotti, a deputy from Nice and an anti-immigration hardliner from the party’s right wing, securing 61% of the vote to his 39%. Days later Elabe, a polling group, recorded a leap for Ms Pécresse from fourth to second place, suggesting she could beat Mr Macron in a run-off. Nomination bumps are common, and other polls recorded a smaller one. But the former budget minister and fellow graduate of the elite École Nationale d'Administration suddenly looks like a credible challenger.

Before the primary campaign, Ms Pécresse was seen in some quarters as an outsider. Polls suggested that if selected by the Republicans she would do worse in a presidential vote than Xavier Bertrand, a rival primary candidate and head of the Hauts-de-France region. Like him, she had quit the party, for her part in exasperation at its fecklessness. But Ms Pécresse performed well in the four televised primary debates, coming across as serious, well-briefed and trenchant. She was also careful to remind viewers that she can be a vote-winner. Earlier this year she was re-elected head of the Ile-de-France region, crushing the hard right, the Greens and the centre. In the end, at the primary, party members preferred her to both Mr Bertrand and Michel Barnier, the European Union's former Brexit negotiator, both of whom were eliminated in a tight vote in the first round.



The Economist

A long-time party hack, Ms Pécresse is a familiar figure in France. First elected deputy 19 years ago, she is a protégée of Jacques Chirac, a Gaullist former president, and became a minister under Mr Sarkozy. She describes herself as "two-thirds Merkel, one-third Thatcher": a blend of consensus-seeking politics and reformist steel. As higher-education minister Ms Pécresse took on the unions to give universities more autonomy. As a primary candidate she pilloried Mr Macron for not cutting civil-service jobs and for “burning through cash” with his high public spending.

It is a mistake, though, to cast Ms Pécresse uncritically as a party centrist. The product of a Catholic private-school education, she is culturally as well as fiscally conservative. Ms Pécresse voted in 2013 against the legalisation of gay marriage (though she later accepted it), and espouses a tough immigration policy, including an end to the automatic right to French citizenship of those born in France.

Ms Pécresse may have triumphed in the primary, but she now needs to keep a divided party together. Eric Zemmour, a reactionary polemicist, has declared that he too is running. This has dragged the debate onto toxic ground. As it is, in 2017 Mr Ciotti refused to vote for Mr Macron to keep out Ms Le Pen. Now he vows he would prefer Mr Zemmour to Mr Macron were that the choice in 2022. He has already complained that since her nomination Ms Pécresse has not embraced his views properly, before the pair hastily arranged a truce for the cameras at a restaurant in Nice.

If she can tread this line deftly, though, Ms Pécresse will make a tricky contender for Mr Macron, who remains most polls’ favourite for 2022. On the centre-right, she could win over some Macron supporters who are alarmed by high levels of public debt. On the hard right, she could lure some former Fillon voters who have been tempted by Mr Zemmour. The polemicist’s candidacy will split the hard-right vote and lower the hurdle for getting through to the second round. With the left enfeebled, this means that a run-off between Mr Macron and a centre-right candidate, which looked unlikely a couple of months ago as the Republicans squabbled, is now entirely plausible. So far only one poll has suggested that Ms Pécresse could then beat Mr Macron. But that is not a bad start. ■

Diplomacy with menaces

Joe Biden adopts a tough new tone with Vladimir Putin

But will it be enough to avert another Russian invasion of Ukraine?

Dec 7th 2021 | WASHINGTON, DC

WHEN JOE BIDEN met Vladimir Putin in Geneva last June, he spoke of his desire for "stable and predictable" relations with Russia and pointed to several areas in which the two could co-operate, not least on limiting nuclear weapons and fighting terrorism. This time, in a two-hour video call, the tone was confrontational. Mr Biden warned his counterpart of harsh retribution if the Russian troops currently massing on Ukraine's borders launched an invasion.

"He told President Putin...that, if Russia further invades Ukraine, the United States and our European allies would respond with strong economic measures," said Jake Sullivan, Mr Biden's national security adviser. "We would provide additional defensive material to the Ukrainians …and we would fortify our NATO allies on the eastern flank with additional capabilities in response to such an escalation."

America is also offering Russia a diplomatic off-ramp, in the form of a broad discussion on European security (eg, cold-war-style accords that limit forces). But this could take place only “in the context of de-escalation”, Mr Sullivan said. It was unclear whether this will be enough to induce Mr Putin to call back his troops.

American and European officials are working on co-ordinated sanctions in case of an invasion. America is pressing the newly installed German coalition led by Olaf Scholz to be ready to halt the opening of the Nord Stream 2 pipeline, which will deliver more gas from Russia to Europe. It is not yet clear whether sanctions would include cutting Russia off from the SWIFT system of financial transfers, which would be hugely damaging.

The Economist

Some assume that Mr Putin’s military manoeuvres are designed to get America’s attention. A similar build-up in the spring yielded the summit in Geneva in June. This one got him a video conference. But few can claim to know how far he will go. Mr Putin says he wants a guarantee that Ukraine will never join NATO, and that it will not be a base for Western weapons that can threaten Russia, even though neither prospect seems remotely likely given the fragility of Ukraine’s government, widespread corruption and unresolved conflicts. Yet NATO feels it cannot formally close the door on

Ukraine. In Mr Sullivan's view, "Countries should be able to freely choose who they associate with."

The real problem for Mr Putin may be less Ukraine joining NATO than NATO helping Ukraine. He is worried about NATO's and Western countries' growing role in arming and training Ukraine's forces, to the point where they present a more capable opponent—though not strong enough to stop a full-scale invasion. Ukraine is one of the largest recipients of American civilian and military aid.

More broadly, Mr Putin wants America to recognise that Ukraine should be within his sphere of influence. In 2014 Mr Putin took over and annexed Crimea, and backed Russian-speaking separatists in the east of the country, creating the breakaway "republics" of Donetsk and Luhansk. The Minsk agreements, intended to end the conflict, would have created a weak and loose federation in Ukraine, possibly in effect giving Russia a veto over its actions. But disputes over their precise meaning and the sequence of steps to be taken have stalled implementation. "Putin does not necessarily have an end state in mind," says Kurt Volker, a special envoy to Ukraine when Donald Trump was president. "He wants to create positions of power, create opportunities and exploit them."

For all Mr Biden's sternness, he appears to have set limits to what America will do. Mr Sullivan said America's purpose is "to deter a Russian military invasion of further territory of Ukraine". That would appear to leave open the prospect of Russia annexing the breakaway regions where it already pulls the strings. And although America is prepared to send more forces to reassure NATO allies, Mr Biden will not commit American forces to Ukraine itself. If an invasion is averted, the next question will be what Mr Biden and Mr Putin might agree to in any subsequent talks. In a tweet before the summit, Volodymyr Zelensky, Ukraine's president, thanked the Americans for their "joint & concerted action". But he added an implied warning: "Nothing about Ukraine without Ukraine." ■

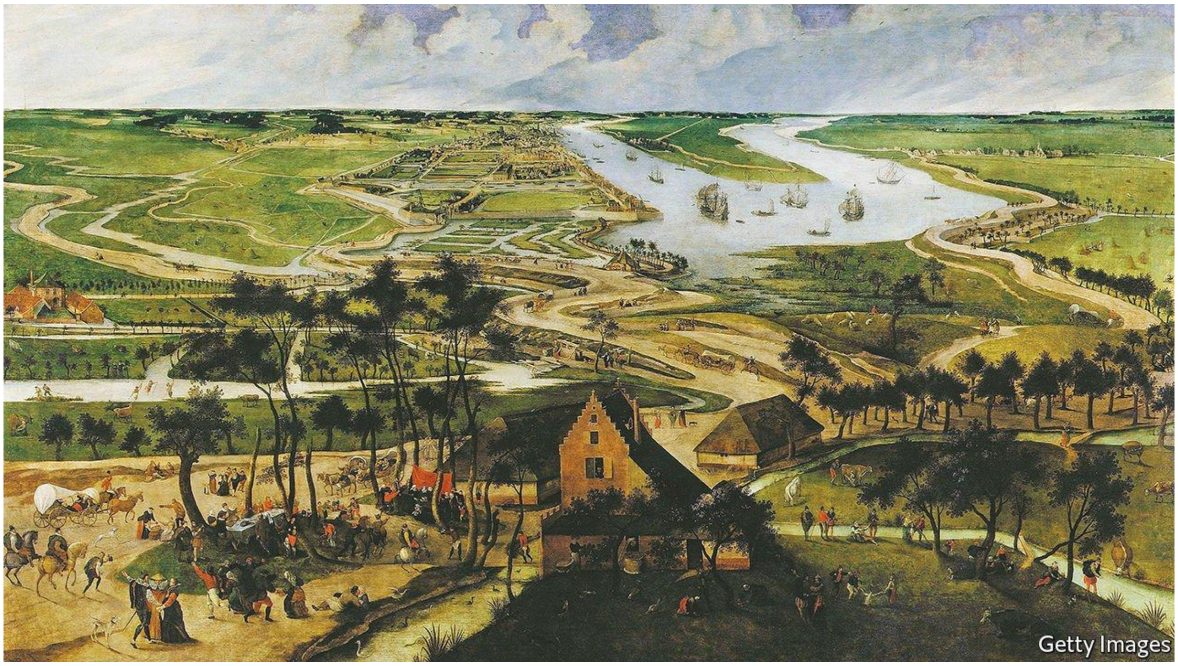
For more coverage of Joe Biden's presidency, visit our dedicated hub and follow along as we track shifts in his approval rating. For exclusive insight and reading recommendations from our correspondents in America, sign up to Checks and Balance, our weekly newsletter.

Poldering on

The Dutch style of government: good for dykes, bad for covid

The Netherlands' consensual "polder model" moves too slowly in a crisis

Dec 11th 2021 | AMSTERDAM



THE DUTCH are not used to being ranked among the worst in Europe. But that is where they stand in covid booster vaccinations: 4.1% of the population have had an extra jab, just behind Romania at 5%. They started on November 18th, months after other countries. "It is impossible to explain," says Roel Coutinho, a former head of the national outbreak-management team. He blames the Dutch culture of governing via exhaustive negotiations and consensus—a system known as the "polder model".

Indeed, almost nine months after elections last March, the country has no new government. For months the ruling centre-right Liberal party locked horns with one of its junior partners, the centre-left D66 party, which wanted more leftist outfits in the coalition. D66 backed down, but an agreement is only now nearing completion.

The Dutch call such lengthy consultations *polderen* on the theory that they stem from the country's history of land and water management. Maintaining polders in a sea-level landscape requires agreements to fix dykes and canals, even between opposing parties. In Dutch government, the polder model means that policy is set in years-long discussions with trade unions, industry associations, housing societies, cyclists—every stakeholder imaginable. In Dutch society, it means a fondness for lengthy meetings where everyone gets a turn.

This consensual system is excellent for long-term planning. Dutch infrastructure and pensions are among the best in the world. But it can be disastrous in a crisis such as a pandemic. Decisions over curfews and vaccine passports are interminably delayed by debates between interest groups and government bodies. Meanwhile, the Dutch political scene has fragmented, and giving everyone a say is getting harder. There are 17 parties in parliament and four in the likely coalition—if they can bring the poldering to an end and strike a deal.

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.

Charlemagne

Angela Merkel, the invisible European

The legacy of Europe's most powerful leader is already fading away

Dec 11th 2021

EXCEPTIONS PROVE who rules. In the summer of 2015 Angela Merkel suspended the EU's asylum rules and allowed 1m people into Germany, in the most controversial decision of her tenure. Rather than being returned to their first port of entry in southern Europe, Syrians arriving in Germany were given a new life in Europe's most prosperous country. Skip forward to December 2021 and asylum rules are being suspended again. This time the aim is to keep people out. Those crossing from Belarus into the EU now face up to four months in a detention centre while their application is processed. Others will not make it even that far. Polish border guards are pushing them back into Belarus, sometimes roughly. *Willkommenskultur* has been shown the door.

When it comes to asylum policy in the EU, it is as if Mrs Merkel's " *Wir schaffen das"* ("We can manage this") had never been spoken. Fences are springing up. Proposals to share the burden of asylum-seekers more evenly have been stuck for five years. It is far from an isolated case: the most significant policies Mrs Merkel pursued at a European level are being undone. The German chancellor left the European stage only on December 8th, when Olaf Scholz's coalition of Social Democrats, liberals and Greens officially took power. Yet the mark left by this century's foremost EU politician is already fading.

Part of this is natural. Even in Germany, a land where consensus is king, a change of government leads to a change of policy. Take its position on central Europe. As chancellor, Mrs Merkel coddled Poland and Hungary as they trampled democratic norms. Mrs Merkel's Christian Democratic Union (and the Christian Social Union, its Bavarian sibling) hindered measures to curb Hungary and Poland's governments, such as cutting EU funds or even just isolating them politically. In Mrs Merkel's mind, the risk of division trumped fears about democracy.

Under the new coalition, a stricter line will emerge. The coalition agreement contained tough provisions on respecting the rule of law. No German government can be seen to throw its weight around on Polish affairs, for fairly obvious reasons. Yet it can stop standing in the way of others, as Mrs Merkel did.

It was a similar story when it came to reforming the EU. Whenever Emmanuel Macron pushed the accelerator of the Franco-German engine, Mrs Merkel would hit the clutch; the car would make a lot of noise, but not go anywhere. In a club of 27, staying still is usually the easiest compromise. It means no one is run over. But it was a particularly enticing option for Germany. After all, from a German perspective, the EU works rather well. It provides Germany with a currency that keeps exports cheap and a large market in which to sell them. Why change the status quo if it works?

When Mrs Merkel lifted her foot from the clutch, things did happen. A €750bn ($845bn) fund to help EU countries recover from covid-19, paid for with common debt, was agreed on her watch. The former chancellor painted it as a pragmatic step in the extreme circumstances of the pandemic. Mr Scholz was comfortable labelling it as something more ambitious, calling potential EU-level taxes to pay for it a "Hamiltonian moment" in the vein of the American Founding Father. Making the fund a permanent fixture induces nausea both in the CDU/CSU and in parts of the coalition. Until recently, Germany could rely on a host of allies who agreed. Now those who would be keen on a repeat, or even making it permanent, are ascendant. If a tool has been used once, it can be used again.

Continental political tides are moving against Mrs Merkel's worldview. Nuclear power, which Mrs Merkel scrapped in Germany, is enjoying a renaissance. Eastern Europe and France are falling back in love with reliable, low-carbon electricity from nuclear plants. (Germany is fighting a rearguard action to stop the commission acknowledging that nuclear power is green.) Mrs Merkel once sat atop a cabal of centre-right leaders who set the direction of the club. At the start of the previous decade, the leader of practically every big EU country hailed from the centre-right. Now not one does. Kyriakos Mitsotakis, the prime minister of Greece (population: 11m), is the most prominent centre-right leader.

A looser line on fiscal rules is emerging across the EU. Under Mrs Merkel, the German view on spending (bad) and saving (good) was foisted on a continent. As finance minister, the centre-left Mr Scholz took pains to play up the similarities between himself and Wolfgang Schäuble, his hardline CDU predecessor. Usually, passports matter more than politics when it comes to EU finance ministers. This time Christian Lindner, the new liberal finance minister, has done his best to avoid being painted as a hardliner. Under Chancellor Scholz, fiscal policy seems to be shuffling from one amenable to Germany to one more forgiving of southern Europe.

Gone, but…also forgotten

Mrs Merkel was the strongest leader on the European stage because others were weak. Whereas Helmut Kohl had François Mitterrand and Charles de Gaulle had Konrad Adenauer, Mrs Merkel generally stood alone. Moments when political clout combined with competence, such as the rise of Mr Macron in France and Mario Draghi's elevation to prime minister in Italy, are brief. Both could be gone next year. If Germany appears to dominate EU politics, it is as much down to the disorganisation of other governments as Teutonic strength.

In a sense, Mrs Merkel's erasure is cruel. Alongside Mr Draghi, she has the best claim of any leader to have kept the EU going. A less patient one might easily have ended up pushing Greece out of the eurozone; a more dogmatic one could have overseen the currency's collapse. She helped the club survive some difficult times, yet she did not shape it. The memory of Mrs Merkel's career will vanish like footprints in the snow. She kept the club together, yet barely left a mark. ■

Read more from Charlemagne, our columnist on European politics:

Why bullshit rules in Brussels (Dec 4th)

A new treaty between France and Italy upends EU politics (Nov 27th 2021)

Last of the commies (Nov 20th 2021)

Britain

The revolution stalls

Behind the chaos and scandal of Boris Johnson's government lies stasis

Two years after a famous election victory, a would-be radical administration has run into the ground

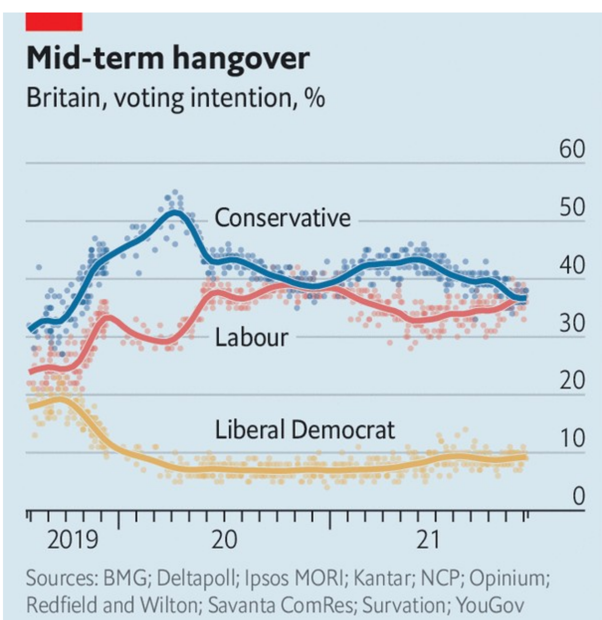
Dec 8th 2021

Editor's note (December 8th 2021): This article has been updated.

THE SECOND anniversary of Boris Johnson's election landslide, on December 12th, is an unhappy one. On December 7th, a junior diplomat-turned-whistleblower laid bare the chaos that surrounded the British evacuation of Kabul in evidence to MPs. The prime minister denied the claim that he personally ordered the airlift of pet dogs as eligible Afghans were left behind. The same day a video emerged of Downing Street aides and press officers joking about a Christmas party held in breach of lockdown a year ago; the next day a senior press officer, Allegra Stratton, who was seen laughingly suggesting that the event had been work-related, resigned. The prime minister, implausibly, declared he was shocked and announced an investigation. And all the while, concerns grow about the Omicron variant of covid-19. Rules on mask-wearing and working from home have been strengthened, though Christmas parties can still go ahead—for now.

Such evidence of arrogance, incompetence and poor judgment would reflect badly on any government. But this one has shrugged off bad press before—including over lockdown breaches, such as a jaunt last year to Barnard Castle, a beauty spot, by Dominic Cummings, then Mr Johnson's chief aide. Labour, the main opposition party, has failed to open up the clear poll lead required by Britain's unequal electoral geography for it to form a majority government (see chart). What leaves Mr Johnson's supporters despairing is less crisis than stasis. On many fronts, the revolution he promised during Brexit negotiations and on the campaign trail in 2019 has stalled. The idea that Johnsonism could be a new model of government, like Thatcherism and Blairism, now looks far-fetched.

The working Tory majority of 87 seats in 2019 was an electoral revolution. It was followed by constitutional revolution, as Britain left the EU. For a "people's government" of self-styled radicals who quote Gramsci and Lenin, that was only the beginning. A revolution in steel and concrete would "level up" Britain's economic geography. A cultural revolution would vanquish elites on behalf of blue-collar voters. A march through the institutions would bring the civil service, courts and quangos to heel.



The Economist

Mr Johnson's ideological victory is total: only a brave few now advocate rejoining the EU or champion cities over towns. But Brexit has become a frozen conflict. David Frost, the chief EU negotiator, is seeking to renegotiate the divorce treaty, and the promised new relationship with Europe is nowhere in sight. EU trade deals have been replicated but no big new deals signed. Nor, to Lord Frost's frustration, has regulation diverged from EU models.

Mr Cummings had started work on new subsidy and procurement rules and a looser immigration regime for scientists, but since his exit in late 2020 policy innovation has ground to a halt. An experimental replacement for EU payments to farmers is still embryonic, even as existing subsidies are withdrawn. Three hefty reforms being pursued by Mr Johnson's government—an online-safety bill, tougher screening of foreign investment and tighter competition rules—are legacies of his predecessor, Theresa May. Rishi Sunak, the chancellor, has shied away from structural tax reform.

As for levelling up, what started as an aspiration to close the productivity gap between north and south has become a slogan for almost any state activity outside London. A policy paper has been delayed. Ministers disagree on devolution. Having promised an infrastructure boom, last month Mr Johnson cut back ambitious plans for new railways in the north.

The government has bashed and battered institutions, but not remade or reformed them. Mr Cummings hankered to break up the civil service, and his tenure saw some senior figures squeezed out. Yet they were replaced by Whitehall lifers, and what remains of the reform programme is consensual and conventional. Ministers have dreamed since the 1960s of relocating civil servants outside London, bringing in more tech skills and improving training, notes Alex Thomas of the Institute for Government, a think-tank. A war on Scottish separatism, led by a combative "Union Unit" in Downing Street, has been wound down, to the relief of Scots Tories who thought it counterproductive. Nadine Dorries, the culture secretary, lobs insults at BBC bosses but has no serious plan for public-service broadcasting.

Who betrayed the revolution? Covid-19 derailed Mr Johnson's premiership, occupying tens of thousands of civil servants, burning political capital with MPs and sending borrowing to £320bn in 2020-21 ($424bn, 15.2% of GDP).

Little surprise, then, that the Treasury has emerged as a major constraint on Mr Johnson's aspirations. It has plumped up departmental budgets, but balked at signing cheques for levelling up. Adult social care, a supposed beneficiary of politically costly tax rises, will remain underfunded as the extra cash goes on the pandemic health-care backlog. Bringing net carbon emissions down to zero is Mr Johnson's most ambitious target, but the Treasury is reluctant to use the tax system to encourage behavioural change.

Sounds like a whisper

For true radicals, Conservative voters can look like the enemy within. The next election will be a defensive operation to hold seats won in 2019, which means jettisoning policies that would disrupt the lives of older voters in provincial towns. A liberalisation of planning rules has been parked; loosening food standards, which would allow a more ambitious trade policy, is off-limits. In their place are simplistic responses to complex problems, such as promises of tougher sentencing for child-abusers, and headline-friendly policies such as stricter pet-welfare laws.

But the main culprits are in Downing Street, which is as callow as the leaked video of staff sniggering about a cheese-and-wine party suggests. Ministers want Mr Johnson to draft in an old hand to lead its inexperienced staff. Mr Cummings wanted it to be a panopticon, monitoring Whitehall performance from a NASA-style control room. Instead it is kept in the dark by ministers and preoccupied with internal politics. Like any good revolutionary, Mr Johnson believed that intractable problems, such as regional inequality and irregular migration, could be solved by sheer willpower. Caution was scorned as gloomsterism. "Government is boring," says a colleague, "and for him it is excruciating."

Far from matching Margaret Thatcher in transformation and vision, Mr Johnson is proving less dynamic than David Cameron, his rival at Eton and Oxford. Mr Cameron's career ended in ignominy after he called, and lost, a referendum on Europe, but he made significant reforms to education, devolution and the civil service. It is neither scandals over cheese-and-wine parties, nor even the risk of electoral defeat, that keeps Tory radicals awake at night. It is the sight of a landslide victory being wasted. ■

Cost drivers

A court bashes Uber into compliance—again

The latest blow may mean vast bill for back taxes

Dec 11th 2021

Alamy

UBER HAS tried repeatedly to persuade others to see it the way it sees itself. Its drivers, the ride-hailing giant has said, are independent contractors with no right to minimum wage, holiday pay or pensions. The drivers, for their part, point out that they are managed algorithmically and cannot set prices or routes. Courts have taken their side. In 2016 the Employment Tribunal ruled that Uber drivers were entitled to minimum wage and holiday pay. Uber lost three appeals, most recently in the Supreme Court in February. On December 6th it was dealt another legal blow when the High Court, in effect, ruled that its entire business model broke the rules.

Uber brought this latest judgment on itself. During the Supreme Court hearing the presiding judge had suggested that the firm might be contravening regulations governing private-hire vehicles in London. Uber asked the High Court to declare that this was not the case. Instead it agreed and said that the rules required Uber, not drivers, to enter into contractual agreements with passengers. Transport for London, the capital’s transport regulator, instructed all ride-hailing operators to step into line.

The change probably means Uber is liable for anything that goes wrong, such as no-shows, and that it is eligible for value-added tax on fares. This may be collected retroactively. Some estimates put the potential bill as high as £2bn ($2.6bn). Rides look likely to become 20% dearer.

Uber’s position in London was already shaky. In its early days it subsidised fares with venture-capital cash in order to dominate the new market. The same tactic bore fruit in America, where Uber and Lyft form a duopoly, but in London Uber is just one of many ride-hailing services, including Free Now, Bolt and Ola, and must also compete against black cabs and an extensive public-transport network. It does not always measure up. Drivers complain that Bolt, an Estonian Uber clone, pays better; customers, that the licensed black cabs that Free Now hails often arrive faster.

This created a negative feedback loop. Fewer available rides meant passengers were less likely to use Uber, which made it even less attractive to drivers. Then came the pandemic, which both reduced demand for rides and provided new ways to make money behind the wheel, delivering meals and packages to locked-down homes. As Britain reopened, the result was a shortage of drivers. In November Uber raised fares by 10% to try to lure them back.

The firm is likely to keep muddling through in London; stepping away from one of its largest markets would send an extremely negative signal to investors. But for London’s 2m Uber riders, the future will be pricier and slower. The days of cheap rides and two-minute pickup times are gone, along with the venture capital that paid for them. For London’s 45,000 Uber drivers, the future is harder to predict. The courts have ruled in their favour, but Uber’s profitability depends on slashing costs—of which they are the biggest. ■

Underlying issues

For the clinically vulnerable, “Freedom Day” has yet to arrive

When will those who have spent 21 months isolating be able to mingle freely again?

Dec 9th 2021

MARK NICHOLLS would not allow a parcel into his home, let alone a friend. Deliveries sat outside for 48 hours: he could not risk any exposure to covid-19, even from a box. Twenty-one months on he is confident enough to visit the supermarket—but only at 11pm, once crowds have thinned. “My life is permanently altered,” he says. “Every journey has to be meticulously planned to limit the risk. I need to avoid crowded places. I will be working from home indefinitely.”

Mr Nicholls is not alone in fearing contact with others. In England alone 3.7m people have been identified as “clinically extremely vulnerable” during the pandemic because of conditions or treatments that can suppress their immune system. For the first 12 months those at risk of severe illness from covid-19 were advised to “shield”: to stay at home, avoid face-to-face contact and arrange deliveries of essentials such as food and medicines.

In the summer, however, the United Kingdom's four constituent nations began to relax restrictions at different speeds. Masks remained mandatory in some public settings in Scotland, Wales and Northern Ireland, but in England on July 19th—dubbed "Freedom Day"—they became merely recommended, and limits on socialising were scrapped. The 6.6% of England's population who had been shielding were advised they could meet people outside but should avoid anyone who had not been fully vaccinated—which, in effect, meant staying away from anyone they did not know well.

An uptick in cases was followed by a convoluted roll-out of top-up vaccines. The most vulnerable could receive a "third primary dose" eight weeks after their second jab, whereas the wider population were allocated a single "booster" after six months—recently revised to three in the hope of avoiding a burst of new infections by the Omicron variant. However, even NHS staff were confused about eligibility criteria and many immunocompromised patients were wrongly told to wait until the six-month mark, says Richard Evans of Blood Cancer UK, a charity that was deluged with inquiries. A poor job was done of explaining the rules, he says, leaving some clinically vulnerable people feeling "in despair, like they've been forgotten".

Even as life returned to normal for many, in mid-October the Office for National Statistics suggested that 22% of the clinically extremely vulnerable in England—more than 800,000 people—were still shielding. Life-satisfaction scores were markedly lower in those who were continuing to shield. Almost all the rest were still taking extra precautions, such as social distancing, avoiding crowded spaces or asking family and friends to take lateral-flow tests before meeting. Prolonged spells out of the workplace meant some employees had to disclose "invisible" medical conditions they would have preferred to keep private, says Sarah Berry from Crohn's and Colitis UK, another charity.

Many such people are frustrated by lax messaging and enforcement, about mask-wearing in particular. Usage fell noticeably over the summer and autumn. Coverings are now compulsory again in England in most indoor spaces and on public transport as Omicron spreads.

"Shambolic" messaging about airborne transmission has not helped, says Deepti Gurdasani, a clinical epidemiologist at Queen Mary University of

London. “We have a prime minister who has repeatedly been observed in places where he’s recommended masks should be worn, and where policy suggests masks should be worn, like in hospitals or on trains, but he hasn’t been wearing them.” Minimising transmission is central to ending lockdowns, she adds. “Unless you make society safe for everyone, including the vulnerable, there is no exit strategy. As long as community transmission is high, no matter what you do you can’t keep it safe.”

Molnupiravir, an antiviral medicine reportedly due to be offered to vulnerable covid-19 patients under a pilot scheme, offers some hope of reducing mortality from the virus among those most at risk of severe illness. But the only way to allow them to return to anything like normality is a “vaccine-plus” approach, says Trish Greenhalgh, a professor of primary care at Oxford University. “Everyone has to be vaccinated and have their boosters, plus we have to look at ventilating buildings, mask-wearing, tracing contacts, testing—the whole lot.”

This feels some way off, however. Your triple-jabbed, severely immunocompromised correspondent did not feel safe even at a recent early-morning blood test in south-east London. The windows stayed shut as people piled in. Two nearby patients had ignored instructions to wear masks. “I don’t have one on me,” said a man, who accepted a mask from a nurse. The other patient sighed as she tweaked the covering tucked beneath her chin. ■

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.

Dual carriageway

Britain is liberalising its listing rules to revive its battered bourse

Companies with dual-class shares will find it easier to raise equity funding

Dec 9th 2021

BRITAIN'S STOCKMARKET has spent a decade and a half in a tailspin. Its share of global initial public offerings (IPOs) has fallen from 20% to 4%, and since a peak in 2007 the number of companies listed on it has fallen by two-fifths. Two government-sponsored reviews published early in 2021 made recommendations intended to arrest this decline. On December 3rd the Financial Conduct Authority (FCA) brought the most important of these into force.

Companies with "dual-class" shares that grant directors outsized voting rights will now be able to join the premium segment of the London Stock Exchange (LSE). Dual-class listings will be permissible if designed to protect fledgling firms from hostile takeovers. The extra voting rights must concern only the removal of a director or change of control, and expire after at most five years. Firms with such share structures will no longer be restricted to the standard segment, meaning that they will be included in the

FTSE indices. That will allow passive funds that track indices to buy their shares, broadening their investor base and increasing liquidity.

But violating the "one share, one vote" principle long regarded as sacred in the City has provoked criticism. Richard Buxton of Jupiter Asset Management wrote in the *Evening Standard* that it would "reduce investor protection and sow the seeds of scandal and losses". In March several fund managers publicly refused to participate in the IPO of Deliveroo, a food-delivery firm, citing its dual-class shares as a reason.

Such opposition is misguided, says Anne Glover, who co-wrote one of the reviews, because "in the early stages of company development, its founders and directors are simply likely to understand the development opportunity better than the general investor." And dual-class shares are favoured by the high-growth, founder-led tech companies the government wants to entice to list in the City. They are beloved of American tech stars that became global giants, from Google and Facebook to Slack and Airbnb.

More importantly, says Ms Glover, dual-class shares protect founders from losing control of their company in the early days after listing. This can be valuable while founders are still learning to communicate their strategy to the market, and especially so given the complex requirements for disclosure that listing brings. The LSE's chief competitors in America, Hong Kong and Singapore all offer this protection, without downgrading the companies that use it. Britain's dearth of listings has been in part due to its failure to do the same.

Three groups stand to benefit from the change. The first is investors in British shares, because firms with dual-class shares tend to generate higher returns. An analysis by MSCI, a provider of stockmarket indices, found that between 2007 and 2017 North American companies with unequal voting rights outperformed those with equal rights by 4.5% per year. Some of this was because many tech firms have dual-class shares, and the sector fared particularly well. But mostly, it was down to differences between individual companies, suggesting that the concentration of voting power in itself boosted returns.

The second group to benefit will be companies with dual-class shares that listed on the LSE's standard segment in recent years, among them Deliveroo, Oxford Nano pore and Wise. They may need to fine-tune their dual-class shares to qualify for the premium segment, but they now have a path to upgrading to a premium listing and inclusion in the FTSE indices, without losing protection against takeovers.

The final beneficiaries—and the main motive for changing the rules—are companies that might list in London one day. The FCA has also decreased the proportion of its shares a firm must make available to the public in order to list, from 25% to 10%. It hopes this will encourage founders and early investors who want to keep their shares to list their companies nonetheless.

Some argue for further liberalisation. Dominic Hallas of Coadec, a tech lobbyist, points out that the five-year limit on dual-class shares sends an odd message to founders looking at the outperformance of firms with permanently unequal voting rights. But after a long time lagging behind its rivals, Britain's stockmarket is moving in the right direction. ■

Bigger inside

Nostalgia and the profit motive have created a market in old phone kiosks

But BT, Britain's former telecoms monopoly, is not happy

Dec 9th 2021

Andrew Testa/New York Times/Redux/Eyevine

ON A RECENT Sunday afternoon, Hampstead High Street offered a very British sight: an orderly queue outside a red telephone kiosk that has not been used to make a call for many years. Danny Baker, a retiree-turned-barista, whips up flat whites on an espresso machine where the phone used to be. The novelty of the kiosk draws in passers-by, some of whom have become regulars.

Edward Ottewell, who owns the kiosk, seems to have found a way to keep it, and others around Britain, useful and profitable. He has bought more than 100 and rents some out for a few thousand pounds a year. One, a few streets from the one Mr Baker rents, houses a cupcake machine. Another is home to a QR code that offers discounts for an ebike-share scheme. Mr Ottewell also sells kiosks on Bidx1, an online platform. The one Mr Baker rents is on the market for £57,500 ($76,200).

Britain once had more than 60,000 red telephone boxes. The original red-box model, the K2, was designed by Sir Giles Gilbert Scott, the architect responsible for Battersea Power Station and Liverpool Cathedral. Most were K6s, a design Scott updated to mark King George V's silver jubilee. For BT, Britain's former telecoms monopoly, which owns them, they are a drain on resources. It has been seeking to offload them ever since mobile phones made them redundant. Its official reseller offers uprooted K6s online—£1,750 for a fixer-upper; £2,900 for one with a lick of paint.

But about 200 k2s and 3,200 K6s have a historic designation, often Grade II, which means they cannot be moved or significantly altered without approval. So since 2008 BT has also been running an "Adopt a Kiosk" programme, under which charities and councils can buy a box for £1 to turn it into something useful, like a home for a defibrillator or book-swap library—and, to BT's displeasure, mini-cafés and coffee shops run for profit.

Mr Ottewell bought his K2s and K6s at this knockdown price through a charity he co-founded. It appears to have sold them to a company, also co-founded by him, which rents them out and sells them on. One off Ashford High Street in Kent went for £5,400 in March. He has since sold another 40 or so, including some at eye-watering prices. In November a buyer from Hong Kong paid £43,000 for one. Another, outside the British Museum, went for £32,000 to an artist who plans to use it as gallery space. Most have a heritage designation, which means buyers in effect also get the square metre of land the kiosk sits on.

So far, so standard for the "law of rent", according to which the person who owns a scarce resource reaps the profit when that resource is put to productive use. But now BT is threatening legal action. In May it served a legal letter to Mr Ottewell's company and charity, saying that they were not "honouring their contractual obligations" and disputing the right of either to sell the kiosks. (Mr Ottewell did not respond to requests for comment.)

Any case may turn on whether BT can prove that Mr Ottewell always intended to use the boxes to make profits rather than for charitable purposes, says Rob Bratby of Bratby Law, a firm that specialises in telecoms. The standard contract says BT can reclaim boxes from a buyer that loses charitable status, but does not prohibit resale. So unless a specific clause was included, buying boxes for charitable purposes and then changing your mind would probably be fine, Mr Bratby thinks.

If BT did manage to prove misrepresentation, it might be able to seek the return of the kiosks Mr Ottewell still owns, but not those he has already sold. That would mean even fewer available for private purchasers and—by another iron law of economics, that of supply and demand—even higher prices. ■

Santa’s little helpers

The robots are gathering to help beat Britain’s supply-chain shortages

Building automated warehouses

Dec 9th 2021 | Erith and Northampton

SOME 3,000 boxy robots, each the size of a small refrigerator, are scurrying around a metallic chequerboard about seven times the size of a football pitch. Every second or so one halts as a crate of groceries rises up and is deposited inside it. The bot then conveys the crate to a picking station, where a human puts orders into bags. This is the “Hive” (pictured), a giant fulfilment centre in Erith, south-east London, operated by Ocado, an online grocer. An AI-driven computer system choreographs the bots’ movements. Each travels some 60km a day, helping to bag around 1m items.

Brexit and a shortage of lorry drivers mean items are missing from supermarket shelves. But further up supply chains, the picture is cheerier, for a nation of shopkeepers has built some of the world’s most advanced retail logistics. With around £350,000 ($450,000) spent on automation per warehouse in 2020, Britain’s distribution and fulfilment centres are the world's most robotised, according to Interact Analysis, a research group. In America, for comparison, the figure is $375,750.

Automation was first motivated by high wage costs, says Ash Sharma, Interact's managing director. Britain spends $18 per square foot on warehouse labour, compared with $16 in America and $4 in China. But now the issue is labour shortages: "Firms just can't find workers."

Britain was also an early mover in e-commerce. Amazon set up its virtual British store in 1998, three years after the American original. Its British fulfilment centres use small, squat robots to slide under shelves and shuttle them to people who pick and pack the right goods.

Online shopping has been the main source of demand. From barely 3% in 2006, the share of retail sales in Britain made online has risen to 26%. When Ocado began delivering groceries ordered online in 2002, there was little technology for automating the handling of goods that must be kept chilled or frozen. So it developed its own. Nowadays, Ocado Group provides robotics to other retailers. It is building 50 more Hive-like systems around the world.

On the shopping list

To keep up, firms need supply chains to become more efficient, not just for e-commerce but also for bricks-and-mortar stores, as the two have become entwined. Nowhere is this more apparent than in a giant warehouse beside the M1 motorway at Northampton. Cygnia, the logistics firm that owns it, handles warehousing and order fulfilment for some 30 retailers, selling goods ranging from beer to beauty products. Its employees pick and pack from tens of thousands of items, not just for online customers, but also for shops, beauty salons and other businesses.

Things get hectic at this time of year. A recent Black Friday offer by one client resulted in two days' worth of off-peak order volume in an hour, says Scott Merrick, Cygnia's chief information officer. The firm also has to cope with constant change, in the form of new products and customised packaging such as Christmas gift boxes. All this is a problem for robots, which, unlike humans, struggle with variety.

Nevertheless, they are coming. Cygnia was bought in September by Wincanton, a giant logistics firm that got its start almost a century ago delivering milk in the West Country. It will introduce robots similar to some it uses elsewhere that work like automated trolleys, fetching items to spare workers from pushing things around. Mr Merrick expects a 200% increase in productivity with two-thirds less labour.

Cygnia says workers displaced by robots will be redeployed, as the firm is expected to grow. Indeed, automation can create jobs, not just for technicians and programmers, but also because improved efficiency tends to generate additional business, says Rueben Scriven, a senior analyst with Interact. He already sees signs of a net increase in warehouse employment.

How long that continues will depend on how well engineers succeed in automating jobs that robots find tricky. It takes dexterity and knowledge not to drop a bag of potatoes on a box of eggs. With the help of sensors and AI, one-armed robots at Ocado's warehouse in Erith are learning the ropes. They can already pick and pack about 10% of the 50,000 product lines stored in the Hive, says James Gralton, chief engineering officer for Ocado's technology division. He thinks that could rise to 60-80% over time.

Vehicles such as forklift trucks and goods transporters will also start to be automated, says Ian Hunt, automation and engineering director for Wincanton. And companies are keen to automate the "last mile"—the bit of the supply chain that ends with the customer. Starship Technologies, an Estonian firm, already offers robotic delivery in Northampton and Milton Keynes. Its six-wheeled pods trundle along footpaths and cycleways to deliver groceries from Co-op stores, using sensors to avoid people and other vehicles. Operators monitor the pods' progress through their cameras and can take control if necessary. When the pods arrive, they are unlocked by shoppers using a mobile app.

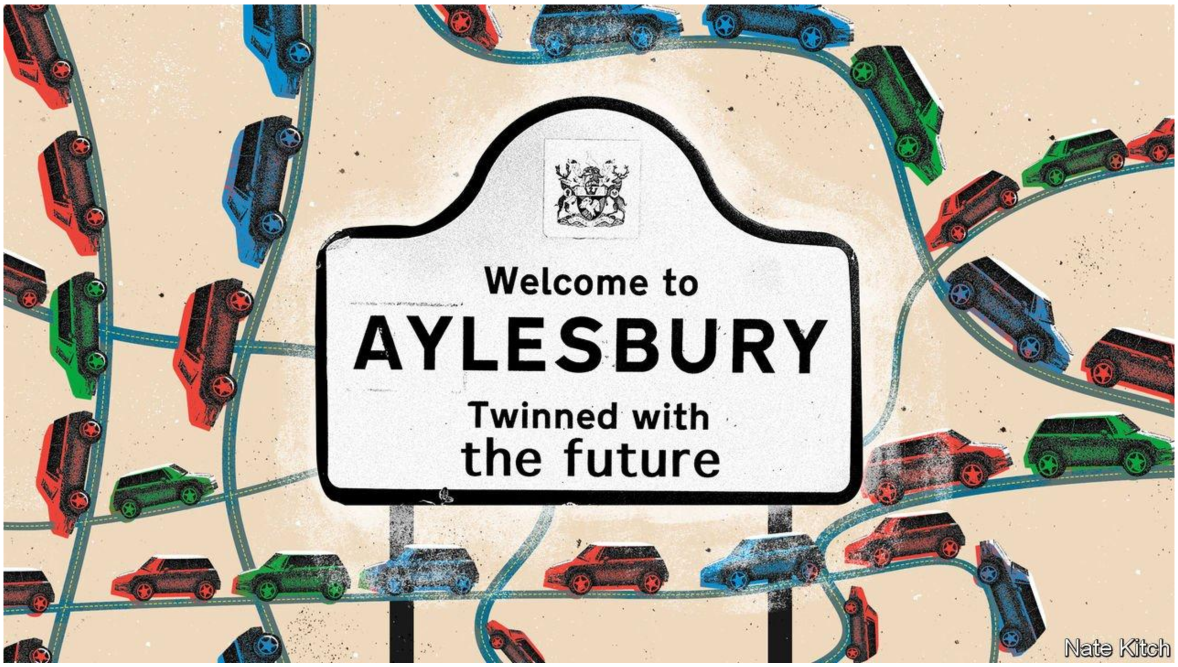
As technologies improve and regulators allow, bigger autonomous delivery vans using roads will arrive. Wayve, a London-based startup, is running trials, including some with Asda, a supermarket chain, and Ocado. For now vehicles have "safety drivers" on board as backup. Lorries will also gain automated-driving aids to help with lane-keeping and avoiding other vehicles. But the complexity of their operations—try reversing a big lorry through a busy, narrow high street to drop goods off at a convenience store —means HGV drivers will be in demand for years to come. ■

Bagehot

Britain's new suburbs are peculiar places

They resemble neither American suburbs nor older British ones

Dec 11th 2021



THE SOUNDTRACK to life on the outskirts of Aylesbury, a town in south-east England, consists of drilling and the beeping of reversing lorries. Fences, scaffolding and piles of earth dot the landscape. Workers in hi-vis vests are turning farmers' fields into suburban developments of a few hundred or a few thousand homes. New roads appear frequently, perplexing any satnav that has not been scrupulously kept up to date.

Britain is often said to be building too few houses, but that is not the whole story. Imagine a balloon that is being gripped by a pair of hands. The balloon is steadily inflating as the population grows and the national government nags local authorities to build new homes. Meanwhile the hands, representing planning restrictions and local NIMBYs, try to constrain any expansion. In many places the hands prevail, and little or nothing gets built. But in parts the balloon bulges spectacularly, resulting in many more homes than local people need.

Aylesbury Vale in Buckinghamshire is one of the bulges. Between 2011 and 2020 its population swelled by 18% to 207,000, making it one of Britain's fastest-growing places. Aylesbury is neither beautiful nor a roaring economic success. But it lies just beyond the green belt around London, in which development is restricted, so it gets some of the suburban homes that might otherwise be bolted onto the capital. It is England's frontier, or its Texas—a place where the country is being created at high speed.

It bears little resemblance to the suburbs that Britain built in the 20th century. Developments used to be consistent in form and colour—red-brick rashes, as the poet John Betjeman dismissively described them. The ones going up around Aylesbury are erratic by design. A short stretch of road might contain three-, four- and five-bedroom houses plus a few flats. Some homes are faced with brick, while others have been painted green or finished with cream-coloured render. Roofs have different-coloured tiles and are pitched at various angles. Nothing lines up perfectly. Local planners favour this sort of ersatz villagery, and so do developers, who like a mix of properties to sell.

Despite a railway line, an abundance of pavements and some appealing paths around the edges of the suburbs, cars dominate. Every household seems to have at least two. Local sales agents say that couples moving out from London tend to arrive with one but quickly succumb and acquire a second. But the new suburbs seem more embarrassed by their car dependency than older ones did. The local authority insists that vehicles are tucked beside homes or in courtyards behind them, rather than lining the streets. Roads curve and twist in an attempt to slow drivers down.

The new suburban developments are dense. A large one known as Kingsbrook constructed by Barratt Homes, Britain's biggest home builder, fits 33 properties into a hectare (13 per acre). With so much land given over to car parking and garages, little is left for gardens. In "Metroland", Julian Barnes's novel of suburbia, published in 1980, the protagonist lies in bed listening to the sound of lawnmowers. The new suburbanites often find that their small, shady yards cannot support lawns. "We turfed the garden three times and it died every time," says Anna, who lives in a development called Buckingham Park. Like others around her, she gave up and laid Astroturf.

The frontiersmen and women of Aylesbury Vale settled there in the social-media era, and they often gather online, on thriving community Facebook pages. “That’s the way you connect immediately. That’s where you ask what the school is like and how to find a plumber,” says James Talbot, a vicar. Though mostly middle-class, they are a striking mix of white, south Asian and black African. Muslims gather for Ramadan, Hindus for Diwali and cultural Christians for carol-singing. But when these events are over everyone returns to streets and schools that are thoroughly integrated. The developments have no history of racial segregation and no purpose-built churches, mosques or ethnic food shops that might encourage ethnic or religious groups to form clusters.

In any case, most residents belong to the same cult of child-worship. Two kinds of people move to the outskirts of Aylesbury: those with children and those who are about to have them. The developments are child-oriented even by suburban standards. They are arranged around schools and playgrounds, with just a few shops and other businesses added, almost as an afterthought. More than anything, they resemble national nurseries.

British cities grew in the 19th and 20th centuries by accretion, as new suburbs were built next to older ones. By contrast, the latest developments are islands. Fast roads and high acoustic fences separate them from the rest of Aylesbury. Established residents tend to prefer that large new developments remain at a respectful distance, says Adam Tillion of Barratt Homes. As a result, Aylesbury Vale as a whole is a mess. Though the estates are well-planned individually, they do not add up to a coherent town.

Out of sight, out of mind

Nobody loves the new suburbs—apart, that is, from the people who live in them. Rob Butler, Aylesbury’s Conservative MP, says that voters complain about growing pressure on roads and doctors’ surgeries. His constituency is next to Chesham and Amersham, which the Conservatives lost in June to a Liberal Democrat candidate running a NIMBY campaign. Boris Johnson’s government attends to ailing post-industrial towns in the north and Midlands while ignoring fast-growing suburbs in the south-east.

It seems an unfortunate oversight. Aylesbury Vale is sprawling and disconnected—a clump rather than a city. But in its ambivalence about cars, its digital enthusiasm, its ethnic complexity and its almost complete lack of high-street shops or formal religious institutions, it points forward. Like it or not, it is a guide to the country Britain is becoming. ■

Read more from Bagehot, our columnist on British politics:

Jordan Peterson and the lobster (Dec 4th)
Boris Johnson should pick fights with conservative institutions (Nov 27th)
Britain's establishment has split into two, each convinced it is the underdog (Nov 20th)

International

- **[Transport: Car wars]**

Car wars

Politicians are sending mixed signals about private car ownership

National leaders are promoting it. Local ones want to curb driving

Dec 11th 2021 | Madison and Paris

THE ALLIANT ENERGY CENTRE, a stadium complex in Madison, the capital of Wisconsin, hosts all sorts of events, from exhibitions to concerts. In November it played host to "Mega Monster Trucks Live", a three-day affair apparently dedicated to choking its attendees, mostly families with small children, with exhaust fumes. The stadium was filled with mud and two large ramps, over which five enormous cars did jumps. "I know we have some big-time monster-truck fans!" called the breathless announcer. At one point an ageing BMW was lifted into the arena for the trucks to crush. A motorcyclist roared in with a bikini-clad model riding pillion, carrying an American flag. Children in ear mufflers screamed in delight as the vehicles, with names like "Kamikaze" and "Jailbird", each a good five metres (16 feet) tall, pulled doughnuts and kicked up mud.

At shows like this, America's car culture looks as strong as ever. What is more American than owning a giant pickup truck? The vast car park outside the Alliant centre was filled with vehicles such as the Ford F-150, a pickup almost the same size as the M4 Sherman tank used in the second world war. President Joe Biden proudly calls himself a "car guy", and on November 17th was photographed driving an electric Hummer, the civilian version of the Humvee, outside a factory in Michigan. The "Build Back Better" bill being debated in Congress includes hefty tax credits for the purchase of electric cars. Pete Buttigieg, Mr Biden's transportation secretary, sings the praises of electric pickup trucks, including a version of the F-150, as a hardy alternative to petrol for rural Americans.

Two legs better

And yet American politicians are not all as obsessed with cars as they were. Madison, the liberal college city hosting the monster-trucks rally, boasts about how many of its people walk, take public transport or cycle to work. A series of city leaders elected across America have promised to nudge people out of their cars. For many owning a car is no longer the great aspiration it was. In that, America is gently following a pattern established in Europe for decades, and now accelerating. On both continents city leaders want to reduce car ownership, so as to cut congestion and pollution.

National leaders however tend to want to add to it, to help the car industry. The result is clashing policies, where people are encouraged to buy ever more cars, but find that they are increasingly unable to use them as they would like. Car ownership is becoming political.

In New York Eric Adams, the incoming mayor, though famous for flouting parking rules, has promised to implement congestion-charging in Manhattan at last. In Boston Michelle Wu, another newly elected mayor, promises to make several important bus routes free for the next two years. In Cleveland, Ohio, Justin Bibb, the mayor-elect, promises to put "people over cars", and to encourage more people to bike and walk, largely by turning traffic lanes into protected bike lanes. Cities as diverse as Buffalo, New York, and Minneapolis, Minnesota, have begun to ditch "parking minimum" rules, which required developers to provide ample free parking at new buildings. Even in California, a state where driving is practically a way of life, state-assembly members have proposed bills to ban cities from imposing parking minimums near public transport. LA Metro, Los Angeles's transport authority, is studying congestion pricing.

European cities have been doing this in some cases for decades. London established its congestion charge in 2003. The leading city now is arguably Paris, the capital of France. Under Anne Hidalgo, the socialist mayor, and her predecessor, Bertrand Delanoë, cars were banned from the left and then the right banks of the Seine in 2013 and 2017. On the right bank, an expressway named for Georges Pompidou, who proudly opened it in 1967 when he was prime minister, has been converted into a sort of urban park. Ms Hidalgo, who achieved this despite lawsuits led by the right, called it a "reconquest" of the city for its residents. Bars now line the open sections of the road, while families on bicycles zoom through the eerily quiet (and now unpolluted) tunnels. Ms Hidalgo has been a vocal proponent of "15-minute cities", the idea that almost everything a person needs for daily life ought to be within a 15-minute walk or cycle.

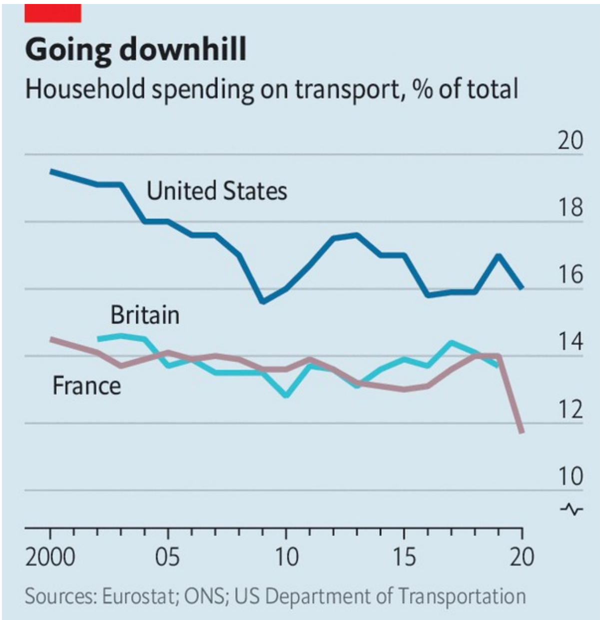
With public transport closed or discouraged during France's lockdown, "we did not want people to turn back to their cars," says Christophe Najdovski, Ms Hidalgo's deputy in charge of transport. So the city quickly opened more bike lanes. In just a few days in May 2020 they converted 50km of road to exclusive cycle lanes. Nicknamed "coronapistes" by locals, they can be less pretty than the rest of Paris; crude concrete blocks, soon defaced with graffiti, separate cyclists from motorised traffic. But they worked. When France's first lockdown ended last summer, there were 60% more cyclists on Paris's roads than the previous year, and the number has kept on rising. "In just a few months we did what we would have needed four or five years to do," says Mr Najdovski.

Car-exclusion zones

It is not only Paris. Britain's government gave local councils the power to close roads to create "low-traffic neighbourhoods" (LTNs) without the usual consultations with residents that block them. Planter bollards have proliferated across England's cities, blocking off residential streets to all but bicycles (typically, residents can enter and exit with their cars, but cannot drive through). When lockdowns started, Amsterdam temporarily banned cars from Spuistraat, Haarlemmerdijk, and Haarlemmerstraat, three central boulevards. The change now seems likely to be made permanent. As Glasgow, Scotland's biggest city, played host to COP26 last month, city leaders announced plans to ban all cars from the centre over the next five years, in the hope of reducing carbon-dioxide emissions. In New York City, as in many places, street parking was converted into outdoor dining space, so that restaurants could stay open. Chicago has unveiled plans for a further 160km of segregated cycle lanes.

Such policies work. From 2001 to 2019 car ownership in Paris dropped from 60% of households to 35%. But they are not always popular. Drivers, especially those who live in the suburbs, feel assaulted by urban policies intended to keep them out. In France, although the changes made in Paris are generally popular, a congestion charge is almost impossible, says Mr Najdovski. The national government, which would have to approve it, is still shaken by the *gilet jaune* (yellow vest) protests that began in 2018 against a proposal by President Emmanuel Macron to raise the cost of petrol. In New York City congestion-charging proposals have also been stalled by the state assembly and then the federal government, even though the state governor and the city's mayors were in favour. In London, the expansion of LTNs, and a charge levied on polluting older cars, have led to protests and vandalism.

In general, for national politicians, supporting car ownership is good politics. Car owners tend to be older, and older people vote more. In America the poorest fifth of the population spend 29% of their post-tax income on transport, almost all of it on buying and running their cars, and even the richest fifth still spend around 10%. In countries with first-past-the-post voting systems, such as Britain and America, they are also more likely to live in swing neighbourhoods, such as suburbs, whereas people who drive less live in the centre of cities, which are usually politically safer.



The Economist

The cost of running a car has in many countries actually been falling (see chart). Britain's Conservative government has put off planned increases in petrol taxes every single year for over a decade. The federal government's gas tax in America was last raised in 1993. On November 23rd Joe Biden declared he would release oil from the strategic reserve, so as to lower petrol prices, which have climbed by 55% since last year. Electric cars are likely to prove even cheaper to run.

And yet a growing number of drivers believe that there is what Rob Ford, the crack-cocaine-smoking former mayor of Toronto, called in 2010 "a war on cars". Some of this is deluded. In America some on the right have spread the idea that a secret UN "Agenda 21" has called for a ban on private cars. In Britain Piers Corbyn, a conspiracy theorist who believes covid-19, vaccines and global warming are all hoaxes, has promoted a campaign for drivers to break London's new rules on driving. But much is motivated by actual city policies. In Germany *Bild,* a feisty tabloid, lambasts a culture that is "against the car and people who rely on four wheels" . In Britain the *Daily Mail* has run a long campaign against LTNs and cycle lanes, arguing that they cause traffic jams and increase pollution.

Driving on the right

That may reflect the politics of car ownership. In Britain analysis of exit polls from the 2019 election showed that car owners were more likely than non-owners to vote Conservative by a margin of 17 percentage points, while Labour had a similar lead among non-owners. In America a study by Stanford University, using data gathered from Google Street View images, found that if saloon cars outnumber pickup trucks in driveways, there is an 88% probability a city will vote Democrat at a presidential election; if the reverse is true, there is an 82% chance it will go Republican. Polling for Strategic Vision, a consultancy, in 2017 showed that Republicans are roughly eight times as likely as Democrats to drive heavy-duty pickup trucks.

Car usage continues to rise, but mostly because baby-boomers who grew up with cars have taken the place of an older generation that had never learned to drive in the first place. Young people are driving less. In America in 1983, 92% of 20- to 24-year-olds had a driving licence. By 2017, that had fallen to 79%. The median age of a new car buyer is now 53. In Germany between 1998 and 2013 car-ownership rates fell for all ages under 40, but rose sharply among those aged over 65. Young people are more likely to live in cities, and to prefer public trans port (possibly because they can still use their phones).

Eventually, this may mean fewer cars on the roads. For now, however, despite automotive bosses' fears of "peak car", car ownership continues to rise. And as it does, the rules of the road are sure to become more controversial. Over the next two decades, the amount of time wasted in traffic in Britain is likely to increase by 50%, according to a study by the Tony Blair Institute, a think-tank, in August. But it spotted "a huge opportunity to rethink our relationship with our cars and the incentives we put around their use". This would be the introduction of road-pricing, ie, charging tolls to use almost all urban roads. Mayors struggling with air pollution and constant traffic jams will almost certainly agree. National leaders, who need to court the older, petrolhead, vote will probably think the opposite. ■

Special report

Japan

A country that is on the front line

Japan offers the world examples to follow as well as ones not to. It is as relevant as ever, argues Noah Sneider

Dec 7th 2021

JAPAN'S NEW imperial era began in spring 2019, when a nondescript man in a dark suit revealed its name: Reiwa. The first character, rei, means "auspicious" or "orderly"; wa means "harmony" or "peace" (officials chose "beautiful harmony" as the English rendering). For the first time the name came not from classical Chinese literature, but from Japan's Manyoshu poetry anthology, compiled over a millennium ago: "In this auspicious (rei) month of early spring, the weather is fine and the wind gentle (wa)."

The early months of Reiwa were hardly auspicious, nor the winds gentle. In early 2020 covid-19 blew in. Japanese donned masks and stayed at home, fuming at politicians who continued to dine out. China, Japan's biggest trade partner, flexed its muscles and suppressed Hong Kong that summer. In the autumn the president of the United States, Japan's chief ally, refused to accept his defeat at the ballot box. The pandemic postponed the 2020 Olympics, which Abe Shinzo had hoped to be the crowning achievement of his record-long tenure as prime minister. Ever fewer babies were born. Mr Abe's intestinal illness led him to step down. The nondescript man in the dark suit, Suga Yoshihide, took over, but after a year he too was gone.

Yet amid all the turbulence, Japan has fared rather well. The Olympics went off in the summer of 2021, with few spectators and little fanfare, but without the epidemiological disaster that detractors had predicted. The ruling Liberal Democratic Party (LDP) chose a new leader, Kishida Fumio, another inoffensive figure. On October 31st voters gave the party a healthy majority in the Diet's powerful lower house. No populist rabble-rousers hijacked the debates and no pseudo-authoritarians impugned the outcome. Average life expectancy in Japan hit new highs of 88 years for women and 82 for men. Excess mortality actually fell; only 18,000 have died of covid-19, in a country of 126m. Masks have stayed on and double-vaccination rates have risen to around 80%.

The rest of Reiwa will demand more resilience in the face of unprecedented challenges. In the Showa era, from 1926 to 1989, Japan lost and recovered from the second world war, grew into the world's second-largest economy and led Ezra Vogel, a Harvard historian, to write about "Japan as Number One" and to urge America to learn lessons from its former foe. Mr Abe had this in mind when he declared that "Japan is back"—his Olympics recalled those of 1964, which symbolised the post-war revival. Such nostalgic bravado exaggerates modern Japan's successes. But the pessimism of Japan's "lost decades", a hangover from the Heisei era that followed Showa, when the bubble burst and the economy stagnated, also exaggerates its failures.

Reiwa's dawn has already provoked plenty of soul-searching. "The question for the Reiwa era is what kind of Japan do we want to get back?" muses Funabashi Yoichi, a writer. Japan is in a "post-growth or post-development era", and its values must evolve from the "faster, higher, stronger" of Showa to "diversity, resilience and sustainability", argues Yoshimi Shunya of the University of Tokyo. Others hope to reprise past glories. "We must make Japan Number One again," declares Amari Akira, an LDP bigwig.

At least one safe bet is that Reiwa will be a time of demographic decline. On current trends the population will shrink by a fifth to 100m by 2050. It is likely also to be a period defined by competition between America and China, by natural catastrophes, by ageing and by secular stagnation. This special report will explore how Japan is grappling with these issues. Once seen as the maladies of an idiosyncratic patient, they have become endemic for many—they simply afflicted Japan earlier or more intensely. A more fitting identity for Reiwa-era Japan may be what Komiyama Hiroshi, a former president of the University of Tokyo, calls *kadaisenshinkoku*, or an "advanced-in-challenges country".

Put another way, Reiwa will find Japan to be on the global front line. That is the result of proximity, not prescience. But it will nonetheless fall to Japan to demonstrate foresight in working out how to survive there. Its successes can serve as models, and its failures as cautionary tales. It is a "harbinger state", argues Phillip Lipscy of the University of Toronto. "We treat Japan as unique at our own peril."

An outdated image

All too often what happens in Japan is seen as *sui generis*, reflecting an almost-mystical social cohesion possible only on a closed island with a relatively homogeneous citizenry. This cultural essentialism is for Japanese both a source of pride and a cover to ignore examples from outside, while giving foreigners (especially Westerners) a source of fascination and a licence to discount unsexy policies, from disaster drills to zoning laws. Culture is obviously important, but it also changes, often through cross-pollination. The behaviour that had the most impact on the course of covid-19 in Japan—mask-wearing—first came from the West, taking root during the Spanish flu of 1918. In Japanese, "face mask" is still written in *katakana*, the alphabet reserved for foreign words.

The idea that Japan never changes is an old chestnut that needs cracking. These days change is only gradual. But that does not mean it does not happen—and that it cannot accelerate, as it has at times in the past. One reason the economy has avoided the collapse that some predicted decades ago is that policies have changed. The transformation is even more pronounced in foreign affairs. Once derided for "karaoke diplomacy", singing from American tunes, Japan now does more of its own song-writing. Diplomats speak of Asia in terms of the "Free and Open Indo-Pacific", a coinage of Mr Abe's. Trade negotiators discuss "Data Free Flow with Trust", another Japanese idea. Central bankers ponder "quantitative easing", also pioneered in Japan. Years before Joe Biden promised America would "Build Back Better", Japan pushed to insert the phrase into the UN framework for disaster-risk reduction.

Japanese society is changing too, though mostly from the bottom up. "It seems as if change is not happening, but the seeds for future change are there," says Mr Komiyama. Old ideals, from the *sarariman* (salaryman) to *shimaguni* (island nation), are eroding. In Japan's stubbornly seniority-based system, the Showa generation still runs the country. But those who follow have a different outlook and different values, reckons Hiroi Yoshinori, a philosopher at Kyoto University. "The young don't know the period of high growth—there is a huge generational gap."

For too many, it is an anxious time. That comes through in conservative voting patterns: young Japanese are more likely to support the LDP than the old. Some retreat into the dark realms of the *netto-uyoku* (far-right online extremism) or isolation as *hikikomori* (shut-ins)—hardly uniquely Japanese behaviour. Others, though, embrace the chance for reinvention, choosing startups or freelancing over large companies and lifetime employment. Their energies are often channelled not into products and services, but into cultivating the social capital that makes a society resilient, into volunteering, social entrepreneurship and socially engaged art. Their scale is local, not national or global, their arenas the private sector or civil society, not politics.

This is partly because politics has become ossified in the absence of real competition. Such stasis is a big reason why being on the front line does not mean being in the vanguard. Japan's treatment of women is retrograde, its protection of minority rights weak, its government services archaic and its climate policy dirty. Many institutional frameworks are stuck in the past. Labour laws are designed for industrial-era monogamous employment, tax codes and family law for the Meiji-era patriarchy, immigration practices for a growing population. "The central government is running behind the times," laments Yanai Tadashi, the founder and head of Fast Retailing, and Japan's second-richest person.

Those weaknesses will hamper Japan in the Reiwa era. Nonetheless, its ability to cope should not be underestimated. And the world should pay attention. Showa Japan once offered lessons in how to win the future, while Heisei Japan showed how to lose it. Reiwa Japan will offer lessons in how to survive. The place to start is on Japan’s front line with China. ■

Foreign and security policy

Why Japan needs more forceful defence

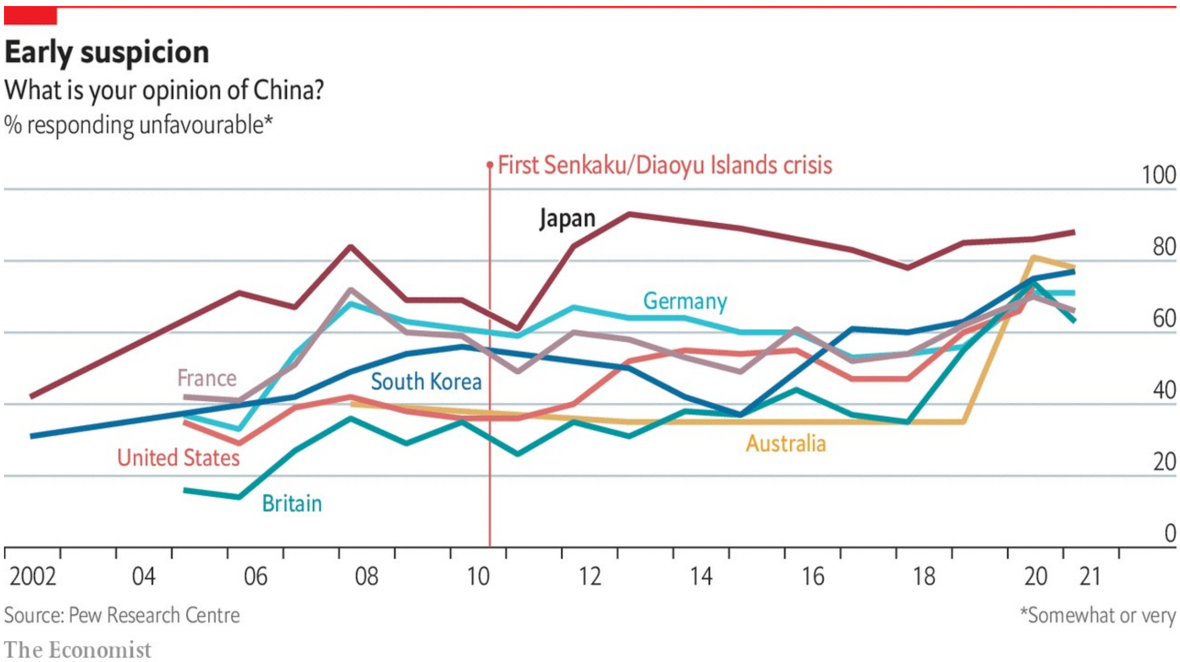
The strong case for more active and interventionist security and defence policies

Dec 7th 2021 | YONAGUNI

YONAGUNI, A ROCKY island at the edge of the East China Sea, long had few defences: just two policemen and two guns. That suited locals, a laid-back, heavy-drinking bunch—until recently. China's rise has made many wary. "Look at what's happening in Hong Kong," frets Itokazu Kenichi, the island's mayor. There is also "a sense that America is in decline", says Tasato Chiyoki, a councillor. As Japan's westernmost territory, such worries are no abstraction: on a clear day, Taiwan looms a mere 111km away.

Japan's Self-Defence Forces (SDF), as its army is called, opened a small outpost on Yonaguni in 2016. It faced resistance, but opposition has since faded. Earlier this year, local voters elected Mr Itokazu, an advocate of expanding the military presence. Even some who were against have changed their tune. "I don't think China will invade," Mr Tasato says. "But with the current situation, you never know." Now he would like his government to plan for refugees who might flee Taiwan in a conflict.

If rivalry between China and America is the big story in 21st century geopolitics, no other country, except perhaps Taiwan itself, has as much influence as Japan over how it will unfold—nor as much to lose if it goes badly. "Japan is the front line," says General Yoshida Yoshihide, chief of the army. This reality is forcing a realisation that, although there can be no substitute for America, Japan must supplement it in order to maintain a favourable balance of power.



Japan is strengthening defences and building ties with others. Tanaka Akihiko, of the National Graduate Institute for Policy Studies (GRIPS) in Tokyo, speaks of a shift from a "one-pillar" to a "multi-pillar" architecture. "We can't rely on America alone," he says. That does not mean turning away but keeping America close by contributing more. Nor does it mean antagonising China, upon which the economy depends. "As the rest of us figure out how to compete with China without catastrophe, Japan has been there for at least a decade and Japan has the best strategy," says Michael Green, a former official at America's National Security Council.

Although this strategy coalesced under Mr Abe, it is the culmination of a long evolution. After the war Yoshida Shigeru, a former prime minister, said Japan should shelter under the American security umbrella and focus on reviving its economy. Others, such as Kishi Nobusuke, Mr Abe's grandfather, wanted to ditch the strictures of the American-imposed constitution and re-establish Japan as a military power. The Yoshida doctrine won. For decades, Japanese foreign policy was limited to economics.

The first inklings of change came under Nakasone Yasuhiro in the 1980s. But the big turning-point was the first Gulf war. "Even Honduras went there with a stick," says Kanehara Nobukatsu, a later deputy national security adviser under Mr Abe. "Japan sat on the couch and sent a cheque—that was our reputation." When the Kuwaitis took out an advertisement in American newspapers to thank the coalition, Japan was left off the list, prompting policymakers to rethink its role, says Iokibe Makoto, a historian of diplomacy. The shift coincided with the rise of a generation of revisionist leaders.

The China threat

China's aggression has been a catalyst, especially in clashes over the disputed Senkaku Islands in 2010, when it banned exports of rare earths to Japan. "We had been in a greenhouse," says Miyake Kunihiko, a former diplomat. "China was kind enough to break the windows—the cold wind came in and we woke up." America's ambivalence to Asia has made Japanese leaders fear abandonment; Donald Trump's erratic behaviour led some to speak of going nuclear (an option that remains unlikely). Officials welcome Joe Biden's focus on Asia, but worry about the absence of American trade policy and a tendency to frame the contest with China in ideological terms. In Mr Biden's talk of a "foreign policy for the American middle class", many hear echoes of "America First".

That has increased the urgency to do more at home. To Mr Abe's chagrin, Article Nine of the constitution, which forbids "land, sea, and air forces, as well as other war potential", stands. In practice, it matters less than it did, owing to changes in the laws governing the SDF passed in 2014 and 2015. In the past, it could use force only in response to a direct attack. The new framework allows it if the Diet deems a situation an "existential threat". "Some people focus on the limits," says Richard Samuels, a security expert at MIT. "But those are pretty flexible limits: an existential threat is what you call an existential threat."

The Economist

One result of the new laws is more space to plan realistically. During the cold war, Japan and America had a combined operations plan for what to do in a conflict with the Soviet Union, but it was largely worthless because it considered only a scenario in which the Soviet Union invaded Japan alone, says Michishita Narushige, also of GRIPS. “The constitutional limit really distorted the scenario,” he says. No longer. Discussions about a clash with China are under way. Japanese and American officials talk a lot about Taiwan. In April Mr Biden and Mr Suga, then prime minister, mentioned “peace and stability in the Taiwan Strait”, the first such reference since 1969.

Behind closed doors, consultations focus on two types of contingency. First is an invasion of Taiwan, probably involving Chinese attacks on American bases in Japan and perhaps an attempt to seize Japanese islands. But senior officials worry more about a second, less clear-cut situation, such as a blockade of Taiwan, or occupation of its outer-lying islands. There is no consensus about Japan’s red lines (nor an understanding of America’s). A Japanese leader now has the tools to act, but needs a political decision to use them. Officials fret that the public does not share their sense of urgency, and might recoil against using force. The LDP is in coalition with Komeito, a pacifist party with close ties to China. Issues between China and Taiwan "need to be resolved through those parties", says Yamaguchi Natsuo, Komeito's leader.

The SDF has been moving resources from Hokkaido towards the south-west. A host of new bases have appeared in the Nansei Islands, which spread some 1,200km from Okinawa to Yonaguni. The army has created a force for recapturing islands modelled on America's Marine Corps. At the base of this new Amphibious Rapid Deployment Brigade on Kyushu, soldiers train to swim with 45kg packs and practise escaping from capsized troop carriers. "It's different from the cold-war period," says General Hirata Takanori, the brigade's commander. "We are the first responders now."

The shift is a work in progress. "This is not enough firepower," admits General Yoshida. Defence spending has grown since 2010, but not at the pace of China's (or even South Korea's). The SDF is often like a football team practising without a ball. On Amami-Oshima, the site of a new missile base, drills stop before the firing begins; to practise shooting missiles, troops must travel to America. Decision-making is still too slow. By the time Japan got planes to Afghanistan to evacuate personnel after America's withdrawal, almost nobody was left to be picked up.

Yet "Japanese capability is not inconsequential", says Sheila Smith, author of "Japan Rearmed". The submarine fleet has grown from 16 to 22, making a difference to Chinese planning. Last year Japan and Australia agreed to let their forces operate in each other's territory—the first such pact with a country other than America. Negotiations over a similar deal with Britain began after the recent visit of the aircraft-carrier *Queen Elizabeth*. Warships from Germany and the Netherlands also called by this year, and French forces joined Japanese-American exercises for the first time. Co-operation with India has blossomed through the Quad club. "The fact that India is active in the Quad—a lot of that has to do with Japan," says C. Raja Mohan, an Indian foreign-affairs expert.

Japan has played a similar role in South-East Asia. "Of all the ASEAN dialogue partners, Japan understands ASEAN the best," says Bilahari Kausikan, a former senior Singaporean diplomat. Though China's Belt and Road Initiative has attracted more attention, Japanese companies and government agencies have quietly worked to build a big stock of investment in ASEAN's infrastructure. Those in the region have noticed: polls show Japan is the most trusted big power among South-East Asians.

That is not true in South Korea. In 2015 the two agreed that Japan should apologise and pay compensation to Koreans held as sex slaves by its imperial armed forces, but South Korea later backed off that pact. There is plenty of blame for poor relations all round. Yet in South-East Asia "the second world war is a non-issue", says Mr Kausikan. It sometimes helps that Japan does not press too hard on human rights, an approach equal parts strategic and self-serving. For some, Japan seems a more reliable partner than America. "Americans only talk," says Mr Mohan. "The Japanese are the ones who built it all—they have the experience, money and political skill to move things in the region."

From Japan's perspective, America's approach to South-East Asia is too inflexible. The Americans avoid state-owned enterprises, but in much of Asia, it is hard to find purely private-sector projects, says Maeda Tadashi, governor of the Japan Bank for International Co-operation. Emphasising competition between democracy and authoritarianism impedes closer co-operation with countries such as Vietnam, a communist dictatorship that has an important strategic role. Demanding allegiance to cold-war-style blocs is anathema to many. "They don't like to be forced to choose between China or America," says Kitaoka Shinichi, president of the Japan International Co-operation Agency.

Nor, for that matter, does Japanese business. "I do not want to be on the US side," says Mr Yanai. "I do not want to be on China's side either." China accounted for 22% of Japan's exports in 2020, while America took 18.4%. That has informed the government's approach to decoupling, which is decidedly selective. Mr Amari, who has spearheaded economic-security policy, says Japan's focus is on reducing risks from "choke-points", such as medical equipment and semiconductors. TSMC, a big Taiwanese semiconductor manufacturer, was lured this year with big subsidies to build a foundry in Japan.

More sensitive industries are girding for further divisions. Nakajima Norio, boss of Murata, a manufacturer of high-end electronic components that once counted both Apple and Huawei as big customers, reckons the worst case may mean developing separate supply chains or even separate legal entities to work for clients on both sides. Less sensitive industries continue to press ahead. Mr Yanai's Uniqlo has just opened a flagship store in Beijing and plans to build 100 new stores in China every year.

Japan can teach America lessons on "how you diminish some vulnerabilities, while still not talking about wholesale decoupling", says Mireya Solis of the Brookings Institution think-tank. America might try to learn from Japan on trade policy as well. Where Japan was once a laggard, it has undergone a dramatic evolution since deciding to join the Trans-Pacific Partnership (TPP) in 2011, and ultimately rescuing it when America under Mr Trump pulled out in 2017. "We saw Japan transform from rule-taker—doing what it was pressured to do—to rule-maker," says Wendy Cutler, a former deputy United States trade representative.

Japan's new leadership in the region is facing its first real test with duelling bids from China and Taiwan to join what is now the CPTPP. It is indicative of the trials that await in the Reiwa era. The delicate balancing act with China—deterring but not provoking, enjoying the fruits of its market while denouncing the ills of its politics—will be harder to sustain. Officials reckon that Xi Jinping has not yet decided what to do with Japan. But they worry that may change, especially if China's economy stalls. Japan remains an ideal target for nationalist passions: in China, memories of its wartime atrocities are still potent.

However, Japan's new activism abroad will also be significantly constrained by its own domestic limitations. It has chosen to become more proactive internationally at a time when its relative economic strength is slipping. Its economy is still the world's third-largest. But the trajectory will force difficult choices about priorities. Back on Yonaguni, China is not the only potential disaster on Mr Itokazu's mind. ■

Climate and the environment

Japan has a chequered record on climate change

Prepared for disaster, unprepared for climate change

Dec 7th 2021 | OMACHI

KARASHIMA YUKARI sits before a colour-coded map. She points out homes that were inundated by floods in Saga prefecture in August, for the second time in two years. Ms Karashima, who works at the Peace Boat Disaster Relief Volunteer Centre, a non-profit, spends much time rushing to scenes of crisis, staying long after the television cameras have gone, scrubbing mould from wet walls and training residents to prepare for the next disaster.

There is plenty to keep her busy. Japan is a "department store of natural hazards", says Nishiguchi Hiro of Japan Bosai Platform, a group of firms that develop disaster-related technologies. Few countries have been shaped so much by hazards and disasters. Besides earthquakes and tsunamis, there are typhoons, floods, landslides and volcanic eruptions. Japan has had to learn to live with risks, making it a laboratory for resilient societies. "The concept of resilience is key to what others can learn from Japan," says Rajib Shaw, a disaster expert at Keio University in Fujisawa.

As the threat from natural hazards grows, from climate change-fuelled fires to zoonotic pandemics, the world must live with more risk. The countries that fare best will be the resilient ones. In “The Resilient Society”, Markus Brunnermeier, an economist from Princeton University, argues that “Resilience can serve as the guiding North Star for designing a post-covid-19 society.”

The biggest lesson from Japan is the value of preparation. As Ms Karashima says, “It’s too late if you start acting after the disaster happens.” That this sounds banal in much of the world makes its absence more striking. Of $137bn provided in global disaster-related development assistance from 2005 to 2017, 96% was spent on emergency response and reconstruction, less than 4% on disaster preparedness. Donors prefer high-profile rescue work; the media cover disasters when they happen, not when they do not. Many governments treat prevention as a cost, not an investment. But natural hazards are not always disasters. “The hazard becomes a disaster when the coping capacity is too weak,” says Takeya Kimio, an adviser to Japan’s overseas development agency. In 2015 he promoted the “Build Back Better” concept in the UN Sendai Framework, a global pact on disaster-risk management.

It is a lesson learned through bitter experience. The Ise Bay Typhoon, which killed 5,000 people in 1959, prompted the first disaster-management reforms. Another round came after the Kobe earthquake in 1995, which killed 6,500 and left more than 300,000 homeless. The government now has pre-arranged contracts for repairing infrastructure, allowing post-disaster reconstruction to begin fast without going through cumbersome procurement precesses, says Sameh Wahba, of the World Bank’s disaster-management programme. Local governments stockpile essential goods in schools and community centres. Parks have benches that can be used as stoves and manholes that become makeshift toilets. Across Japan, every day as dusk falls, folk tunes spill out from neighbourhood speakers—a charming element of local life, but also a means of testing alert systems.

Building safer

The government focuses on engineering-based solutions. Such investment, along with improvements to building codes, has reduced risks. That most structures built to new standards withstood the 9.0 magnitude Great East Japan Earthquake in 2011 that triggered a big tsunami and nuclear meltdown is testimony. “If not for Fukushima, it is the biggest averted disaster in history,” reckons Francis Ghesquiere of the World Bank.

But one cannot discount Fukushima. This nuclear meltdown points to another lesson: that over-reliance on technology can create a false sense of security. Officials who believed sea walls would protect them ignored scientists’ warnings about the plant’s location near a major fault line. Regulators who were too cosy with the nuclear industry overlooked the placing of the plant’s backup generators in a basement. When the earthquake knocked out the main electricity lines, the tsunami overcame the sea walls and flooded the generators, cutting power to the water pumps, leading the reactors to overheat. Even the best hardware can fail.

The software is as essential as the hardware. When Shimizu Mika, a resilience expert at Kyoto University, was a child in Kobe in 1995, citizens were unprepared. “We used to have a drill in schools, duck and cover, and then nothing else,” she recalls. Now people realise disaster risk is everyone’s business. A cabinet-office survey before the pandemic found a majority had discussed household disaster plans in the preceding year or two. Both the private sector and civil society, which blossomed after Kobe, have invested in disaster preparedness. The key is making this participatory and citizen-led; the goal is not simply imparting knowledge of evacuation routes, but strengthening ties within a community.

Research suggests such efforts are more than feel-good fests. When disaster strikes, social capital makes a big difference in survival and recovery rates, argues Daniel Aldrich, director of the resilience-studies programme at Northeastern University. He points to the neighbourhoods of Mano and Mikura in Kobe. Both had similar demographic and physical characteristics, but Mano had more social capital, thanks to a history of activism and community events. When the earthquake hit, residents in Mano self-organised to fight fires; those in Mikura did not. More than 15 years later, NGO density is a better predictor of population recovery rates than income or public spending, Mr Aldrich contends.

The Reiwa era will test these personal ties. One reason is climate change. On Yonaguni, typhoons have become "highly unpredictable", says Mr Itokazu. Perversely, Japan's history of disasters has made it a laggard on climate change. With so many old hazards, the new ones have not generated as much urgency as elsewhere, laments Koizumi Shinjiro, a former environment minister. The Fukushima meltdown has kept environmentalists focused on anti-nuclear campaigns, rather than climate change.

The nuclear disaster also paralysed energy policy. Although the government has pledged to reach net-zero emissions by 2050, it has yet to provide a credible plan for how to get there. Its interim maps depend on restarting large numbers of mothballed nuclear plants, an unlikely prospect given popular resistance. Leaders have avoided frank discussions with the public about the trade-offs. Meanwhile, Japan will continue to consume lots of fossil fuels, including coal.

Another difficulty is the "changing landscape of vulnerability", says Mizutori Mami, head of the UN office for disaster-risk reduction. The elderly, of whom Japan has growing numbers, are at most risk. That was a lesson from the floods two years ago, says Ms Karashima; this year, her team had lists of those who could not reach evacuation shelters and needed help. The pandemic led even more people to remain at home. Adapting to a future when multiple hazards may hit at once will require a flexibility that the Japanese system lacks.

Earthquakes remain the greatest threat, particularly in and around Tokyo. The government reckons that in the next 30 years there is a 70-80% chance of a severe earthquake and tsunami in the Nankai Trough, a zone south of Japan's main island. It may strike where the population and economy are concentrated, crippling industry and roiling global supply chains. The death toll could reach as many as 323,000 (the earthquake and tsunami in 2011 took some 20,000 lives); one study reckons it could lop 11.1% off GDP (a loss 4.5 times bigger than in 2011). "It would challenge the survival of Japan as a state," says Fukuwa Nobuo, director of the disaster-mitigation research centre at Nagoya University. It would also devastate one of the world's great cities, again. ■

Tokyo

The big city that is also pleasant to live in

Surprisingly, the world's biggest city is also one of its most liveable

Dec 7th 2021

"ONLY THUMBS stood up from the flatlands—the chimneys of bath-houses, heavy house safes and an occasional stout building with heavy iron shutters," wrote Russell Brines, the first foreign journalist to enter Tokyo after the second world war. From a pre-war population of 7m people, only 3.5m were left. As Tokyo rebuilt, the city was rife with violence and slum-like living conditions. Ahead of the 1964 Olympics, officials rushed to spruce up the infrastructure and clean up the streets, clamping down on then-widespread practices such as public urination.

Tokyo is now the world's largest city, with 37m residents in the metropolitan area and 14m in the city proper. It is also one of the world's most liveable, with punctual public transport, safe neighbourhoods, clean streets and more restaurants and Michelin stars than any other. In the liveability index of the Economist Intelligence Unit, our sister group, Tokyo comes joint fourth, but its population is larger than the combined populations of the others (Adelaide, Auckland, Osaka and Wellington). "It's possible to have a liveable city at any scale—Tokyo proves that," says Gabriel Metcalf, at Committee for Sydney, an Australian think-tank.

It offers lessons to developing cities elsewhere. In 1950, 30% of the world's population was urban; by 2050, 68% will be. Much remaining growth will be in megacities of more than 10m in Asia and Africa. There are 33 such cities now; by 2030 there will be 43. As Tokyo grapples with what to do when cities age and shrink, it can also serve as a case study for other rich cities.

Tokyo's liveability is a product of planning's successes but also its failures, argues Jordan Sand of Georgetown University. One success was public transport. After the Meiji restoration, the government put rail ahead of roads, expanding networks through the city and then underground. Even as large firms in America built headquarters in suburbs, in Japan they clustered around transport hubs, incentivising the use of trains and subways, says Okata Junichiro of the University of Tokyo. That helped make Tokyo polycentric, with many hubs, not one.

Around those hubs grew dense, mixed-use neighbourhoods. That was the planning "failure". After the war, city planners sought to impose zoning as in the West, as they had after the Great Kanto Earthquake of 1923. But the government's resources were too limited and Tokyo's growth too rapid to control the process. Japan instead developed lax zoning codes, which allow pretty much anything to be built, rather than prescribing what is permitted. Historically, this model "was part of a modernist ethos to separate functions, to say work happens here, living happens here", explains Mohsen Mostafavi of Harvard's Graduate School of Design.

In recent years there has been a "paradigm shift" in how Tokyo is perceived, says Christian Dimmer of Waseda University, Tokyo. Scholars find evidence that, as Tokyo grew, neighbourhoods developed gradually, and became more equal, rather than stratified. In one study, Benjamin Bansal, a Bangkok-based independent researcher, shows that differences in living space per head and other indicators between the city's 23 central wards have declined during Tokyo's rapid growth from 1955 to 1975. Activists in the West also note that Tokyo has avoided the housing crises of many rich countries; some reckon permissive zoning made a big difference.

What once were problems now seem virtues. "[Mixed-use neighbourhoods] have proved very resilient," says Murayama Akito at the University of Tokyo. Consider the work of Jane Jacobs, an American urbanist who railed against planning in the 1960s. "Intricate minglings of different uses in cities are not a form of chaos," she wrote in "The Death and Life of Great American Cities" . "On the contrary, they represent a complex and highly developed form of order." Tokyo has many qualities she championed, says Mr Dimmer: "Social capital, eyes on streets, self-management and self-government, people of many walks of life rubbing elbows in public spaces, a mix of old and new buildings."

The pandemic underlined the value of such qualities. "We became aware of what is there in the square mile around us," says Rahul Srivastava, co-founder of Urbz, a Mumbai-based research collective. For Mr Srivastava and Matias Echanove, another co-founder, such qualities make Tokyo a model for megacities. Their study of Tokyo informs their work in Dharavi, a poor part of Mumbai, where they advocate what Mr Echanove calls a shift from a "less is more" ethos that sees poorer neighbourhoods as problematic districts to be razed and rebuilt, to a "mess is more" ethos that embraces gradual, in situ development.

Tokyo is still growing, but it is also ageing and its population is projected to decline after 2025. "The urbanisation process is finite," argues Andre Sorensen of Toronto University. "Japan is the first country to see that." The shrinkage has already begun in Tokyo's suburbs, where developers once attracted hordes of baby-boomers to freshly built housing complexes. Now, the boomers are getting old and their children have left. Vacant properties, known as *akiya*, are proliferating. Accessing public transit has become more difficult for the elderly.

Technology can help. As Tokyo thinks about "downsizing" public services, big data will matter, says Koike Yuriko, its governor. The city already has granular readings from smart water meters: during football matches at the Olympics, officials could tell when half-time hit from the uptick in flushing toilets. Such data may help make water provision more efficient, and could even be used to flag potential problems with elderly residents who live alone, according to Ms Koike.

Some suburban communities have tried to attract younger residents with promises of cheap property and plentiful space. A handful of developers have shifted to trying to revive such areas. But the sad reality is that some suburbs will survive and others decay. That process is even more obvious in distant regions. ■

Demography

An ageing country shows others how to manage

Japan has aged faster than anywhere else, but it is learning how to cope

Dec 7th 2021 | GOJOME

EVER SINCE 1495 residents of Gojome, a town in northern Japan, have gathered for a morning market. On a recent weekday, along a street of closed shops with almost no people, elderly sellers lay out their autumnal wares: mushrooms and chestnuts, okra, aubergines and pears. It was not always so empty, sighs Ogawa Kosei, who runs a bookshop on the street. He points to pictures his father took that show the scene packed with shoppers.

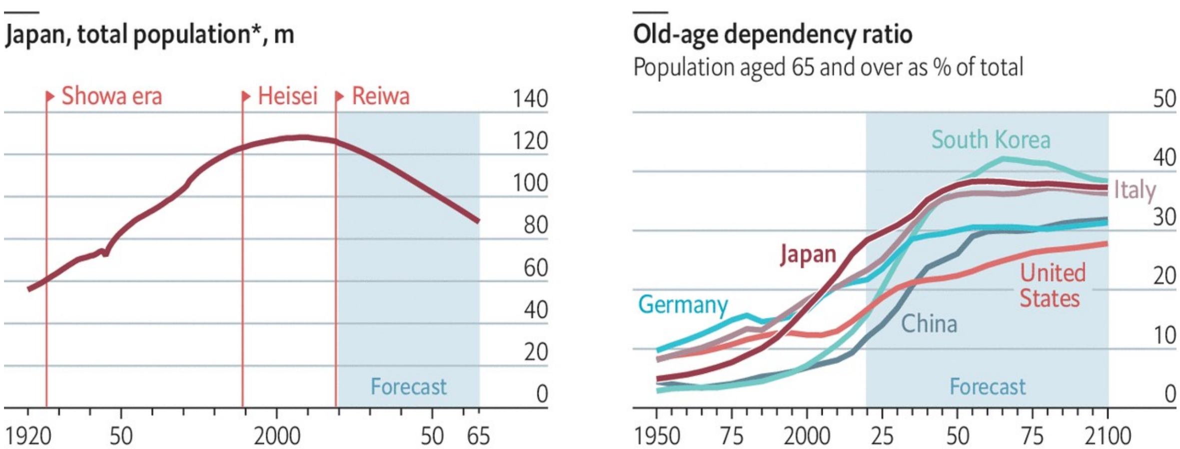
The population of Gojome has shrunk by half since 1990. More than half its residents are over 65, making it one of the oldest towns in Akita, the oldest prefecture in Japan, which is in turn the world's oldest country. Yet Gojome is less an outlier than a portent. According to the UN, every country is experiencing growth in the size and proportion of its elderly population; by 2050 one in six people in the world will be over 65, up from one in eleven in 2019. The UN also projects that 55 countries, including China, will see their populations decline between now and 2050.

Demographic change has two drivers often lumped together: rising longevity and a falling birth rate. Their convergence demands “a new map of life”, says Akiyama Hiroko, founder of the University of Tokyo’s Institute of Gerontology. Infrastructure created when the population was younger and the demographic pyramid sturdier must be redesigned, from health care to housing to transport. The new reality demands a “completely different way of thinking”, says Kashiwa Kazuyori, head of Gojome’s town-planning department. When he started work in the 1970s, the focus was on growth. Now it is about managing decline.

Part of the challenge is that demographic change affects everyone differently. Two towns or regions may look similar from a distance, but have distinct historical, cultural and environmental conditions; two individuals may be the same age, make the same money and live on the same street, yet have different mental and physical health. “We often miss the context,” says Kudo Shogo of Akita International University. He is one of scores of young outsiders who have been welcomed to Gojome, which was a trading hub at the crossroads of farm districts. Comparable farm-focused neighbours have been less open to incomers.

That makes designing national policy difficult. “There’s not a one-size-fits-all model,” says Iio Jun, a political scientist at GRIPS. While the national government is responsible for finance, including pensions, the new map of life is best drawn from the ground up. Many ideas come from listening to citizens, says Ms Akiyama. “They know what the issues are—and many times they know how to solve them.”

Rise and fall



Sources: UN World Population Prospects; National Institute of Population and Social Security Research

*1945-71 population excluding Okinawa Prefecture

The Economist

One issue is how ageing is discussed: as a problem or a burden. "Older people feel they're not needed by society," laments Hatakeyama Junko, the 70-year-old head of Akita Partnership, a non-profit that manages a community centre. Longevity is not itself a problem—it should be celebrated. The problems arise when people live long but unhealthy, lonely, or dependent lives. The goal in Japan has shifted from increasing life expectancy to enhancing the "healthy, autonomous life expectancy", says Ms Akiyama.

This means finding ways for old people to keep working. Nearly half of 65- to 69-year-olds and a third of 70- to 74-year-olds have jobs. Japan's gerontological society has called for reclassifying those aged 65-74 as "pre-old". Ms Akiyama speaks of creating "workplaces for the second life". But the work of the second life will differ from that of the first; its contribution may not be easily captured in growth statistics. "We have to seek well-being, not only economic productivity," Ms Akiyama says. Experiments abound, from municipalities that train retirees to be farmers, to firms that encourage older employees to launch startups. The elderly "want dignity and respect", says Matsuyama Daiko of the Taizo-in temple in Kyoto, which has a "second-life programme" that offers courses for retirees to retrain as priests.

The other key is staying healthy, physically and mentally. Wiser municipalities focus on preventive care. At the Kadokawa Care Centre, a sleek facility in a former school in Toyama, north-west of Tokyo, septuagenarians, octogenarians and nonagenarians splash through a swimming pool and pump away at exercise machines. "If not for this place, I'd be in a nursing home," gushes Kyoda Taketoshi, an 82-year-old. The socialisation is no less important. "It cost a lot to build this place, but it was worth it," says Saito Yoneaki, 80, before skipping off to join friends in the sauna. Although Japan's healthy life expectancy trails overall life expectancy by eight to 12 years, the gap fell slightly between 2010 and 2016.

The birth rate is harder to change. It fell to 1.34 in 2020, far below the 2.1 needed to keep a population stable. Even if Japan could raise it, rural areas would still struggle. One study reckons more than half of Japan's 1,700 municipalities could vanish by 2040, as young people, especially women, leave. Yet though a return to growth is unlikely in most regions, there is an alternative to outright disappearance: a critical core of newcomers. Even a handful of transplants can revitalise an ageing town without replacing the population entirely, notes Mr Iio.

Gojome is a good example. Although the population has been shrinking, "a new wind is blowing in the town", says Watanabe Hikobe, its mayor. Over the past decade a small group of young outsiders has arrived, drawn by visions of a slow, bucolic life, and the chance to try new models of untethered work and communal living. Yanagisawa Ryu, a 34-year-old with a computer-science degree from Japan's leading university, ditched his job in Tokyo and became a "social entrepreneur". He oversees Babame Base, a business hub in an empty school in Gojome that hosts a graphic-design studio, an ecotourism outfit, a local doctor and a firm that trains farmers to use drones, among others.

Such "urban migrants" are still a relative rarity. Mr Yanagisawa admits his university friends find his lifestyle choices "weird". But in many ways, they are the vanguard. "Rather than trying to recreate the past, we have to think: what kind of community, what kind of town do we want now?" says Mr Kudo. They are not the only outsiders moving in. ■

The economy

Japan’s economy is stronger than many realise

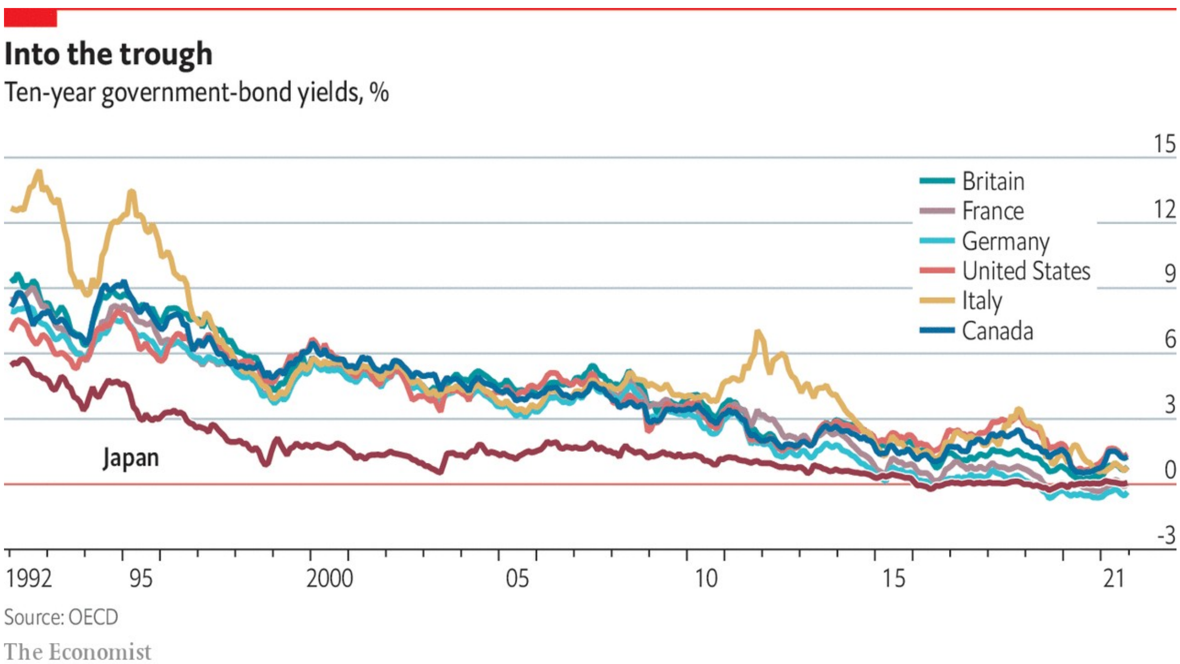
Not bad, but could be better

Dec 7th 2021

“THE MOST decisive mark of the prosperity of any country is the increase of the number of its inhabitants,” wrote Adam Smith in “The Wealth of Nations” in 1776. Later David Ricardo and Thomas Malthus traded barbs over whether the food supply would keep up. By 1937 John Maynard Keynes was warning of future population decline, with deleterious economic effects.

Japan is the canary in this coal-mine. In the 1980s its booming economy struck fear in the world. After the bubble burst in the 1990s, public debt ballooned and deflation set in. Many in the West said Japan’s debt was unsustainable and the Bank of Japan (BOJ) should do more to boost inflation. In 2013 the BOJ’s governor, Kuroda Haruhiko, embarked on dramatic monetary easing. The debt hovered around 230% of GDP. A strange thing ensued: no fiscal crisis struck, nor did inflation come near the 2% target. “The standard textbook on macroeconomics needs an additional few chapters—it doesn't capture the problems Japan faced," says Shirakawa Masaaki, Mr Kuroda's predecessor.

Many rich countries now face similar "secular stagnation": low inflation, low interest rates and low growth. Although higher inflation has emerged recently, financial markets suggest secular stagnation will return soon. Demography is a big factor; Japan simply started ageing and shrinking earlier. As Japan has adapted and others have become more like it, some economists are seeing its economy in a new light.



Debt has not turned out to be such a problem. "What we thought used to be fiscal limits are no longer fiscal limits," argues Adam Posen, of the Peterson Institute for International Economics (PIIE) think-tank. "[Japan] has forced people to confront reality: the interest rate can stay below the growth rate for very long periods." The public debt has been above 100% of GDP for almost 25 years without causing a crisis.

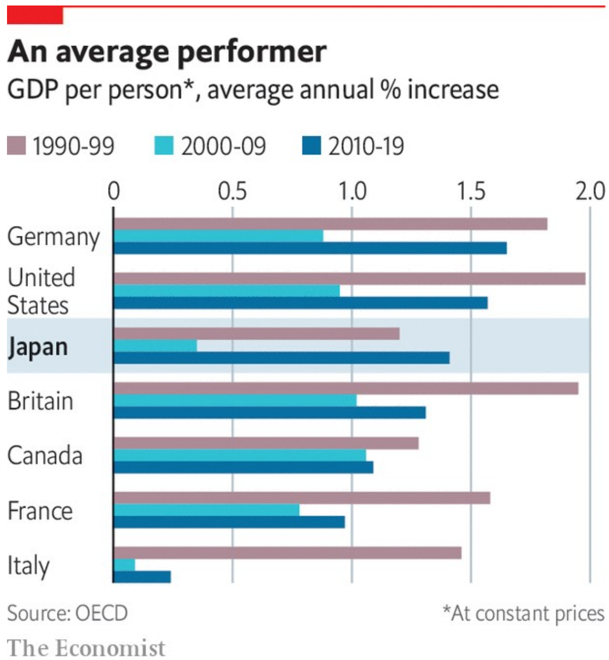
It helps that the country borrows in its own currency, the government has big financial assets and the BOJ holds a big share of the debt. But as David Weinstein of Columbia University argues, Japan has also managed to contain spending. Since 2000, he writes in a paper with Mark Greenan, spending per head on the elderly has actually fallen. "There's a quiet functionality that people miss," says Mr Weinstein. "Markets are sanguine because Japan has a rare ability to adjust." With low marginal tax rates, there is also room to raise revenues.

Some still fear what would happen if interest rates were to go up. The argument that Japan need not worry about its debt because it can respond by levying taxes is "too academic", says Yoshikawa Hiroshi, president of Rissho University. Raising consumption taxes is a political loser. Policymakers are also haunted by the spectre of external shocks that create new fiscal needs. Recently Yano Koji, a vice-minister of finance, caused a stir with a column comparing the country's fiscal situation to the *Titanic*.

Seeking fiscal space

Yet some reckon fiscal policy ought to be used more forcefully. Many now regret two ill-timed consumption-tax increases in 2014 and 2019. Mr Abe's preferred candidate in the recent LDP leadership race called for postponing the government's primary-balance target until the BOJ hits its inflation target. In late November Mr Kishida's government announced a huge fiscal stimulus worth ¥55.7trn ($483bn).

Getting inflation up has not proved easy. Under Mr Kuroda, the BOJ expanded quantitative easing, adopted inflation targeting, and purchased a wider variety of assets. That helped pull the country out of its mild deflation, but only barely. "We misunderstood the inflation issue," says Mr Posen. "It turns out that secular stagnation is far more real and persistent than we thought."



Once inflation expectations are anchored around zero, raising them is hard. Moreover wages have not risen much, despite a tight labour market. Unions prefer stability of employment to wage rises, reckons Nakaso Hiroshi, a former deputy governor of the BOJ. Companies have gradually taken on more "non-regular" workers on part-time contracts; they account for 40% of the labour force, twice as much as in 1990. Perverse incentives may help depress their wages: many women limit their hours or incomes to secure a tax deduction for married couples earning below a threshold.

Ageing, shrinking populations may also be weighing on demand and thus inflation. For Mr Shirakawa, that is a vindication of sorts. He argued at the BOJ that deflation was more a symptom of factors causing low growth, not the cause. In a new book, "Tumultuous Times", Mr Shirakawa says the impact of demographic change on growth "is still under-appreciated".

Overall growth has remained sluggish, but growth per head has recently been comparable with others in the G7. Unemployment has been minimal, longevity has increased and inequality has stayed relatively low. "Maybe Western economists who were so critical of Japan circa 2000, myself included, should go to Tokyo and apologise to the emperor," Paul Krugman, an economist, tweeted in 2020. "Not that they did great; but we did much worse."

Yet Japan could still do better. Public spending should be aimed more at improving long-term growth. Economists in Tokyo fret that the government has wasted its pandemic stimulus on handouts: a study by Hoshi Takeo of the University of Tokyo finds that fiscal support in 2020 was more likely to go to companies that were already struggling before covid-19.

Boosting productivity could help to offset the impact of the shrinking population. Mr Yoshikawa reckons that innovation is key to growth, and that ageing creates new problems that entrepreneurs can solve. Generational shifts may help. While many still prefer stable *sarariman* (salaryman) jobs in big firms, some of today's brightest graduates go into startups. "There is a burgeoning wave—they are a different species," says Mr Niinami. But structural reforms are necessary too, particularly to the inflexible labour market. It should be easier for workers to move between firms and industries, and harder for firms to exploit non-regular workers.

Yet pressure for reforms is lacking, partly due to resistance from vested interests, but also because life remains comfortable enough. "It's not an acute disease, it's chronic," says Mr Nakaso. "You don't really feel the pain, but it impacts your health in the long-term." This could be treated. As Mr Posen puts it, "There are 10,000 yen notes lying on the ground waiting to be picked up." Will Japan's leaders grab them? ■

Immigration

Letting more migrants in by stealth

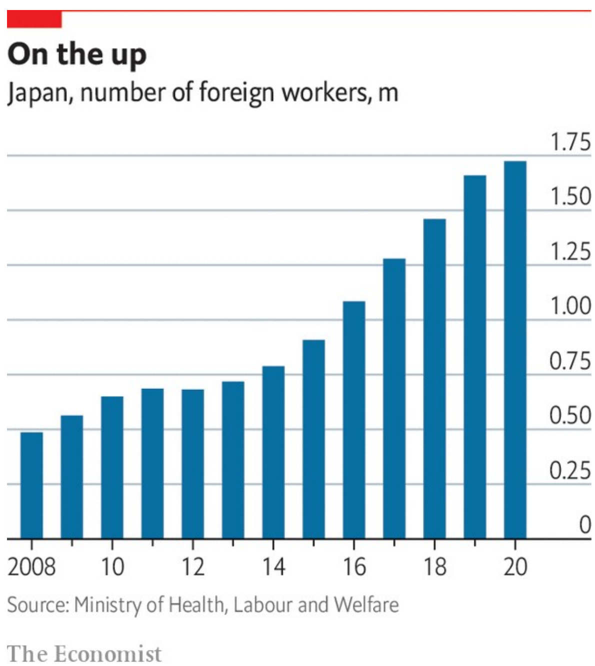
From a low base, immigration is growing quite fast

Dec 7th 2021

TAKEUCHI MASANOBU has a message for his compatriots: "If you order something, it arrives on time, if you go to the convenience store, you have cheap, good, food—that's all sustained by foreigners." Across Japan, foreigners are key in industries from farming to retailing. Vietnamese can be found in the fields of Yonaguni and the factories of Hokkaido. Chinese and Uzbeks man counters in Tokyo's convenience stores. In Gunma Nepali staff help ageing proprietors of inns carry the *futon*. "They are the labour greasing the wheels of Japan's convenience," says Mr Takeuchi, a lawyer in Fukuoka, where one in every 55 workers is foreign, up from one in every 204 in 2009.

Japan may lack an immigration policy, but plenty come in by stealth. The number of foreign workers has trebled in a decade, albeit from a low base. Yet the system is rife with abuse, shown by the death this year of Wishma Sandamali, a 33-year-old Sri Lankan woman detained for overstaying her visa. The pandemic did not help: border controls left thousands stranded abroad. The government has hinted that it may allow low-skilled workers to stay permanently, but it has not taken up the cause of broader reform.

Local leaders express more openness to foreigners than the stereotype of Japan as a *shimaguni* (island nation) suggests. “It’s key to bring in people from outside the prefecture, including those from overseas, to bring in new perspectives,” says Satake Norihisa, governor of Akita. “People with different backgrounds make Tokyo only more attractive,” says Ms Koike, its governor. “If they’re sincere and good people, I have no concerns about them coming—give them land and let them live here,” says Mr Itokazu, mayor of Yonaguni. “It doesn’t matter which country you’re from, we are all descended from apes.”



Forward-looking business leaders agree. “This is the time to define a better immigration policy,” says Mr Yanai, Fast Retailing’s founder. Attracting high-skilled workers is “key” to future competitiveness, says Niinami Takeshi, boss of Suntory, a drinks firm. Noda Seiko, from the LDP’s liberal wing, says it is time to consider ending the idea of “Japan as a country for Japanese people”. The public is becoming more open to foreigners. Familiarity helps. Nearly 32m foreigners visited Japan in 2019, up from fewer than 7m a decade earlier.

Yet “there’s a limit to what local governments can do,” laments Toyama’s governor, Nitta Hachiro. Businesses must handle their own language training and social integration. Many foreigners are left without the support they need. The government “leaves the doors wide open for foreigners, but refuses to position Japan as an ‘immigration nation’,” says Hisamoto Kizo, Kobe’s mayor. Presented with a choice, voters may decide the risks of immigration outweigh the benefits. But a frank national discussion is long overdue.

Looking ahead

The future could be brighter

It could be a lot better with younger and more dynamic political leaders

Dec 7th 2021

THE FIRST general election of the Reiwa era went smoothly. Voters shuffled into polling booths, cast ballots, and gave the LDP a victory, as they have done all but twice since the party's founding in 1955. In one sense, it is a story of stability, despite frustration over the pandemic and worry about the future. Yet in an election with little competition, it is unclear what voters chose.

In the past, competition came from factions within the LDP, says Gerald Curtis of Columbia University: "There was lots of corruption and money politics, but there was a real dynamism." But factional influence has waned. The opposition offered competition for a time, even winning power from 2009 to 2012. But after the disaster on its watch, it has become like the *akiya* that dot Japan's countryside: no price is low enough to entice voters. The marketplace for ideas in Japanese politics has broken down.

Without a threat of losing power, any ruling party becomes unaccountable. Demographic change exacerbates things: some 20% of local politicians are elected without a contest. The result is a government that, in many ways, does not look or think like its people. Less than 10% of new Diet members are women; just three out of 21 cabinet ministers are. Only two are under 50. Dynastic politicians still dominate.

Society is changing faster than established powers. Japan is in the midst of a quiet transformation, argues Hosoya Yuichi, a political scientist: “There is a new wind, but within an old-fashioned structure.” On social issues from gay rights to family law, the LDP is out of step. Many voters feel they cannot change the system, which drives some into business or civil society, not politics. “People are kind of giving up on the country,” says Mr Yanagisawa from Gojome. “Maybe it’s not our issue to think about the country, maybe we should just think about the community.”

The absence of competition creates little incentive for political leaders to take risks. Politicians often lament the lack of “animal spirits” in Japanese business. But the Diet could use some too. Local leaders, especially in ageing regions, feel more urgency. “We can’t just rely on old models or past experiences,” says Mr Satake, Akita’s governor.

Enter Kishida

Mr Kishida, the new prime minister, touts a “new model of capitalism”. But so far it looks like the old one. He also likes to boast of his listening ability, doubtless an admirable quality. What Japan really needs are leaders with vision. Whether Mr Kishida and his successors can demonstrate this will determine if it emerges from the Reiwa era as a model or a cautionary tale.

They should keep three risks in mind. One is external shocks, such as natural hazards and nasty neighbours. A second is internal: today’s mild frustration could turn into something worse. Japan has largely avoided populism and polarisation. But nothing makes it immune to internal divisions. Only 60 years ago Japanese fought in the streets over the security treaty with America. And then there is the risk of aimless drift. Polls find roughly two-thirds of respondents reckon their lives will be “similar” in the future (9% think they will get better, 27% that they will get worse). Complacency could yet rob the country of a brighter future.

The world, in turn, would be wise to pay more heed. Japan used to capture attention mainly as a threat, first in military terms, then in economic ones. Since its "lost decades", it has fallen out of the headlines. It now generates global interest mostly as a cultural dynamo, a travel destination or a source of tales of "weirdness". But supposedly unique Japanese phenomena have a habit of appearing elsewhere. Excessive focus on the mystique of Japaneseness obscures how the country is changing, and how policy choices shape this.

It is time to retire the narrative of a stagnant, isolated country in terminal decline. Japan is central to this century's geopolitics; its international role belies the outdated stereotypes. Big disasters forced the country to change; as a result, it has become more resilient to natural hazards than most. It does not have answers to all the challenges of demographic change or secular stagnation, but it has so far done better on the front line than is often recognised.

Japan should be looked upon as a laboratory for studying shared challenges. The world has an opportunity to draw insights from its successes and its failures. It would be better off if it assimilated more from the outside world. The lessons of the Reiwa era will differ from those of Showa or Heisei, but they will be no less valuable. Japan is no longer Number One, but it still has plenty for the world to learn from. ■

Sources and acknowledgments

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Business

Current situation

A lack of chargers could stall the electric-vehicle revolution

Forget Tesla's production hell. The hardest bit of EVs is the powering up

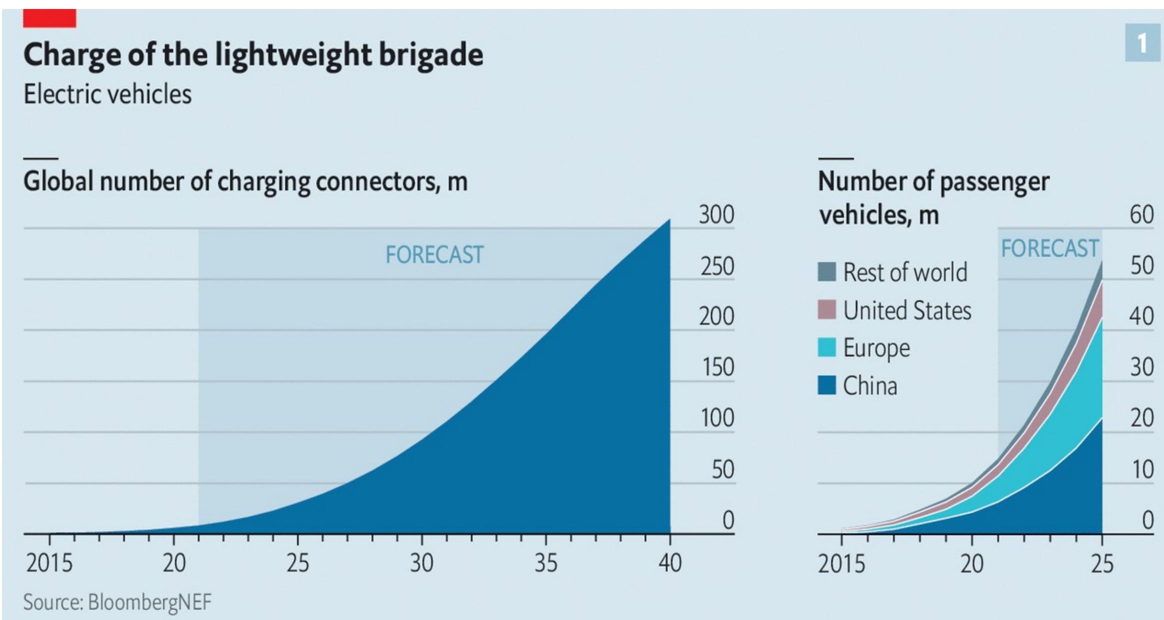
Dec 6th 2021

CAR-BUYERS are getting behind the wheel of an electric vehicle (EV) in ever greater numbers. As battery costs tumble, prices are falling. Compared with internal combustion engine (ICE) cars, which can be a pain to drive and service, electric cars are a thrillseeking motorist's dream. But the shift to EVs is about more than driving pleasure. Transport accounts for around a quarter of the world's carbon emissions, and road vehicles for around three-quarters of that share. If the world is to have any chance of reaching net-zero by 2050, EVs will need to take over, and soon.

The 6m pioneers who opt for EVs this year will still represent only 8% of all car purchasers. That figure must rise to two-thirds by 2030 and to 100% by 2050. Many investors are operating on the assumption that this will all happen as smoothly as a Tesla accelerates. The soaring market values of Elon Musk's $1trn company, newcomers such as Rivian, which makes electric pickup trucks, and Chinese luxury EV firms, attest to sky-high confidence. Electric-battery makers, too, are booming.

Look beyond the glamorous, high-tech-filled automobiles that most obviously embody the EV revolution, however, and a merciless bottleneck appears. Not even those eyeing a new EV are sufficiently aware of it. Governments are only waking up to the problem. Put simply: how will all the electric cars get charged?

The current number of public chargers—1.3m—cannot begin to satisfy the demands of the world's rapidly expanding electric fleet. According to an estimate by the International Energy Agency (IEA), a forecaster, by the end of this decade 40m public charging points will be needed, requiring an annual investment of $90bn a year as 2030 approaches. If net-zero goals are to be met, by 2050 the world will need five times as many.

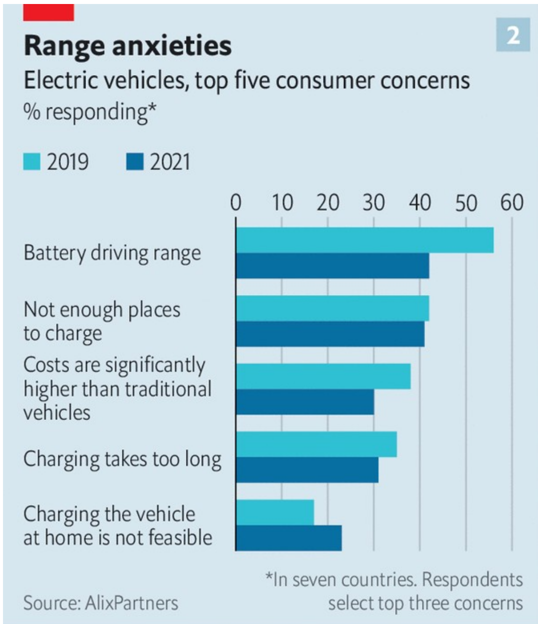


The Economist

Governments' current pledges to phase out ICE cars and shift to EVs are, it is true, not quite consistent with net-zero. Even if roads turn electric less speedily than they should, though, the sums the world needs to spend on charging infrastructure are still stupendous. In a slower scenario envisaged by BloombergNEF (BNEF), a research firm, in which EV sales keep rising as battery prices fall but reach just under a third of all vehicles sold by 2030, roughly $600bn of investment would still be needed by 2040. That would pay for fewer chargers than the IEA foresees—24m public points alone by 2040 (and 309m in total, see chart 1). If net-zero is to be achieved by 2050, BNEF puts the cumulative charging investment required at a whopping $1.6trn.

Besides installing too few public chargers, the charging industry's operational record is poor. The official number currently exceeds what some authorities reckon is needed. The European Commission, for example, thinks every ten EVs require one public charger. According to the Boston Consulting Group (BCG), there are now five EVs per charging point in the EU and China, and nine in America.

That is in theory. In practice, a survey of chargers in China by Volkswagen (VW) found many inoperable or " ICEd" chargers (those blocked inadvertently or deliberately by fossil-fuelled cars). Only 30-40% of China's 1m public points were available at any time. It is safe to assume some inoperability in the EU and America. This summer Herbert Diess, VW's boss, complained on LinkedIn, a social network, that his holiday had gone less than smoothly because Ionity, a European charging network, provided too few points on the Brenner Pass between Austria and Italy. "Anything but a premium charging experience," Mr Diess wrote. That VW part-owns Ionity made the criticism sting more.



The Economist

Drivers can smell trouble ahead. Range anxiety and the availability of public charging is a huge issue (see chart 2). In a recent survey by AlixPartners, a consultancy, in the seven countries that make up 85% of global EV sales the cars' high prices came third on the list of top five reasons not to switch to battery power; the four others were all worries related to charging.

To assess the scale of the challenge start with the basics. A big advantage of EVs is that they can be charged at home—or at workplaces, if employers install chargers. In America 70% of homes have off-street parking where a charger can be installed (the equivalent figure is lower in Europe and China). BCG estimates that in 2020 home and workplace charging accounted for nearly three-quarters of the total charging energy use in America, seven-tenths in Europe and three-fifths in China.

Current EV models typically have batteries with ranges of around 400km. Some go over 650km. The average American drives 50km a day, according to Bank of America. Europeans and Chinese drive less. Two types of charger are good enough to top up vehicles, or give them a boost overnight at home or during the working day. The slowest, providing up to 8km of range an hour, can do the job. So do "level 2" chargers that provide 16-32km. Both are easy on the wallet. Drivers can use dedicated sockets that cost a few hundred dollars (and are often subsidised by governments) to tap the cheapest electricity tariffs.

The Economist

Nonetheless, home and workplace charging only gets you so far. As EV ownership spreads from wealthier households to people living in flats or dwellings without the ability to plug in, a public network becomes vital. In America, Europe and China demand for public charging is expected to increase (see chart 3). Public chargers come in three varieties. A common kind is kerbside charging, via converted lampposts or other dedicated points, where cars might park overnight. Then there is "destination" charging, of the sort that is becoming more widely available in car parks at shopping centres, restaurants, cinemas and the like. Both kinds are level-2, with installation costs usually between $2,000 and $10,000 per point.

Fast charging, which typically adds 100-130km of range every 20 minutes, is vital on main roads for drivers making long inter-city trips and in cities for a quick emergency jolt. Commercial vehicles driving longer distances, such as taxis, need fast charging, too. But since charging firms need to recoup hefty costs of $100,000 or more per fast charger, using such facilities is pricey. To make life easier for customers, Tesla's mapping software directs its cars on long journeys and works out the best route weaving through its dedicated “Supercharger” network. Other new EV models come with similar features.

Charging-industry insiders point out, reasonably, that both EV ownership and charging are in their infancy. Pessimism is unwarranted, they argue, based on a few short years of experience. Only one in 100 cars on the world’s roads is an EV, after all. Pat Romano of ChargePoint, one of the world’s biggest charging firms, talks of the start of “a 20-year arc”.

Fair enough. Still, future demand for charging at scale is impossible to know as yet. Expansion is coming fast, say some. Along with the momentum from electrophile governments, the opportunity to make money charging the world’s expanding fleet means that “hyperbolic growth” is on the way, says James West of Evercore ISI, a bank. But exactly how many public chargers are needed for each EV on the road is “an open question”, notes Bank of America. Scott Bishop of Yunex Traffic, a division of Siemens, a German firm that makes charging hardware, hears many different answers when he asks insiders what share of chargers should be slow versus fast.

Another problem is the industry’s structure. Aakash Arora of BCG’s automotive practice calls its many complex layers the “gnarliest problem of all”. The need to co-ordinate with and get permission from many parties helps explain the slow roll-out. First, there are firms that make the chargers themselves. Then there are the operators. These might own the points, earning money from charging. Or they might collect fees for maintaining chargers operated by site-owners. Site-owners, usually businesses, other private landlords or local authorities, provide the locations for chargers and charge rent to point-owning operators. Service providers are middlemen who allow the charging to happen, with apps or cards that give access to charge points and facilitate payment.

Watt a business

Three kinds of firm are coming to rule the EV-charging roost. One is the vertically integrated car giant. Tesla has not revealed what it has spent on its “Supercharger” network, which now numbers 30,000 points worldwide. But it is probably several billion dollars. Other car firms are following, to a point. BMW, Ford, Hyundai and Daimler are partners with VW in Ionity. Its fast-charging network hopes to expand from 1,500 points to 7,000 by 2025. Electrify America, set up by VW in 2016 as part of its settlement with American regulators over its emissions-cheating scandal, now has 2,200 fast chargers in the United States. General Motors says it will spend $750m on charging. Its first move will be to install 40,000 points at dealerships.

Specialist charging businesses are also expanding. Several have gone public in the past year. None is profitable, and their revenues are tiny for now, but their market values are rising. The most richly valued (at around $7bn) is ChargePoint, which controls 44% of America's public-charging market and is expanding in Europe. EVBox, a Dutch firm, has 300,000 points worldwide, including a quarter of Europe's public level-2 chargers and a third of fast-charging points. EVgo has half the fast-charging market in America (excluding Tesla). But as Ryan Fisher of BNEF notes, in the next decade charging firms will have to find business models that reliably produce profits even if governments cut subsidies.

A third category is energy firms. Fearful of losing business at petrol stations, they are developing ambitious schemes. After buying Ubitricity, a big European on-street charging firm, in February, Royal Dutch Shell, an Anglo-Dutch oil major, said in August that it planned to roll out 500,000 charging points around the world by 2025, both kerbside and fast charging. BP and Total have also been buying charging firms. Utilities are making a push, too. Wallbox, part-owned by Spain's Iberdrola, sells chargers for homes and workplaces. The Electric Highway Coalition, made up of 17 American power companies, plans to install fast charging along inter-city routes.

Governments will act. America's new infrastructure law sets aside $7.5bn for the installation of 500,000 public points by 2030. Mandates such as that recently announced in Britain requiring new homes, workplaces and retail sites to have charging points, adding 145,000 every year, are likely to become more common. A reason for optimism is that improvements in batteries should continue to offer ever longer ranges, and so less need for frequent charging. Newer batteries will be replenished more rapidly than today's are, and chargers will provide current more swiftly.

Doubts about the ramp-up nevertheless persist. The numbers are still small relative to the vast scale of charging networks the world needs. More money will be required to update electricity grids to distribute power to the new source of demand. BCG forecasts that America, Europe and China, home to most of the world’s EVs, will have only 6.5m public chargers between them by 2030—not enough to meet the IEA’s global target of 40m. More cars will vie for each charger. Drivers may need to seek patience as well as thrills. ■

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Bartleby

The shortcuts to Theranos

The trial of Elizabeth Holmes contains lessons for decision-makers of all kinds

Dec 11th 2021

EARLY ON IN “The Inventor”, a documentary about Elizabeth Holmes, the founder of Theranos, she talks about her childhood-reading habits and her interest in what makes a great leader. “So much changes in our society technologically but as humans we don't change a lot,” she says in that slow, deep voice.

Whatever the verdict in Ms Holmes’s ongoing trial, on charges of defrauding investors and patients by making false claims about the startup’s blood-testing technology, she is right about that. The story of Theranos is not simply about how its leaders behaved, and whether they deliberately misled others. (Ms Holmes denies the charges.) It is also about how people take decisions. The trial has shown how cognitive shortcuts helped propel the firm to a valuation of more than $9bn, before reporting by the *Wall Street Journal*, revealing that its proprietary technology did not work, sent it spiralling towards oblivion.

One shortcut concerned Ms Holmes herself. On the face of it, Theranos's product was a blood-testing device. In fact, the firm's real product was its founder, a fundraising machine in a turtleneck. Her charisma intoxicated investors, lured employees and charmed the elder statesmen who crammed the startup's board. Her story—a female entrepreneur who had dropped out of Stanford to disrupt the world of health care—was catnip to journalists.

Charisma is a reasonable trait for investors to like in a startup founder. But people too easily equate confidence with competence. In a study from 2012, researchers from the University of Lausanne taught a bunch of mid-level managers a set of "charismatic leadership tactics"—from three-point lists and moral conviction to hand gestures. Observers' assessment of the managers' competence leapt as a result.

Some of Ms Holmes's charisma may likewise have been learned. Her defence team has entered two handwritten documents into the court records. One is a note in which she lays out a list of instructions to herself for the day ahead. The other is a set of business rules penned for her by Sunny Balwani, Theranos's one-time chief operating officer and Ms Holmes's former lover, whose own trial begins next year. (Ms Holmes's defence rests in part on her allegations that she was abused, moulded and controlled by Mr Balwani, which he denies.)

The documents themselves look risible. "All the laws of nature, all secrets, are imprinted on every cell of our body," writes Mr Balwani, a somewhat concerning statement from the leader of a medical startup. Ms Holmes's note includes lines such as "I know the outcome of every encounter", "I constantly make decisions and change them as needed" and "My hands are always in my pockets or gesturing". But the formula, if that is what it was, seems to have worked. Seasoned executives at large companies lauded Ms Holmes for "owning the room", but ignored warning signs that the firm's product did not work.

That may have been because of a second decision-making shortcut: many investors and executives relied heavily on the judgments of others rather than their own eyes. Large chunks of the trial have focused on the addition of the logos of drugmakers like Pfizer and Schering-Plough, without their knowledge, to reports that seemed to validate Theranos's technology. A former chief financial officer of Walgreens, a pharmacy chain that teamed up with the startup, testified that he thought the reports were written by the pharmaceutical firms, when in fact they had found the technology wanting. Ms Holmes has said that she added the logos herself, claiming to have done so in good faith.

It is simply not practical to fact-check everything, or to run a business on the assumption that all information has been doctored. There was no reasonable way to infer from the documents that Pfizer and Schering-Plough were unimpressed by Theranos's devices. But at some point due diligence has to extend to seeing a technology in action.

The story of Theranos is not just about Ms Holmes's guilt or innocence. It raises questions about Silicon Valley's "fake-it-till-you-make it" culture, investors' fear of missing out on the next big thing and the scrutiny that private firms receive compared with listed peers. It is also about the thought patterns that helped Ms Holmes soar. When you review a job candidate's credentials or take comfort from logos on a website, when you are blown away by someone's charisma, ask yourself what you really know.

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The great reallocation

Want to own shares in Chinese companies?

Come to China

Dec 11th 2021 | Hong Kong

INVESTORS ARE still speculating about exactly what Didi Global, a ride-hailing giant, did to draw the ire of Chinese regulators. Some say it foolishly pushed forward with its $4.4bn initial public offering (IPO) in New York despite being told by officials to delay the listing. Others suggest it stole the thunder from leaders in Beijing by kicking off trading on June 30th, the eve of the 100th anniversary of China's Communist Party.

Whatever its sin, Didi now says it plans to delist from New York and relist in Hong Kong. It has not specified its reasoning or responded to queries on the move. It is possible that the company has been forced to leave America by Chinese internet regulators. This is a fiasco for the firm and its shareholders, such as SoftBank, a Japanese investment group (whose share price has sunk by 8% since the delisting announcement). It also portends two big changes in how foreign investors will access Chinese shares in the future.

The first is the end of Chinese IPOs in America. Not long ago American exchanges were the leading destination for ambitious Chinese firms. Alibaba, an e-commerce behemoth which went public in New York in 2014, remains the largest American IPO in history. Didi was part of a recent groundswell of Chinese darlings keen to tap America's deep capital markets. Some 248 Chinese groups with a combined market capitalisation of $2.1trn were trading in New York in early October.

Those listings have already been threatened by American rules that require all listed firms to provide access to internal auditing documents or be booted off exchanges. Chinese companies cannot readily comply because officials in their home country consider such materials to be "state secrets". The dilemma goes back a decade but a law put into practice by the Securities and Exchange Commission on December 2nd will purge all non-compliant companies from American bourses by 2024. That could have potentially painful consequences for some investors.

Many have held out hope of an eventual agreement between American and Chinese regulators that would revive a once-booming cross-border listing business. However, the suggestion that Chinese regulators are behind Didi's delisting—an unprecedented intervention by a foreign government in the American market—makes a deal much more difficult to strike, says Jesse Fried of Harvard Law School.

The Economist

A second shift is the redirection of capital flows towards Chinese markets. Didi has been one of many Chinese tech groups in recent months to be hit with harsh regulations. The campaign, which has been aimed almost exclusively at companies with overseas listings, has erased some $1.5trn in shareholder value since February. Yet at the same time Chinese securities markets have experienced a windfall. In particular, foreign holdings of Chinese stocks and bonds on the mainland have nearly doubled between the start of 2019 and September of this year, to about $1.1trn (see chart).

The reallocation is mainly the result of two forces. One is the inclusion of Chinese stocks and bonds in global indices, which has meant that index funds need to hold them. Another is the fact that mainland exchanges host few of the pummelled online groups, which mostly have American or Hong Kong listings. As a result, stocks listed in Shanghai and Shenzhen are less exposed to regulatory ire and more diversified, notes Alicia Garcia Herrero of Natixis, a bank. That makes them particularly attractive this year. As more Chinese companies follow Didi from America to Hong Kong, or move to the mainland, even more capital could flow into China.

Many foreign investors expect Chinese-listed firms to be more attuned to its rapidly changing regulatory environment, says Louis Luo of ABRDN, an asset manager. And despite their willingness to crush foreign-listed tech groups, the authorities are much more sensitive to domestic market turmoil given the high level of retail investment from ordinary households. It is hard to imagine regulators causing a locally listed group's share price to collapse as Didi's has. Rather, companies with regulatory challenges will henceforth need to sort them out before listing in China. Chinese authorities have long hoped that their corporate darlings would list closer to home. They are getting their wish. ■

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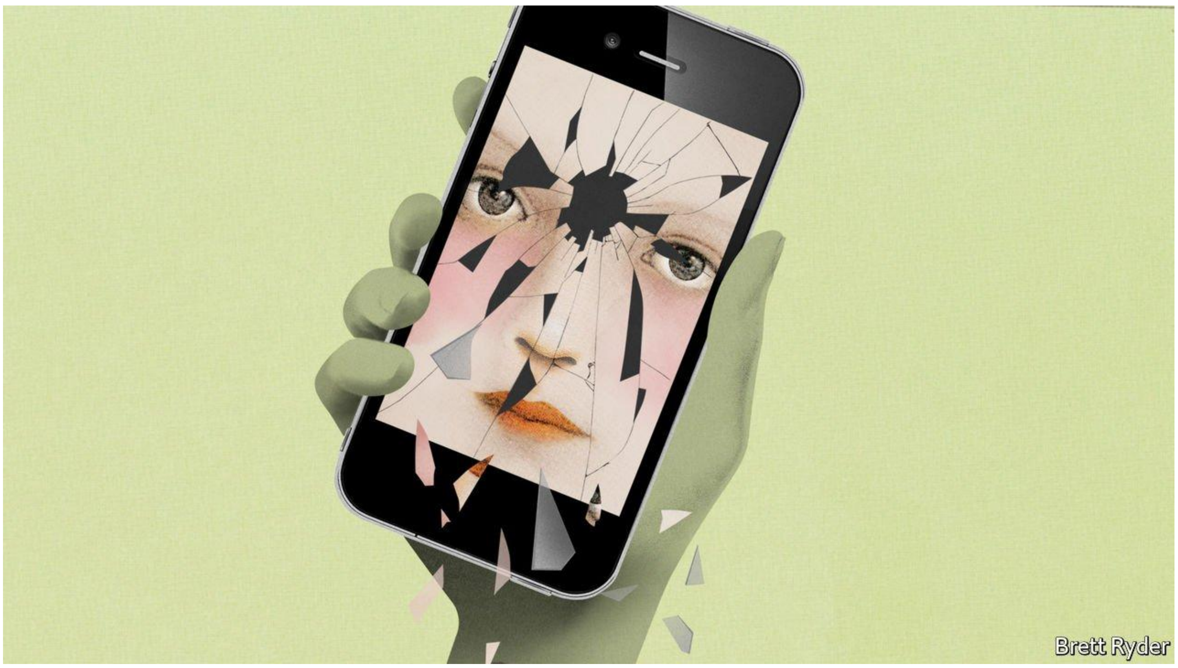
Psyber Boom

Dramatic growth in mental-health apps has created a risky industry

Customers' "emotional data" can be hacked, and no one is checking if the apps work

Dec 11th 2021



WHEN CAROLINA ESCUDERO was severely depressed, going to a therapist's office became hard to face. So she joined BetterHelp, a popular therapy app. She paid $65 each week but spent most of her time waiting for her assigned counsellor to respond. She got two responses in a month. "It was like texting an acquaintance who has no idea how to deal with mental illness," she says. BetterHelp says its service does not claim to operate around the clock, all its therapists have advanced degrees and "thousands of hours of hands-on clinical work", and users are able easily to switch them if scheduling is hard.

Helping people to deal with mental problems has rarely been more urgent. The incidence of depression and anxiety has soared in the pandemic—by more than 25% globally in 2020, according to the *Lancet*, a medical journal. That, combined with more people using online services, has led to a boom in mental-health apps. The American Psychological Association reckons 10,000-20,000 are available for download. But evidence is mounting that privacy risks to users are being ignored. No one is checking if the apps work, either.

Mental-health-tech firms raised nearly $2bn in equity funding in 2020, according to CB Insights, a data firm. Their products tackle problems from general stress to serious bipolar disorder. Telehealth apps like BetterHelp or Talkspace connect users to licensed therapists. Also common are subscription-based meditation apps like Headspace. In October Headspace bought Ginger, a therapy app, for $3bn. Now that big companies are prioritising employees' mental health, some apps are working with them to help entire workforces. One such app, Lyra, supports 2.2m employee users globally and is valued at $4.6bn.

Underneath, though, a trauma lurks in some corners of the industry. In October 2020 hackers who had breached Vastaamo, a popular Finnish startup, began blackmailing some of its users. Vastaamo required therapists to back up patient notes online but reportedly did not anonymise or encrypt them. Threatening to share details of extramarital affairs and, in some cases, thoughts about paedophilia, on the dark web, the hackers reportedly demanded bitcoin ransoms from some 30,000 patients. Vastaamo has filed for bankruptcy but left many Finns wary of telling doctors personal details, says Joni Siikavirta, a lawyer representing the company's patients.

Other cases may arise. No universal standards for storing "emotional data" exist. John Torous of Harvard Medical School, who has reviewed 650 mental-health apps, describes their privacy policies as abysmal. Some share information with advertisers. "When I first joined BetterHelp, I started to see targeted ads with words that I had used on the app to describe my personal experiences," reports one user. BetterHelp says it shares with marketing partners only device identifiers associated with "generic event names", only for measurement and optimisation, and only if users agree. No private information, such as dialogue with therapists, is shared, it says.

As for effectiveness, the apps' methods are notoriously difficult to evaluate. Woebot, for instance, is a chatbot which uses artificial intelligence to reproduce the experience of cognitive behavioural therapy. The product is marketed as clinically validated based in part on a scientific study which concluded that humans can form meaningful bonds with bots. But the study was written by people with financial links to Woebot. Of its ten peer-reviewed reports to date, says Woebot, eight feature partnerships with a main investigator with no financial ties to it. Any co-authors with financial ties are disclosed, it says.

Mental-health apps were designed to be used in addition to clinical care, not in lieu of them. With that in mind, the European Commission is reviewing the field. It is getting ready to promote a new standard that will apply to all health apps. A letter-based scale will rank safety, user friendliness and data security. Liz Ashall-Payne, founder of ORCHA, a British startup that has reviewed thousands of apps, including for the National Health Service, says that 68% did not meet the firm's quality criteria. Time to head back to the couch? ■

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How can we be heroes?

Why Germany is such tough terrain for food delivery

Complex labour laws, organised labour, pricey workers and stingy consumers all play a part

Dec 11th 2021 | BERLIN

DELIVERY HERO has had a good run in the past couple of years. In August 2020 it ascended to the DAX, the stockmarket index of Germany's most valuable listed firms. It is present in 50 countries on four continents. Revenue for the third quarter was €1.8bn ($2bn), a jump of 89% compared with the same period in 2020. "We grew 100% before Corona, 100% during Corona and we will grow 100% after Corona," says Niklas Ostberg, the Berlin-based firm's Swedish chief executive.

By number of orders Delivery Hero is more than twice as big as DoorDash, its large American rival. Even so, DoorDash's market capitalisation is $58bn, more than that of Delivery Hero ($31bn) and Just Eat Takeaway.com ($13bn), the two big European food-delivery firms, combined. European shares tend in general to underperform American ones. But another reason for investors' caution is more specific to food delivery. Strict labour laws, a tradition of union organising, pricey unskilled workers and stingy customers, who buy little and tip rarely, make Europe the toughest of all continents for the business.

Mr Ostberg says that high labour costs have become less of a problem in Europe, because the efficiency of delivery has improved substantially in recent years. European consumers have also grown less parsimonious amid the pandemic boom in online shopping of all kinds. As a consequence, Delivery Hero has reversed its decision to leave the German market altogether, by offloading its domestic businesses, Foodora, Lieferheld and Pizza.de, to Takeaway.com (a Dutch firm that subsequently merged with Just Eat) in order to focus on fast-growing Asia. In the summer it launched a new app, Foodpanda, in Berlin, Frankfurt, Hamburg and Munich.

When it comes to other labour matters, however, things may be about to get tougher still. If a draft proposal in the works in the European Union (EU) becomes law, as many as 4m gig workers delivering meals or ferrying ride-hailers could be reclassified as employees. This would entitle them to a minimum wage, sick leave and paid leave, unemployment benefits, health- and long-term-care coverage, and pension-insurance contributions.

The EU estimates that the reclassification could cost gig-economy firms around €4.5bn a year. Like his counterparts in the business, Mr Ostberg insists that many of his riders choose to be freelancers because that lets them work as much as they want, whenever they want. “More or less anyone can work for us at any time of the day,” he says. But such arguments are increasingly cutting less mustard. In February Britain’s highest court ordered Uber (which runs both food-delivery and ride-hailing apps) to reclassify its drivers in London as employees. Delivery Hero’s share price fell by nearly 3% on December 3rd following reports of the draft EU proposal.

Such developments help explain why couriers are getting more assertive. The riders of Gorillas, a German online grocer with operations across Europe, have clashed with management for months over working conditions and pay. In October the firm sacked hundreds of riders who had participated in strikes, which further fuelled tensions. In late November a labour court in Germany rejected the management’s attempt to stop Gorillas riders from electing an in-house works council, which they duly did. The firm’s executives grudgingly had no choice but to say they will work with workers' representatives.

All this is happening as competition in Germany intensifies. Delivery Hero will have to invest some €120m in German sales and marketing in 2022, reckons Jürgen Kolb of Kepler Cheuvreux, a financial-services firm. It is now competing with Lieferando, which dominates the German market (and is owned by Just Eat Takeaway.com), Uber Eats, which launched in April, and Wolt, a Finnish firm recently acquired by DoorDash for €7bn. Last month DoorDash launched under its own brand in Stuttgart. The next few years look poised to be dog-eat-dog in German food delivery. Consumers can count on full bellies, courtesy of the gig firms. Their shareholders may go hungry. ■

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Schumpeter

Big business v big labour

American unions are reasserting their power. American companies are working out how to respond

Dec 11th 2021

Brett Ryder

ASKED WHAT labour wanted, Samuel Gompers, founding president of the American Federation of Labour in the late 1800s, is often quoted as responding: “more”. His actual answer was surprisingly lyrical. “More schoolhouses and less jails…more learning and less vice…more leisure and less greed…more of the opportunities to cultivate our better natures.” His ability to tie loftiness to pragmatic demands for better wages and working conditions helped make the labour movement a powerful and popular force.

After years in decline, big labour is regaining both power and popularity. Joe Biden, whose political career began in the union-friendly 1960s, has vowed to be the most pro-union president in history. Feeling newly empowered, workers have staged 241 big strikes this year, 58 of them in November alone. Unions are popping up in surprising places. Last month curators at Boston’s Museum of Fine Arts, who set one up last year, downed catalogues for a day. On December 3rd Liz Shuler, new head of the AFL-CIO, the successor umbrella group to Gompers's organisation, said big tech is the next frontier to be organised. Workers at Alphabet and Kickstarter have already set up unions. Amazon is in the midst of a protracted conflict at a warehouse in Alabama. All this is going down well with Americans. Public support for unions has reached 68%, according to polling by Gallup, a level not seen in half a century.

That presents a pickle for businesses. On the one hand, they are already dealing with a tight labour market. On the other, taking on unions risks angering consumers and potential hires, as well as the president. To balance these competing objectives companies must tread carefully.

These days the first-order answer to the Gompers question given by both the Biden administration and big labour is "more trade unions"—or, as the labour movement and its supporters put it, an increase in the "density" of union representation. Only then, the reasoning goes, will better pay, benefits and working conditions follow. The primary objective has been pursued vigorously. Minutes after his oath of office in January Mr Biden dismissed the general counsel of the National Labour Relations Board (NLRB), who acts as the de facto government prosecutor in labour-management disputes. The general counsel's office has since reversed procedures adopted under Mr Biden's more pro-business Republican predecessor, Donald Trump, and pushed to undo older rules, some dating back to the days of Harry Truman. In late November the NLRB voided the result of the unionisation vote at Amazon's Alabama warehouse, which the e-commerce giant carried by more than two to one, and on December 7th it allowed vote-tallying at three Starbucks cafés to go ahead.

More densification efforts are afoot. Two bills to expand labour power directly are unlikely to go anywhere, given the Democrats' slim majorities in both houses of Congress. But worker-friendly provisions have been sewn into other legislation. The new bipartisan infrastructure law directs spending to projects with union labour. Mr Biden's $2trn social- and climate-spending bill, which has passed the House, includes the tax deductibility of dues and tax credits for electric cars made by unionised workers (as well as heavy fines for labour-law violations). A report of a "whole-of-government" task-force set up by the White House to come up with pro-labour policies that could be advanced without new laws is due out any day. It has received more than 400 suggestions.

This revival of organised labour could yet turn out to be a blip. Previous ones petered out; a series of strikes in 1945-46, accompanied by rising inflation, soured the public mood and led to the passage of the more restrictive legislation that remains in force to this day. Unionisation rates have been declining for decades across the West, not just in America. Still, companies are not taking any chances. They are pursuing two main strategies.

The first one is to keep quiet. Rather than inveigh against new labour rules, companies are keeping a low profile. They are operating through big business groups such as the National Association of Manufacturers and the US Chamber of Commerce. Both have been lobbying furiously against pro-labour provisions under consideration in Congress, with some success.

If firms have no choice but to respond directly, as when facing a unionisation drive, they also proceed discreetly. Most CEOs avoid public statements on such matters. Their comments, says a longtime labour lawyer, can be used as evidence of unfair labour practices or provoke a customer backlash. When they do speak up, it is in anodyne terms such as praising the "direct relationship" between employer and employees, as Starbucks's boss, Kevin Johnson, did this week. Businesses also rely on third-party consultancies and specialised law firms to conduct surveys to gauge worker dissatisfaction (which may lead to disputes and, eventually, union drives), and organise message bursts and workshops to help convince workers (unthreateningly, since anything else would be illegal) that union dues is not money well spent.

Fruits to their labour

The second strategy involves being very loud indeed. Companies are publicising higher wages and benefits. In October Starbucks announced its third rise in just over a year. It will pay baristas at least $15 an hour by 2023, more than twice the federal minimum wage. Amazon has set a floor at $18 for new employees, plus signing bonuses and other perks. Other firms have no choice but to follow suit. According to the Bureau of Labour Statistics, compensation for non-union private-sector employees rose by 1.4% in the third quarter, compared with the second, the biggest jump in a decade. The Conference Board, a business-research outfit, finds that companies expect to raise pay by 3.9% in 2022 on average, the most since 2008. A lot of this is the result of a worker shortage. That it helps pre-empt union demands is a welcome side-effect. One thing is clear. Organised or not, it is labour's moment. ■

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Finance & economics

All mouth and no trousers

Evidence for the "great resignation" is thin on the ground

Job quits are not unusually high

Dec 6th 2021 | SEATTLE

AS THE EFFECTS of the Spanish flu waned in 1919, Seattle's workers agitated. Many were fed up with long hours and poor pay, especially at a time of high inflation. Shipyard workers went on strike, leading others to down their tools in solidarity. Newspapers were filled with stories of machinists, firefighters and painters quitting their jobs. Events in Seattle sparked labour unrest across the rest of America and even much of the rich world. Bosses worried that the lower classes had become work-shy anti-capitalists.

Seattle once again seems like ground zero for a big shift in labour relations. In October the local carpenters' union finished a weeks-long strike over pay and conditions. Hotels and shops remain understaffed. Local tech firms, worried about losing staff, have raised average salaries by nearly 5% since 2020. Microsoft, one of them, claimed earlier this year that 46% of the global workforce was planning to make "a major pivot or career transition".

Seattle seems like an example of what Anthony Klotz of Texas A&M University has called the “great resignation”. That memorable term has quickly become a corporate buzzword, spouted on companies’ earnings calls and at cocktail receptions. It has also made waves online. An “anti-work” message board on Reddit, a social-media site, is filled with screeds against the demands of greedy bosses. The forum now generates more user comments a day than the “WallStreetBets” subreddit, which moved stockmarkets earlier this year.

The term is elastic, but in essence it makes the proposition that the pandemic has provoked a cultural shift in which workers reassess their priorities. People in low-status jobs will no longer put up with bad pay or poor conditions, while white-collar types scoff at the idea of working long hours. Some people have become lazier or feel more entitled; others want to try something new, or desire money less because they have come to appreciate the joys of a simpler life. This is, supposedly, leading to a tsunami of resignations and dropouts. There is just one catch: the theory has little hard evidence to support it.

The Economist

The great-resignation thesis seems strongest in America and Britain. In October 4.2m Americans quit their jobs, equivalent to nearly 3% of total employment, close to the record (see chart 1). In the third quarter of the year nearly 400,000 Britons moved from one job to another after handing in their notice, the highest-ever level. Employers may be responding to the threat of further departures, too. A tracker compiled by Goldman Sachs, a bank, suggests that wage growth in both countries is unusually strong (see chart 2). A weak jobs report for America, released on December 3rd, seemed to confirm how hard it has become to hire staff even as vacancies remain sky-high. The world's largest economy added just 210,000 jobs in November, below economists' expectations of 550,000.

The Economist

In other parts of the rich world, however, a great resignation is harder to spot. It is certainly true that millions have dropped out of work. Our best guess is that the labour force in the rich world is 3% smaller than it would have been without covid-19, a deficit of 20m people. Yet outside America and Britain there is little sign that this reflects more people quitting.

In November 107,000 Canadians who had left their jobs within the past year did so because they were "dissatisfied", down from 132,000 on the eve of the pandemic. In Japan the number of unemployed people who had quit their previous job is near an all-time low. There are hints of a small rise in resignations in Italy, but across the EU as a whole the flow of people from work into leisure is lower than before the pandemic. Data from New Zealand on labour-market flows look entirely unremarkable. And in many places there is little sign that workers are getting antsy, which you might think could presage a rise in resignations. The number of industrial disputes in Australia continues to trend downwards. Collective disputes are “facing extinction”, according to a recent issue of *Japan Labour Issues*, a journal. If the pandemic has changed workers’ outlook on the world, they are hiding it pretty well.

Other factors, then, probably help explain the decline in the labour force. Many people still say they are fearful of catching covid-19 and may therefore be avoiding public spaces, for instance. Immigrants have returned to their home countries.

Even if a wave of resignations is largely an Anglo-American phenomenon, is there any evidence that the people who are quitting are doing so because they have become work-shy? Reddit posts aside, this does not seem to be the case. In Britain a tenth of workers say they would like a job with fewer hours and less pay—but that is in line with the long-run average. A recent study by Gallup, in America, suggests that “employee engagement”, a rough proxy for job satisfaction, is near its all-time high: hard to square with the notion that lots more people are desperate for a way out.

That suggests two more prosaic explanations for soaring quit rates. One relates to vacancies. When there are lots of open positions, people feel more confident about handing in their notice, even if they rather like their job. They may also be poached. Vacancies are high right now partly because the pandemic has led to surging demand in new sectors (say, warehouses for online retail). Analysis of America by Jason Furman of Harvard University and of Britain by Pawel Adrjan of Indeed, a job-search site, suggests that job quits are at the level you would expect them to be, given the number of vacancies.

Messrs Furman and Adrjan’s analysis may nonetheless underestimate how unremarkable the surge in quits truly is. In both countries resignations sank during the worst of the pandemic in mid-2020. Many people who would like to have left a position last year may only now have plucked up the courage to do so. Account for these “pent-up” resignations, and the recent pickup looks even less unusual.

Could a truly "great resignation" ever emerge? It would probably require more radical cultural changes. Households would need to decide, en masse, that their future consumption needs, and the income needed to fulfil them, were substantially lower. That would mean no more foreign holidays, less dining out and fewer household appliances. It would also mean fewer Christmas presents. Anyone who visited a Black Friday sale this year, in Seattle or elsewhere, would be quickly disabused of the notion that such a dramatic shift was on the cards. ■

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Only disconnect

The difficulties of policing remote work

Why bans on after-hours calls may not work

Dec 11th 2021

AS OFFICE LIFE approaches some sort of new normal, remote working is here to stay. Employers enjoy cost savings as they spend less on desks and floor space. For employees the promise is of time saved: spared of their commute, they can get their work done and focus on their families and hobbies. That, at least, is the idea. But, as many a remote employee knows, the boundary between work and home life can blur.

Some governments and employers are trying to restore balance. In November Portugal announced legislation that, according to Ana Mendes Godinho, its labour minister, seeks to make the most of *teletrabalho* (remote work) while mitigating the downsides. Bosses are now banned from calling their employees "after hours": those who make contact outside previously agreed times could be fined more than €9,000 ($10,000). Employers are also required to provide remote-working equipment and reimburse electricity and internet costs, and must hold in-person meetings twice a month, to help combat isolation.

Several European countries had similar rules in place even before covid-19. In 2017 the "right to disconnect", which allowed workers to ignore after-hours texts, emails or calls from their bosses without fear of repercussion, took effect in France. Italy followed soon after. Earlier this year Ireland said workers could disregard late emails and calls.

Whether legislation can bring hours down, though, is unclear. Ambitious workers have plenty of incentive to pick up a call from their boss long after 5pm has come and gone; by comparison they stand to gain little from reporting violations of the law and landing their employer with a fine.

Then there is the practical difficulty of agreeing on when workers should be contactable, something that is often left to be negotiated between employer and employee. In France and Italy there is no obligation to find an agreement. Aside from one widely publicised court decision in 2018 ordering a pest-control company to pay €60,000 to an employee it had required to be reachable at all times in case of an emergency, little has come of the law in France. Even Ms Mendes Godinho's office communicated with your correspondent at 7pm.

Perhaps change must come from within. In Japan, where toiling any less than 50 hours can be interpreted as a lack of commitment to the job, half of all workers were already back in the office at least three days a week by April 2021. But even there employers are responding to workers' demands for a better work-life balance. Fujitsu, a technology giant, has introduced flexible hours and allows remote work. Elsewhere, the number of chief remote officers is proliferating. But few companies have gone as far as Volkswagen. For the past decade, the German carmaker's servers have ensured that employees covered by a collective-pay agreement do not receive work emails on their phones between 6.15pm and 7am.

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Giving less generously

In word and deed, China is easing economic policy

Both the central bank's actions and the Politburo's words point to modest easing

Dec 11th 2021 | HONG KONG

BEN BERNANKE, the former chairman of America's Federal Reserve, entitled his memoir "The Courage To Act". But a lot of what central bankers do these days is talk. They talk about what they are doing, will do and might do. In central banking, words can speak louder than actions.

China is no different. Its macroeconomic policymaking is a combination of acts and signals, execution and exegesis. On December 6th, for example, the People's Bank of China announced that it was cutting the reserve requirement ratio (the amount of money banks are required to hold in reserve, as a share of deposits) by half a percentage point, from a weighted average of 8.9% to 8.4%. That, it said, would "unleash" about 1.2trn yuan ($190bn) of funding.

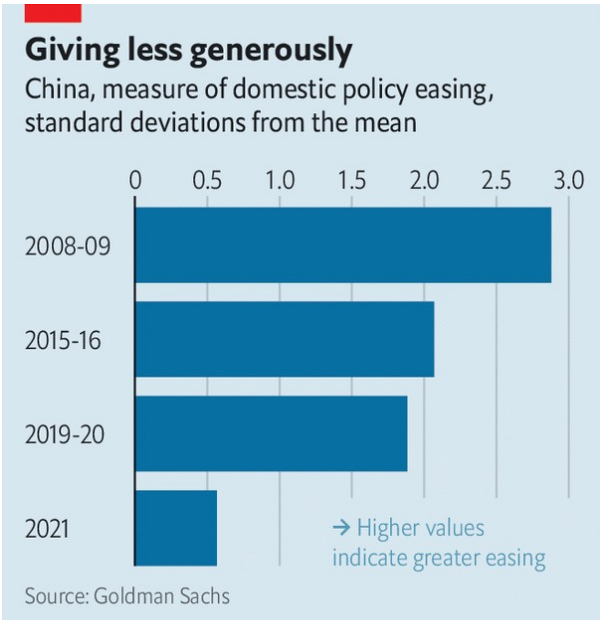
The cut was, you might think, a straightforward act of easing—an understandable response to a slowing economy, a mutating virus and the financial risks posed by property developers, two of which (Evergrande and

Kaisa) defaulted on their offshore bonds, according to Fitch, a rating agency, shortly after the cut.

But the decision was accompanied by some cautionary talk. “The stance of sound monetary policy remains unchanged,” the central bank said. It also pointed out that banks will need part of the additional funds (about 80% of them) to repay medium-term loans from the central bank that are due to mature on December 15th. Much of the extra money would, in other words, soon return to the institution that had unleashed it. The impact of the cut “is likely to be neutral”, said one analyst, quoted by *Economics Daily*, an official newspaper. An editorial in the same paper cautioned against the “relatively simplistic” view that a cut in reserve requirements amounted to “loose” macroeconomic policy.

So are China’s policymakers easing or not? The short answer is yes, they are indeed easing. But not without qualms and qualifications. They want to stabilise growth. But they do not want to revive speculation, especially in property. Their expansionary actions are therefore accompanied by a lot of clarificatory and cautionary chitter-chatter.

Perhaps the clearest evidence of easing lies not in the deeds of the central bank but in the words of the Politburo, the 25-member body that oversees the Communist Party. After a meeting on December 6th to set the macroeconomic tone for 2022, it emphasised expanding domestic demand and preserving the “six stabilities” (in employment, finance, trade, foreign and domestic investment, and expectations). The Politburo also had some words of comfort for the beleaguered property market. It said the sector should be supported to better serve homebuyers’ “reasonable” demand. (“Reasonable” was not defined. But it is safe to say it does not include buying a property and keeping it vacant in the expectation of selling it for a higher price.)



The Economist

The debate now is not whether China's policymakers are easing but by how much. Because stimulus can take many forms, especially in China, measuring its overall scale is not easy. One attempt to do so, by Goldman Sachs, a bank, combines indicators of monetary policy (the benchmark lending rate and market rates), credit policy (including reserve requirements), fiscal policy and housing policy into a single index. In the face of the global financial crisis, this index swung by almost 2.9 points on its scale (see chart). It swung by a little over two in response to China's 2015 slowdown and by a little less than two after the pandemic began.

The easing in the first ten months of this year was modest by comparison. The latest reserve requirement cut will add to it, but not by much in itself. Policymakers therefore have plenty of scope to loosen before they can be accused of replicating the "flood" of stimulus in 2008-09, which has acquired a reputation for profligacy, despite its brute effectiveness in returning China to its pre-crisis economic trajectory.

If China's policymakers had an equivalent index of their own, their cautionary talk could be more precisely calibrated. "We may ease by one point but not two," they might say. In the absence of such a measure, China-watchers have the harder task of inferring macroeconomic intentions from vague party slogans. How many cuts in reserve requirement ratios, one wonders, will be necessary to preserve the six stabilities? ■

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Emergency exit

Two key questions for the European Central Bank

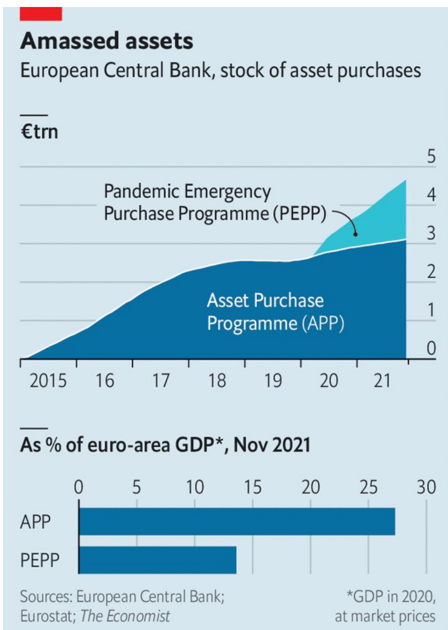
Will inflation eventually settle at its target, and are asset purchases still useful?

Dec 11th 2021

CENTRAL BANKERS in Frankfurt may be feeling a little discombobulated. Having struggled to revive too-low inflation for the best part of a decade, they now find themselves hoping that too-high inflation will die down. Since the pandemic struck, the European Central Bank (ECB) has bought nearly €2trn ($2.3trn) in government bonds in order to soothe markets and gin up the economy (see chart). Now it must consider whether such quantitative easing (QE) remains appropriate. That involves grappling with two questions at its next policy meeting on December 16th: whether the euro area has truly escaped its low-inflation trap, and whether asset purchases have outlived their usefulness. The first is easier to answer than the second.

Inflation in the euro area, as in much of the rest of the world, is soaring. Consumer prices rose by 4.9% in November, compared with a year ago, the fastest pace in the history of the single currency. Many of the ECB's rich-world counterparts, including the Federal Reserve and the Bank of England, are worried that inflation could become entrenched. In the euro area, however, the greater likelihood is perhaps that, once disruptions from the pandemic fade, it still undershoots the ECB's 2% target.

To see this, consider the differences between economic conditions in the euro zone and America. There is less evidence of booming demand in Europe. Output is still slightly below its pre-covid level, whereas it is well above it in America. Fiscal stimulus in the euro area has been less generous.



The Economist

Meanwhile, one-off disruptions seem to have played a bigger role in Europe. About half the inflation rate in November reflected surges in food and energy prices, which are unlikely to last. Other pandemic-related factors, including a temporary value-added-tax cut in Germany last year, have also played havoc with the base used to calculate annual inflation. Strip these out, by comparing "core" prices today with those in 2019, and annualised inflation falls below 1.5%, said Fabio Panetta, a member of the ECB's council, in November. (The measure exceeds 3% in America.)

Hawkish types would argue that even temporary disruptions could generate "second round" effects, by becoming embedded in wage demands. But a strong pickup in wage growth is yet to materialise, and measures of inflation expectations are, on average, just below 2%. After its year-long strategy review concluded in the summer, the ECB promised to raise interest rates only if it expected inflation to reach 2% in the coming one to two years and stay there. Those criteria do not seem to have been convincingly met.

What about the need for QE? The Bank of England is soon due to stop making new bond purchases; Jerome Powell, the head of the Fed, has said that he will start to taper purchases more quickly. But in the euro area the answer is muddy precisely because the inflation picture is different. Some on the ECB's council, including Isabel Schnabel, point out that the unwanted side effects of asset purchases are rising, and the gains are diminishing. The ECB will therefore be better off providing guidance on its interest rates to steer markets. One undesirable consequence of QE could be that central banks are now big players in government-bond markets: the ECB holds more than 40% of outstanding German and Dutch sovereign bonds, according to estimates by Danske Bank.

The expiry in March of one of the ECB's bond-buying schemes, which was intended to counter the financial-market effects of the pandemic, could provide an opportunity for the ECB to stop expanding its footprint in bond markets. But not everyone agrees on the need to scale back asset purchases. Many economists expect the ECB instead to top up another existing asset-purchase programme in the coming months, so as to ensure that bond-buying does not tail off too rapidly. Mr Panetta has worried that too sharp a reduction in asset purchases could lead to a "premature increase in long-term interest rates". In other words, if the ECB's ultimate problem is that inflation is too low, rather than too high, then it may not have the luxury of doing away with QE. ■

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On the rails

The economics of a new China-Laos train line

Why connectivity matters

Dec 11th 2021 | HONG KONG

IN THE LATE 1860s, French sailors who had set off from Saigon to find the source of the Mekong river encountered the precipitous Khone Falls between Laos and Cambodia, and realised that the waters would be impassable for larger trading vessels. Their dreams of reaching the riches of southern China by river were dashed. Quixotic plans for rail networks followed, first from British and French imperialists, and then from the Association of South-East Asian Nations (ASEAN), which in 1995 outlined its ambition to connect Singapore with Kunming, in China's Yunnan province.

On December 3rd, at long last, a portion of those aspirations was realised. A high-speed rail line connecting Kunming to Vientiane, the capital of Laos, was opened after five years of construction. The route is part of China's Belt and Road Initiative, and the completed section comes with a hefty price tag of $5.9bn—equivalent to nearly a third of Laos's annual GDP before the pandemic.

For China, the rationale for closer links with South-East Asia is clear. Rising factory wages at home make the case for moving low-complexity manufacturing to cheaper nearby locations. In 2019 Vietnam was China's fourth-largest trading partner for intermediate goods, between America and India, and up from 15th place a decade ago. China's intermediate-goods trade with Cambodia and Laos has risen nine- and 11-fold, respectively, in the same time.

The strategy has historical precedent. Until the 1970s Japanese firms' main interest in South-East Asia was buying raw materials. Then they began moving production to the region. The shift took off after the Plaza Accord of 1985, at which Japan agreed to let the yen appreciate, which widened the gap between domestic wages and those in low-cost countries. Firms were able to preserve their competitive advantage by moving, while also fostering technological expertise elsewhere.

What does the new train line mean for Laos? The landlocked country suffers most from South-East Asia's limited connectivity. The World Bank has been cautiously optimistic about the new route: Vientiane, it reckons, could become a logistical hub into China from Thai ports, but only if the Lao customs system were made more efficient and connecting roads improved. Although Laos has a land border with Yunnan and no coastline, as recently as 2016 almost two-thirds of its exports to China were transported via maritime routes.

Other assessments, however, are less optimistic. A paper published by the Asian Development Bank Institute last year suggested that the investment was unlikely to be profitable given its expense. Opinions of the Belt and Road Initiative have soured since 2016, and fears have risen that the infrastructure acts as a debt trap which gives China influence over borrowers. Laos has assumed 30% of the liability for the project, most of the funding for which was borrowed from the Export-Import Bank of China. Nor will the line bring in Chinese tourists for the foreseeable future, given China's zero-covid policy.

A wider network across the region would yield greater economic benefits for everyone, but that is outside any one country's control. Thailand approved the first step of a Chinese-built high-speed line in March; it is intended to reach the Lao border at a later stage. Even the first half is not expected to be completed for five years, however, and such schemes often miss their deadline, if they materialise at all. The Malaysian government is studying a high-speed link to Bangkok, but serious discussion has barely begun. Until those longer-term benefits arrive, Laos may mainly be stuck with the bill. ■

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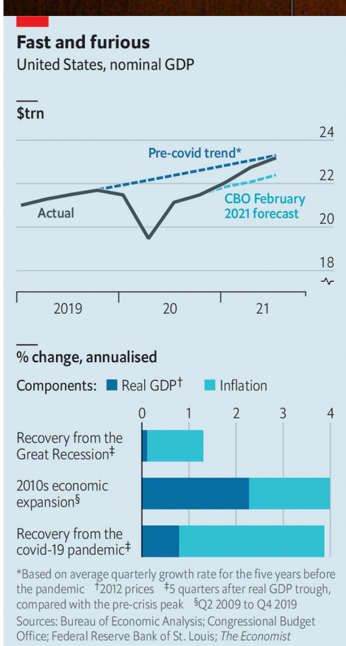
Nominal sums

America is seeing both fast growth and high inflation

What can nominal GDP reveal about the economic recovery?

Dec 8th 2021



The Economist

AMERICA MAY be suffering from high inflation but its nominal GDP, which combines output and prices in a single measure, was almost exactly at its long-term trend in the third quarter. It has blown past forecasts made before President Joe Biden introduced $1.9trn in fiscal stimulus in March. Some doves argue that the return to trend is a sign that policy has been well-calibrated, unlike after the global financial crisis. But nominal GDP may now be overshooting: many forecasters think it is growing at double-digit annualised rates in the fourth quarter, as stimulus fuels fast growth and high inflation.

Buttonwood

Why the dollar’s ascendancy won’t last

All it takes is a slowdown in America, lower inflation and a Fed pivot

Dec 11th 2021

THERE IS SOMETHING slightly tedious about the dollar’s rude health. It seems as inevitable as lying politicians and stormy winters. The DXY, a gauge of the dollar against half a dozen other rich-world currencies, is up by almost 7% since the start of the year. The broad dollar index, which measures the dollar against 26 of America’s trading partners, has also risen markedly since June. It is difficult to imagine what might check its rise. But it is still worth trying. You may find that the case for a reversal of the dollar in 2022 is more plausible than you had thought.

The dollar’s current strength is tied to American exceptionalism of a sort. The S&P 500 index of leading shares consistently outperforms the stockmarkets of other countries. America’s economy has proved to be a reliable source of growth. It has emerged from the pandemic more strongly than just about anywhere else. After a brief loss of energy in the summer it is now showing renewed vigour.

As a consequence, inflation is stubbornly high. The chairman of the Federal Reserve, Jay Powell, has already said that the Fed will move faster towards ending its bond purchases, thus paving the way for interest-rate increases. Elsewhere things are running less hot. China's GDP growth is sluggish. In Europe a wave of covid-19 infections has led to some restrictions on business activities. And while the full implications of the Omicron variant are not certain, there is a general feeling it will prove to be more of an economic headwind outside America.

One currency that has kept up with the dollar is the yuan. This is because more money is flowing into China than out of it. Bumper exports to America have contributed to a huge trade surplus. Portfolio capital is washing in. Foreign investors are loading up on bonds and stocks, which are now a bigger part of their benchmarks. Meanwhile less money is leaking out. Spending abroad by Chinese tourists has all but vanished, as a consequence of travel bans. Still, the risks seem tilted towards a fall in the yuan against the dollar. China is leaning towards a looser monetary setting, as policymakers grapple with distress in the property sector. This week's reduction in reserve requirements might even be a hint that Beijing would prefer a weaker yuan.

Put this all together, and the argument for a strong dollar looks watertight. But the situation is fluid. There is a decent case that the dollar will peak in the coming months and then weaken. For that to happen, three conditions need to be fulfilled. First, the global growth gap must narrow. America's economy has more than recovered. Other countries still have ground to make up. They will eventually do so. Too much of the sluggishness of Asia is put down to China's slowdown and not enough to the lingering effects of the pandemic across the region. Europe has never quite reopened fully. And there is fiscal stimulus from the EU recovery fund in the pipeline. America may still lead the pack. But the race will be closer.

A second condition is lower inflation. Oil prices have fallen already. There are tentative signs that bottlenecks are easing. Business surveys in goods-producing hubs, such as Taiwan and Vietnam, show a pickup in delivery times. If these developments translate into lower headline inflation, says Mansoor Mohi-uddin of the Bank of Singapore, it will allow the Fed to pivot towards a less hawkish stance—a third condition for a weaker dollar. It is hard to be an interest-rate dove when inflation is so high. But if it falls back during 2022, and the economy slows, the Fed's focus could easily tip back to the "jobs" part of its mandate. By the spring or early summer, markets may find themselves pricing in more interest-rate rises than the Fed is minded to deliver.

It is easy to forget, but other central banks get to do monetary policy, too. A recovering euro-zone economy might easily stir the hawks at the European Central Bank, says Kit Juckes of Société Générale, a bank. Even the hint of an interest-rate rise in the euro zone could be a game-changer for currency markets.

For dollar bulls, this might all sound a bit far-fetched. A lot of their enthusiasm is tied to high inflation and its implications for interest rates. But this carries dangers. Inflation is not a high-quality reason for backing a currency, says Steven Englander of Standard Chartered, another bank. Quite so. If inflation in America proves stubborn in the medium term, that is not obviously good for the dollar either. For now, the greenback is a winning currency. But there are still a few ways it could lose.

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Crypto’s crew

Crypto lobbying is going ballistic

As regulators toughen up, companies hope to influence where the rules end up

Dec 7th 2021

BETWEEN 2017 and mid-2021 the Commodities Futures Trading Commission (CFTC), America’s derivatives-markets regulator, was one of the agencies that discussed crypto the most. Brian Quintenz, who ran its technology committee, was responsible for much of that, organising presentations on everything from the integrity of bitcoin spot markets to the subject of decentralised finance. “I developed a reputation as being…an advocate of innovation,” he says.

In September Mr Quintenz joined Andreessen Horowitz, a venture-capital firm and an investor in crypto startups, as an adviser. He is only one of many former American officials to have flocked to the cryptoverse. Others include Jay Clayton, the previous head of the Securities and Exchange Commission (SEC); Brian Brooks, who until January was the acting Comptroller of the Currency; and Chris Giancarlo, head of the CFTC between 2017 and 2019.

In Britain, Philip Hammond, a former chancellor of the exchequer, joined Copper, a crypto startup, in October.

A recent wobble notwithstanding, the market value of crypto assets has risen 12-fold since early 2020, to $2.4trn. Some places, like El Salvador, have sought to ride the wave, embracing crypto to gain celebrity. Others, such as China and India, have threatened to ban it. Watchdogs in America and Europe, the home to much crypto-trading activity, by contrast, are only just beginning to sniff around digital assets. And that in turn is prompting crypto firms to try to steer, if not head off altogether, the coming wave of regulation. “All of a sudden”, says Loni Mahanta of the Brookings Institution, a think-tank in Washington, lobbying “is on a rocket ship.”

Reams of regulations are potentially in play. One set involves stopping crypto assets from being used to launder money. In October the Financial Action Task Force, an intergovernmental body which sets global standards, recommended new rules for crypto-services providers, including those regarding the user data they must collect. Countries are implementing these, but at varying speeds. A second area, overseen by lawmakers, concerns the taxation of crypto investments. Some countries treat them like property, with levies on capital gains due only when assets are sold. Others regard them as akin to foreign exchange, meaning unrealised gains are also taxed.

A third set of rules involves financial regulation: protecting consumers from fraud, reducing systemic risk and ensuring fair competition. Market watchdogs are pondering whether digital assets count as securities, which require heavy disclosures from issuers, or as commodities, where the (lighter) onus is on exchanges to prevent market manipulation. Gary Gensler, the head of the SEC, has said he wants tougher policing of the crypto “Wild West”. The EU is preparing rules that force crypto firms to seek licences and ban tweets meant to manipulate markets. Officials seem keenest to tame stablecoins, tokens that are pegged to conventional money.

How to win friends

Until recently most crypto firms, some of which aspire to a libertarian Utopia where blockchains remove the need for financial intermediaries and regulators, took little notice of officials. But that has changed as the pressure has ratcheted up. Binance, a large crypto-exchange, came under scrutiny in the summer, with regulators in Britain, Germany and Japan warning that it was conducting certain operations in their jurisdictions without the appropriate authorisation. Another wake-up call came from America in August, when a clause that required many crypto firms to report transactions to the taxman was tucked into President Joe Biden’s infrastructure bill. The industry began a counter-offensive.

One prong of it has been to lure government officials and compliance experts from banks with big pay packets. Deepali Vyas of Korn Ferry, a headhunting firm, says senior risk managers are typically promised a salary of $600,000-2m; former high-ranking regulators are also locked in with share options worth tens of millions of dollars, which vest over many years. The ex-head of an American regulator, now at a crypto group, says he spends a lot of time meeting lawmakers and civil servants.

The industry is also hiring lobbyists. Based on public disclosures *The Economist* calculates that crypto firms spent around $5m lobbying the American Senate in the first nine months of 2021. About $2.5m of that was spent between July and September—a quadrupling over the same period last year. Such activities employ the equivalent of 86 full-time staff, up from just one in 2016. Coinbase, a big crypto exchange, doled out $625,000 on lobbyists in the third quarter alone. Block, a crypto-friendly payments firm, has spent more than $1.7m since April 2020. The campaign is also ramping up in Brussels, the EU’s de facto capital, where the industry has deployed the equivalent of 52 full-time lobbyists.

Some big firms are trying to pre-empt stricter rules by making proposals of their own: Andreessen, for instance, is pressing for self-regulation, while Coinbase argues for a new industry watchdog. Another route for influence comes from firms clubbing together through trade associations. Perianne Boring, who runs the Chamber of Digital Commerce, a group in America that is largely made up of crypto firms, says her work ranges from advocating for bitcoin exchange-traded funds to rebutting arguments linking cryptocurrencies to ransomware. “We’re seeing much higher-level officials engaging with us,” she says.

The industry has gained political capital, too. In America, the congressional Blockchain Caucus counts 35 lawmakers as members. Cynthia Lummis, a senator from Wyoming, has received a big chunk of her 2026 campaign contributions from individuals linked to crypto firms. Last month she said she opposed Jerome Powell's reappointment as head of the Federal Reserve because of the central bank's "political approach to digital assets". In October 2020 the Chamber of Digital Commerce's political-action committee gave $50 worth of bitcoin to every member of Congress.

With watchdogs on the alert, crypto-capitalists' visions for regulation are unlikely to materialise in their entirety. But the risk is that they lead to puny rules. In August the passage of the infrastructure bill was delayed by a week after a bipartisan group of lawmakers objected to the crypto provision. The legislation, including the provision, was eventually enacted in November. But a new bill is now trying to weaken the crypto clause. The rewards for walking through the revolving doors are only going up. ■

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Free exchange

Why the demographic transition is speeding up

New research suggests "demographic contagion" could explain falling fertility rates

Dec 11th 2021

Otto Dettmer

AS BIRTH ANNOUNCEMENTS go, it was momentous. On November 24th India's government declared that the country's fertility rate had dropped to 2.0 children per woman. That is below the replacement rate—at which new births are sufficient to maintain a steady population—and puts India in the company of many richer economies. Indeed, fertility rates are now below replacement level in all four " BRIC" countries (Brazil, Russia, India and China), with the population probably falling in Russia and China. It is no surprise that emerging economies should follow a demographic trajectory similar to that travelled by rich economies before them. But the pace of change seems to be accelerating, with potentially profound implications for the global economy.

What social scientists refer to as the "demographic transition" has long been an essential feature of economic modernisation. In pre-industrial societies both birth and death rates (annual births and deaths per 1,000 people) were very high, and overall population growth was uneven and slow. But in the 18th century, death rates in parts of north-west Europe began to decline, marking the first stage of a seismic demographic shift. Falling death rates led to rapid population growth; Britain's population roughly doubled between 1760 and 1830. Yet from the late 18th century, fertility rates began to decline as well. By the 20th century, birth and death rates in rich countries stabilised at low levels, leading to slow or even negative population growth in the absence of immigration.

Transitions are complex social phenomena. Falling death rates are easiest to explain, as the product of improved nutrition, medicine and public health. Falling birth rates are in part a response to economic incentives. As the return to skill increases, for example, families seem to have fewer children in order to invest more in each child's education. But culture matters, too. In a recent paper, Enrico Spolaore of Tufts University and Romain Wacziarg of the University of California, Los Angeles, note that in Europe, new fertility norms first emerged in France in the late 18th and early 19th century. The fashion for fewer births was probably rooted both in changes in outlook associated with secularism and the Enlightenment and in the spread of information about family planning. As birth rates fell across Europe, they did so faster and earlier in places with linguistic and cultural ties to France.

Demographic transitions today follow fairly similar patterns, reckon Matthew Delventhal of Claremont McKenna College, Jesús Fernández-Villaverde of the University of Pennsylvania and Nezih Guner of the Universitat Autònoma de Barcelona, in another new paper. The authors gather data on 186 countries, and find that all but 11 have experienced the transition to lower, more stable death rates that are well below pre-industrial norms. A bevy of about 70 countries began their transition towards low fertility rates between 1960 and 1990. Only one country—Chad—has yet to begin a fertility transition. (In 80 countries, both mortality and fertility shifts towards modern lows are now complete.)

Importantly, the pace at which countries undergo a demographic transition seems to have sped up. While Britain's transition unfolded in a leisurely fashion between the 1790s and the 1950s, Chile's occurred more briskly between the 1920s and the 1970s, and those begun towards the end of the 20th century have taken only a few decades. This acceleration seems at least partly to reflect what the authors call “demographic contagion”, or the fact that transitions occur sooner and faster where geographically and culturally proximate places have already undergone a fertility shift. This proximity effect may also mean transitions now start at lower income levels. Whereas fertility transitions over the past two centuries tended to begin at GDP per person of about $2,700 (on a purchasing-power-parity basis and in 2011 prices), those begun since 1990 occurred at an income level of around $1,500.

The upshot of this rush into the demographic transition is a steady drop in global fertility and population growth. The world’s fertility rate, which stood at 3.5 births per woman in the mid-1980s, fell to just 2.4 in 2019. Indeed it is possible, given observed declines in rich-world births during the pandemic, that covid-19 may have pushed the world as a whole within sight of a replacement-level fertility rate, if only temporarily. The world’s population will continue to grow even after that level is attained, because of the large number of people either at or approaching child-rearing age. India’s population, for example, is still expected to rise to about 1.6bn by mid-century. But that is a lower peak (by about 100m people) reached sooner (by about a decade) than previously expected. Similarly, the rapid decline in global fertility may mean that projections by the UN, which show the global population rising towards 11bn by 2100, will ultimately have to be revised downwards.

Old money

The global completion of the demographic transition will not be without its headaches. It may complicate long-run macroeconomic problems, for example, or so suggests recent work by Adrien Auclert and Frédéric Martenet of Stanford University, Hannes Malmberg of the University of Minnesota and Matthew Rognlie of Northwestern University. They note that increased saving by ageing populations depresses inflation and interest rates. As the share of world population over 50 rises from 25% today to 40% in 2100, low interest rates may become more entrenched, returns on assets could drop and global imbalances widen.

Yet demographic transitions could also bring a range of economic benefits. Slower population growth could make the challenge of cutting carbon emissions less daunting. And the potential of the fewer workers around might be better realised, through better education and more women participating in the labour force. The arrival of immigrants, once viewed as a threat, could even become as momentous an occasion as a birth in the family. ■

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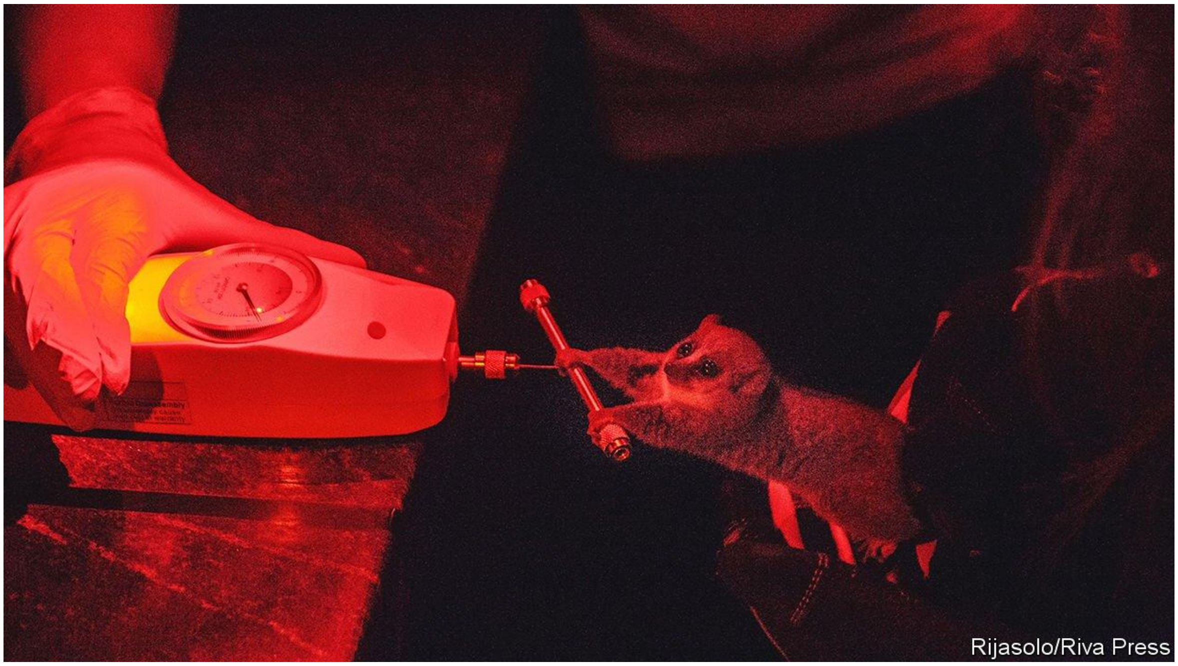
Science & technology

Mouse lemurs

A tiny primate may join the ranks of the world's model organisms

Lemurs may be better than mice for understanding human disease

Dec 8th 2021 | Ranomafana



Rijasolo/Riva Press

TREE 2B, RANOMAFANA, is not an address recognised by Madagascar's postal service. It is, though, someone's home. The someone in question is a mouse lemur called Judah, the 349th participant to be enrolled into a project run by Mark Krasnow, a biochemist at Stanford University, in California.

Judah's involuntary membership of the project began when he found himself trapped inside a metal box. He had been lured there by a bait of banana put there by Dr Krasnow's collaborators, Haja Ravelonjanahary and Mahery Razafindrakoto of the ValBio research centre on the edge of Ranomafana National Park, 260km south of Antananarivo. Judah's captivity was temporary, for he was released back into his home at 2B about six hours later. But in the interim he was subjected to various indignities. He had his testes measured, a blood sample taken and he was made to do exercises to see how strong he was. He also had a tiny transponder inserted under his skin so that he could be identified next time he was caught.

Judah, and his 348 predecessors similarly trapped and released by biologists at ValBio, are among the first recruits to what is, on the face of it, an extraordinarily ambitious undertaking. For Dr Krasnow's plan is to add mouse lemurs to the short and rather random list of so-called model organisms. These are species which, for various reasons, biologists know a lot about. And, since knowledge breeds knowledge, they tend to be the ones about which further knowledge accumulates.

The recruiting sergeant calls

Model organisms assist all sorts of biological research, but a lot of it is medical. And here there is a problem. Ideally, medical research would be done on species that resemble *Homo sapiens*. But working on human beings' closest relatives—apes and monkeys—is increasingly hard to do. First, such large animals are expensive to keep. Second, that expense means they are often unavailable in the numbers needed for statistically significant work. Third, public opinion, at least in the West, is swinging against their use.

Mice, one common alternative to primates, are cheap, abundant and less prone to stir consciences. But they can only take you so far. Though mammals, they are not close relatives of people. Sometimes that lack of relatedness can be finessed by inserting human genes that are relevant to the matter under investigation. But even then, the underlying platform is still a rodent, not a primate. By contrast, a mouse lemur, though it looks and behaves a bit like a mouse, and is not much bigger, is indeed a primate, and so is much more similar to a human being than a rodent is.

Mice, moreover, have short lives, and thus high turnover. But mouse lemurs can live for 14 years in captivity and maybe ten in the wild. That is a nice compromise between a period brief enough to arrive at conclusions that are useful (and will result in career-enhancing research papers), and long enough to be more similar to a human being's life-history. Yet, like mice, mouse lemurs breed prolifically and quickly, with a gestation period of just two months and maturity achieved within six to eight months. And not just in a laboratory. In Madagascar there are millions of them—for, contrary to common perception, not all lemur species are endangered.

What is particularly intriguing for Dr Krasnow and his colleagues, though, is that, in captivity at least, mouse lemurs suffer several illnesses which affect humans too. These include Alzheimer's and other neurodegenerative disorders, cardiac arrhythmias, metastatic uterine cancer, strokes and atherosclerosis, the furring of the arteries that can lead to a heart attack.

Model organisms tend to happen by accident. Yeast is used by brewers and bakers, so is an obvious topic for study. Fruit flies were picked by Thomas Morgan, an early geneticist, because they are easy to breed in large numbers—and it helped that some of their cells have giant chromosomes which showed up well under the microscopes of the day. And mice were kept as pets by fanciers long before one saw the inside of a laboratory cage.

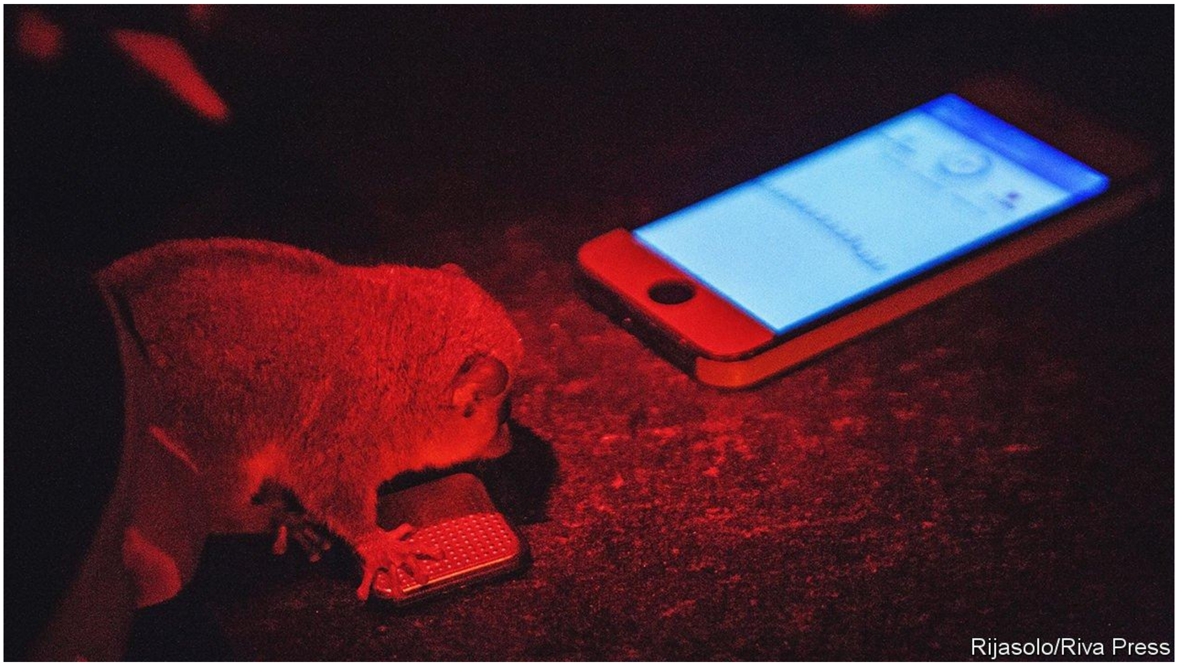
Dr Krasnow's plan to add mouse lemurs to the list was slightly less accidental than these. It began in 2009, when he charged his daughter Maya, then still at school, and two of her friends to come up with a new model organism for studying primates as a summer project in his laboratory. After reviewing the gamut of the primate order, which contains about 500 species, and also looking at a few outliers such as tree shrews, Krasnow junior and her two compadres settled on mouse lemurs. Not only are these abundant and fast-breeding, they also do well in captivity, as a 60-year-old colony of them in France testifies.

Not one to ignore his daughter's advice, Dr Krasnow investigated in more detail. In 2011, he organised a workshop of lemur biologists at the Howard Hughes Medical Institute, in Virginia, to kick the idea around. It found favour, and in particular it accelerated the completion of a genome-sequencing project for the animals—a *sine qua non* for any self-respecting model organism. It also introduced Dr Krasnow to the idea that fieldwork might be an important part of his proposal.

That, in some ways, is the most intriguing idea of the lot. Most biologists working with model organisms make a fetish of control. Mice, in particular, are often bred deliberately to be as genetically similar to one another as possible, within a given line. Dr Krasnow has the opposite plan. Genetic analysis is now so cheap that every animal involved in a project can be sequenced. Made visible in this way, diversity is as much an opportunity as a problem, for that information can be correlated not only with obvious, medically relevant stuff, such as disease manifestation, but also with behaviour—and behaviour expressed in the wild, not just in the restricted environment of a laboratory.

That insight led to collaboration with Patricia Wright, a primatologist at the State University of New York, Stony Brook, who helped encourage the Malagasy government to found Ranomafana, and who has been working there for decades. And that led to the lemur-trapping project now joined by Judah. One early discovery from the genetic analyses made possible by this project (admittedly, one that is not of much obvious medical use) is that what appeared to be one species of brown mouse lemur, the species Dr Krasnow and Dr Wright thought they were investigating, is actually two. They live in the same range and are indistinguishable to the human eye. But they can clearly tell each other apart because their genetics show that they diverged several million years ago, and do not interbreed.

Dr Krasnow does, however, have high hopes of the medical side. In particular, as they age, mouse lemurs in captivity sometimes develop the plaques and tangles of abnormal protein seen in human Alzheimer's patients. At the same time, they develop behavioural abnormalities, such as forgetfulness. Nothing similar happens naturally in mice. Nor do mice develop the sorts of heart arrhythmias seen in people. But mouse lemurs do. In fact, he and his colleagues have now identified nine types of arrhythmia in their lemurs, each of which corresponds to one found in people.



Pressing the paws button

Though the animals will not be subjected to invasive sampling while alive, the ability to identify them individually in the wild means that their behaviour can be studied, to see if it changes as they age in ways similar to ageing in people. What else might be discovered from this behavioural work remains to be seen, for this is an old-fashioned experiment of the sort that is not testing a specific hypothesis but, rather, searching for leads to pursue.

Meanwhile, back in the lab, and thanks to a technique called single-cell RNA expression profiling, Dr Krasnow and his Stanford colleague Stephen Quake have built a near-complete atlas of lemur cell types—about 750 in all. This permits a whole new level of investigation. For example, they were able to identify a metastatic cell in the lung of an animal that had had to be put down because it had cancer, as deriving from that animal's uterus.

Taking the shilling

It could all fall flat on its face, of course. For one thing, the field data may shed no light on disease-relevant biology after all. Most of the illnesses that Dr Krasnow is interested in manifest themselves in later life. In humans, such diseases are associated with behaviours which evolution did not foresee, such as consuming processed food or sitting at a desk all day. Since being locked up in a cage and fed a reliable supply of food is equally unnatural, that may also be true for lemurs. It is therefore by no means clear that looking at wild lemurs will add anything. Moreover, illnesses like Alzheimer's are not exactly life-elongating. In the wild, any individual manifesting them would probably get short shrift from natural selection. Indeed, there is a whole body of theory which suggests the very reason they manifest only in old age is because, in a state of nature, a human being would probably have died or been killed before they had had a chance to appear.

There is also the political side of things. Though researchers on other species are unlikely to be hostile in principle to mouse lemurs joining the model-animal-research party, whether they will co-operate with the group of newcomers in the far corner who are talking animatedly about the critters remains to be seen. Model animals do, however, require a consensus that that is what they are—and this consensus is best built by lots of people studying lots of different aspects of them. So if not enough people join the mouse-lemur clique, the project will be doomed.

Another potential threat is that, although mouse lemurs do not truly share the mini-me human lookalikeness of monkeys and apes, they are still pretty cute. Those opposed to animal experiments of any sort—even the carefully non-invasive work being done by Dr Krasnow and Dr Wright—could probably make something of that. And the very similarity of physiology to humans that makes the lemurs an attractive subject of study might also be used to argue that they should not be used in research.

Still, it is a bold idea, and certainly worth pursuing. Perhaps the cross-fertilisation of laboratory and field studies in this way will, indeed, turn out to be the wave of the future. In army terms, mouse lemurs are now at boot camp, undergoing basic training. Whether they will pass muster remains to be seen. ■

High-tech chickpeas

Chickpeas, a neglected crop, may soon get a high-tech makeover

A new genetic analysis paves the way for smart selective breeding

Dec 8th 2021

PLINY THE ELDER, a Roman administrator with a sideline in philosophy, appreciated the complexities of the chickpea. In his master work, "Naturalis Historia", he wrote of it: "This plant presents considerable differences in reference to size, colour, form and taste." One type, he reported, came in the shape of a ram's head. Another, the Venus pea, was white, round and smooth. A third had small, angular seeds.

These days, chickpeas are still as varied, though the main types now recognised are the large, light-coloured Kabuli and the smaller, darker Desi. They are grown in more than 50 countries, particularly in Asia and Africa, and contribute 11.5m tonnes of protein-rich pulses to the world's food supply, making them the third most productive leguminous food crop, after beans and peas. But their variety is under-exploited, and much of it is found in poorly studied "landraces"—local varieties that have some genetic coherence but are not as selectively bred as modern cultivars.

Recognising this, a group of researchers from the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and 40 other organisations, led by Rajeev Varshney of Murdoch University, in Australia, have produced a comprehensive “pan-genome” derived from the cultivated plant, *Cicer arietinum*, and seven of its wild relatives, which they have now published in *Nature*. One of their purposes was to identify blocks of genes, called haplotypes, that encode particular, desirable properties, and which could be bolted together in various combinations to yield both better chickpeas overall, and chickpeas better suited to particular sets of circumstances. In a world where circumstances are changing rapidly, that matters. A study published in 2016, for example, estimated that shifts in temperature and rainfall patterns could, by 2069, decrease chickpea yield in parts of the world by almost 20%.

Building on an initial map of more than 28,000 chickpea genes, published by ICRISAT in 2013, Dr Varshney’s team sequenced 3,171 cultivated chickpeas and 195 wild examples taken from collections around the world. That added 1,582 previously unknown genes to the list, including ones that encode responses to environmental factors such as cold, acidity and oxidative stress. The result is the most comprehensive genetic map of any vegetable species.

Crucially, the samples came with useful data about the characteristics of the plants they were taken from, known in the argot as their phenotype. That allowed the team to cross-correlate between genotype and phenotype, identifying which bits of the former appeared responsible for what parts of the latter. As a consequence, they think they have identified 24 haplotypes that do useful things like increasing seed weight, improving yield per plant and reducing the time it takes for a plant to become mature enough to flower.

Looking back at the original collections, they found around 80% of cultivars lacked these beneficial blocks of genes, suggesting there was considerable room for improvement. Knowing exactly which genes are involved means the process of breeding in those improvements can be done quickly. Instead of waiting for a plant to grow and mature, you can check its genes shortly after it has germinated, and throw it away if you do not want it.

Upgrades suitably developed, the question will be how to get them into the wider world. Dr Varshney says that big agricultural and seed companies tend to have limited interest in chickpeas. That means more reliance on smaller firms and co-operatives for distribution. If this can be done, though, the humble chickpea will join the big boys like rice and soyabeans as crops whose genes have been analysed for the betterment of human nutrition. ■

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Mechanical engineering

How to build machines from liquid metal

Small blobs of liquid-metal alloy can replace troublesome moving parts

Dec 8th 2021

GEARS ABRADE, pistons crack, pumps clog. If engineers had their way, machines would have no moving parts at all. Alas, a sedentary lump of metal would be a paperweight, rather than a useful machine. So, perhaps just one moving component would be an acceptable compromise.

Such machines are now beginning to appear. The component in question is a cleverly chosen liquid, any one of a number of alloys of gallium that melt below room temperature. These have three alluring properties: the highest surface tensions of any known liquid (nearly ten times that of water), good electrical conductivity, and extreme chemical reactivity, in the form of a willingness to donate electrons—a process known as oxidation—to nearby compounds.

In a recent paper published in *Matter*, Kourosh Kalantar-Zadeh at the University of New South Wales used these properties to design a machine with a single moving part: a continuous-flow reactor. As the name suggests, these are devices for performing chemical reactions under sustained pumping, which offers more precision than mixing chemicals in vats. The mechanical pumps that power them, however, are frequently fouled.

Dr Kalantar-Zadeh designed and 3D-printed a circular track, 14cm in circumference, for reactants to flow around. It was interrupted by a single cavity containing a droplet of liquid metal hooked up to an electrical power source. A voltage applied to the droplet produces a gradient in its surface tension. That, in turn, leads to a pressure difference across the metal's surface strong enough to pull reactants across, allowing electron donation to happen and the desired chemical reaction to occur. The deformation of the droplet as it tenses and relaxes within its cavity pumps the resultant chemical away, allowing fresh reactants to flow in and the process to begin again. The researchers successfully applied this model to three different reactions, including the reduction of flakes of graphene oxide, which is useful for purifying water and in energy storage.

And this is only the latest in a growing body of experiments and prototyping aimed at exploiting the unique properties of liquid metals. In 2014, Dr Kalantar-Zadeh's group developed a pump capable of driving liquids around a circuit by similar means, but which did not exploit the metal's reactivity. In 2016, miniature robots were fitted with liquid metal wheels that could be steered across an aqueous solution by manipulating their surface tension. In 2018, wheels containing droplets of liquid metal were developed that changed their centres of gravity in the presence of electric fields, thereby causing the wheels to rotate. In 2021, another group of researchers devised a liquid metal-powered motor that suffered far less wear and tear than those built from solid parts.

The laws of physics dictate just where such liquid-metal machines will be most effective. The forces produced by surface tension dominate at small scales. At larger scales they are eclipsed by those generated by electromagnetism, on which conventional motors rely. This means that liquid-metal engineering will be most useful for objects that are roughly centimetre-size and below. As this is the regime where maintenance and repairs are the most fiddly and costly, such a feature is good news.

Researchers are exploring their use in "labs-on-a-chip", which are portable devices for conducting a variety of scientific tests in the field, far from conventional laboratory infrastructure. Some scientists have crafted them into modular antennas, whose resonant frequencies can be changed by adjusting their shape. Others hope to weave them into soft robots, where they could act as artificial muscles, or to use them in 3D-printed electronics.

And even though they will likely be limited to smaller devices, the appeal of liquid metals is easy to see. Blobs of liquid experience none of the friction-induced wear-and-tear that eventually causes gearboxes, valves and the like to break down. Any damage or disruption they suffer is naturally self-healing. Gallium alloys, moreover, are easy to make, harmless to the touch, and have very low rates of evaporation, meaning that users are unlikely to inhale them accidentally. Just the ticket, in other words, for creative engineers. ■

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Crowd behaviour

What architects can learn from bull-running

A Spanish tradition offers insight into how crowds behave

Dec 8th 2021

EVERY YEAR thousands of people converge on the city of Pamplona, in north-eastern Spain, for the opportunity to run for their lives as six fighting bulls are released to charge through the town. There are dozens of injuries every year, and there have been at least 15 deaths recorded since 1910. But the event is of interest to more than just adrenaline junkies and animal-rights activists. A paper just published in *Proceedings of the National Academy of Sciences* describes the insight the event offers into the psychology of panicked crowds.

That is a useful topic to explore. Architects, civil engineers and urban planners must try to work out how people will behave in the event of a disaster like a fire, a flood or a terrorist attack so they can design their creations to avoid potentially lethal crushes. Unfortunately, solid information is hard to come by. Ethics-review boards, after all, are likely to frown on researchers putting volunteers into deadly danger simply to study how they might behave. But Daniel Parisi, a physicist and computer scientist at the

Technical Institute of Buenos Aires, and the paper's lead author, realised that the Pamplona bull-runs offered the perfect natural experiment.

Dr Parisi and his team went to two different rooftop locations in Pamplona in July 2019, and recorded footage of the runners as the animals were released. A wave of people running at top speed raced past their cameras a few seconds ahead of the bulls. The researchers brought their recordings back to the lab to calculate the velocities of the runners, the density of the crowd and the probability of a runner tripping and falling. They also examined the trajectories of the bulls, the responses of individual runners as bulls came near to them, and the relationship between runner-group density and velocity.

Perhaps unsurprisingly, the researchers found that runners picked up speed when the bulls drew near. Less expected was the finding that the speed of individual runners increased with the density of the crowd. At the crowd's maximum speed of around four metres per second, density reached roughly one pedestrian per square metre. This finding is at odds with a long-held assumption in architectural and urban-design circles that people will slow their pace as group density goes up, in order to lower the risk of a collision, which could lead to a fall and, perhaps, injury or death as a runner is trampled by others. Dr Parisi's data suggests that groups of fast, crowded runners are indeed at risk: of 20 people who fell, all did so within a fast-moving, dense group. Most (14 of the 20) involved two or more people, with one person tripping another.

Yet it seems that, in the heat of the moment, people pay little heed to the danger of colliding with each other, and do not slow down. The onus therefore falls upon urban designers to work out how best to plan the construction of future alleys, tunnels, bridges and other passages that restrict flow. The only option may well be to make them wider.

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Books & arts

Our books of the year

The best books of 2021

Our favourite works considered God, opioids, China and cannibalism

Dec 11th 2021

Politics and current affairs

Empire of Pain. By Patrick Radden Keefe. *Doubleday; 560 pages; $32.50. Picador; £20*

This is the tragic, enraging story of the Sackler family, the previously low-profile owners of Purdue Pharma—which in 1996 introduced the drug OxyContin. The author shows how an epidemic of prescription-opioid abuse morphed into a worse one of illicit heroin and, later, fentanyl.

Do Not Disturb. By Michela Wrong. *PublicAffairs; 512 pages; $32. Fourth Estate; £20*

A devastating exposé of a remarkable leader, President Paul Kagame of Rwanda. He won global praise for ending the genocide of Tutsis in 1994 and promoting development. But his regime has ruled through fear, invaded its neighbours and assassinated opponents even after they fled abroad. The author, a former admirer, spent years gathering evidence for this terrifying account.

Invisible China. By Scott Rozelle and Natalie Hell. *University of Chicago Press; 248 pages; $27.50 and £22*

The biggest obstacle to China's development is that rural children—two-thirds of the total—do terribly in school, argues this stunningly researched book. Many are malnourished, lack reading glasses or suffer from energy-sapping intestinal worms. If these basic problems are not fixed, say the authors, China will struggle to reach its goal of broad prosperity.

The Sex Lives of African Women. By Nana Darkoa Sekyiamah. *Dialogue Books; 304 pages; £18.99. To be published in America by Astra House in March; $28*

A Ghanaian feminist and activist relays stories of sexual freedom and relationships. Mostly told pseudonymously, they are touching, joyful, defiant—and honest.

Red Roulette. By Desmond Shum. *Scribner; 320 pages; $30 and £20*

An extraordinary behind-the-scenes glimpse of the nexus of business and politics in China from a former insider, combining explosive revelations with grubby details of elite life. The well-born are shielded from the worst effects of anti-corruption probes, the author charges: "Red aristocrats got a prison sentence; commoners got a bullet in the head."

How the Word is Passed. By Clint Smith. *Little, Brown; 352 pages; $29. Dialogue Books; £20*

By blending journalistic inquiry with historical insights and poetic descriptions, the author turns a complex and traumatic subject—racism and the legacy of slavery in America—into a beautiful, insightful and even enjoyable journey.

We Are Bellingcat. By Eliot Higgins. *Bloomsbury Publishing; 221 pages; $28 and £20*

How did a bunch of self-taught internet sleuths help solve some of the biggest crimes of recent years, such as the downing of flight MH17 over Ukraine and the Salisbury poisonings? Bellingcat's founder chronicles some of the outfit's investigations, and its efforts to galvanise citizen journalists, expose war crimes and pick apart disinformation. An antidote to cyber-miserabilism.

History

The Gun, the Ship and the Pen. By Linda Colley. *Liveright; 512 pages; $35. Profile Books; £25*

A wide-ranging account of the forces that propelled the writing of constitutions—documents that have defined the modern world—from the 18th century until today. The trend was driven by the evolving nature of war and turbocharged by high-speed printing presses. An illuminating and original global history.

Tunnel 29. By Helena Merriman. *PublicAffairs; 352 pages; $28. Hodder & Stoughton; £20*

Using a narrow, 120-metre tunnel beneath the wall that had recently divided their city, 29 East Berliners escaped to freedom in September 1962. A captivating retelling of one of the most astonishing episodes in East Germany's grim history.

Cuba: An American History. By Ada Ferrer. *Scribner; 576 pages; $32*

The idea of putting the United States at the centre of Cuba's history is not surprising, but this fascinating book shows just how intertwined the two countries have been. America was domineering from the start, but today has a chance to prove itself to be a friend to the island's progress.

The Greek Revolution. By Mark Mazower. *Penguin Press; 608 pages; $35. Allen Lane; £30* An elegant and rigorous account of the Greek uprising against Ottoman rule 200 years ago—events, it argues, which helped shape modern Europe. The episode also holds lessons on the galvanising effects of violence, the role of foreign intervention and the design flaws in dreams.

Biography and memoir

Fall. By John Preston. *HarperCollins; 352 pages; $28.99. Viking; £18.99*

The story of Robert Maxwell, a monstrous, enigmatic, bullying, narcissistic crook of gigantic appetites—who at his peak was one of the world's most recognisable businessmen—may be largely unknown to anyone under 40. This book tells it with great verve and the benefit of extensive interviews with, among others, Maxwell's one-time rival Rupert Murdoch.

The Radical Potter. By Tristram Hunt. *Metropolitan Books; 352 pages; $29.99. Allen Lane; £25*

Josiah Wedgwood wanted to "astonish the world". He succeeded, says this delightful biography of the 18th-century British potter. To boost productivity, he aimed to make machines of men—and he did.

There is Nothing for You Here. By Fiona Hill. *Mariner Books; 432 pages; $30*

An account of how the daughter of an English miner rose to become the top adviser on European and Russian affairs in Donald Trump's National Security Council. She draws perceptive comparisons between the post-industrial blight of her childhood and disadvantaged parts of Russia and America—and between the Kremlin's evisceration of democracy and the dangers it faces in America.

All the Frequent Troubles of Our Days. By Rebecca Donner. *Little, Brown; 576 pages; $32. Canongate; £16.99*

A feat of historical excavation that tells the inspiring story of the author's great-aunt, Mildred Harnack. A quiet English professor from Wisconsin, Harnack wound up leading one of the most important resistance cells in second-world-war Berlin—before she was betrayed and executed.

The Last King of America. By Andrew Roberts. *Viking; 784 pages; $40. Published in Britain as "George III: The Life and Reign of Britain's Most Misunderstood Monarch"; Allen Lane; £35*

A stout Tory defence of a much misunderstood king, based heavily on unpublished correspondence. Far from being a crazed tyrant who deservedly lost the American colonies, George, it argues, was an honourable, rule-abiding stickler for protocol, who worked hard to support and even strengthen Britain's parliamentary democracy and to promote its interests.

All In. By Billie Jean King. *Knopf; 496 pages; $30. Viking; £20* True to its title, this autobiography is bracingly candid. The author describes her battles on the tennis court—she won six Wimbledon singles championships and 14 in doubles in one of the 20th century's great sporting careers—as well as her struggles with sexism and prejudice.

Culture and ideas

God: An Anatomy. By Francesca Stavrakopoulou. *Picador; 608 pages; £25. To be published in America by Knopf in January; $35*

A theologian presents the Judaeo-Christian God as few will have seen him before. Placing him in the context of other divinities of south-west Asia, she conducts a learned but rollicking journey through every aspect of Yahweh's body. A book that will offend some but delight many more.

The Sinner and the Saint. By Kevin Birmingham. *Penguin Press; 432 pages; $30. Allen Lane; £25*

Like Fyodor Dostoyevsky, Pierre-François Lacenaire had literary aspirations, served in the army and gambled rashly. Both flirted with radical politics; both went to prison. Dostoyevsky eventually wrote "Crime and Punishment"—based in part on murders committed by Lacenaire in 1834. This book situates their connection in the stew of mid-19th-century ideology.

Fallen Idols. By Alex von Tunzelmann. *Harper; 320 pages; $26.99. Headline; £20*

Ranging from George III to Saddam Hussein, India to the Dominican Republic, this account of the fates of controversial statues—variously dumped, destroyed, moved and re-erected—offers insights into the times and places they were put up and taken down. Statues simplify history, the author says; what is really educational are the arguments they provoke.

Barça. By Simon Kuper. *Short Books; 352 pages; £20*

This look at how modern football megaclubs are run (and misrun), by a columnist for the *Financial Times* and lifelong fan of Barcelona, may be one of the most forensic books about the football industry ever written. Thoughtful and dramatic.

The Twelve Lives of Alfred Hitchcock. By Edward White. *W.W. Norton; 400 pages; $28.95 and £22.99*

A bracing and original study of the master of suspense. It covers his mistreatment of female stars and admiration of Cary Grant: "an avatar for an inner Hitchcock that could not be outwardly expressed".

Fiction

Mother for Dinner. By Shalom Auslander. *Riverhead Books; 272 pages; $28. Picador; £16.99*

In this laugh-out-loud, gravely serious satire on identity politics, a mother's deathbed presents a solemn decision: whether or not to eat her. The family are Cannibal-Americans, the most reviled minority in a place where "everyone else was retreating to their cages and calling it freedom". What, the novel asks uproariously, do individuals owe history?

The Books of Jacob. By Olga Tokarczuk. Translated by Jennifer Croft. *Fitzcarraldo Editions; 928 pages; £20. To be published in America by Riverhead Books in February; $35*

The tome that secured its author the Nobel prize of 2018 encompasses a "fantastic journey across seven borders, five languages and three major religions, not counting the minor sects". At the centre of this epic of faith, ideas and the Enlightenment is a real-life 18th-century mystic.

The Plot. By Jean Hanff Korelitz. *Celadon Books; 317 pages; $28. Faber; £8.99*

There are too many novels about writers, but this is one to read. A down-on-his-luck author steals a slam-dunk plot from a creepy student. The result is wealth, fame—and spiralling disaster. At once a close-to-the-bone satire on publishing, an inquiry into the ethics of storytelling and a propulsive upmarket thriller.

Great Circle. By Maggie Shipstead. *Knopf; 608 pages; $28.95. Doubleday; £16.99*

A sweeping saga that alternates between the life of a tenacious female aviator in the 1930s and that of a millennial film star cast to play her in a biopic. In death, "each of us destroys the world," the author observes—but her engrossing novel is a moving reflection on the will to survive.

Klara and the Sun. By Kazuo Ishiguro. *Knopf; 320 pages; $28. Faber; £20*

The author's first novel since winning the Nobel prize in 2017 is a coming-of-age drama in which sophisticated androids are bought by wealthy parents as company for their offspring. Alongside the futuristic speculation, this is a satire on aspirational parenting. Questions of faith and mortality mix with storylines involving boy trouble and mother-daughter strife.

The Promise. By Damon Galgut . *Europa Editions; 256 pages; $25. Chatto & Windus; £16.99*

Four funerals mark the passage of time in this profound tale of an unhappy white South African family coming to terms with apartheid's end. The Booker-winning novel is also a meditation on a house and inheritance in the tradition of "Brideshead Revisited" and "Howards End".

Detransition, Baby. By Torrey Peters. *One World; 352 pages; $27. Serpent's Tail; £14.99*

Three characters—a trans woman, a cis woman and a man who has recently detransitioned after a short period living as a woman—decide to bring up a child together. What follows is an intense and fraught exploration of identity and what it means to be a woman and a parent, bound up in a moreish, at times hilarious narrative.

Chronicles from the Land of the Happiest People on Earth. By Wole Soyinka. *Pantheon; 464 pages; $28. Bloomsbury Circus; £20*

The first work of fiction by the Nobel-prizewinning playwright for 50 years is both a sophisticated thriller and a denunciation of Nigeria's political class. The narrator is a doctor who finds that a trade in human body parts is being run from his hospital. "Something is broken," a character laments. "Beyond race. Outside colour or history. Something has cracked."

Economics and business

The World for Sale. By Javier Blas and Jack Farchy. *Oxford University Press; 416 pages; $29.95. Random House Business; £20*

The story of how a few commodity-trading firms quietly reconfigured the world economy, making fortunes, juggling embargoes and swaying geopolitics. Unscrupulous operators such as Marc Rich (who spent two decades as a fugitive from American justice) became global power-players as intermediaries between resource-rich autocrats and their customers.

Career and Family. By Claudia Goldin. *Princeton University Press; 344 pages; $27.95 and £22*

An economist documents the typical life experiences of five generations of American college-educated women as they trade off work and family. Today's gender pay gap, she argues, is mainly the result of couples making a rational choice over how to maximise household income—by giving precedence to one high-paying career. Provocative and compelling.

The Future of Money. By Eswar Prasad. *Belknap Press; 496 pages; $35 and £28.95*

The digitalisation of finance has huge implications—and as it loses physical form, money's meaning will become ever-harder to grasp. This nuanced book explores the effects of the upheaval.

The Power of Creative Destruction. By Philippe Aghion, Céline Antonin and Simon Bunel. Translated by Jodie Cohen-Tanugi. *Belknap Press; 400 pages; $35 and £28.95*

An application of Joseph Schumpeter's most powerful idea—which prizes innovation as the driver of progress—to contemporary debates in economics. The result is sweeping, authoritative and, for the times, strikingly upbeat.

The Story of Work. By Jan Lucassen. *Yale University Press; 544 pages; $30 and £25*

Beginning in the hunting-and-gathering past, this long view of work shows how little has changed over millennia. Progressing through the rise of cities, wages and markets for labour, it traces a perennial cycle of injustice and resistance—and the age-old desire for more.

The Key Man. By Simon Clark and Will Louch. *Harper Business; 352 pages; $29.99. Penguin Business; £20*

As head of the Abraaj Group, a private-equity firm that preached profit with purpose, Arif Naqvi became an investors' darling—then came unstuck. The gripping tale of the alleged perpetrator of one of the largest corporate frauds in history.

Science and technology

A Shot to Save the World. By Gregory Zuckerman. *Portfolio; 384 pages; $30. Penguin Business; £20*

A journalist at the *Wall Street Journal* tells the story of the great vaccine race of 2020. A superb scientific drama of failure, determination and triumph.

I, Warbot. By Kenneth Payne. *Oxford University Press; 336 pages; $29.95. Hurst; £20*

A thought-provoking reflection on how artificial intelligence will change conflict. The offence will dominate, the author says. Martial virtues such as courage and leadership will yield to technical ones.

Being You. By Anil Seth. *Dutton Books; 352 pages; $28. Faber; £20*

Understanding consciousness is a "hard problem", noted the philosopher David Chalmers. Here a pioneering neuroscientist takes readers to the edge of what is known, how scientists know it, and, most importantly, how that knowledge could be made useful in medicine and psychology.

The Genetic Lottery. By Kathryn Paige Harden. *Princeton University Press; 312 pages; $29.95 and £25*

Genes matter, says this study of their relationship with life chances. But people are no more responsible for them than for the circumstances of their birth. So the state should ameliorate genetic inequalities as much as those of upbringing. A clear case on a complex subject.

Water: A Biography. By Giulio Boccaletti. *Pantheon; 400 pages; $30 and £22.50*

Water moves and, until about 10,000 years ago, people moved with it—following the green flush of rainy-season growth and grazing herds. Then came agriculture, irrigation, ever-expanding settlements—and a need for rules and institutions to manage water resources. Humankind's intensely political relationship with water is the undergirding of civilisation, argues this rich and engaging history. ■

See also:
The best books of 2020
The best books of 2019

Staff books of the year

In 2021 our writers considered technology, meritocracy and the trans debate

Not to mention civil liberties, human cognition and the history of Athens

Dec 11th 2021

Athens: City of Wisdom. By Bruce Clark. *Pegasus; 512 pages; $35. Head of Zeus; £25*

A regular contributor on culture and ideas documents the history of one of the world's oldest continuously inhabited places, from its legendary origins to the bustling modern conurbation where an ancient passion for politics and verbal pyrotechnics remains undimmed. The result is an "enchantingly readable history", said the *Literary Review*.

Framers. By Kenneth Cukier, Viktor Mayer-Schönberger and Francis de Véricourt. *Dutton; 272 pages; $28. WH Allen; £20*

Our By-Invitation editor and his co-authors explore what people can do that AI can't: use mental models to see the world in a new way. AI depends on data, but human cognition applies counter factuals to see what isn't there. A plea for pluralism that is “different, and better, than the usual recipes for smart thinking”, said the *Financial Times*.

We See It All. By Jon Fasman. *Public Affairs; 288 pages; $28. Scribe; £16.99*

Our US digital editor examines the moral, political and legal implications of surveillance technologies used by police, reporting from Ecuador, Israel, Sweden and across America. He shows how surveillance affects everyone, and what concerned citizens can do. An “illuminating account”, said *Publishers Weekly*, which “issues an essential warning”.

Trans. By Helen Joyce. *Oneworld; 320 pages; $25.95 and £18.99*

Our Britain editor analyses the sidelining of biological sex in favour of self-declared “gender identity” in situations from rape-crisis centres to sport. A “searing and at times devastating analysis”, said the *Sunday Times*. The *New York Times* called it an “intelligent, thorough rejoinder to an idea that has swept across much of the liberal world”.

Dohany Street. By Adam LeBor. *Head of Zeus; 384 pages; £18.99*

The third volume in a noir trilogy featuring Balthazar Kovacs, a detective in the Budapest murder squad. An Israeli historian goes missing after investigating the lost wealth of Hungarian Jews murdered in the Holocaust. “A sure-footed piece”, said the *Financial Times*, set in “an exuberantly realised Budapest”. By our former Hungary correspondent.

A Brief History of Motion. By Tom Standage. *Bloomsbury; 272 pages; $28 and £20*

One of our deputy editors considers the rise of the car, and the history and future of urban transport, in a 5,500-year road-trip that explodes myths and imagines roads not taken. “Great fun—and utterly timely”, reckoned the *Sunday Times*. “Standage writes with a masterly clarity,” said the *New York Times*.

Two Hundred Years of Muddling Through. By Duncan Weldon. *Little, Brown; 339 pages; £20*

A former British-economy correspondent reflects on 200 years of the country's economic history, showing how politics and the economy have interacted since the Industrial Revolution. "Impressively researched, succinctly written and highly readable", said the *Times*.

The Aristocracy of Talent. By Adrian Wooldridge. *Skyhorse; 504 pages; $24.99. Allen Lane; £25*

A history of the rise of the meritocratic idea, its tendency to harden into aristocracy and the current revolt against it, by our departing Bagehot columnist. The *Times Literary Supplemen*t called it "extraordinary and irresistible…unfailingly entertaining, effortlessly drawing on a wealth of anecdote and statistics".

Economic & financial indicators

- **Indicators: Economic data, commodities and markets**

Indicators

Economic data, commodities and markets

Dec 9th 2021

Economic data

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	Gross domestic product % change on year ago: latest		quarter*	2021†	Consumer prices % change on year ago: latest		2021†	Unemployment rate %	
United States	4.9	Q3	2.1	5.5	6.2	Oct	4.4	4.2	Nov
China	4.9	Q3	0.8	7.9	2.3	Nov	0.8	4.9	Oct‡§
Japan	1.2	Q3	-3.6	2.1	0.1	Oct	-0.2	2.7	Oct
Britain	6.6	Q3	5.1	6.7	4.2	Oct	2.4	4.3	Aug††
Canada	4.0	Q3	5.4	5.0	4.7	Oct	3.2	6.0	Nov
Euro area	3.9	Q3	9.1	5.0	4.9	Nov	2.3	7.3	Oct
Austria	5.7	Q3	14.6	4.7	4.3	Nov	2.7	5.8	Oct
Belgium	4.9	Q3	8.4	5.2	5.6	Nov	2.8	6.3	Oct
France	3.3	Q3	12.6	6.7	2.8	Nov	2.1	7.6	Oct
Germany	2.6	Q3	6.9	2.7	5.2	Nov	3.0	3.3	Oct
Greece	13.7	Q3	11.3	6.5	3.4	Oct	0.1	12.9	Oct
Italy	3.9	Q3	11.0	6.3	3.8	Nov	1.9	9.4	Oct
Netherlands	5.0	Q3	8.0	3.7	5.2	Nov	2.3	2.9	Oct
Spain	2.7	Q3	8.3	4.4	5.6	Nov	2.7	14.5	Oct
Czech Republic	2.8	Q3	6.1	3.0	5.8	Oct	3.8	2.6	Oct‡
Denmark	3.6	Q3	3.5	3.2	3.0	Oct	1.7	3.1	Oct
Norway	5.1	Q3	16.1	4.0	3.5	Oct	3.3	3.6	Sep‡‡
Poland	5.5	Q3	9.5	5.1	7.7	Nov	4.9	5.4	Nov§
Russia	4.3	Q3	na	4.2	8.4	Nov	6.7	4.3	Oct§
Sweden	4.5	Q3	8.2	4.1	2.8	Oct	2.2	7.6	Oct§
Switzerland	4.1	Q3	6.8	3.6	1.5	Nov	0.5	2.5	Nov
Turkey	7.4	Q3	na	8.0	21.3	Nov	18.1	11.1	Sep§
Australia	3.9	Q3	-7.5	3.8	3.0	Q3	2.7	5.2	Oct
Hong Kong	5.4	Q3	0.5	6.5	1.8	Oct	1.6	4.3	Oct‡‡
India	8.4	Q3	54.1	9.2	4.5	Oct	5.0	7.0	Nov
Indonesia	3.5	Q3	na	3.1	1.7	Nov	1.7	6.5	Q3§
Malaysia	-4.5	Q3	na	3.8	2.9	Oct	2.4	4.3	Oct§
Pakistan	4.7	2021**	na	3.8	11.5	Nov	9.2	6.9	2019
Philippines	7.1	Q3	16.1	4.8	4.2	Nov	4.5	7.4	Q4§
Singapore	7.1	Q3	5.2	6.1	3.2	Oct	1.9	2.6	Q3
South Korea	4.0	Q3	1.3	4.1	3.7	Nov	2.2	2.8	Oct§
Taiwan	3.7	Q3	1.1	5.7	2.8	Nov	2.0	3.8	Oct
Thailand	-0.3	Q3	-4.2	1.4	2.7	Nov	1.0	1.5	Dec§
Argentina	17.9	Q2	-5.5	8.7	52.1	Oct	48.3	9.6	Q2§
Brazil	4.0	Q3	-0.4	5.0	10.7	Oct	8.2	12.6	Sep§‡‡
Chile	17.2	Q3	21.0	11.0	6.7	Nov	4.3	8.1	Oct§‡‡
Colombia	12.9	Q3	24.9	9.8	5.3	Nov	3.4	11.8	Oct§
Mexico	4.5	Q3	-1.7	6.1	6.2	Oct	5.6	3.9	Oct
Peru	11.4	Q3	15.0	13.2	5.7	Nov	4.0	8.6	Oct§
Egypt	7.7	Q2	na	3.3	6.3	Oct	5.7	7.5	Q3§
Israel	4.1	Q3	2.4	6.1	2.3	Oct	1.6	5.0	Oct
Saudi Arabia	-4.1	2020	na	2.9	0.8	Oct	3.1	6.6	Q2
South Africa	2.9	Q3	-5.8	4.9	5.1	Oct	4.4	34.9	Q3§

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, 2021†	Budget balance % of GDP, 2021†	Interest rates 10-yr gov't bonds latest,%		change on year ago, bp	Currency units per $ Dec 8th	% change on year ago
United States	-3.4	-12.4	1.5		60.0	-	
China	2.8	-4.9	2.7	§§	-40.0	6.35	2.8
Japan	3.3	-8.9	nil		-8.0	114	-8.6
Britain	-2.9	-10.9	0.8		34.0	0.76	-1.3
Canada	0.8	-9.5	1.6		85.0	1.27	0.8
Euro area	3.3	-7.3	-0.3		29.0	0.88	-5.7
Austria	2.0	-5.8	-0.1		39.0	0.88	-5.7
Belgium	1.7	-6.6	nil		35.0	0.88	-5.7
France	-1.3	-8.9	nil		28.0	0.88	-5.7
Germany	6.5	-6.2	-0.3		29.0	0.88	-5.7
Greece	-4.4	-9.6	1.4		73.0	0.88	-5.7
Italy	3.8	-9.6	1.0		49.0	0.88	-5.7
Netherlands	8.5	-5.2	-0.3		21.0	0.88	-5.7
Spain	1.1	-8.4	0.4		31.0	0.88	-5.7
Czech Republic	3.2	-8.3	2.4		112	22.5	-3.2
Denmark	7.5	-0.3	nil		45.0	6.56	-6.4
Norway	12.5	0.4	1.4		76.0	8.90	-1.5
Poland	1.1	-5.8	3.1		176	4.07	-9.6
Russia	5.3	-0.5	8.6		248	73.7	-0.5
Sweden	4.9	-1.9	0.1		9.0	9.05	-6.3
Switzerland	5.4	-3.8	-0.3		22.0	0.92	-3.3
Turkey	-2.8	-3.1	20.5		765	13.7	-43.0
Australia	4.1	-5.8	1.6		60.0	1.40	-3.6
Hong Kong	4.0	-4.6	1.5		79.0	7.80	-0.6
India	-0.8	-7.0	6.3		41.0	75.5	-2.5
Indonesia	-0.1	-6.0	6.3		14.0	14,358	-1.7
Malaysia	2.7	-6.0	3.5		79.0	4.22	-3.5
Pakistan	-4.5	-6.9	11.9	†††	199	177	-9.7
Philippines	-1.9	-7.5	5.0		185	50.4	-4.6
Singapore	18.1	-4.2	1.7		78.0	1.36	-1.5
South Korea	4.6	-4.4	2.2		55.0	1,176	-7.7
Taiwan	15.1	-1.2	0.6		26.0	27.7	1.8
Thailand	-1.4	-7.8	1.7		50.0	33.5	-10.3
Argentina	1.7	-4.6	na		na	101	-19.5
Brazil	0.5	-6.1	10.8		339	5.55	-8.7
Chile	-1.8	-7.1	5.6		268	840	-11.4
Colombia	-5.3	-8.5	8.0		305	3,903	-10.5
Mexico	1.7	-3.3	7.4		200	20.9	-5.6
Peru	-2.6	-4.4	6.0		208	4.08	-11.8
Egypt	-4.3	-8.0	na		na	15.7	-0.2
Israel	5.1	-5.5	1.0		12.0	3.10	5.2
Saudi Arabia	4.6	-2.0	na		na	3.75	nil
South Africa	2.8	-8.0	9.5		58.0	15.7	-4.5

Source: Haver Analytics. §§5-year yield. †††Dollar-denominated bonds.

The Economist

Markets

In local currency	Index Dec 8th	% change on: one week	% change on: Dec 31st 2020
United States S&P 500	4,701.2	4.2	25.2
United States NAScomp	15,787.0	3.5	22.5
China Shanghai Comp	3,637.6	1.7	4.7
China Shenzhen Comp	2,521.3	-0.1	8.2
Japan Nikkei 225	28,860.6	3.3	5.2
Japan Topix	2,002.2	3.4	10.9
Britain FTSE 100	7,337.1	2.3	13.6
Canada S&P TSX	21,077.4	3.0	20.9
Euro area EURO STOXX 50	4,233.1	1.3	19.2
France CAC 40	7,014.6	1.9	26.4
Germany DAX*	15,687.1	1.4	14.3
Italy FTSE/MIB	26,751.9	1.4	20.3
Netherlands AEX	797.7	0.9	27.7
Spain IBEX 35	8,478.4	0.3	5.0
Poland WIG	68,729.6	0.3	20.5
Russia RTS, $ terms	1,612.7	-4.4	16.2
Switzerland SMI	12,597.4	2.7	17.7
Turkey BIST	2,004.6	7.9	35.7
Australia All Ord.	7,707.2	2.0	12.5
Hong Kong Hang Seng	23,996.9	1.4	-11.9
India BSE	58,649.7	1.7	22.8
Indonesia IDX	6,603.8	1.5	10.4
Malaysia KLSE	1,494.0	-0.2	-8.2
Pakistan KSE	43,846.9	-3.4	0.2
Singapore STI	3,129.8	1.0	10.1
South Korea KOSPI	3,001.8	3.5	4.5
Taiwan TWI	17,832.4	1.4	21.0
Thailand SET	1,618.4	1.7	11.7
Argentina MERV	89,242.8	4.8	74.2
Brazil BVSP	108,095.5	7.3	-9.2
Mexico IPC	51,056.3	2.1	15.9
Egypt EGX 30	11,451.1	0.3	5.6
Israel TA-125	1,996.4	0.8	27.3
Saudi Arabia Tadawul	10,991.8	1.3	26.5
South Africa JSE AS	72,403.9	1.7	21.9
World, dev'd MSCI	3,196.4	3.5	18.8
Emerging markets MSCI	1,241.0	1.2	-3.9

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2020
Investment grade	119	136
High-yield	341	429

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	Nov 30th	Dec 7th*	% change on month	% change on year
Dollar Index				
All Items	150.9	155.7	6.7	8.7
Food	132.3	136.1	3.9	24.3
Industrials				
All	168.2	173.9	8.8	-0.5
Non-food agriculturals	150.9	153.8	6.8	31.0
Metals	173.3	179.9	9.3	-6.2
Sterling Index				
All items	174.0	179.5	9.2	9.7
Euro Index				
All items	148.6	153.5	9.9	17.0
Gold				
$ per oz	1,780.1	1,783.1	-2.2	-4.5
Brent				
$ per barrel	73.3	75.5	-11.1	54.0

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

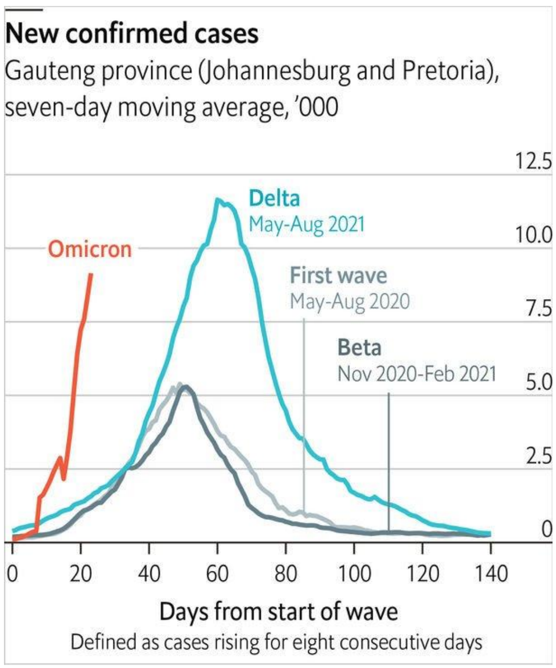
Graphic detail

Mixed signals

Early data on Omicron show surging cases but milder symptoms

The variant's capacity for reinfection appears unprecedented

Dec 11th 2021

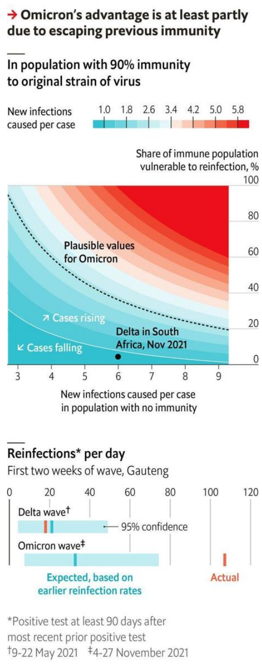


T WO WEEKS after the Omicron variant was identified, hospitals are bracing for a covid-19 tsunami. In South Africa, where it has displaced Delta, cases are rising faster than in earlier waves. Each person with Omicron may infect 3-3.5 others. Delta's most recent rate in the country was 0.8.

South Africa is not in lockdown, which may partly explain Omicron's rapid spread. However, prior variants benefited from encountering lots of people with no immunity. By now, most South Africans have either recovered from covid or been vaccinated.

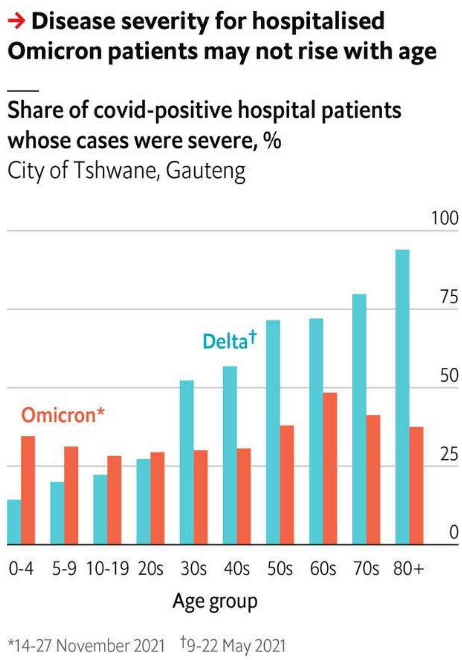
In such an environment, there are two ways Omicron could spread so fast. One is greater infectiousness, which depends on such factors as how easily it enters cells. The other is better evasion of immunity.

The Delta variant became dominant mainly because of its transmissibility. In contrast, Omicron seems to have advantages in both areas. Anecdotal evidence for its greater contagiousness is mounting: super-spreader events after which 35-78% of people tested positive have occurred in Norway, Denmark, Spain and Britain.



Moreover, Omicron has unprecedented capacity for reinfection. A recent study led by Juliet Pulliam of Stellenbosch University showed that the number of South Africans who test positive at least 90 days after their last positive test is more than you would expect based on earlier waves. And antibodies generated by Pfizer's vaccine are less effective against Omicron than against earlier variants. However, they still achieved solid neutralisation in people with booster jabs or prior infections. Current vaccines may offer good protection against severe disease caused by Omicron.

Data on virulence are more heartening. In hospitals Omicron has not yet shown a pattern of worse disease in older people. Among covid-positive hospital patients in the South African city of Tshwane, 70% of those aged 50-69 and 90% of over-80s had severe cases during the Delta wave. This share is now around 30% for all ages.



The average severity of Omicron cases could rise. If it does not, one possible reason is that Omicron's mutations yield milder illness. This would partly offset the impact of a surge in cases, though death rates could yet rise if wards are overwhelmed. Another explanation is that many older South Africans got jabs in recent months. If this is the cause, Omicron would pose a serious threat to the unvaccinated. ■

Sources: NICD, South Africa; Trevor Bedford; "Increased risk of SARS-CoV-2 reinfection associated with emergence of the Omicron variant in South Africa", by J.R.C. Pulliam et al. (working paper)

Obituary

- [Bob Dole: Climbing that hill]

Climbing that hill

Bob Dole believed in hard work, not words

The Republican leader and quintessential Kansan died on December 5th, aged 98

Dec 9th 2021

WHENEVER HE STEPPED out in public or entertained in private, Bob Dole carried a pen in his right hand. Always a black felt-tip. It looked purposeful, as if he meant to take notes. In fact, it was to stop well-wishers trying to shake his hand. Every day he went through the ritual of pushing the pen between his right thumb and forefinger, then folding the other fingers round the shaft. All with his left hand, which just about worked. His right hand and arm could do nothing at all. Not after that day in Italy in 1945 when, as a young lieutenant, he had been told to take Hill 913 and German fire had smashed his shoulder away.

For some time he was completely paralysed. Over months and years he worked and worked until the dead arm was his only visible handicap. Yet this meant he could not lace up shoes, cut up his food, put in eye drops or button a jacket. It was hard to turn pages, and impossible to hold both a mike and a script. Frustration sharpened the edge of his dry, terse Kansan tongue.

That could lead to political suicide, as when in a TV debate in 1976 he called all the conflicts of the 20th century “Democrat wars”. He truly went for the jugular then, and it was his own.

His injuries, though, also propelled him towards becoming at many points the most powerful Republican in the land. Since he didn’t want to end up on the street selling pencils, he started reading. That got him into law school, then into politics. For 35 years from 1961 he served in Congress, 27 of them in the Zoo, as he called the Senate, and 11 of those as ranking Republican leader. He was also chairman of the Finance Committee, the guy who could arrange the quid pro quos for the long line of lobbyists who came to his door. Pen in hand, he would ask them in—with an accommodating smile for the agribusinesses that grew like Topsy all over the Sunflower State.

The role of dealmaker was ideal for him. His three years of recuperation in an army hospital had taught him infinite patience. He could wait for weeks, tanning himself on the balcony outside his office, sipping chocolate milkshakes in the Senate Dining Room, until the time was right to make a move. Then someone would give way, and the deal was struck. Since he could not take notes he listened intently, his face settling into that dark scowl that earned him the nicknames Mr Grumpy and Mr Gridlock. Yet he also cut deals with Democrats—on Social Security, food stamps and the law he took most pride in, the Americans with Disabilities Act. His energetic campaigns for veterans united everyone. He often broke the tension, too, with one of his zinger jokes. And though he mocked President Jimmy Carter as “chicken-fried McGovern”, he even came to respect McGovern, after a while.

Three times he ran for president himself, and three times failed. (The closest attempt was in 1996, against Bill Clinton. Twice he did not get as far as nomination.) The question that dogged him was what his vision was. He couldn’t say, and wouldn’t be scripted either. When some fool asked him what single thing people should know about him, he replied “Beats me.” He just hoped to serve the country. If the media didn’t like one vision, he told them, he could easily find another in his vision-of-the-month club. That joke didn’t go down too well.

He was plainly conservative, a foreign-policy hawk who disliked labour laws, environmental protection, over-regulation and extravagant social services. But he had mostly become a Republican because he was a doer, and without being red you could do nothing in Kansas. Certainly he was no radical. Supply-side economics, with its tax cuts for the rich, struck him as garbage. (The good news he'd heard was that a busload of supply-siders went over a cliff, and everyone was killed. The bad news was that two seats were empty.) The guiding principle of his politics was that governments should not run deficits. For years he refused to sign a no-tax-increase pledge, until it was clear that his party would not back him unless he did.

He had not learned such parsimony in Washington. He had learned it in Kansas in the 1930s, when dust-clouds turned the sky dark-brown round his tiny town of Russell, in the Plains. The farms disappeared that fed the creamery where his father worked, and his mother had to sell sewing machines door-to-door. As for him, he became a soda jerk in Dawson's drugstore, and could flip a scoop of ice cream up to the ceiling to catch it in a glass. That was before the war came, and Hill 913.

Russell was the real vision he carried in his head. This was an America that was not some myth from a golden past. He had known it personally. The virtues prized there were honesty, frugality, faith and, above all, dogged perseverance. He trusted in the hard way. The reason he became Richard Nixon's hatchet man during Watergate, fighting off his attackers, was not just because he considered the president a mentor and a friend. It was because Nixon, though hardly honest, was a poor grocer's son who had risen through sheer determination. At the president's funeral he pictured him as a boy lying in bed, listening to the whistle of night trains bound for distant places. That image seemed to apply more to Russell than to Yorba Linda, California.

In 1996 he went back home to celebrate gaining the nomination. It was half a century since he had thumped face-down in the dirt, trying to spit the blood out of his mouth, and found he could feel nothing below his neck. At the old house on Maple Street the pulley-and-weights contraption his father had built, to help him strengthen his arms, was still on the wall of the garage.

In his right hand, too, he still clutched his pen. Black felt-tip, with slight toothmarks. He wanted it buried with him. ■

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