The Economist



OCTOBER 23RD–29TH 2021

# Instant economics

## The real-time revolution

# The world this week

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# Politics

Oct 23rd 2021


Police investigating the murder of a Conservative MP in Britain were treating the incident as an act of terrorism. Sir David Amess, who represented the town of Southend, to the east of London, was stabbed to death while holding one of his weekly consultations with constituents. The suspect is a 25-year-old man born in Britain to a Somali family. He had reportedly once been referred to a programme that tries to turn youngsters away from radicalisation.

## Time for Plan B?

Health-service leaders in Britain called for the immediate reimposition of pandemic measures, such as masks in public places and work-from-home orders. Deaths from covid-19 are at their highest level sinceMarch, though still less than 10% of the peak in January. The government said infections could reach 100,000 a day over the winter, but it was not planning to reintroduce restrictions. The British Medical Association described that as "wilfully negligent".

In Russia Vladimir Putin backed a plan to keep workers at home for a week to curb a tide of covid-19 infections. It will be the closest Russia has come to a lockdown.

The European Parliament awarded its annual Sakharov prize to Alexei Navalny, Russia's leading opposition figure, who has been imprisoned after surviving an assassination attempt by Russian agents.

Ursula von der Leyen vowed that the European Commission will punish Poland after its constitutional court, acting on a legal request from the prime minister, ruled that parts of the EU treaties are not compatible with Polish law. The commission president's threat is directed against Polish access to some €57bn ($66bn) in funds for recovery from the pandemic.

A primary involving members of six opposition parties in Hungary chose Peter Marki-Zay, the mayor of a small town, as their joint candidate to take on Viktor Orban, the prime minister, in elections due next spring. The parties will also field joint candidates for all parliamentary seats.

A panel of senators in Brazil recommended in a draft report that Jair Bolsonaro, the president, be charged with crimes against humanity, among other things, for playing down the covid-19 virus and failing to tackle it. Mr Bolsonaro, who has told Brazilians to "stop whining" about the disease, is unlikely to stand trial. More than 600,000 of his countrymen have died.

Thousands of people protested in El Salvador against President Nayib Bukele. Salvadoreans are angry about the introduction of bitcoin as legal tender and decisions that have eroded democracy, such as the dismissal of judges. Responding to the protests, Mr Bukele changed his Twitter profile to "Emperor of El Salvador".

A group of 17 American and Canadian missionaries, including children, were abducted by a gang in Haiti. The Caribbean country already had one of the highest kidnapping rates in the world, but the security situation has deteriorated since the assassination in July of the then president, Jovenel Moïse. Emboldened gangs are vying for territory.

Seven people were killed and dozens injured in Lebanon when gunfire broke out at a protest against [the judge investigating last year's explosion at Beirut's port](). The rally was organised by the country's two main Shia parties, Hizbullah and Amal, which are unhappy with the probe. They blamed the violence on a Christian faction, which denied involvement.

A bomb attack on an army bus in Damascus killed 14 people, according to Syrian state media. Though the country is still fighting a decade-old civil war, attacks in the capital have become rare. No group claimed responsibility, but the army responded by shelling the opposition-held Idlib region, reportedly killing ten people.

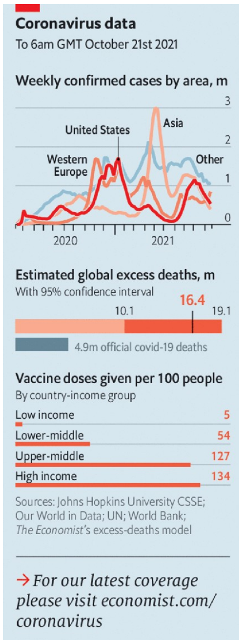
The Democratic Republic of Congo accused Rwandan troops of crossing its border and invading several villages, leading to clashes with Congolese soldiers. Rwanda said its men were only chasing smugglers and that it wished to maintain friendly relations.

Ethiopia bombed Mekelle, the main city in the breakaway province of Tigray, in an escalation of the year-long civil war. Abiy Ahmed, Ethiopia's prime minister, also threatened to stop all food aid coming into the country. That would further hamper efforts to avert famine in Tigray, which is under a blockade.

## Deleting its profile

Microsoft said it would shut down its local version in China of LinkedIn, a professional networking site. A LinkedIn executive wrote that the service was facing a "significantly more challenging operating environment" there.

China denied reports that it had tested a nuclear-capable hypersonic missile in August. It was subsequently reported that there had been two tests, the first in July.

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North Korea confirmed that it had tested a new submarine-launched ballistic missile, which it is prohibited from doing by the UN. The missile landed in the Sea of Japan. The launch comes against a backdrop of increasing missile tests by both North and South Korea in recent weeks, causing concern about an accelerating arms race.

Floods and landslides killed more than 150 people in India and Nepal after heavy rain that lasted several days. The subcontinent's monsoon generally recedes by October, but changing weather patterns have made it more unpredictable.

India has now dispensed 1bn covid-19 vaccines. More than 60% of the population has received one jab, and around a quarter have had two doses.

America's Justice Department asked the federal Supreme Court to suspend a law in Texas that in effect bans abortion, arguing that it contravenes decades of constitutional precedent. The law has been crafted in such a way as to allow private citizens to sue anyone who assists in an abortion. Its backers say that is legally a deterrent, and not a ban.

# Business

Oct 23rd 2021


Britain's annual rate of inflation dipped slightly to 3.1% in September, pulled down by a fall in restaurant prices. As in other countries, inflation is expected to remain high because of the dual crunch in energy markets and supply chains. Speaking before the release of the data, Andrew Bailey, the governor of the Bank of England, said that action might be needed to tame inflationary pressures. Some saw this as a sign that the central bank will raise interest rates before Christmas, though Mr Bailey suggested he is more concerned about taming prices over the medium term.

Jens Weidmann announced that he would step down as president of Germany's Bundesbank, a position he has held since 2011. As a leading hawk on the European Central Bank's council, Mr Weidmann was a vocal critic of quantitative easing, saying in 2019 that the ECB had overreacted to the euro zone's slowdown. In remarks this week he warned central bankers "not to lose sight of prospective inflationary dangers".

## Demand for supply

European gas prices surged again, after a closely watched auction of pipeline capacity suggested that Russia will not increase its supply in the coming weeks. Russia provided 43% of the European Union's gas imports last year. The Kremlin denies it is withholding supplies as a way of pressing Germany to certify Russia's recently completed Nord Stream 2 pipeline. In Germany a senior Green politician accused Russia of blackmail and said the pipeline should not get a permit.

Tesla reported quarterly records for both revenue ($13.8bn) and net profit ($1.6bn). The electric-carmaker delivered its most vehicles ever in the quarter, overcoming a shortage of chips that has put a dent in the sales figures of other car companies.

America's first bitcoin-linked exchange-traded fund listed in New York. Investments are made in bitcoin futures, not the cryptocurrency itself. The price of a bitcoin reached a new high, rising above $67,000 for the first time.


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Hit by a shortage of coal, which powers two-thirds of its electricity generation, China's gdp grew by just 4.9% in the third quarter, year on year. Amid rolling blackouts, industrial production expanded by only 3.1% in September. A spate of covid-19 outbreaks, leading to severe localised lockdowns, has also knocked the economy.

Another factor dragging on Chinese GDP is the fallout from financial troubles at Evergrande, a big property developer. As Evergrande approached a deadline to settle payments, Sinic, another developer, defaulted on a bond. China's economic data revealed that output in the property sector has shrunk.

The IMF is looking for a new chief economist. Gita Gopinath is leaving the job in January and returning to her academic position at Harvard.

## Y viva España

Jack Ma reportedly made his first trip abroad—a holiday in Spain—since his run-in with regulators in China a year ago and subsequent government campaign against big tech. The share price of Alibaba, the e-commerce giant founded by Mr Ma, jumped in response to the news that he had been let out of the country. The company also unveiled a new chip to increase its cloud-computing capabilities.

Another 4.4m subscribers signed up to Netflix in the third quarter,taking its total customer base to 214m. North America still accounts for the biggest chunk of revenue at the streaming service, though Europe (and the Middle East) is closing the gap in the number of most users: 70.5m compared with 74m in North America. Netflix's production schedule was disrupted by covid-19 but is now back on track and it is releasing oodles of new content in the coming months. It is also acquiring the rights to Roald Dahl's stories.

More than two years after its disastrous attempt to go public through an IPO was dropped when its valuation failed to live up to the hype, WeWork was set to debut on the stockmarket through a merger with a special-purpose acquisition company. The provider of office space is no longer offering free beer, but is still making heavy losses.

Italia Trasporto Aereo made its maiden flight as Italy's state-owned airline. A slimmer version of Alitalia, which has now stopped operating, ITA has the same colours as its predecessor and is wholly owned by the government.

Facebook was reportedly preparing to change its name to capture its role across the "metaverse", which it has described as "a new phase of interconnected virtual experiences”. Back in the physical universe, the company reached a settlement with the American government over claims that it unlawfully reserved jobs for immigrants and refused to consider American workers for some positions.

# KAL’s cartoon

Oct 23rd 2021


Dig deeper into this week’s cartoon:

- Broken promises, energy shortages and covid-19 will hamper COP26
- The IEA warns much more ambition is needed to curb global warming
- What to look out for at COP26

*KAL’s cartoons appear weekly in The Economist. You can see last week’s here.*

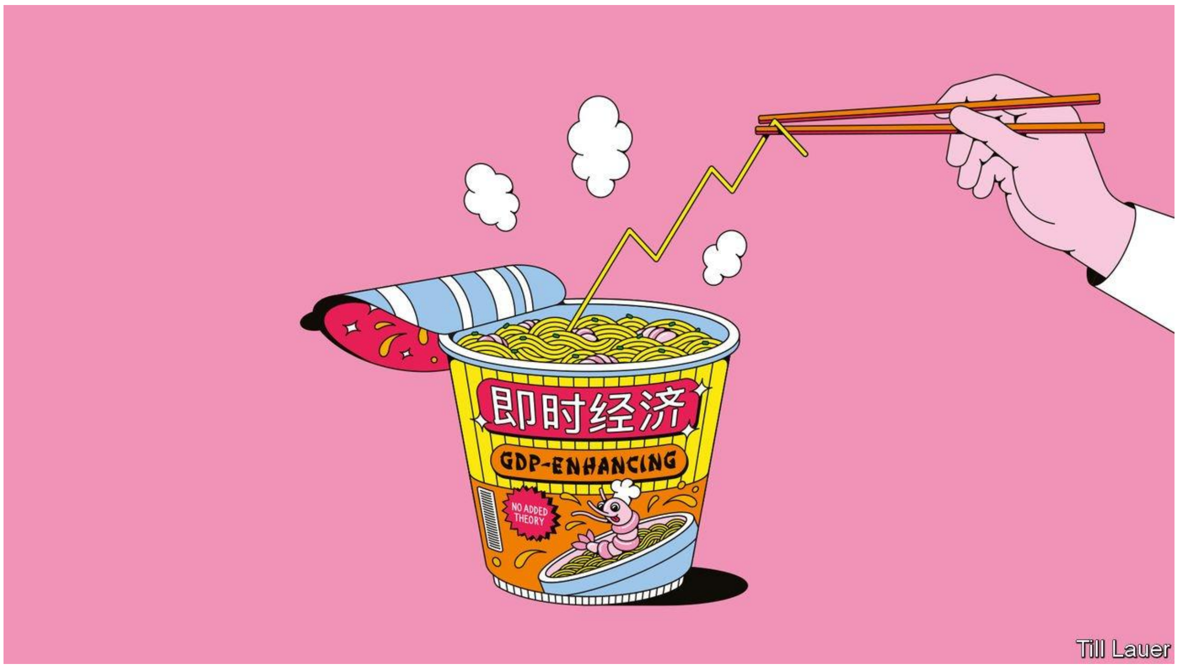
# Leaders

**Instant economics**

# A real-time revolution will up-end the practice of macroeconomics

*The pandemic has hastened a shift towards novel data and fast analysis*

Oct 23rd 2021




DOES ANYONE really understand what is going on in the world economy? The pandemic has made plenty of observers look clueless. Few predicted \$80 oil, let alone fleets of container ships waiting outside Californian and Chinese ports. As covid-19 let rip in 2020, forecasters overestimated how high unemployment would be by the end of the year. Today prices are rising faster than expected and nobody is sure if inflation and wages will spiral upward. For all their equations and theories, economists are often fumbling in the dark, with too little information to pick the policies that would maximise jobs and growth.

Yet, as we report this week, the age of bewilderment is starting to give way to greater enlightenment. The world is on the brink of a real-time revolution in economics, as the quality and timeliness of information are transformed. Big firms from Amazon to Netflix already use instant data to monitor grocery deliveries and how many people are glued to "Squid Game". The pandemic has led governments and central banks to experiment, from monitoring restaurant bookings to tracking card payments. The results are still rudimentary, but as digital devices, sensors and fast payments become ubiquitous, the ability to observe the economy accurately and speedily will improve. That holds open the promise of better public-sector decision-making—as well as the temptation for governments to meddle.

The desire for better economic data is hardly new. America's GNP estimates date to 1934 and initially came with a 13-month time lag. In the 1950s a young Alan Greenspan monitored freight-car traffic to arrive at early estimates of steel production. Ever since Walmart pioneered supply-chain management in the 1980s private-sector bosses have seen timely data as a source of competitive advantage. But the public sector has been slow to reform how it works. The official figures that economists track—think of GDP or employment—come with lags of weeks or months and are often revised dramatically. Productivity takes years to calculate accurately. It is only a slight exaggeration to say that central banks are flying blind.

Bad and late data can lead to policy errors that cost millions of jobs and trillions of dollars in lost output. The financial crisis would have been a lot less harmful had the Federal Reserve cut interest rates to near zero in December 2007, when America entered recession, rather than in December 2008, when economists at last saw it in the numbers. Patchy data about a vast informal economy and rotten banks have made it harder for India's policymakers to end their country's lost decade of low growth. The European Central Bank wrongly raised interest rates in 2011 amid a temporary burst of inflation, sending the euro area back into recession. The Bank of England may be about to make a similar mistake today.

The pandemic has, however, become a catalyst for change. Without the time to wait for official surveys to reveal the effects of the virus or lockdowns, governments and central banks have experimented, tracking mobile phones, contactless payments and the real-time use of aircraft engines. Instead of locking themselves in their studies for years writing the next "General Theory", today's star economists, such as Raj Chetty at Harvard University, run well-staffed labs that crunch numbers. Firms such as JPMorgan Chase have opened up treasure chests of data on bank balances and credit-card bills, helping reveal whether people are spending cash or hoarding it.

These trends will intensify as technology permeates the economy. A larger share of spending is shifting online and transactions are being processed faster. Real-time payments grew by 41% in 2020, according to McKinsey, a consultancy (India registered 25.6bn such transactions). More machines and objects are being fitted with sensors, including individual shipping containers that could make sense of supply-chain blockages. Govcoins, or central-bank digital currencies (CBDCs), which China is already piloting and over 50 other countries are considering, might soon provide a goldmine of real-time detail about how the economy works.

Timely data would cut the risk of policy cock-ups—it would be easier to judge, say, if a dip in activity was becoming a slump. And the levers governments can pull will improve, too. Central bankers reckon it takes 18 months or more for a change in interest rates to take full effect. But Hong Kong is trying out cash handouts in digital wallets that expire if they are not spent quickly. CBDCs might allow interest rates to fall deeply negative. Good data during crises could let support be precisely targeted; imagine loans only for firms with robust balance-sheets but a temporary liquidity problem. Instead of wasteful universal welfare payments made through social-security bureaucracies, the poor could enjoy instant income top-ups if they lost their job, paid into digital wallets without any paperwork.

The real-time revolution promises to make economic decisions more accurate, transparent and rules-based. But it also brings dangers. New indicators may be misinterpreted: is a global recession starting or is Uber just losing market share? They are not as representative or free from bias as the painstaking surveys by statistical agencies. Big firms could hoard data, giving them an undue advantage. Private firms such as Facebook, which launched a digital wallet this week, may one day have more insight into consumer spending than the Fed does.

## Know thyself

The biggest danger is hubris. With a panopticon of the economy, it will be tempting for politicians and officials to imagine they can see far into the future, or to mould society according to their preferences and favour particular groups. This is the dream of the Chinese Communist Party, which seeks to engage in a form of digital central planning.

In fact no amount of data can reliably predict the future. Unfathomably complex, dynamic economies rely not on Big Brother but on the spontaneous behaviour of millions of independent firms and consumers. Instant economics isn't about clairvoyance or omniscience. Instead its promise is prosaic but transformative: better, timelier and more rational decision-making. ■

Dig deeper

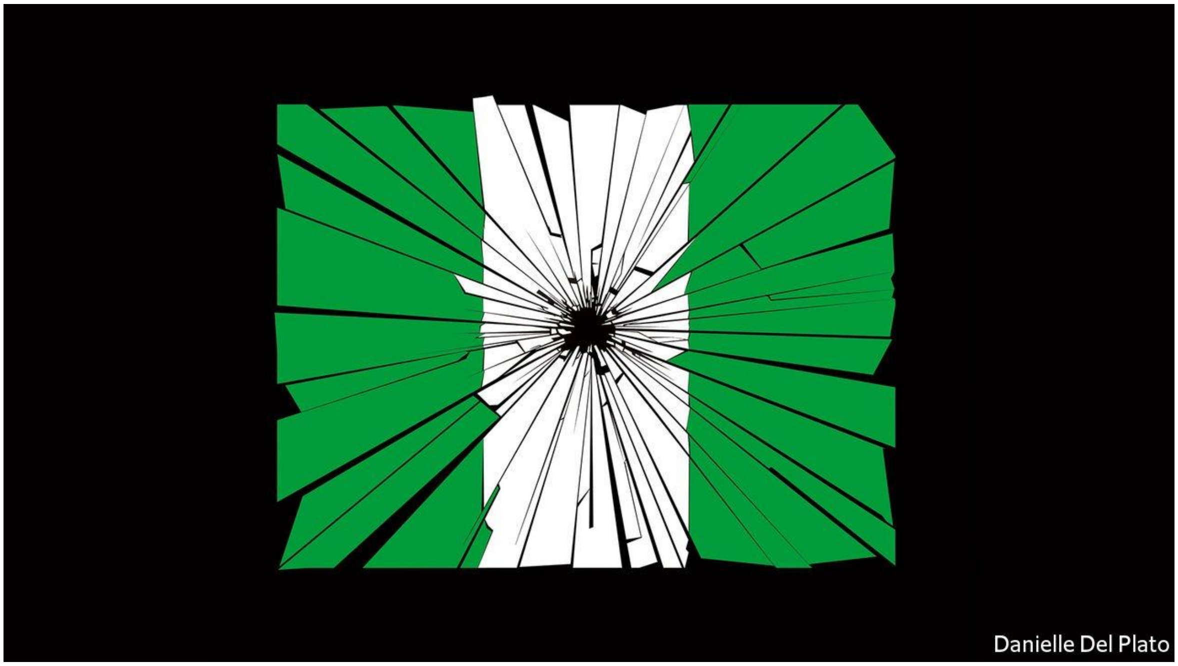
*All our stories relating to the pandemic can be found on our coronavirus hub. You can also find trackers showing the global roll-out of vaccines, excess deaths by country and the virus's spread across Europe.*

The crime scene at the heart of Africa

# Insurgency, secessionism and banditry threaten Nigeria

*Africa's biggest nation faces its biggest test since its civil war 50 years ago*

Oct 23rd 2021




LITTLE MORE than six decades ago, as Nigeria was nearing independence, even those who were soon to govern Africa's largest country had their doubts about whether it would hold together. British colonists had drawn a border around land that was home to more than 250 ethnic groups. Obafemi Awolowo, a politician of that era, evoked Metternich, fretting that "Nigeria is not a nation. It is a mere geographical expression."

The early years of independence seemed to prove him right. Coup followed coup. Ethnic pogroms helped spark a civil war that cost 1m lives, as the south-eastern region calling itself Biafra tried to break away and was ruthlessly crushed. Military rule was the norm until 1999. Despite this inauspicious start, Nigeria is now a powerhouse. Home to one in six sub-Saharan Africans, it is the continent's most boisterous democracy. Its economy, the largest, generates a quarter of Africa's GDP. Nollywood makes more titles than any other country's film industry bar Bollywood. Three of sub-Saharan Africa's four fintech "unicorns" (startups valued at more than $1bn) are Nigerian.

Why, then, do most young Nigerians want to emigrate? One reason is that they are scared. Jihadists are carving out a caliphate in the north-east; gangs of kidnappers are terrorising the north-west; the fire of Biafran secessionism has been rekindled in the oil-rich south-east. The violence threatens not just Nigeria's 200m people, but also the stability of the entire region that surrounds them.

Readers who do not follow Nigeria closely may ask: what's new? Nigeria has been corrupt and turbulent for decades. What has changed of late, though, is that jihadism, organised crime and political violence have grown so intense and widespread that most of the country is sliding towards ungovernability. In the first nine months of 2021 almost 8,000 people were directly killed in various conflicts. Hundreds of thousands more have perished because of hunger and disease caused by fighting. More than 2m have fled their homes.

The jihadist threat in the north-east has metastasised. A few years ago, an area the size of Belgium was controlled by Boko Haram, a group of zealots notorious for enslaving young girls. Now, Boko Haram is being supplanted by an affiliate of Islamic State that is equally brutal but more competent, and so a bigger danger to Nigeria. In the south-east, demagogues are stirring up ethnic grievances and feeding the delusion that one group, the Igbos, can walk off with all the country's oil, the source of about half of government revenues. President Muhammadu Buhari has hinted that Biafran separatism will be dealt with as ruthlessly now as it was half a century ago.

Meanwhile, across wide swathes of Nigeria, a collapse in security and state authority has allowed criminal gangs to run wild. In the first nine months of this year some 2,200 people were kidnapped for ransom, more than double the roughly 1,000 abducted in 2020. Perhaps a million children are missing school for fear that they will be snatched.

Two factors help explain Nigeria's increasing instability: a sick economy and a bumbling government. Slow growth and two recessions have made Nigerians poorer, on average, each year since oil prices fell in 2015. Before covid-19, fully 40% of them were below Nigeria's extremely low poverty line of about $1 a day. If Nigeria's 36 states were stand-alone countries, more than one-third would be categorised by the World Bank as "low-income" (less than $1,045 a head). Poverty combined with stagnation tends to increase the risk of civil conflict.

Economic troubles are compounded by a government that is inept and heavy-handed. Mr Buhari, who was elected in 2015, turned an oil shock into a recession by propping up the naira and barring many imports in the hope this would spur domestic production. Instead he sent annual food inflation soaring above 20%. He has failed to curb corruption, which breeds resentment. Many Nigerians are furious that they see so little benefit from the country's billions of petrodollars, much of which their rulers have squandered or stolen. Many politicians blame rival ethnic or religious groups, claiming they have taken more than their fair share. This wins votes, but makes Nigeria a tinderbox.

When violence erupts, the government does nothing or cracks heads almost indiscriminately. Nigeria's army is mighty on paper. But many of its soldiers are "ghosts" who exist only on the payroll, and much of its equipment is stolen and sold to insurgents. The army is also stretched thin, having been deployed to all of Nigeria's states. The police are understaffed, demoralised and poorly trained. Many supplement their low pay by robbing the public they have sworn to protect.

To stop the slide towards lawlessness, Nigeria's government should make its own forces obey the law. Soldiers and police who murder or torture should be prosecuted. That no one has been held accountable for the slaughter of perhaps 15 peaceful demonstrators against police abuses in Lagos last year is a scandal. The secret police should stop ignoring court orders to release people who are being held illegally. This would not just be morally right, but also practical: young men who see or experience state brutality are more likely to join extremist groups.

## Things don't have to fall apart

Second, Nigeria needs to beef up its police. Niger state, for instance, has just 4,000 officers to protect 24m people. Local cops would be better at stopping kidnappings and solving crimes than the current federal force, which is often sent charging from one trouble spot to another. Money could come from cutting wasteful spending by the armed forces on jet fighters, which are not much use for guarding schools. Britain and America, which help train Nigeria's army, could also train detectives. Better policing could let the army withdraw from areas where it is pouring fuel on secessionist fires.

The biggest barrier to restoring security is not a lack of ideas, nor of resources. It is the complacency of Nigeria's cosseted political elite—safe in their guarded compounds and the well-defended capital. Without urgent action, Nigeria may slip into a downward spiral from which it will struggle to emerge. ■

Don’t jump the gun

# The Bank of England should not raise interest rates until 2022

*But Britain may need tighter money sooner than America*

Oct 23rd 2021


BRITAIN IS UNIQUELY exposed to the malign forces troubling the world economy. It gets two-fifths of its energy from natural gas, which is in short supply. Trade flows are worth more than half of its GDP, making bunged-up supply chains particularly painful. Brexit has exacerbated its labour shortage and disrupted trade further. It even has a high rate of covid-19 infections, posing a lingering threat to consumer confidence, though more than 90% of the population has antibodies against the disease.

Could a central-bank mistake soon be added to the list of problems? The Bank of England has encouraged markets to expect interest-rate rises sooner than in other big rich countries. In mid-September investors began betting that interest rates would start rising in December. This week comments by Andrew Bailey, the bank’s governor, led traders to place about an 80% chance on a rate increase on November 4th. Our reading of Mr Bailey’s remarks—which, admittedly, were imprecisely worded—suggests that the markets are getting ahead of themselves. The governor has promised only to be vigilant. And yet the bank has not disabused bond desks of the notion that a series of rate rises is imminent.

That is worrying. Inflation has risen to over 3% and will probably reach around 5% by the spring. But many of the forces pushing it up, such as energy-price increases, should prove temporary. The normal approach is to disregard inflation when it is caused by supply disruptions rather than by an overheating economy. The bank did this in 2011 when commodity prices rose and inflation reached 5.2%, and did so again after the Brexit referendum sent sterling tumbling in 2016, making imports more expensive. On both occasions high inflation subsided.

The Economist

Those who worry that, in contrast to those episodes, the labour market is running too hot or supply could be permanently impaired should take comfort from the fact that the government is already turning off some stimulus. The furlough scheme, which helped pay the wages of staff who were temporarily laid off, finished at the end of September. A temporary boost to welfare benefits worth an annual £6bn (0.3% of GDP) lapsed at around the same time. The government has announced tax rises worth an annual £12bn, to take effect from April. Tighter fiscal policy gives policymakers time to see how the economy responds. The bank's November meeting would be a poor time to jump the gun, because data on the jobs market's response to the end of the furlough scheme will not yet be available.

The bank is troubled by the risk of inflation expectations rising, baking in persistent price increases as workers demand higher wages and firms' costs rise. It is a reasonable concern. Several measures of inflation expectations have drifted upward and average wage growth is curiously strong. Britain, unlike America and the euro zone, did not have persistently below-target inflation before the pandemic, meaning the public may be more accustomed to price rises.

On present trends, the Old Lady would have to raise rates before other central banks, such as the Federal Reserve, in 2022. But tightening monetary policy to preserve long-term credibility, rather than because it is warranted by underlying economic conditions, is more typical of emerging markets than the rich world. That it may be necessary is a sign of Britain's fragility.

Whatever policy they follow, rate-setters should communicate their intentions more clearly. One has even suggested that if markets price in higher rates, tightening financial conditions, that might slow the economy sufficiently to avoid monetary policymakers having to follow through—an approach that would create a credibility problem all of its own. ■

An October revolution

# At last, a backlash against bad government in Eastern Europe

*The EU's battles with Poland and an opposition alliance in Hungary are overdue signs of change*

Oct 23rd 2021


CORRUPTION, AUTOCRACY, overbearing government—these were the perils many hoped eastern Europe was escaping when its fledgling democracies joined the European Union in the early 2000s. Instead, the rest of Europe now worries, the eastern members have simply smuggled these vices into the EU.

One of the biggest offenders is Poland. First the government in Warsaw stacked its constitutional court with pliant judges and then got them to rule that the Polish constitution can override the European treaties—an assault on a basic principle of EU membership. Viktor Orban, Hungary's long-serving prime minister, has bullied political opponents, critical media outlets and gay Hungarians, among others.

Sleaze, meanwhile, is smothering economies across much of the former Soviet empire. The most motivated citizens vote with their feet and seek a better future in the West, hollowing out the places they leave behind. That can become a self-reinforcing dynamic, giving a boost to conservative, rural, populist outfits, such as Law and Justice, Poland's ruling party, Mr Orban's Fidesz or GERB, the Bulgarian group headed by Boyko Borisov, a former prime minister and prime figure in various scandals.

Until this month, there had been only the odd flicker of resistance amid the gloom of bad government. One came in 2019, with the election of Zuzana Caputova, an environmental and anti-corruption campaigner, as president of Slovakia. Last year another activist was elected president of nearby Moldova (which is not a part of the EU). And earlier this year Mr Borisov failed to win a fourth term as Bulgaria's prime minister—although his opponents have not yet managed to form a government.

October has seen a refreshing change of pace. On the 9th Andrej Babis, the Czech Republic's plutocratic leader, fared badly at the polls. He now looks set to be ousted as prime minister by a rival coalition (though he may step in as temporary president, since the incumbent is ill). One of the factors that seems to have led to his defeat was his appearance in the Pandora papers, a trove of documents revealing public figures' use of shell companies, tax havens and other tricks of the footloose rich. Mr Babis, like Mr Borisov, denies any wrongdoing.

The same day, in an unrelated corruption scandal, the chancellor of Austria, Sebastian Kurz, resigned after his coalition partners threatened to bring down the government if he did not. Mr Kurz also insists he has done nothing wrong. Across central and eastern Europe, voters' tolerance for the alleged shenanigans of their rulers seems to be running out.

Even Mr Orban is under pressure. Hungary's six main opposition parties, generally as much at each other's throats as at his, have at last managed what they had previously always failed to do: to form a united front. In a process that was admittedly a little fractious, they agreed not to compete against one another in parliamentary elections and selected a joint candidate for prime minister. Fidesz's fourth electoral triumph in a row no longer seems inevitable.

At the same time, and none too soon, the EU itself is getting tough with Hungary and Poland. The European Commission is sitting on hundreds of billions of euros allocated to help escape the slump brought on by the pandemic. Each member country is entitled to a big dollop, but the commission must approve their spending plans before it disburses the cash. Citing problems with the rule of law, it has so far refused to give Hungary or Poland their share. If the courts are unsound, the thinking runs, then the EU's cash is unsafe. It may use a similar argument to delay the distribution of other funds.

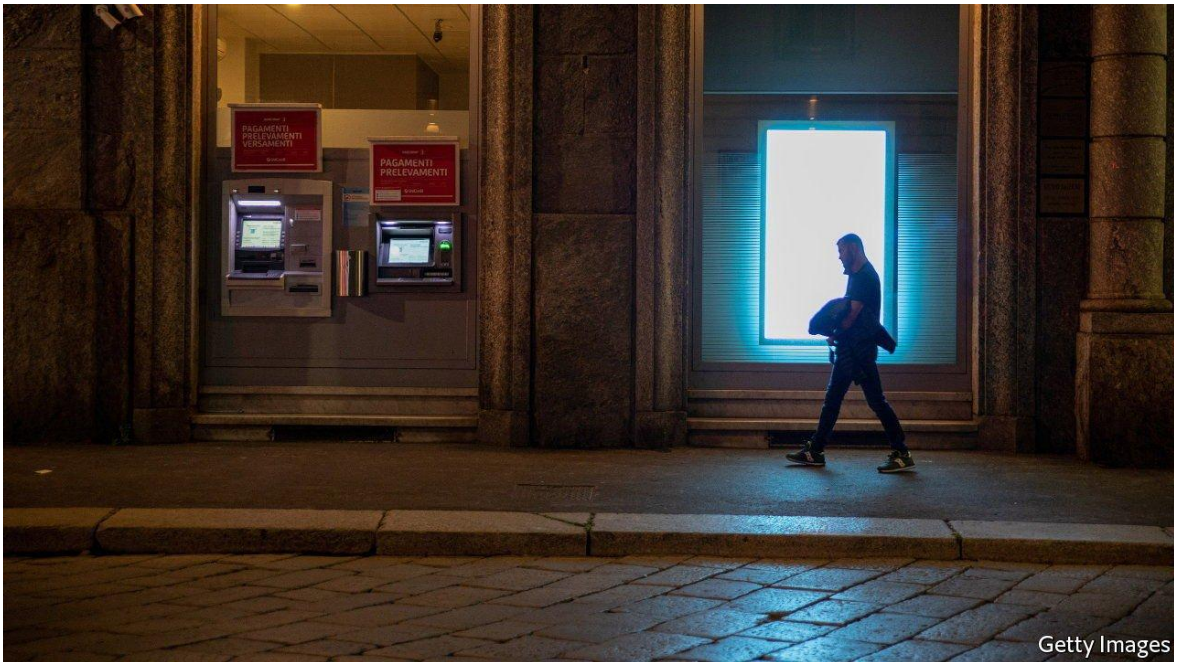
The row seems arcane, but it may be the first moment the EU has done more than tut-tut about the erosion of democracy in its eastern half. How far it is willing to go remains to be seen. But if its leaders' constant talk of European values is to have any meaning, it will have to be firm. Glory to October! ■

**Be swift, be bold**

# The geopolitics of money is shifting up a gear

*If Western countries and firms want to stay in charge of global payments they have to modernise how they happen*

Oct 23rd 2021

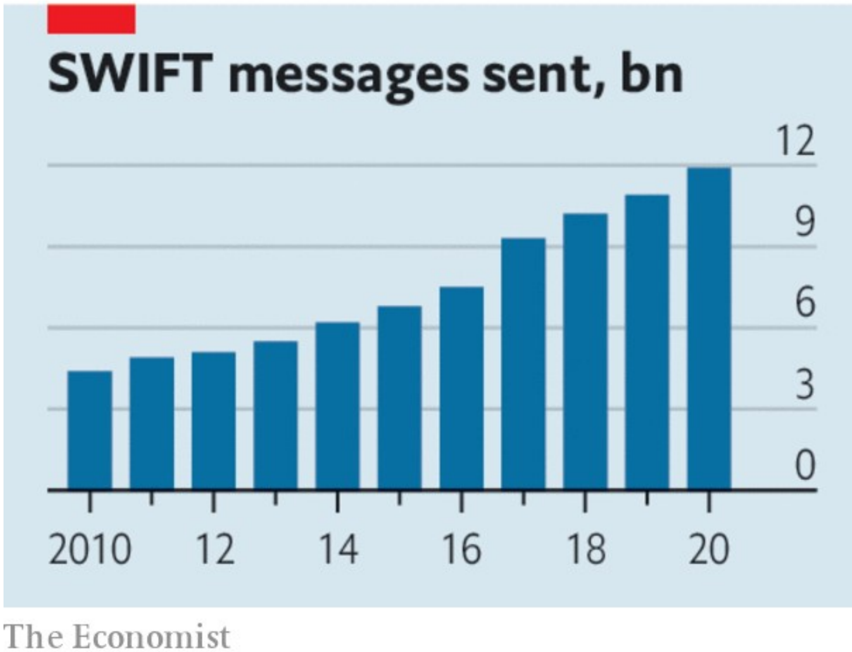


Getty Images

IN THE PAST few years the Western-led infrastructure behind globalisation has fallen into disrepair even as China has been building credible alternatives. The World Trade Organisation is in tatters, the IMF and World Bank are struggling for relevance and tarnished by scandal, and no one can agree on global rules to govern technology.

There is an exception to this dismal picture: the global payments system that underpins the dominance of Western currencies, particularly the dollar. Over the past year one of its main networks, SWIFT, carried $140trn of transactions, a record level and the equivalent of about 150% of global GDP. It is an impressive sum but more must be done to modernise the payments architecture if its pre-eminence is to last.

The way money flows around the world is still overwhelmingly under the control of liberal democracies. Payments typically happen in the dollar and to a lesser extent the euro, pound and yen. This is, on balance, good for the world, providing a reliable system governed by law. It is certainly good for Western countries, bolstering their legal norms, firms and influence.




Behind it lie myriad institutions, from banks to New York's clearing-houses. Despite its importance, SWIFT, owned by global banks and founded in the 1970s, is an obscure part of all this. It connects 11,000 banks in over 200 countries, providing a messaging system for transactions. Although it is based in Europe, it is an accidental linchpin of American influence, with JPMorgan Chase alone accounting for 24% of SWIFT dollar volumes.

The threat to SWIFT comes from several sides. Its own record is patchy. In 2016 North Korean hackers used stolen SWIFT credentials to steal $81m from the Bangladeshi central bank. America is complacent about the dollar system. It has used SWIFT to pursue politicised sanctions, giving countries an incentive to develop alternatives. In addition, America has been slow to upgrade payments systems at home or to develop a central-bank digital currency, and Congress is critical of the Federal Reserve's stabilising global role.

Meanwhile big tech firms, credit-card networks and banks are keen to create alternatives. On October 19th Facebook launched its digital wallet. Innovation is welcome, but if only a few firms dominate, fees will rise and poorer countries suffer. And China is trying its own payments system, called CIPS, and a central-bank digital currency. It has just asked McDonald's to adopt the e-yuan in its Chinese branches.

Rather than assume that the dominance of payments is their birthright, democracies should ensure their systems are faster, cheaper and safer so that they remain firms' first choice on merit. SWIFT has upgraded its network and says that 92% of large transfers on its high-speed pipes happen within a day. Not all kinds of financial-market transactions need to be settled at once but SWIFT should aim for its payments to be instantaneous. Another goal should be to connect to more real-time domestic payments networks, which are live in 65 countries. This may cost money, but SWIFT's capital expenditure in 2020 was $56m, less than a fifth of the budget of payments giants such as Ant Group and Visa.

The hardest task will be to reform SWIFT's governance. Its board is packed with European banks, which was justifiable in the 1970s when they dominated cross-border finance, but now looks anachronistic. The board's 25 seats include just two American firms and a single Chinese one. India and Brazil have none. America and Asia should be better represented, even as liberal democratic countries remain in control. When a house needs renovating a good place to start is the plumbing. ■

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# Letters

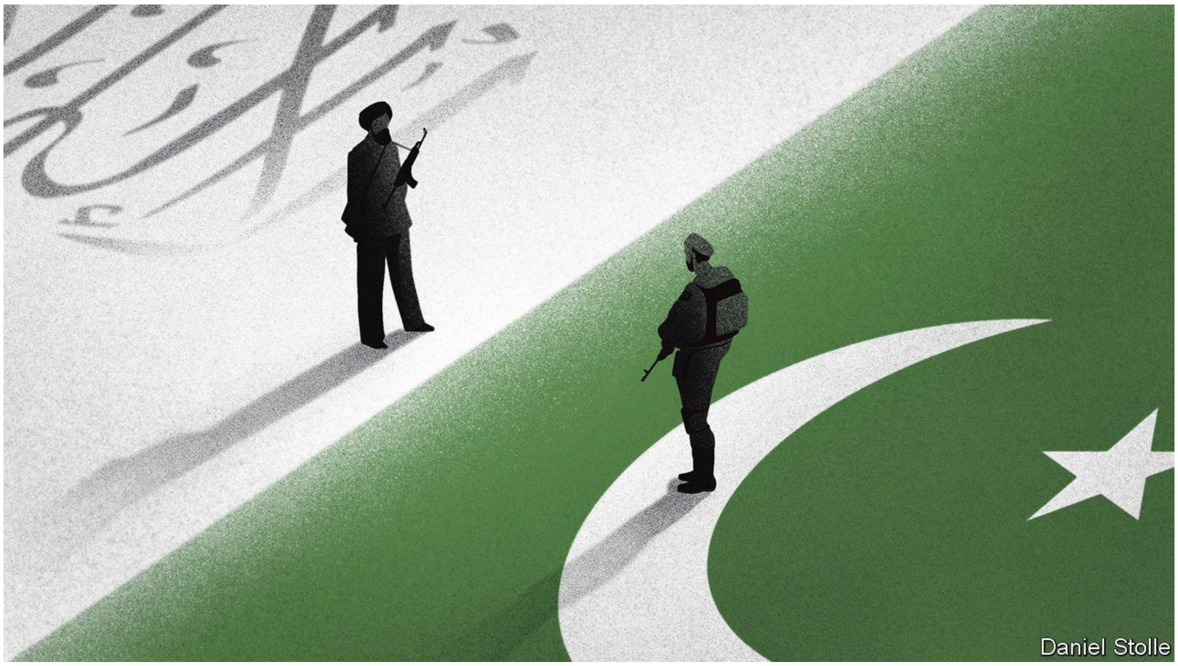
- **Letters to the editor: On Pakistan, the American navy, management, the Peshtigo fire, Ethiopia, learning classics, God**

**On Pakistan, the American navy, management, the Peshtigo fire, Ethiopia, learning classics, God**

# Letters to the editor

*A selection of correspondence*

Oct 23rd 2021




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

## Pakistan and Afghanistan

You repeated stale accusations about Pakistan's role in Afghanistan ("Now what?", October 9th). Industrial-scale corruption, the government's loss of credibility among the Afghan people, internecine squabbling, Ashraf Ghani placing himself above the national interest and an intransigence towards dialogue were the real and only reasons behind the fall of Kabul.

Every country, and its armed forces, has a responsibility to safeguard its national interest as it deems fit, especially when hostile forces are operating in its backyard. Pakistan has paid a heavy price for supporting the American-led war on terror, with over 80,000 casualties. After 9/11 Pakistan extended full intelligence co-operation to the West, which resulted in the dismantling of al-Qaeda and the capture of hundreds of its operatives. It is regrettable that neither Pakistan's concerns, nor our repeated exhortations for a more realistic approach, were ever really heeded. Our views were always processed through a jaundiced lens, and reduced to calls to "do more".

Moreover, comparing Pakistan's economy with that of its regional peers is as odious as it is simplistic. None of the regional countries was part of the West's war on terrorism in the way Pakistan was, none faced the security fallout, and none incurred economic losses of more than $150bn.

If Pakistan wants other countries to help stabilise Afghanistan, it is because we do not want the world to repeat the mistakes of the past by abandoning Afghanistan and leaving a vacuum for terrorists. It is clear that the consequences would be no different this time around. While a deteriorating security situation and the subsequent refugee crisis will hurt Pakistan immediately, it will impact the West eventually.

MUNEER AHMAD
First secretary (press)
Pakistan High Commission
*London*


Your thoughtful leader on Pakistan argued that the West has a good chance of influencing Islamabad because the elite "send their children to American and European universities and holiday in London and Paris" ("An all-weather frenemy", October 9th). The penchant for nice destinations among problematic leaders is nothing new. Chinese and Russian bigwigs love American and European places, both for leisure and to educate their offspring. Even Kim Jong Un went to school in Switzerland. Svetlana Alliluyeva, Stalin's only daughter, dashed off to America at the first opportunity. None of these instances led to improved relations, so perhaps one shouldn't put too much faith in similar behaviour in Pakistan.

MICHAEL KUTTNER
*Stege, Denmark*


## A racial first

The review of "Blood and Ruins" claimed that the American navy was white-only until 1942 ("Graveyard of empires", October 2nd). African-Americans were allowed in the navy before 1942, although mostly for menial work. Doris Miller, a cook on the USS *West Virginia*, was the first black man to be awarded the Navy Cross for his heroic actions when the ship was bombed during the attack on Pearl Harbour on December 7th 1941.

DAVID JONES
*Abu Dhabi*


## Required reading

I read with interest Schumpeter's column regarding bosses writing memoirs and guidance books (October 2nd). The former chief executive of Admiral Group, Henry Engelhardt, always had a nice turn of phrase, introspection and self-awareness introducing our annual reports. He also uttered many Henryisms, printed on T-shirts for staff on his last day in the office. I often wondered whether he would write his own book, and during the pandemic he did just that. It was a guidance book for the company's entire management to help them and get the best out of their staff. No reward or publicity (though it was eventually published), just a desire to improve the performance and well-being of the staff working for the company he co-founded, even though it was years since he was in charge. Perhaps it should be read more widely.

GARETH ROWLANDS
*Bridgend, South Wales*


## America’s forgotten inferno

The Chicago fire was indeed a tragic event (“From the ashes”, October 9th). However, an even greater tragedy happened that same day, 250 miles north in Peshtigo, Wisconsin. Whereas the Chicago fire spread over 3.3 square miles and killed 300 people, the Peshtigo fire covered 2,344 square miles with an estimated death toll of 1,200 to 2,400. By any measure the Peshtigo fire was much larger, more destructive, and more deadly. It remains to this day the deadliest fire in American history, but because the blaze in Chicago occurred at the same time it has been mostly overlooked.

JOHN HOHOL
*Madison, Wisconsin*

## Ethiopians would suffer

It was rather vexing to see *The Economist* join the spiteful campaign to remove Ethiopia's trade benefits under America's African Growth and Opportunity Act ("No favours for killers", October 9th). The investments in light manufacturing that this preferential trade agreement attracts are by no means a major source of tax revenue or foreign exchange for the Ethiopian government, which you want to punish for expelling a handful of UN diplomats. This misguided sanction would only end up destroying more than 100,000 jobs directly, and hurt the livelihoods of almost a million semi-skilled, mostly female workers who toil below the poverty line.

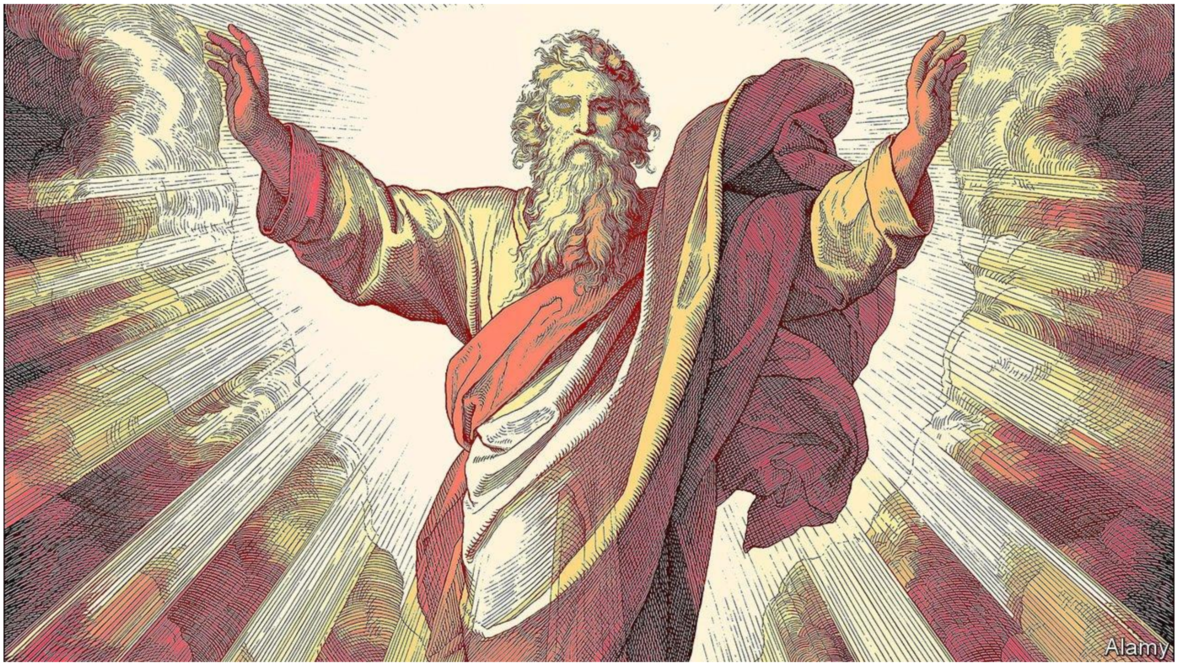
The irony must have been lost on those who advocate such a malicious policy response in the name of humanitarian intervention.

TIGLUN MANAYE MANDEFRO
*Hawassa, Ethiopia*


## Learning through play

Although the formal study of Latin, Greek and ancient history in Britain today is indeed "concentrated in fee-paying and academically selective state schools" ("Bearing gifts," October 2nd), a new generation is being schooled in the period in a novel and entertaining way. Over 10m copies of "Assassin's Creed Odyssey", an action role-playing video game, have been sold worldwide. The game is set in the years 431-422 BC and introduces characters and events in a way that should encourage players from all classes and races to seek more information. This would appeal to Socrates, who believed that "Education is the kindling of a flame, not the filling of a vessel."

MICHAEL LAGGAN
*Newton of Balcanquhal, Perthshire*




## A physical being

Your review of "God: An Anatomy" suggests that the book's author, Francesca Stavrakopoulou, has illustrated in a dramatic way the truth of Voltaire's remark that if God has created us in His image, we have more than returned the compliment ("With his outstretched arm", October 2nd).

NEVILLE MOSES
*Sydney*

Surely God, to the extent that she exists, is a woman. And she walks among us incarnate. Anyone who has stood in the presence of a Renoir or watched a Sophia Loren movie can be in no doubt.

R. POETON
*Lenox, Massachusetts*

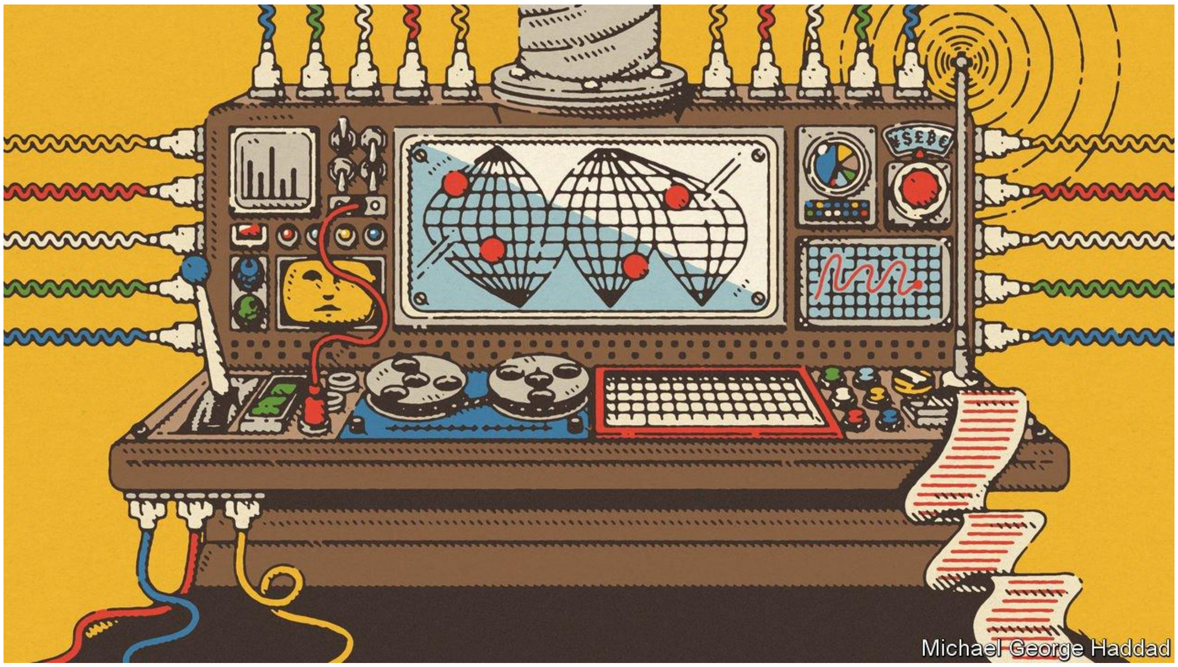
# Briefing

The real-time revolution

# Enter third-wave economics

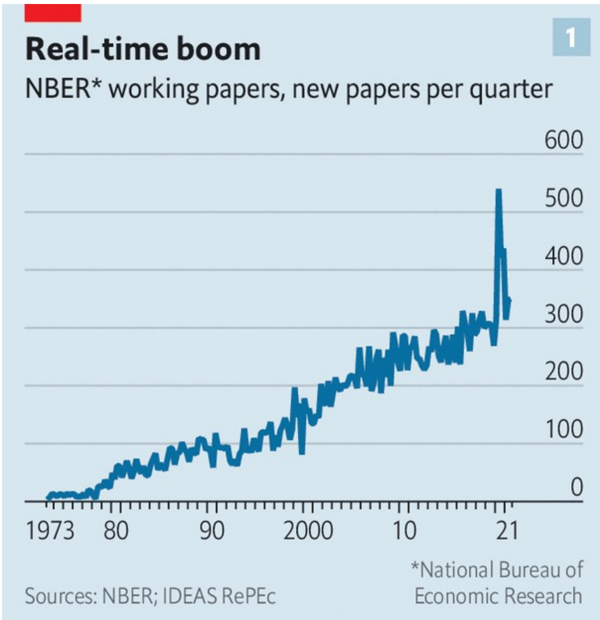
### *How the pandemic reshaped the dismal science*

Oct 23rd 2021 | Salina, Kansas




AS PART OF his plan for socialism in the early 1970s, Salvador Allende created Project Cybersyn. The Chilean president's idea was to offer bureaucrats unprecedented insight into the country's economy. Managers would feed information from factories and fields into a central database. In an operations room bureaucrats could see if production was rising in the metals sector but falling on farms, or what was happening to wages in mining. They would quickly be able to analyse the impact of a tweak to regulations or production quotas.

Cybersyn never got off the ground. But something curiously similar has emerged in Salina, a small city in Kansas. *Salina311*, a local paper, has started publishing a "community dashboard" for the area, with rapid-fire data on local retail prices, the number of job vacancies and more—in effect, an electrocardiogram of the economy.



The Economist

What is true in Salina is true for a growing number of national governments. When the pandemic started last year bureaucrats began studying dashboards of "high-frequency" data, such as daily airport passengers and hour-by-hour credit-card-spending. In recent weeks they have turned to new high-frequency sources, to get a better sense of where labour shortages are worst or to estimate which commodity price is next in line to soar. Economists have seized on these new data sets, producing a research boom (see chart 1). In the process, they are influencing policy as never before.

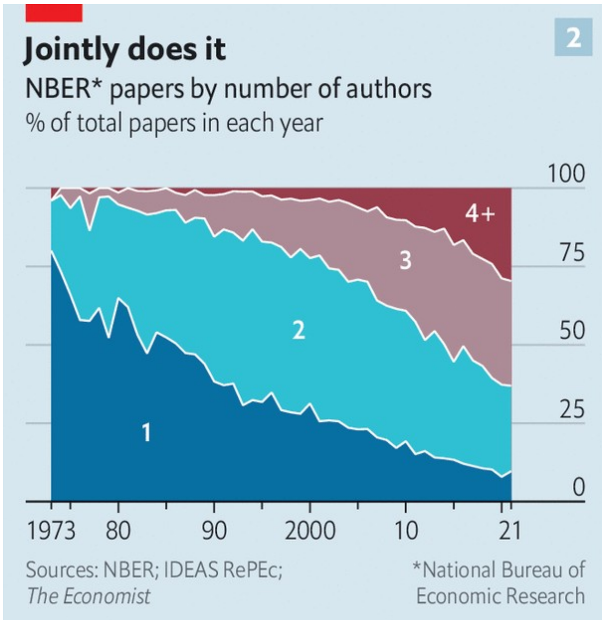
This fast-paced economics involves three big changes. First, it draws on data that are not only abundant but also directly relevant to real-world problems. When policymakers are trying to understand what lockdowns do to leisure spending they look at live restaurant reservations; when they want to get a handle on supply-chain bottlenecks they look at day-by-day movements of ships. Troves of timely, granular data are to economics what the microscope was to biology, opening a new way of looking at the world.

Second, the economists using the data are keener on influencing public policy. More of them do quick-and-dirty research in response to new policies. Academics have flocked to Twitter to engage in debate.

And, third, this new type of economics involves little theory. Practitioners claim to let the information speak for itself. Raj Chetty, a Harvard professor and one of the pioneers, has suggested that controversies between economists should be little different from disagreements among doctors about whether coffee is bad for you: a matter purely of evidence. All this is causing controversy among dismal scientists, not least because some, such as Mr Chetty, have done better from the shift than others: a few superstars dominate the field.

Their emerging discipline might be called "third wave" economics. The first wave emerged with Adam Smith and the "Wealth of Nations", published in 1776. Economics mainly involved books or papers written by one person, focusing on some big theoretical question. Smith sought to tear down the monopolistic habits of 18th-century Europe. In the 20th century John Maynard Keynes wanted people to think differently about the government's role in managing the economic cycle. Milton Friedman aimed to eliminate many of the responsibilities that politicians, following Keynes's ideas, had arrogated to themselves.

All three men had a big impact on policies—as late as 1850 Smith was quoted 30 times in Parliament—but in a diffuse way. Data were scarce. Even by the 1970s more than half of economics papers focused on theory alone, suggests a study published in 2012 by Daniel Hamermesh, an economist.



The Economist

That changed with the second wave of economics. By 2011 purely theoretical papers accounted for only 19% of publications. The growth of official statistics gave wonks more data to work with. More powerful computers made it easier to spot patterns and ascribe causality (this year's Nobel prize was awarded for the practice of identifying cause and effect). The average number of authors per paper rose, as the complexity of the analysis increased (see chart 2). Economists had greater involvement in policy: rich-world governments began using cost-benefit analysis for infrastructure decisions from the 1950s.

Second-wave economics nonetheless remained constrained by data. Most national statistics are published with lags of months or years. "The traditional government statistics weren't really all that helpful—by the time they came out, the data were stale," says Michael Faulkender, an assistant treasury secretary in Washington at the start of the pandemic. The quality of official local economic data is mixed, at best; they do a poor job of covering the housing market and consumer spending. National statistics came into being at a time when the average economy looked more industrial, and less service-based, than it does now. The Standard Industrial Classification, introduced in 1937-38 and still in use with updates, divides manufacturing into 24 subsections, but the entire financial industry into just three.

## The mists of time

Especially in times of rapid change, policymakers have operated in a fog. "If you look at the data right now…we are not in what would normally be characterised as a recession," argued Edward Lazear, then chairman of the White House Council of Economic Advisers, in May 2008. Five months later, after Lehman Brothers had collapsed, the IMF noted that America was "not necessarily" heading for a deep recession. In fact America had entered a recession in December 2007. In 2007-09 there was no surge in economics publications. Economists' recommendations for policy were mostly based on judgment, theory and a cursory reading of national statistics.

The gap between official data and what is happening in the real economy can still be glaring. Walk around a Walmart in Kansas and many items, from pet food to bottled water, are in short supply. Yet some national statistics fail to show such problems. Dean Baker of the Centre for Economic and Policy Research, using official data, points out that American real inventories, excluding cars and farm products, are barely lower than before the pandemic.

There were hints of an economics third wave before the pandemic. Some economists were finding new, extremely detailed streams of data, such as anonymised tax records and location information from mobile phones. The analysis of these giant data sets requires the creation of what are in effect industrial labs, teams of economists who clean and probe the numbers. Susan Athey, a trailblazer in applying modern computational methods in economics, has 20 or so non-faculty researchers at her Stanford lab (Mr Chetty's team boasts similar numbers). Of the 20 economists with the most cited new work during the pandemic, three run industrial labs.

More data sprouted from firms. Visa and Square record spending patterns, Apple and Google track movements, and security companies know when people go in and out of buildings. "Computers are in the middle of every economic arrangement, so naturally things are recorded," says Jon Levin of Stanford's Graduate School of Business. Jamie Dimon, the boss of JPMorgan Chase, a bank, is an unlikely hero of the emergence of third-wave economics. In 2015 he helped set up an institute at his bank which tapped into data from its network to analyse questions about consumer finances and small businesses.

The Brexit referendum of June 2016 was the first big event when real-time data were put to the test. The British government and investors needed to get a sense of this unusual shock long before Britain's official GDP numbers came out. They scraped web pages for telltale signs such as restaurant reservations and the number of supermarkets offering discounts—and concluded, correctly, that though the economy was slowing, it was far from the catastrophe that many forecasters had predicted.

Real-time data might have remained a niche pursuit for longer were it not for the pandemic. Chinese firms have long produced granular high-frequency data on everything from cinema visits to the number of glasses of beer that people are drinking daily. Beer-and-movie statistics are a useful cross-check against sometimes dodgy official figures. China-watchers turned to them in January 2020, when lockdowns began in Hubei province. The numbers showed that the world's second-largest economy was heading for a slump. And they made it clear to economists elsewhere how useful such data could be.

## Vast and fast

In the early days of the pandemic Google started releasing anonymised data on people's physical movements; this has helped researchers produce a day-by-day measure of the severity of lockdowns (see chart 3). OpenTable, a booking platform, started publishing daily information on restaurant reservations. America's Census Bureau quickly introduced a weekly survey of households, asking them questions ranging from their employment status to whether they could afford to pay the rent.


The Economist

In May 2020 Jose Maria Barrero, Nick Bloom and Steven Davis, three economists, began a monthly survey of American business practices and work habits. Working-age Americans are paid to answer questions on how often they plan to visit the office, say, or how they would prefer to greet a work colleague. "People often complete a survey during their lunch break," says Mr Bloom, of Stanford University. "They sit there with a sandwich, answer some questions, and that pays for their lunch."

Demand for research to understand a confusing economic situation jumped. The first analysis of America's $600 weekly boost to unemployment insurance, implemented in March 2020, was published in weeks. The British government knew by October 2020 that a scheme to subsidise restaurant attendance in August 2020 had probably boosted covid infections. Many apparently self-evident things about the pandemic—that the economy collapsed in March 2020, that the poor have suffered more than the rich, or that the shift to working from home is turning out better than expected—only seem obvious because of rapid-fire economic research.

It is harder to quantify the policy impact. Some economists scoff at the notion that their research has influenced politicians' pandemic response. Many studies using real-time data suggested that the Paycheck Protection Programme, an effort to channel money to American small firms, was doing less good than hoped. Yet small-business lobbyists ensured that politicians did not get rid of it for months. Tyler Cowen, of George Mason University, points out that the most significant contribution of economists during the pandemic involved recommending early pledges to buy vaccines—based on older research, not real-time data.

Still, Mr Faulkender says that the special support for restaurants that was included in America's stimulus was influenced by a weak recovery in the industry seen in the OpenTable data. Research by Mr Chetty in early 2021 found that stimulus cheques sent in December boosted spending by lower-income households, but not much for richer households. He claims this informed the decision to place stronger income limits on the stimulus cheques sent in March.

## Shaping the economic conversation

As for the Federal Reserve, in May 2020 the Dallas and New York regional Feds and James Stock, a Harvard economist, created an activity index using data from SafeGraph, a data provider that tracks mobility using mobile-phone pings. The St Louis Fed used data from Homebase to track employment numbers daily. Both showed shortfalls of economic activity in advance of official data. This led the Fed to communicate its doveish policy stance faster.

Speedy data also helped frame debate. Everyone realised the world was in a deep recession much sooner than they had in 2007-09. In the IMF's overviews of the global economy in 2009, 40% of the papers cited had been published in 2008-09. In the overview published in October 2020, by contrast, over half the citations were for papers published that year.

The third wave of economics has been better for some practitioners than others. As lockdowns began, many male economists found themselves at home with no teaching responsibilities and more time to do research. Female ones often picked up the slack of child care. A paper in *Covid Economics*, a rapid-fire journal,finds that female authors accounted for 12% of economics working-paper submissions during the pandemic, compared with 20% before. Economists lucky enough to have researched topics before the pandemic which became hot, from home-working to welfare policy, were suddenly in demand.

There are also deeper shifts in the value placed on different sorts of research. *The Economist* has examined rankings of economists from IDEAS RePEC, a database of research, and citation data from Google Scholar. We divided economists into three groups: “lone wolves” (who publish with less than one unique co-author per paper on average); “collaborators” (those who tend to work with more than one unique co-author per paper, usually two to four people); and “lab leaders” (researchers who run a large team of dedicated assistants). We then looked at the top ten economists for each as measured by RePEC author rankings for the past ten years.

The Economist

Collaborators performed far ahead of the other two groups during the pandemic (see chart 4). Lone wolves did worst: working with large data sets benefits from a division of labour. Why collaborators did better than lab leaders is less clear. They may have been more nimble in working with those best suited for the problems at hand; lab leaders are stuck with a fixed group of co-authors and assistants.

The most popular types of research highlight another aspect of the third wave: its usefulness for business. Scott Baker, another economist, and

Messrs Bloom and Davis—three of the top four authors during the pandemic compared with the year before—are all "collaborators" and use daily newspaper data to study markets. Their uncertainty index has been used by hedge funds to understand the drivers of asset prices. The research by Messrs Bloom and Davis on working from home has also gained attention from businesses seeking insight on the transition to remote work.

## But does it work in theory?

Not everyone likes where the discipline is going. When economists say that their fellows are turning into data scientists, it is not meant as a compliment. A kinder interpretation is that the shift to data-heavy work is correcting a historical imbalance. "The most important problem with macro over the past few decades has been that it has been too theoretical," says Jón Steinsson of the University of California, Berkeley, in an essay published in July. A better balance with data improves theory. Half of the recent Nobel prize went for the application of new empirical methods to labour economics; the other half was for the statistical theory around such methods.

Some critics question the quality of many real-time sources. High-frequency data are less accurate at estimating levels (for example, the total value of GDP) than they are at estimating changes, and in particular turning-points (such as when growth turns into recession). In a recent review of real-time indicators Samuel Tombs of Pantheon Macroeconomics, a consultancy, pointed out that OpenTable data tended to exaggerate the rebound in restaurant attendance last year.

Others have worries about the new incentives facing economists. Researchers now race to post a working paper with America's National Bureau of Economic Research in order to stake their claim to an area of study or to influence policymakers. The downside is that consumers of fast-food academic research often treat it as if it is as rigorous as the slow-cooked sort—papers which comply with the old-fashioned publication process involving endless seminars and peer review. A number of papers using high-frequency data which generated lots of clicks, including one which claimed that a motorcycle rally in South Dakota had caused a spike in covid cases, have since been called into question.

Whatever the concerns, the pandemic has given economists a new lease of life. During the Chilean coup of 1973 members of the armed forces broke into Cybersyn's operations room and smashed up the slides of graphs—not only because it was Allende's creation, but because the idea of an electrocardiogram of the economy just seemed a bit weird. Third-wave economics is still unusual, but ever less odd. ■

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.*

# Asia

**From gulag to ordinary grumbles**

# Uzbekistan's president abolished slave labour. What next?

*Shavkat Mirziyoyev's reforms are at risk of losing momentum*

Oct 23rd 2021 | TASHKENT


THE SCREENS of the digital billboards illuminating the streets of Tashkent flip between the faces of politicians who are running in a presidential election on October 24th. Shop windows display posters of the five candidates lined up side by side. Newspapers plastered in press kiosks grant equal space to all contenders. Uzbekistan is engaged in a scrupulous attempt to show one-person, one-vote democracy at work in a competitive election. But in truth there is only one man, and that is the president, Shavkat Mirziyoyev, who is guaranteed to win with a thumping landslide. He may well improve on the 89% of the vote he won five years ago.

Mr Mirziyoyev took office in 2016 after the death of Islam Karimov, whose brutal 27-year rule made his regime a particularly nasty one even by the standards of the five Central Asian post-Soviet republics. Under Karimov—with Mr Mirziyoyev as prime minister—Uzbekistan forced adults and children to pick cotton, slaughtered demonstrators and tortured prisoners.

The elevation of Mr Mirziyoyev promised more of the same. Yet over the past half-decade he has surprised both the 35m-odd Uzbeks and the world by embracing change. Forced labour has dramatically declined, the country's most notorious prison camp has been closed, Soviet-era planning in the vast cotton sector has ended and strict rules mandating where citizens could live and travel have been abolished.

Economic reforms have accompanied political ones as international institutions have been invited in to offer advice. Entrepreneurs say the lifting of currency-conversion restrictions and streamlined customs procedures have transformed the climate for business. Day-to-day life has become much easier, says Dildora Atadjanova, who runs two small firms. In the Karimov era she gave up running a café because of the need to comply with "ridiculous requests", such as feeding local apparatchiks for nothing. These days officials are keen to meet the needs of business owners instead. "The ideological change has been tremendous," says Zafar Khashimov, the boss of Korzinka, a supermarket chain. The government even managed to sustain growth last year, when the pandemic caused most economies to contract.


Yet the reforms so far have been the "pleasant", or less painful ones, says Jamshid Kuchkarov, a deputy prime minister. The difficult business of structural change lies ahead. The state squats heavily over the economy, controlling 55% of assets and 85% of the banking sector. A privatisation drive aimed at reducing the number of state-owned enterprises by three-quarters has begun, but the behemoths need overhauling to lure investors. Land reform is going slowly. Corruption and cronyism remain endemic.

Political reform might help Mr Mirziyoyev and his overworked ministers tackle these challenges. Sodiq Safoev, the deputy chairman of the Senate, said as much recently, remarking that society could not develop without opposition and "alternative ideas". The president has declared himself open to opposition. But in practice his government has proved resistant to registering parties critical of the status quo. Citing a technicality, the government rejected a bid by one little-known maverick to set up an opposition party as a springboard for an election bid.

The law bars independent candidates from running, and Mr Mirziyoyev faces little threat from the four candidates representing pro-government parties—the only type that exists. "I'll toss a coin," jokes Shavkat Mamedov, who rents out bicycles in Tashkent, explaining how he will decide which box to tick on the ballot paper.

One reason for the slow pace of change is the intelligence service, which remains resistant to the emergence of a genuine civil society, says Agzam Turgunov, a former political detainee who spent a decade in Jaslyk, a prison camp shut down by Mr Mirziyoyev. He is one of 50 political prisoners released under the president's rule. But 2,200 inmates—10% of the prison population—are still in jail on religiously and politically motivated charges, according to an American government commission.

One of Mr Mirziyoyev's early moves after coming to power was to rein in the security service by firing its longtime boss and curbing its powers. But the legacy of a police state lurks, and the spooks like to flex their muscles. They are behind several secret trials on spurious treason and espionage charges that have alarmed rights campaigners. These include the case of Kadyr Yusupov, an ex-diplomat who remains behind bars on treason charges despite UN calls to free him.

Emboldened Uzbek media report unflattering news, and these days take on topics that were formerly taboo, such as corruption. But red lines remain for reporters, and some websites and social-media networks are blocked. The jailing of an outspoken blogger on dubious corruption charges and the arrest of a social-media firebrand on charges of insulting the president this year made journalists shiver.

There are mutterings in Tashkent that the government is losing reform momentum as vested interests push back. But Mr Mirziyoyev's supporters are bullish nonetheless. U-turns are out of the question, insists Mr Safoev, deputy chairman of the Senate. "The way back is suicide."■

**Extremists v ultra-extremists**

# The Taliban find themselves on the wrong side of an insurgency

### *The new Afghan regime promised peace. It has not delivered*

Oct 23rd 2021 | ISLAMABAD


AS SOON AS the first gunshots echoed across the courtyard from the street outside, the congregation began to scatter. The worshippers at Kandahar's Bibi Fatima mosque were all too aware of the fate of their fellow Shia Muslims in Kunduz a week earlier and immediately started running. The warning came too late. Suicide-bombers had shot their way into the building. Seconds later a cloud of dust engulfed the scene as they blew themselves up.

The blast on October 15th killed at least 40 people, though some put the toll far higher. Seven days earlier, at the Gozar-e-Sayed Abad mosque in the capital of Kunduz province, Friday prayers had been interrupted by a similar atrocity. In that attack at least 50 died. Both bombings were claimed by the local offshoot of Islamic State (IS), known as Islamic State Khorasan Province (ISKP).

Two months after the Taliban's takeover and America's withdrawal—during which an ISKP bombing killed more than 100—it is this group, rather than any residual resistance from the former government, that has emerged as the new regime's biggest security challenge. The mosque bombings have been accompanied by assassinations of Taliban fighters. Patrols have been ambushed and fighters kidnapped and beheaded.

ISKP first gained a foothold in the region in 2014, when it was not only fiercely anti-Western, but also quickly became a bitter rival of the Taliban. The jihadists went on to accuse the Taliban of selling out for signing a deal with America and co-operating with its withdrawal. They regularly attacked the country's Shia minority, whom they deem infidels. Their brutality became notorious in a country already accustomed to horror. They began to carve out territory in Afghanistan's eastern provinces before being largely beaten back by the Taliban, who benefited from American air strikes on the jihadists.

In the tumultuous August days as the government of Ashraf Ghani, the former president, collapsed, hundreds of jailed ISKP fighters escaped from prison. Bolstered by these reinforcements, the group switched from trying to hold rural territory to waging an urban terrorist campaign, using the Taliban's hit-and-run tactics and suicide-bombings against them. David Petraeus, a former director of the CIA, who also led international troops in Afghanistan from 2010 to 2011, this week told British MPs that the Taliban were "becoming acquainted with how much more challenging it is to be a counter-insurgency force than it is to be insurgents and hang out in the hills".

The Taliban's message, as they seized power, was that they would bring peace. Clearly, they have not. Their attempts to downplay the insurgency sound hollow. "Daesh [Islamic State] is not a big threat in Afghanistan, and it has been controlled," said the Taliban spokesman, Zabihullah Mujahid, a day before the Kandahar blast.

Such complacency reassures neither Afghans nor the country's neighbours. Iran's president, Ebrahim Raisi, on October 18th called on the Taliban to do more. "They should know if they do not deal with Daesh seriously and if Daesh is not destroyed in the region this will pave the way for the harassment of many other countries and people in the region," he warned.

Indeed the attacks on Shias may spur Iran to engage more closely with the Taliban, perhaps sharing intelligence.

The Taliban say they have been breaking up ISKP cells. There are reports of clerics associated with the militants being killed and of sympathisers being rounded up. But as Western forces discovered over the past 20 years, brutal or clumsy counter-insurgency efforts can be counterproductive. Asfandyar Mir at the United States Institute of Peace, a government think-tank in Washington, warns of a "vicious cycle" of counter-insurgency and violence against a backdrop of mass-casualty attacks, particularly against minorities.

Though ISKP is, for now, the most serious armed opposition to the Taliban, its extremism and paranoia make it unlikely to attract recruits from wider anti-Taliban constituencies, says Haroun Rahimi, assistant professor of law at the American University of Afghanistan. But the Taliban know their many enemies will be watching for signs of weakness.■

Valley of fear

# Militants are targeting Hindu and Sikh civilians in Kashmir

*A spate of killings aimed at minorities recalls the bad old days*

Oct 21st 2021 | DELHI AND SRINAGAR


SANJAY TICKOO fidgets in a small, yellow-walled room at a secret location surrounded by concertina wire and military patrols. The security forces tell Mr Tickoo that his confinement is for his own good, and he believes them. He is a Pandit, born to one of the 800-odd Hindu families in Kashmir who stayed on through a generation of deadly insurgency. This month unidentified militants have shot and killed at least 11 civilians—Pandits, Sikhs and non-Kashmiri migrants from elsewhere in India—for the apparent purpose of terrorising those minorities who still live alongside the Kashmiri Muslim majority.

India and Pakistan have been fighting over the state of Jammu & Kashmir since 1947. Each administers a part and claims the whole. But the region's centre of gravity, the Kashmir valley, has always been held by India. It has been gripped by separatist fevers since 1989. Roughly half a million Indian troops have become a permanent presence. Tens of thousands of Kashmiris have been killed in the process. Millions more are angry about living in what has come to resemble occupied territory.

This was all supposed to change on August 5th 2019. Fresh into his second term, India's prime minister, Narendra Modi, pushed two bills through parliament that cleaved the state in two and scrapped what autonomy it still enjoyed. Under the new regime, Kashmir is ruled directly from Delhi, the national capital. The reorganisation promised to replace corrupt politicians, to attract investment and prosperity and to bring lasting peace.

Two years on, none of these aims has been realised. No new political class has been mustered to represent the Kashmiri people at home or in Delhi; unemployment, at 21%, is the highest in India; and killings of all kinds rattle Srinagar, the former state's capital. The pandemic could be blamed for some of these problems. Instead the central government pretends they do not exist. On October 12th the head of its human-rights commission praised the home minister for blessing Kashmir with "a new era of peace, and law and order". A week earlier, a Hindu businessman named Makhan Lal Bindroo (pictured) had been shot point-blank at his pharmacy.

Not all bloodshed in Kashmir garners coverage. It is barely news when troops are ambushed—nine died on October 11th—or when Kashmiri Muslims are killed, as when paramilitary forces gunned down a young nomad named Parvez Ahmed Khan for failing to stop at a checkpoint, two days after Mr Bindroo's death. But the current wave of assassinations targeting victims on the basis of religious and ethnic identity has reminded Kashmiris of old wounds.

Most Pandits fled during a grim insurgency in 1990s. There are also some 80,000 Sikhs, some of whom are now being murdered too. But by far the largest, most vulnerable group of potential targets are the migrant workers who have come from the rest of India, mainly the poor states of Bihar and Uttar Pradesh, over the past two decades. Some are Muslim; most are Hindu. None speaks the local language and almost all relocated to escape penury. There may be 300,000-400,000, including many now scrambling to flee.

An outfit calling itself the Resistance Front (TRF), which Indian security forces say has links to Pakistan, has claimed responsibility for the killings.

Most Kashmiris of all religions are appalled at the violence aimed at the defenceless. It may be that TRF or other groups are attacking civilians around Srinagar because their forces have been worn down from the fight against armed forces in the countryside and are finding softer targets.

Or it may be that the terrorists are trying to pre-empt an influx of Indian settlers into the valley. Their actions betray a broader obsession with demography in the territory, one in which Muslims are the majority. When Kashmir's special protections were abrogated, Kashmiris were most alarmed to be losing a constitutional assurance that purchases of land would never be opened to outsiders, who could overwhelm them with sheer numbers. Mr Modi's Hindu-nationalist government has hardly allayed those fears. Instead it has tested ways to minimise the demographic strength of the valley's Muslims. First it made 400,000 Hindus displaced from Pakistan in 1947 eligible for permanent residency. Then it liberalised the criteria for more recent immigrants to settle. It also seems to be gerrymandering Kashmir's future constituencies to the disadvantage of Muslims.

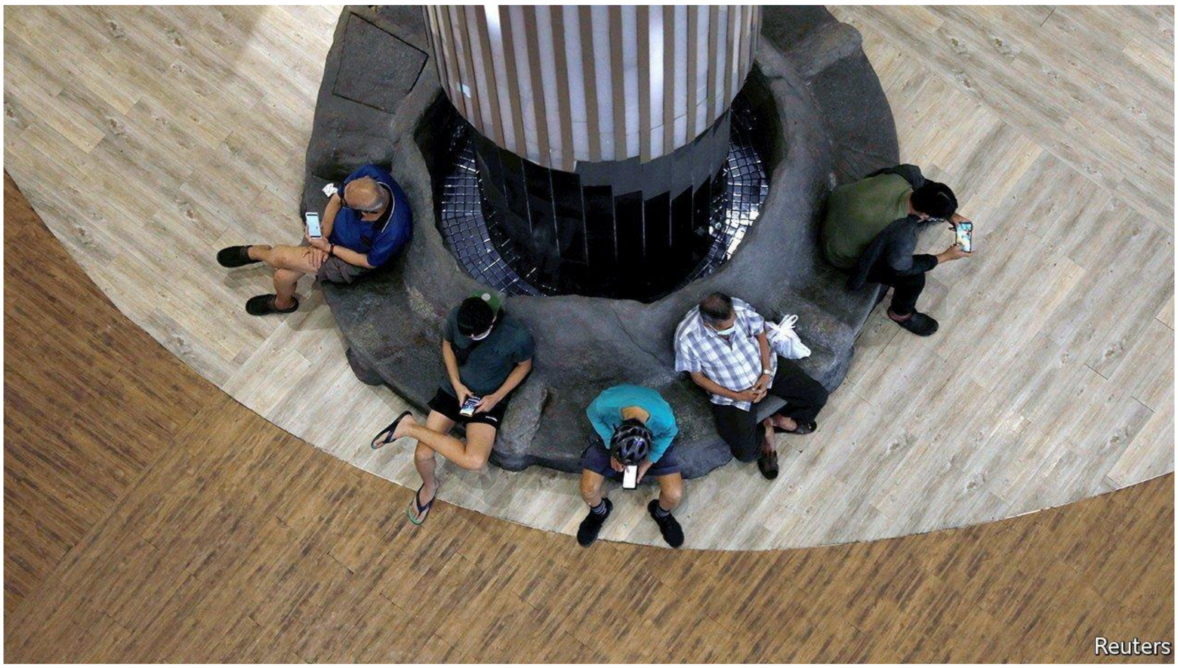
The government's priority is to thwart the terrorists from provoking another exodus. In response to the murder of three Bihari workers, the territory's police chief this week ushered vulnerable migrants into military camps for their protection. That will not be enough. Sandeep Koul, a young Pandit hunkering down at his mother's home in Srinagar, complains, "We have done nothing to deserve this fate." Mr Koul is 29 years old; he has lived under the shadow of militancy his whole life. "If the attacks continue," he laments, "my family, too, will have to leave Kashmir." ■

**Outside job**

# Singapore is cracking down on foreign political interference

*A new law designed to prevent outside meddling could muzzle civil society*

Oct 23rd 2021




PARLIAMENTARY DEBATE in Singapore, which has been governed by the same political party since 1959, usually makes for snoozy viewing. Not on October 4th. The bill under discussion was to give the government sweeping powers to curb foreign influence in local politics. Legislators agreed that the government needed tools to strike back at malign foreign actors. But the Foreign Interference (Countermeasures) Act is “draconian”, one opposition MP thundered. And why, other lawmakers asked, was Parliament given just three weeks to digest a 249-page bill? Nonetheless, the bill was eventually passed into law.

The government maintains that the law is urgently needed in an era when foreign countries are ramping up cyber-espionage. The city-state “is especially vulnerable to foreign interference”, it says, because of its diverse racial make-up. Though the home affairs ministry has avoided directly naming countries it is worried about, it cited a report from a French defence think-tank which said that Singapore was vulnerable to Chinese influence operations because of its multi-ethnic population.

The law gives the government several tools to put the brakes on hostile-information campaigns and thwart any spies or locals enlisted by foreign actors. The state can compel internet companies to hand over user information and to remove content and apps without giving a reason. People who are designated as “politically significant” must report donations exceeding S$10,000 ($7,440) and disclose their dealings with foreigners, even if those relationships are apolitical in nature. The law covers Singaporeans’ ties not just with foreign governments but also with foreign individuals, organisations and companies.

Penalties for violating the act are harsh, and include up to 14 years in prison and S$100,000 in fines. Appeals must be made to the home minister or a government-appointed tribunal. The government maintains that decisions must not be disputed in open court because sensitive information would leak. But without transparent judicial oversight, it will be hard for people to challenge the government’s decisions. There is a “50-50” chance that the courts will deem this unconstitutional, reckons Eugene Tan, a law professor at Singapore Management University.

Critics worry that terms like “foreign interference” are so broadly defined as to include “almost any form of expression and association relating to politics”, as 11 human-rights organisations put it in an open letter. “Nonsense,” says K. Shanmugam, the law and home-affairs minister. The legislation only applies to Singaporeans who work with foreigners “to undermine Singapore's public interest”. Some civil-society organisations critical of the government fear that the law will be used to silence them. The government counters that citizens are free to express their political views.

Mr Shanmugam says that the law is popular with a “significant majority” of Singaporeans. Yet many Singaporeans are nervous. P.J. Thum, the boss of New Naratif, an independent news website, says that a local company has broken its contract with his firm because it is worried it may breach the law merely by transacting with it. During the parliamentary debate, Mr Shanmugam suggested that Mr Thum, who is often critical of the government, is an agent of foreign interference. Already, says one activist, “that culture of fear” is back.■

*Editor’s note (October 21st): This piece has been updated to include comments from K. Shanmugam.*

Banyan

# Restarting Asian tourism will be harder than shutting it down

*Tourism-dependent economies are taking a cautious approach to reopening*

Oct 23rd 2021


CALL IT AN October surprise. Almost every day over the past two weeks countries across Asia have revealed plans to loosen pandemic-induced restrictions on inbound tourism. India went first, announcing on October 7th that it would at last resume issuing tourist visas for visitors from all countries on November 15th. Two days later Singapore expanded its quarantine-free travel lanes beyond just Germany and Brunei. Prayuth Chan-ocha, Thailand's prime minister, said on October 11th that fully vaccinated tourists would be able to visit many parts of the country without quarantine from November 1st.

Several Indonesian islands, including Bali, opened up on October 14th. Malaysia's prime minister hinted at a reopening in December. Fiji's government said it wants people to spend Christmas there. Even parts of Australia, which has had among the harshest travel policies in the world, will welcome travellers again from next month. "For double-vaccinated people around the world, Sydney, New South Wales, is open for business," said Dominic Perrottet, the state's premier.

Yet India is an exception in throwing open its borders to all tourists. Most Asian countries welcoming travellers are doing so only for those from a carefully chosen list of countries, with acres of small print. Thailand initially planned to open its doors only to ten, mostly European countries. Bali is welcoming travellers from 19, half from Europe and none from its own region of South-East Asia. Singapore's list has expanded from two to 11, with most in Europe, and even then only on designated flights. Scott Morrison, Australia's prime minister, threw cold water over Mr Perrottet's reopening a few days later when he said that it will at first apply only to Australian citizens, residents and their families.

Indeed, the more reliant a country is on tourism, the greater seems to be its caution. In 2019 tourism made up about half of Fiji's exports, a fifth of Thailand's, and nearly a tenth of Malaysia's. India, by contrast, relied on tourists for just 6% of exports. The share for Singapore is smaller still, but the city-state's economic model depends on being open to the world. The announcements are less an indication of enthusiasm for welcoming visitors back than of the sense that it would be especially damaging to delay longer: now is when people book their winter holidays.

That is one reason why the reopening is so limited. Many Asian economies desperately need a decent season of inbound tourism but do not feel fully prepared to welcome lots of visitors. Even in Thailand, where tourism accounts for a fifth of jobs, 60% of people said in a recent survey that November 1st was too soon for the country to open up. Yet that must be balanced against people's livelihoods. On October 21st Mr Prayuth announced that Thailand would in fact open to 46 countries, more than half of them European. "If we wait until everything is fully ready, we'll be too late. Besides, tourists may choose to go elsewhere," he wrote on Facebook.

A phased approach allows locals to get used to the idea of tourists again. It will also help businesses, which must refill their swimming pools and rehire workers after nearly two years of closures. Taking things slowly is useful for governments, too, which are watching covid-19 case numbers and worry that they may need to throttle back.

"The first markets to open up will be vulnerable to overtourism," says Liz Ortiguera of the Pacific Asia Travel Association, an industry body. The choice of European countries may in part reflect that concern. The vast majority of tourists in Asia come from other Asian countries, who tend to make shorter trips and therefore spend less per visit. Europeans and Americans, having travelled all the way, often stay longer and spend more freely, says David Vanzetti of the University of Western Australia. As countries re-open, they are trying to maximise profits while keeping visitor numbers manageable.

The near-total halt in travel and tourism caused by the pandemic is unique in being caused by a lack of supply rather than demand, says Xiang "Robert" Li of US-Asia Center for Tourism & Hospitality Research at Temple University in Philadelphia. People still want to travel, and will get back on the road as soon as they are allowed. After past crises, such as the SARS outbreak in 2002-04, travel recovered domestically at first, then regionally and eventually across long distances. The same will be true this time, perhaps even more so after nearly two years of public-health messages that painted the outside world as a mortal threat. "We used to take travel for granted," says Mr Li. But after 18 months of being grounded, "we realise that tourism is not just superficial fun. It actually is part of the contemporary lifestyle and has a lot to do with our well-being, who we are, and how to be happy."

*Editor's note (October 21st): This piece has been updated to include Thailand's announcement that residents of several dozen more countries would be allowed to enter from November 1st. It has also been corrected to note that they can travel only to certain parts of the country.*

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.*

## China

Poetry from the gulag

# In Xinjiang, officials are trying to stamp out Uyghur identity

*Uyghur artists and intellectuals are being rounded up, but some of their work escapes*

Oct 21st 2021 | NEW YORK


OFFICIALS IN XINJIANG have always been suspicious of the distinctive cultural identity of ethnic Uyghurs. They worry that it may fuel separatist yearnings in the far-western region. But in 2014, as the authorities stepped up their campaign to crush terrorism there, the government still tolerated displays of pride in Uyghur culture. In October that year a new talent show, “The Voice of the Silk Road”, aired on state-owned Xinjiang Television. It featured songs in various styles, from pop and R&B to traditional *muqam* music with lyrics influenced by classical poetry. The judges mostly spoke in Uyghur.

When China began to open up in the late 1970s, after the death of Mao Zedong, Uyghur culture was allowed to flourish, as long as it avoided any hint of support for a separate Uyghur state. Uyghur writers produced poems and songs filled with universally familiar themes such as love and loss, but also conveying pride in their identity. They created innovative blends of *muqam* with rock and hip-hop that turned a few Uyghurs into household names in China. Songs in such styles were aired on “The Voice of the Silk Road”.

There was nothing politically edgy about the show. It was merely a regional adaptation of a national hit, “The Voice of China” (which is still running). But it fell victim to a security clampdown, launched in response to sporadic attacks by Uyghurs on Chinese belonging to the ethnic-Han majority. Since 2017 some of the show’s stars have disappeared into a vast new gulag in which more than 1m people, most of them Uyghurs, have been locked up.

Officials say the camps offer “vocational education” to help Uyghurs find better jobs and to curb their “extremist” tendencies. But many of those detained have shown no more sign of extremism than simply being devout Muslims. Often, as with those involved in “The Voice of the Silk Road”, their crime has been to show too much enthusiasm for Uyghur culture, not necessarily just Islam.

Those rounded up who were linked with the show include Zahirshah Ablimit, who came second in the competition of 2014, and Muhtar Bugra, a businessman and poet who was its financier and head producer. Both were eventually released. Still thought to be inside are Memetjan Abduqadir, another producer who is also an actor and singer, and Mekhmutjan Sidiq, the director of Xinjiang Television.

Uyghur groups in the West reckon that the four are among nearly 400 intellectuals and cultural figures who have been detained in the new camps, sent to regular prisons or who have otherwise disappeared since the clampdown began. Some are well known in the region: Perhat Tursun, a novelist and poet; Tashpolat Tiyip, the president of Xinjiang University; Rahile Dawut, a scholar of Uyghur folklore; and Ablajan Ayup, an actor and singer sometimes described as a Uyghur Justin Bieber. Others associated with Uyghur culture have been paraded on state television praising the virtues of the Communist Party or singing patriotic songs.

The chill had begun even before the airing of the first episode of “The Voice of the Silk Road”. In September 2014 Ilham Tohti, a revered academic with moderate political views, was sentenced to life in prison for separatism. Mr Tohti had maintained a website that hosted writing by Uyghur intellectuals on social and cultural issues. He had dared to call for more enlightened official treatment of his ethnic group.

Today the only Uyghur culture allowed in China is of a token kind, conforming to a stereotype endorsed by the party such as smiling Uyghurs wearing brightly coloured traditional costume, dancing in public squares and singing, often in Mandarin. On September 29th, at a side event during a meeting in New York of the UN General Assembly, Chinese diplomats showed a video of such performances. It was called "Xinjiang is a Wonderful Land".

Uyghurs living in exile in the West have been waging a parallel campaign to keep their culture alive. It has involved airing the works of underground artists in Xinjiang whose songs and poems explore more politically risky themes such as oppression and alienation, says Mukaddas Mijit, a specialist in Uyghur music living in France. As repression has tightened, she says, the works of such musicians and poets have become increasingly suffused with lament and despair.

Some writing has even emerged from the camps, such as poetry by Abduqadir Jalalidin, an academic. His verses were memorised by other inmates who relayed them to the outside world. "In this forgotten place I have no lover's touch", one begins. "Each night brings darker dreams, I have no amulet / My life is all I ask, I have no other thirst / These silent thoughts torment, I have no way to hope." The translation is by Joshua Freeman of Princeton University, a former student of his.

In 2022 a novel by Mr Tursun, one of the detained writers, will be published abroad in English. Called "The Backstreets", it first appeared online, in Uyghur, in 2013. The surreal fable echoes Ralph Ellison's classic novel "Invisible Man", about a black American who does not feel fully seen (Mr Tursun was influenced by Ellison). On a street in Urumqi, Xinjiang's capital, the narrator meets a man who vows to "chop" to death everyone in southern Xinjiang, a mostly Uyghur area. The man vanishes into the fog and the narrator muses: "I would always be the one he was going to chop, even though we didn't know each other."

Mr Tursun's writings and links with other cultural personalities in Xinjiang may have led to his detention in 2018 and his reported jail term of 16 years. A public figure in Urumqi, his politics had once been officially acceptable. He had even criticised Uyghur ethno-nationalism.

But displays of loyalty to the party are no longer enough to keep people safe. In 2017 Shireli Eltekin, a famous singer, released "A Song for Leader Xi Jinping", a paean to China's president. It includes fawning lyrics such as: "You put light into the hearts of the people." Uyghurs in exile were dismayed to hear a much-loved performer crooning for the regime. But one night in June he was taken away from his home in his pyjamas, says a family friend.

In 2018 "The Voice of the Silk Road" was discontinued.It returned last year, with changes. Introducing the new series, the host made approving remarks about building socialism in Xinjiang and loving the party. In this year's competition, the first contestant to take to the stage sang a Uyghur-language song from the 1950s called "Leader Mao Zedong". In the show's early days, this would have been "unimaginable", says Elise Anderson of the Uyghur Human Rights Project in Washington, an American ethnomusicologist who competed in the inaugural series of "The Voice of the Silk Road" in 2014.

Such popular entertainment used to suggest at least some official acceptance of Uyghur culture. Now it is evidence of its suppression. Ms Anderson worries that, inside China, "only a Potemkin version" may survive. ■

*An early version of this article was published online on October 20th 2021*

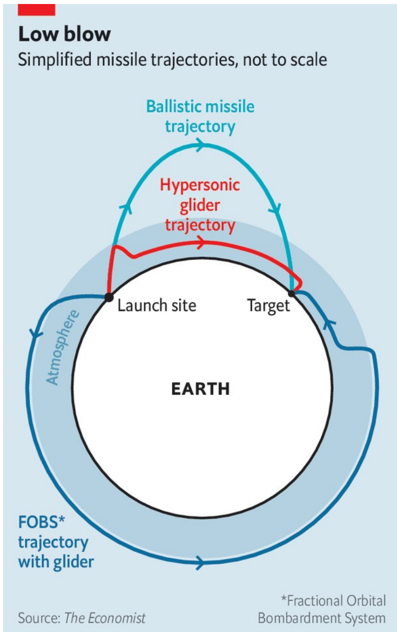
Glide and seek

# China’s test of a hypersonic missile worries America

***It is the latest front in an emerging nuclear arms race***

Oct 23rd 2021


IN LATE JULY a Chinese Long March rocket streaked into space, much like the dozens that took off last year. But having begun to orbit the Earth, this rocket’s payload then lurched downwards, glided through the upper atmosphere and finally crashed to the ground. American officials were stunned, says the *Financial Times*, which recently broke news that this had been a test of a nuclear-capable hypersonic glider (China denies it). China conducted another such experiment a couple of weeks later, says the newspaper.



The Economist

The novelty of such gliders is not that they are unusually fast—in some cases, they are slower than an intercontinental ballistic missile (ICBM) as it re-enters the atmosphere—but that they are manoeuvrable. A Russian or Chinese ICBM fired at America travels over the North Pole and high into space, visible to radar systems in the Arctic, and then plunges back down in a predictable way (see diagram).

Gliders are also taken up on rockets but they are released much lower and re-enter the atmosphere very quickly, if they leave it at all, making them less visible to radar. Then they cruise, unpowered, over long distances, allowing them to take convoluted routes that skirt around missile defences. America and the Soviet Union experimented with gliders in the cold war. Many others are doing so today.

China's tests, however, involved a twist. The gliders did not simply go up and coast down, but also circled the Earth in space. This is similar to the approach employed by the Soviet Union's Fractional Orbital Bombardment System—fractional because it did not involve a full revolution around the Earth—which was deployed between 1969 and 1983. The advantage of an orbital weapon is that it can go over the South Pole and reach America from a direction where the country has neither ground-based radar nor perfect coverage from infra-red satellites that can spot rocket engines.

The combination of orbiter and glider is not in itself new. America’s old space shuttle and its current X-37B spaceplane are examples of things that are sent up by rocket, go into orbit and then glide back. The difference is that the shuttle was not built to crash to the ground with nukes attached. China appears to be the first to turn this combination into a prototype of a weapon, says Tong Zhao of the Carnegie-Tsinghua Centre for Global Policy in Beijing.

China’s motivation for doing this may, in part, relate to America’s development of missile defences, which intensified after the administration of George W. Bush withdrew from the Anti-Ballistic Missile treaty in 2002. China and Russia are building ever more exotic nukes to ensure that their missiles can penetrate any current or future American defences.

The growing geopolitical and military competition between America and China seems to have turbocharged China’s nuclear ambitions. Earlier this year, researchers discovered two large fields of suspected ICBM silos in northern China. All this reflects not just narrow military calculations, but political ones, too. China, suggests Mr Zhao, believes that nuclear strength “helps force the US to accept peaceful co-existence”. ■

**Chaguan**

# The confidence of China's Communist Party is striking

*It is revealed in a rural county sponsored by the Chinese foreign ministry*

Oct 21st 2021


SINCE THE Ming dynasty, Chinese who are oppressed by local officials have sighed, by way of explanation: "The heavens are high, and the emperor far away." An earthier variant runs: "With no tiger in the mountains, the monkeys are in charge." Today's Communist Party bosses have no time for such cynicism. They want the masses to believe that, even in the remotest villages, their welfare is the concern of an all-knowing leader, Xi Jinping, served by officials striving to follow his stern but wise example.

Inspiring the public is not the party's only concern. A central task of the Xi era is to transform morale among the country's 90m party members, including millions of bureaucrats. Officials are told that they serve a rising China, whose growing strength is the awe of the world. Since Mr Xi became supreme leader in 2012, party membership has been presented as something close to a secular priesthood, in which a select few selflessly serve the masses. Government ministries in Beijing play their part in spreading the faith. Their high-flying staff—almost always party members—compete for the career-enhancing honour of a stint as grassroots officials in impoverished villages and towns.

Central government departments have sponsored a growing number of poor counties around the country since 1992, when the State Council first urged ministries to pair up with left-behind places. Chaguan recently spent four days in Malipo, a remote county of conical, cloud-topped hills, terraced fields and fruit orchards in the southern province of Yunnan, on the border with Vietnam. Malipo has been sponsored for 29 years by the foreign ministry, which organised (but did not pay for) this reporter's visit with a delegation of officials from the national and provincial governments. The ministry uses its connections to help the county, which was declared free of extreme poverty in 2019 and last year recorded an average income per person of 11,984 yuan ($1,874). Foreign embassies and businesses have donated school buildings, books and scholarships. On October 17th America's National Basketball Association donated a new basketball court to a middle school in Malipo (the NBA is still trying to mend fences in China after a coach signalled support for Hong Kong's democrats, triggering nationalist fury). "Of course this is thanks to the foreign ministry," said the headmaster, as teenage pupils intently copied the moves of visiting NBA coaches, or shyly asked them for autographs. The nearest city, Wenshan, used to be hours away along winding roads. A new motorway opened on October 1st, following lobbying by the foreign ministry. A diplomatic charity raised funds to build clean water systems for villagers who previously fetched water by hand.

Dozens of younger diplomats have done stints as volunteer teachers in primary schools in villages. More importantly, the ministry sends a mid-ranking official to serve for a year or two as Malipo's deputy county chief. Duties include conducting foreign policy, for officials in Yunnan must talk to Vietnamese counterparts about exchanges of students or travel permits for ethnic minorities whose lands straddle the frontier. Both sides regularly clear landmines from border areas—a lethal legacy of China's brief invasion of Vietnam in 1979, which still costs locals limbs.

Domestic tasks also loom. The ministry's current man in Malipo, Chen Minghuang, served in Japan for several years. In addition to seeking inward investments for the county, he is, among other things, responsible for water quality in several rivers. Asked why a non-specialist can be entrusted with such work, a local official praises foreign-ministry volunteers for their promotional skills. Diplomats may not know how to raise a pig, but they can spot what makes a pig from Malipo marketable, she enthuses.

Chaguan ventures at one point that an Oxbridge-educated British diplomat may receive a thin welcome if sent to help run a county in rural Scotland, without any experience in local government. China is not so hung up about elitism, it turns out. The foreign ministry sends "the best of the best", responds an official from Beijing. It sends party members, because they are expected to be moral exemplars. "Compared with the masses, party members represent more progressive and developed forces. That's how they can help the people," says the visitor from Beijing. A years-long anti-corruption drive has created a culture of honesty among officials of all ranks, she adds. At an agricultural training base, local officials offer a broad defence of rule by technocrats. Farmers may not understand which crops will grow well, and which will make money, says a county official. The role of experts is to guide them to harness market forces.

## Heaven near at hand, and the emperor close by

Some may dismiss all this as a mere propaganda tour. Certainly, the delegation was only taken to handsomely restored villages and model farms, and greeted by folk dancers at every turn. It would take many days of independent reporting to assess the foreign ministry's help, not to mention its sustainability. Malipo is just one of 88 counties in Yunnan formerly ranked as extremely poor.

But a visit to Malipo is a window on something else important. Lots of officials are increasingly proud of the system they serve, especially as they survey what they regard as chaos in the West. More than before they talk openly about the party's role in that system. As Mr Chen puts it, millions of party members are working towards the same goals, guided by strong leaders. He describes the changing views of Malipo's masses as they see their roads being paved, and houses and schools restored. "The central government always enjoyed a high status in people's minds. Now local government's reputation has also risen," Mr Chen says.

Mr Xi’s China remains a big country with complex problems, run by men who see a world full of hostile forces. But the domestic confidence of its ruling party is unmistakable. Outsiders miss that tigerish swagger at their peril. ■

## United States

**Crunch time**

# Striketober: American workers take to the picket lines

## *In a tight labour market, strikers have more leverage than before*

Oct 21st 2021 | LANCASTER, PENNSYLVANIA


THE PANDEMIC has been very good for sellers of cornflakes, and very busy for those who make them. With so many people spending so much time at home, cereal consumption has boomed. Kerry Williams, an instrument technician, says this has translated into almost constant overtime shifts at his Kellogg's plant in Pennsylvania, sometimes as long as 16 hours a day. That would be hard enough. But what makes it that much harder, he says, is seeing Kellogg's, one of the world's biggest producers of ready-to-eat cereals, pull in giant profits even as his pay has barely increased. "We feel it's time that this money trickles down to us, because without the workers on the floor there would be no Kellogg," he says. Mr Williams and about 1,400 colleagues at Kellogg's factories round the country, from Tennessee to Michigan, have been on strike for two weeks.

They are far from alone. On October 14th about 10,000 employees of John Deere, a manufacturer of agricultural machinery, walked off the job in five states. More than 20,000 nurses and workers in California and Oregon with Kaiser Permanente, a health-care company, have voted to strike. About 60,000 behind-the-scenes film and TV workers were also set to head to picket lines, having voted 99% in favour of a strike, but a last-minute deal averted that. Headline writers are referring to the wave of industrial action as "Striketober".

Partly it is the resumption of trends visible before covid-19. Nearly half a million workers were involved in work stoppages in both 2018 and 2019, the most in more than three decades. That reflected both dissatisfaction with pay and working conditions and the unions' confidence that, in a tight labour market, they had leverage. The pandemic has only reinforced these dynamics. Having been lauded as essential workers for the past 18 months, everyone from nurses to food-packers expects better treatment. And with companies struggling to find staff, workers are emboldened.

A dominant feature of the American economy over the past few decades has been sluggish wage growth, albeit with decent gains just before the pandemic. The question now is whether Striketober signals a clearer turning-point, a shift in the balance of power towards labour. Workers have reason for guarded optimism.

Labour's share of non-farm output (the portion of economic output going to workers in wages and other forms of compensation) reached nearly 65% in 2000. At the end of 2019, on the eve of the pandemic, it was down to 60%, according to the Bureau of Labour Statistics. Even more notable has been the rise in inequality. Between 1979 and 2019 the top decile of wages in America rose by 41% in real terms, whereas the bottom decile increased by just 7%.

Several things have weighed on blue-collar wages across the rich world. Advances in technology, including automation, have chipped away at workers' bargaining power. So, too, has the globalisation of production. In America the weakness of unions has exacerbated these trends. Just one worker in ten belongs to a union today, half the proportion of the early 1980s.

Strikers seem to have the public on their side, at least for now. On a blustery autumn morning outside the Kellogg's plant in Lancaster, a town in central Pennsylvania, a few dozen workers pace back and forth in front of the gates, maintaining a round-the-clock picket. Cars honk their horns in solidarity. Opinion polls suggest that 68% of Americans support unions, up notably from a decade ago. "Everyone in this country is a little tired of the greed," says Allan Torres, a middle-aged veteran of Kellogg's packing operations.

The details of each dispute are different. The film and television workers complained about excessive hours. At Kellogg's, workers object to aspects of a two-tiered system that lets managers bring in new staff on stingier packages. The company counters that it provides industry-leading pay and benefits.

Yet a common feature is the workers' belief that they now have the upper hand. The strikers at Kellogg's say the company has brought in buses with replacement staff to show that the factory can run without them. But, they say, the buses are not full. With just a light wisp of white smoke rising from the Lancaster plant, their assumption is that production has ground to a halt. "The grocery shelves aren't going to be looking so good," says Mr Torres.

Even without the strikes, there is no doubt that American workers are getting pickier. Nearly 4.3m quit their jobs in August, the most in the two decades or so that the Labour Department has monitored these data. Celine McNicholas of the Economic Policy Institute, a left-leaning think-tank, notes the exodus has been most pronounced in restaurants and retail operations, service sectors with few unions, low wages and little sick pay. "Folks are saying, 'This is not a job worth it to me right now'," she says. "They're being asked to take it or leave it, and they're leaving it."

Labour organisers also know they have an ally in the White House. Joe Biden has repeatedly said that he aspires to be the most pro-union president in American history. Liz Shuler, president of the AFL-CIO, the largest federation of trade unions, has pointed to a friendly administration, worker activism and public backing as a potent combination. "We have everything lined up," she said in a recent speech.

Not everything, though. "Labour laws have proven time and again to be completely stacked against workers who are interested in forming and joining unions," says Kent Wong, director of the UCLA Labour Centre. Without legal changes that would, for example, prohibit companies from permanently replacing workers who walk off the job, the strike wave may fizzle out. The PRO Act, legislation that would strengthen collective-bargaining rights, has passed the House of Representatives. But it is almost certain to fail in the Senate without Republican support.

Some of the biggest companies are waging their own battles against worker activism, and largely succeeding. An Amazon warehouse in Alabama was seen by labour organisers as their best shot at bringing unions to the e-commerce giant, but in April workers voted against unionising by more than two to one, amid allegations that the company had used intimidating tactics. Meanwhile, faced with a unionisation campaign in Buffalo, Starbucks has sent in out-of-state managers and temporarily closed outlets. It says this is a standard training procedure; labour organisers suspect it of trying to disrupt their efforts.

At the same time, companies are bowing to the reality that they have to offer higher wages to attract and retain workers. Amazon has increased its average starting hourly pay to $18 (from $17 earlier this year) for warehouse workers, well above the $15 that campaigners have long called for as a legal minimum. Walmart, McDonald's and CVS are among the scores of others also raising pay, helping to fuel the biggest increases in blue-collar wages in years.

At the Kellogg's picket lines, the workers trumpet an old union mantra when asked how long they plan to stay off the job: "One day longer, one day stronger". For American businesses, a different rhyming slogan encapsulates their strategy in the face of Striketober: a few dollars higher, the union drive will expire.■

*An early version of this article was published online on October 18th 2021*

**Race and class**

# Ethnic-studies lessons benefit low-achieving non-white pupils

*That might not be enough to convince naysayers of the course's value*

Oct 23rd 2021 | Washington, DC

Allison Zaucha/The New York Times/Redux/Eyevine

SOME CONSERVATIVES have been on a mission to remove critical race theory from classrooms. Described by these advocates as any coursework discussing topics through the lens of racial identities (which is well beyond the original definition used by the critical theorists themselves), they argue that this approach to pedagogy is divisive. Eight states have passed laws banning these discussions in classrooms. Six have proposed similar legislation, or plan to. Some teachers claim they now fear discussing race with their pupils. But there is a trade-off here: according to a study published in the *Proceedings of the National Academy of Sciences*, removing discussions about race from the classroom could disadvantage some low-achieving pupils.

The study shows that San Francisco's ethnic-studies curriculum, a programme for ninth-graders (who are about 14 years old) that is designed to focus on the history of disadvantaged communities and encourages a focus on social issues, had benefits beyond merely what was learned in the classroom. Sade Bonilla of the University of Massachusetts, Amherst and her colleagues show that the programme increased high-school attendance by 6-7 percentage points, course credits earned by up to 15 points (equivalent to about 3 courses) and high-school graduation by 16-19 percentage points.

The researchers were able to study the effect of the programme on low-achieving pupils by comparing children required to enroll (because of earning a grade-point average below 2.0 the previous year) with those slightly at or above the 2.0 grade point average who were not required to enroll. The study follows an article published in 2017 (by two authors of this current study) showing that the same programme improved shorter-term outcomes too: ninth-grade attendance, grade-point average and credits earned all improved.

San Francisco's school district began its ethnic-studies pilot programme in the 2010-11 school year, with faculty members from San Francisco State University. The majority of pupils in the study (1,405 in total) were non-white: 60% were Asian, 23% Hispanic, 6% black and 5% white. Because of the small sample of black and white pupils, the researchers were unable to draw conclusions about those groups.

The curriculum focused on a variety of topics: race as a social construct, the history of eugenics, federal housing discrimination, and others. It also taught pupils about practices to counter racism and oppression: marching, voting, campaigning. Pupils were encouraged to think of ways to counter racism in their own communities.

The results are encouraging. Improving high school graduation is not a trivial matter. Pupils who graduate from high school enjoy higher wages, greater wealth accumulation and better health outcomes. But these positive results probably will not sway everyone. The programme improved outcomes for low-achieving Asian and Hispanic pupils, but the study was unable to measure an effect on other pupils: higher-achieving or white pupils, for example.

California has decided to require the course for graduation for all, starting in 2030. But there are risks with scaling up pilot programmes, and not just because the curriculum has not yet proved to be effective for all. There are also concerns about quality. San Francisco's programme was taught by teachers who chose to offer the curriculum and had extensive training. Educators begrudgingly teaching the programme with lesser training would probably not have the same effect.

Yet the programme in San Francisco was clearly successful at motivating low-achievers who were otherwise uninterested in their schooling, explains Ms Bonilla. These at-risk pupils began engaging more deeply with their schoolwork and may have even attended college at higher rates. "The course seems to really engage them and make them lean into school," she explains. "And not just in their ethnic-studies class, but in science, math[s] and everywhere." Unfortunately for low-achieving pupils in the eight states now banning critical race theory, such teaching may not be allowed in their schools. ■

**Considering the lobster**

# Maine relies on its marine life, but climate change will alter what that means

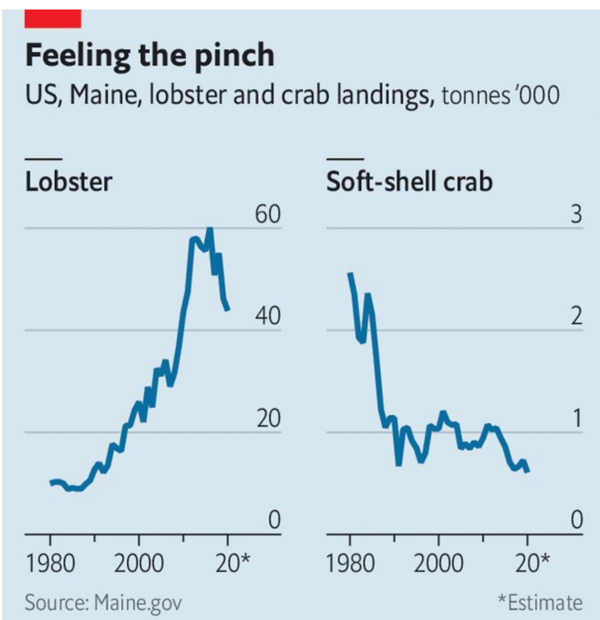
### *Dogfish rolls, anyone?*

Oct 23rd 2021 | PORTLAND, MAINE


STEVE TRAIN used to finish work by 1pm. In those days, Mr Train—who has worked as a lobsterman in Maine for more than 30 years—didn't have to travel far to find the critters. Now he sometimes wraps up closer to 4pm. Some lobsters are still close to shore, but rising temperatures have pushed many of them into deeper, cooler waters that take longer to reach. Where Mr Train will find the creatures has turned into something of a guessing game. "More of us are hunting all the time," he says, as he sips a mezcal margarita from Luke's Lobster, a waterfront restaurant in Portland's historic Old Port. This is where he docks his boat, sells his catch and, three or four days a week, stops in for lunch (often a lobster BLT, lobster roll or fried haddock bites). Lobstering is more than a job, he says. "It's a culture."

Warming waters have done more than change lobstermen's schedules—they have disrupted entire ecosystems, the Gulf of Maine among them. The Gulf of Maine's waters have warmed faster than 99% of the world's oceans over the past 30 years. Experts attribute some of that to changing currents. The effects of the Gulf Stream from the south have grown stronger and have begun to constrict the flow of the Labrador current, which delivers cold water from the North Atlantic to the Gulf of Maine. “The magnitude of change is really going to be dependent on how much water temperatures change,” says Kathy Mills, a research scientist at the Gulf of Maine Research Institute. So far, the heat has altered the patterns of the state’s two most profitable species, lobsters and soft-shell clams, with some experts and industry folk worried about the potential for further population declines. Maine’s overall commercial landings brought in more than $500m last year, but maintaining those profits will require flexibility—at the least, it means acknowledging the gulf may look vastly different in years to come.

Maine produces more fish and shellfish than any other state on the east coast, and much of that is due to its hearty crop of lobsters. The state’s harvest increased sixfold, from about 22m lb in 1988 to close to 132m by 2016. Since that peak, lobster landings have fallen by more than a quarter. “We could see an upswing again,” says Bob Steneck, a marine scientist at the University of Maine. “But by the time you get this many years into a decline, it’s concerning.”




The Economist

Mr Steneck says researchers are not sure why Maine's landings have dipped, and most experts say the population is—and will probably continue to be—robust, even if it continues to fall from its recent peaks. But given what happened in southern New England, some industry men are wary. Rhode Island and Connecticut saw their lobster catches plummet over the past decades. There, the creatures did not reproduce well in the warmer waters and died *en masse* from shell disease, which studies have linked to rising temperatures.

Statewide, the soft-shell clam harvest in 2020 was still the second-most valuable—accounting for 3% of the state's commercial landings—but their numbers have declined, too. Predators like green crabs fare well in the warming climate and have killed off many of the soft-shells. As a result Chris Green, a clammer who lives and works in Brunswick, has increasingly relied on the hard-shells, or 'quahogs.' They have done better in warmer waters, and the harvest has grown from 17,265lb in 1964 to over 1.3m lb in 2017. "They've carried our town for three years," Mr Green says, as he digs his hoe into the mud to pull out another quahog. He is wearing a short-sleeved T-shirt to keep cool on an unusually warm October day ("It's indicative to where we've been headed," he says).

Locals have taken note of the different cast of animals on the shore as well. North Atlantic right-whale sightings have decreased, as the mammal's primary food source—c*alanus finmarchicus*—has died off in warmer waters. Other creatures take a liking to the heat, such as the squid and black sea bass that have appeared in higher numbers in the gulf. The Portland Lobster Co. used to serve a salad with lightly seasoned local shrimp. Then Maine's fishery collapsed, and the restaurant stopped. "There's nothing else that comes close to the Maine shrimp," says general manager Ethan Morgan, insisting that the state's product was sweeter and had a "good snap to it". He still offers shrimp, but only in fried form. "It's more a vessel for the sauce you're using," Mr Morgan admits.

Ecosystems absorb change regularly, and humans can adapt to alterations. Ms Mills recognises that transformation does not mean catastrophe. "We have seen fisheries go through changes in the past," she says. To diversify his lobstering income, Mr Train farms for kelp and scallops. Mr Green hopes to start clam farming as a supplement to his wild catches and, in part, as a backup if a harsh winter kills off the quahogs he relies on. The Portland Lobster Co. offers dishes with local catches as often as it can. But few people come to Maine for dogfish, and Mr Morgan laments that specials prepared with it haven't landed well with customers. ■

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

Toying with the nanny state

# California's approach to gendered toys says a lot about the state's political direction

*The state is turning micromanaging into an art form*

Oct 23rd 2021


GAVIN NEWSOM, the governor of California, recently signed 770 bills into law that had been approved by the state legislature in Sacramento. The one drawing most attention, rightly, is a law that will expand the number of units that can be built on single-family plots and offer a much-needed boost to housing supply. Rick Rivas of Govern for California, a good-governance group, calls it the "most consequential housing bill over the last decade".

Less noticed is a new law taking aim at child's play. Starting in 2024, large retailers with more than 500 employees will no longer be permitted to offer just "boy" and "girl" sections for toys and other child-care items in their stores. They must also add a "gender-neutral" section. Supporters say the new law will help combat gender stereotypes, while opponents see this as government overreach. Showing Barbie dolls only to girls and trucks only to boys is about as passé as giving someone a Mr Potato Head (which earlier this year dropped the "mister" and rebranded itself as "Potato Head" to be more inclusive). But should it be government's role to tell businesses how to display such merchandise?

Sherry Jeffe, a political analyst, says that the new toys law shows that California is intent on managing "minute" issues "down to a level I never thought it would go, in regards to state-level involvement". Another example of the state's micro-management, also recently signed into law, bans restaurants from distributing single-use condiments, such as ketchup and soy-sauce, to customers unless requested. Mr Newsom also signed a new law requiring public universities and schools to offer menstrual supplies on campus.

With Democrats holding a super-majority in the state legislature and control of all state-level elected offices, it may come as no surprise that politicians are using their power to advance issues their party cares about, such as gender equality. Mr Newsom, who defeated a recent campaign to recall him from office by a wide margin, is more concerned about criticism from the left than from marginalised Republicans. He is governing accordingly.

However, while the new toys law may be mostly symbolic, it points to how California is becoming more involved in businesses' and people's daily lives. This is just the beginning, says Bruce Cain, a professor of political science at Stanford. As the state pushes forward with its efforts to combat climate change, "there is probably no dimension of life that will be untouched by California's decarbonisation agenda", he says. For example, Mr Newsom recently signed a law banning the sale of new gas-powered leaf-blowers and lawnmowers. Last year he signed an executive order banning the sale of gas-powered cars from 2035. Some cities are even talking about banning the use of natural gas in new homes and businesses, a measure which would, in effect, bar gas stoves.

California may be taking the most draconian actions on climate change, but it is not alone in using laws to "advance a cultural agenda", says Michael Strain of the American Enterprise Institute, a think-tank. He draws a connection between the toys law and red-state governors, including Greg Abbott in Texas and Ron DeSantis in Florida, who are forbidding companies to require employees to wear masks and get vaccinated. By doing so, Texas and Florida are interfering with the freedom of businesses to decide their own policies. Recent efforts in Texas to halt nearly all abortions serve as another example of government interference in the name of a social agenda. According to Mr Cain of Stanford, "It's not like one party is for freedom and the other isn't. Both parties are for different forms of intrusion."

**Devious licks**

# TikTok and toxic memes

***Parents worrying about Facebook and Instagram should pay more attention to the video-sharing app***

Oct 21st 2021


FOR AN INSIGHT into the thoughts of teenagers about social-media, TikTok is the place to look. "Anyone else feel like it's low key kinda cringe to post on Instagram now?" asks one in a clip uploaded to the video-sharing platform in June. It has been liked over 368,000 times. Facebook, which owns Instagram, is under fire after Frances Haugen, a former employee, leaked internal documents suggesting the firm was aware it was causing harm to the mental health of teenage girls in particular. But the internet's youngest users have been falling out of love with Facebook's platforms for a while. American children aged between four and 15 spent an average of 17 minutes per day on Facebook in 2020, down from 18 minutes in 2019, according to a report from Qustodio, a security software company. Instagram stayed at 40 minutes, and Snapchat was up from 37 minutes to 47. Screen time on TikTok, meanwhile, surged, from 44 average daily minutes to 87.

These numbers are a consequence of lockdowns, but are also a testament to TikTok's engrossing "For You" page (FYP), which is powered by an algorithm that serves users an endless stream of videos they might be interested in. Getting featured on it is often an indicator that a clip will go viral (many videos are tagged #FYP to boost their chances), which is part of the app's thrill. The platform, owned by Beijing-based ByteDance, has become synonymous with lip-synching teenagers, dances and challenges. And despite interventions from various governments, including the threat of its removal from app stores by former President Donald Trump, TikTok has continued to soar since its launch in 2016: last month it hit 1bn monthly users.

As a newer platform, TikTok also had a chance to learn from the mistakes of its predecessors. It has proposed the creation of a "global coalition" of social platforms to protect users better from harmful content. The FYP makes people internet-famous very quickly—and makes them targets for harassment. To address this, TikTok deleted millions of accounts belonging to users under the age of 13, and limited the use of its more public features from its youngest profiles. It also claims that less than 1% of videos uploaded in the first quarter of 2021 violated its terms of service—and those that did were removed within 24 hours. All this, in theory, ought to mean TikTok is healthier than other social media apps.

The reality is different. Last year the Intercept, a news site, published Chinese moderation documents, revealing a preference to filter out users with "ugly facial looks", "beer belly" and content that risked "endangering…national honour and interests". Teenage girls have been targeted with adverts about intermittent fasting. And reports by the Institute for Strategic Dialogue (ISD), a think-tank, have found that videos peddling harmful covid-19 vaccine misinformation and white-supremacist content accumulated millions of views before they were taken down by the company. Some of these exploited TikTok's features, it says, such as trending songs, to extend their reach. The ISD found the firm's application of its policies to be "lacking in accuracy, consistency and transparency".

Ms Haugen's leaks about Instagram have put a spotlight on the platform's role in perpetuating negative thoughts about body image among teenage girls. A similar culture flourishes on TikTok, too. There are currently 8.8bn total views on videos tagged #whatIeatinaday, a viral trend where mostly young girls document their food diaries, some of which include under-eating. Learning from Facebook's mistakes, TikTok announced that it would include safety announcements on these videos and do more to direct users to support resources. Yet the lines between what is a direct consequence of social media and what is symptomatic of wider cultural pressures about body shapes are blurred.

Tumblr, a blogging platform, was polluted with content promoting eating disorders and self-harm over a decade ago, prompting the site to censor accounts that were endorsing harmful behaviour. Internet users are wise to moderators, though. Misspellings of hashtags are used on TikTok to bypass censored words. Last month TikTok censored videos tagged "devious licks"—a viral challenge which saw teenagers vandalising or stealing school property—from its search bar. Yet misspellings of the phrase are still accessible and are even suggested by the platform. Similarly, misspelt eating-disorder tags are easily discoverable and the videos tagged under them have thousands of views. One such post, live for a week at time of writing, promotes eating fewer than 500 calories a day.

Most TikToks are innocuous. But like its predecessors, the app has not yet effectively addressed problems that hide in plain sight. If an under-age user wants to create an account, no community guidelines can stop them from lying about their age. If someone wants to view harmful content, they will seek it out. And the features that make TikTok so successful also make it risky: the more a user engages with certain tags, the more the FYP will serve similar content. Much like Facebook's platforms, in other words. ■

**Oregone**

# Snickerdoodle and secession in eastern Oregon

*Political polarisation raises the appeal of splitting up*

Oct 21st 2021 | BURNS, OREGON


A SPORTING GOODS store off a dusty two-lane road, flanked by cow pastures and sagebrush, is an unlikely site for political revolution. But Michael McCarter, a retired nurseryman, has gathered a small group for such an occasion in Burns, the seat of Harney County nestled in the high desert of eastern Oregon. Between bites of snickerdoodle cookies, they patiently explain their cause to passers-by, careful not to tip over the shop's hunting rifles in their enthusiasm. "Salem won't listen to us," says Mr McCarter, referring to Oregon's state capital. He is here to champion the absorption of eastern and southern Oregon into Idaho, a movement they dub "Greater Idaho." Of the 22 counties the group is targeting, seven have already voted to consider such a move. Harney County faces a similar vote on November 2nd.

America is no stranger to quixotic political projects, and "Greater Idaho" has hitched its wagon to the widening urban-rural divide. Usually, it is liberal cities that strain against the diktats of Republican-controlled states ruled from the hinterland. In Oregon, as in Illinois, New York, and others, it is the cities that dominate, and have only become more Democratic. With growing differences on policy, Mr McCarter's group wonders whether they would be better off next door. The effort is a long shot, and unlikely to succeed. But it is another marker of Americans' reluctance to compromise and live together.

This is another in a long line of attempts to redraw state boundaries, including in Oregon itself. The "State of Jefferson" has long been an aspiration in southern Oregon and northern California. Upstate New York, southern Illinois, and many other areas have seen attempts to form new states from the old. Just three have succeeded: Kentucky (in 1792), Maine (in 1819) and West Virginia (in 1863). No border change on the scale of "Greater Idaho" has happened before. The bar for victory is high, requiring the assent of both the Oregon and Idaho legislatures, as well as an act of Congress. Norman Williams of Willamette University points out that with political interests and thorny legal issues, such as the division of responsibility for pensions, the practical obstacles are daunting.

North-western Oregon dominates the state, with over 70% of the population and 80% of GDP clustered in less than a fifth of the state's landmass along the Willamette valley between Portland and Eugene. Divisions between urban and rural Oregon are not new, says Mr Williams. But there is little doubt that the split has become more acute. In the 2000 presidential election, Al Gore bested George W. Bush by just 0.44% while Republicans held majorities in the state legislature. In 2020 Joe Biden won Oregon by 16 points, and the reliably liberal Willamette valley handed state Democrats another legislative supermajority.

Oregon Democrats have not shied away from wielding their power on issues close to liberals' hearts, such as policing and education. And with Oregon set to gain another congressional seat after the 2020 census, state Democrats have reneged on a deal with Republicans and are preparing a 5-1 map gerrymandered in their favour.

"Greater Idaho" partisans say they suffer real consequences. "The rules are made for Portland, but they hurt us," says Sandie Gilson, the movement's captain for Grant County. A proposal to ban diesel, an environmental policy floated without considering the needs of agricultural equipment, was a frequent topic of conversation. Inevitably, the discussion circled back to guns, as a last defence against urban lawlessness. Asked when they first began to feel ignored by state Democrats, Ms Gilson is unequivocal: “Obama,” she says. “These days, you’re just called a racist.”

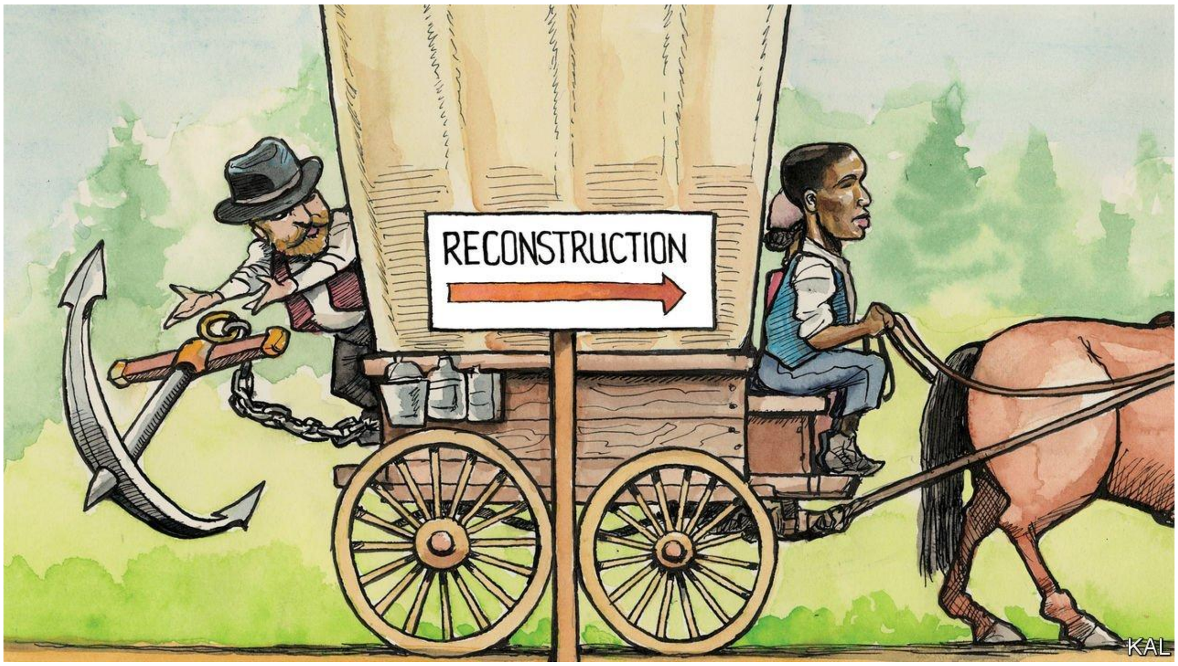
Despite leading an idealistic political movement, Mr McCarter insists he is a pragmatist. “The fact is, the divisions between us are too much, so this is a good idea for both.” Thus far, his group’s efforts have been met with silence from Salem. Mr McCarter is clear that the county votes he has won count for only so much. He hopes they will lead to talks with state legislators by the spring. “It sends a message: you’ve got a problem.”■

Lexington

# Reconstructing America

***On the failed promises and quiet successes of America's most propagandised decade***

Oct 23rd 2021




PAUL GARDULLO, co-curator of the Smithsonian's new exhibition on post-bellum Reconstruction, had warned Lexington that it "played with time a bit". This was an understatement.

The exhibition, which opened this month at the National Museum of African American History & Culture, begins in a war-ravaged plantation house and ends with Georgetown University's recent announcement of a bursary for the descendants of 272 slaves sold to cover its debts. In between visitors step from a re-enactment of Fredrick Douglass's chilling 1876 speech to the Republican Party—"When you turned us loose, you gave us no acres, you turned us loose to the sky, to the storm"—to a shrine-like display of a grey sweatshirt punctured by a single fraying bullet-hole. Trayvon Martin was wearing it when he was shot dead running an errand in 2012, leading to the Black Lives Matter movement.

Lexington can be a bit of a fuddy-duddy about museums. But Mr Gardullo's time-chopping exhibition could not be more apposite. Reconstruction refers to the momentous decade following the civil war, which saw sweeping legal and constitutional reforms and the formation of biracial governments across the former Confederacy. And then vicious white reprisals, leading, after federal troops were withdrawn from the South in 1877, to Jim Crow. Yet as the historian Eric Foner has written, the term also describes the epic process that those great, contradictory changes represented: America's ongoing effort to manage the legacy of its 200-year-old institution of slavery. "The definition of citizenship and voting rights, the relative powers of the national and state governments, the relationship between political and economic democracy, the proper response to terrorism, racial bias in the criminal-justice system—all of these are Reconstruction questions."

They have rarely been more pressing. Since Mr Gardullo started work on his exhibition, covid-19 has revealed black Americans' residual ill health; America has been swept by the biggest race protests since the 1960s (sometimes called the "Second Reconstruction"); and a race-baiting president has tried to win re-election by rallying whites against those protests. Such headlines make it possible to ask whether America has made racial progress at all.

The African-American museum is one sign that it has. First proposed in 1916, it was finally opened on the National Mall by Barack Obama a century later. Since visited by millions, it stands as a symbol of the political and cultural influence African-Americans now wield. It also represents the importance racial-justice campaigners attach to reappraising history. The *New York Times*'s campaign to recast America's freedom struggle as a war over slavery indicated the excesses this effort can lead to. Mr Gardullo's exhibition illustrates how necessary it generally is.

Until relatively recently Reconstruction was considered a corrupt, reckless experiment in democracy that southern whites sensibly put paid to. Emancipated blacks were unready for suffrage; giving it to them was a ruse to mask northern carpet-bagging. The primary purpose of the exhibition, as laid out in its satisfyingly stodgy timeline, is to promulgate the more accurate view that historians now unanimously hold.

Reconstruction was an astonishing liberal experiment, which conjured multi-racial democracy amid the ashes of slavery. Before the civil war, only three African-Americans had held public office of any kind; during Reconstruction over 1,000 were elected, including 16 to Congress. A 54-foot-long petition for equality, signed by 3,740 "coloured citizens of South Carolina" and recently unearthed in a dusty drawer on Capitol Hill, gives a sense of the mass craving behind this revolution. Yet the experiment failed not because its architects went too far, but because they stopped short.

The failure to provide former slaves with means to support themselves—the promised 40 acres and a mule—left them vulnerable to their former owners. Their defenders, northern whites, ultimately allied with the same. This is not what most Americans over the age of 40 learned in school—as Hillary Clinton showed, on the trail in 2016, when she equated Reconstruction with Jim Crow.

The exhibition's achievement is not only in correcting that gross error. It also adds nuance to the notion that Reconstruction failed. On a political level, this is incontestable; African-Americans' new rights were ignored. Yet the period also produced enduring social infrastructure, including the black church, public schools in the South and the reunified black family. These were fruits of the 4m freed slaves' new agency. Thus, most movingly, the mass effort to find scattered relatives. "Mr Editor," wrote one Lewis Wright of Mississippi. "I wish to inquire for my wife and children. She used to belong to Matison Gunn…he sold her to R.D. Dick Price in 1862, and he sold her and children on Flint Creek, GA."

Desperately inadequate though this was—a matter of notional rights and inching progress—it was the foundation for the civil-rights struggle. In turn, the accelerated progress that that Second Reconstruction unleashed is what makes the Black Lives Matter movement seem not a throwback, but perhaps a Third Reconstruction. The exhibition's elision of past and current events points to this history of erratic but undeniable progress. The failure to compensate former slaves locked millions into bonded labour; beneficiaries of the Georgetown University bursary will likely be drawn from the world's biggest black middle-class. Reconstruction was a time of everyday terror for African-Americans; Trayvon Martin's killing was an outrage that sparked a movement.

## An easier rebuild

Mr Obama viewed race relations through an “arc of history” bending towards justice. The exhibition shows how much more spasmodic than that rainbow-like image their advance has been. But he was right about the direction of travel. America, alas, may require more Reconstructions yet to fulfil its founding promise. At least each would be less improbable than what went before.■

# The Americas

**Jobs for the comrades**

# Pedro Castillo, Peru’s new president, tries to seem less left-wing

***Investors are not entirely convinced***

Oct 23rd 2021 | LIMA


WHEN HE TOOK office as Peru’s president on July 28th, the bicentenary of the country’s independence, Pedro Castillo declared that he would not govern from the presidential palace. Built on the site of the house of Francisco Pizarro, the Spanish conquistador, the palace is a “colonial symbol”, he said, which he would turn into a museum. Three months later President Castillo is quietly living and working there after all. It is a sign that whatever Peru’s hard-left president might like, the country is not in the throes of revolution.

Rather Mr Castillo’s presidency has been defined so far by his political inexperience and indecision, the extremism and infighting of his allies and his weak mandate. A rural schoolteacher, farmer and union activist from a small town in the Andes who had never before held political office, his victory by just 44,000 votes out of 17.5m was a surprise. For his supporters he represents both the Peru that has not shared fully in the country’s economic growth and a provincial rebellion against Lima, the capital. He won because politics has fragmented, because the pandemic exposed injustice and neglect and because many Peruvians could not bring themselves to vote for his opponent, Keiko Fujimori, a conservative whose father ruled the country as a corrupt autocrat in the 1990s.

Mr Castillo wasted his first nine weeks in office, appointing a dysfunctional cabinet of the far left that many Peruvians saw as an affront. His own political base is of radical teachers, many close to the former Maoist terrorists of the Shining Path. Police records suggested that the labour minister may have taken part in terrorist attacks. Vladimir Cerrón, the boss of Perú Libre (Free Peru), the party under whose banner Mr Castillo ran, is a Cuban-trained Leninist doctor. Mr Cerrón tried to co-govern through Guido Bellido, his nominee as Mr Castillo's first prime minister, an agitator who publicly countermanded any sign of moderation from the president. Mr Cerrón and Mr Castillo both want a constituent assembly, the device through which other leftist Latin American presidents have imposed authoritarian regimes.

With the government destabilising itself, the currency depreciated daily, pushing up inflation (to 5.2% over the past year). The opposition-controlled Congress began to murmur of impeachment. In early October Mr Castillo "decided to take some decisions in favour of governability", as he put it.

For a start, he replaced Mr Bellido with Mirtha Vásquez, a human-rights lawyer and former speaker of Congress. Although she has leftist convictions, she is seen as realistic and consensual. Of a constituent assembly, she said the government "is not going to propose this for tomorrow" and that its priorities were vaccination, reopening schools and economic recovery. At the same time Mr Castillo reappointed Julio Velarde, the respected central-bank president, for a fourth five-year term. That calmed the currency market. "We are left-wing, but we are not going to do crazy things," insists Pedro Francke, the economy minister.

The new cabinet is only a marginal improvement. The interior minister is a former policeman with a string of (unfair, he says) disciplinary reprimands. As a lawyer he has represented arms traffickers as well as Mr Cerrón (who was convicted of corruption). Only four or five ministers have a reputation for competence. But at least Mr Castillo has bought some time.

Can he use it to achieve change that benefits poorer Peruvians? The government wants to expand tax revenues from 15% of GDP to 17%, to spend more on health care, education and family farming. Mr Francke sees scope to raise taxes on mining companies, which are enjoying high prices, and to crack down on evasion. He has asked the World Bank and the IMF to advise on tax reform "so that it's not anti-competitive". Whereas Mr Bellido had threatened to nationalise the Camisea natural-gas field, Ms Vásquez's team is studying ways to build pipelines so that more Peruvians can benefit from it.

## Brothers in arms, and government

Mr Castillo faces two big problems. He mistrusts "technocracy, the market, business people and Lima", says an official who has dealt with him. He shuns the media, preferring rallies with his base in the interior. That mistrust is reciprocated. Many in private business are alarmed, especially by the threat of a constituent assembly. While output has already recovered from last year's slump (though employment has not), lack of confidence means that Peru will be lucky if its economy grows by 3% next year. Lima's once-booming property market is dead. Capital and business people are leaving the country.

The second problem is that the government's diagnosis of Peru's difficulties is mistaken. It is not the market economy that has failed but an inefficient state. Tax collection is low because 70% of Peruvians work informally. In many ministries, Mr Castillo's team are placing supporters in senior posts for which they are unqualified. That has happened in the social-development ministry, which has a big role to play in ensuring that the 3m Peruvians who fell into poverty last year get out of it. The new education minister is a friend of Mr Castillo, and a former teacher, who wants to repeal a successful reform that requires teachers to be subjected to evaluation and paid according to performance.

Mr Castillo and his supporters reject the idea of ending up like Ollanta Humala, a former president who campaigned as a radical leftist but presided over a mildly social democratic government. Yet that may be the only way for Mr Castillo to survive for five years. “The country is so complicated, there’s no space for their more radical proposals,” says Miguel Castilla, who was Mr Humala’s economy minister. It looks likely to become even more complex.■

**President anti-vaxxer**

# Jair Bolsonaro is accused of crimes against humanity in Brazil

*It will harm the reputation of the beleaguered president further*

Oct 21st 2021 | SAO PAULO


FEW BRAZILIANS had high hopes for a Senate inquiry into the country's disastrous handling of covid-19. But its thousand-page report, leaked this week, is far more damning than expected. President Jair Bolsonaro should be tried for "crimes against humanity", its authors say. His "macabre" approach to the pandemic, including organising large gatherings of his supporters and disparaging scientists, constitutes a "crime against public health". Some 65 others are also implicated and could face criminal proceedings.

"The president has committed several crimes and will pay for them all," said Omar Aziz, one of the senators behind the investigation. But the payment may be some way off. On October 19th the head of the inquiry announced that it would be dropping the most incendiary accusations, of homicide and genocide against indigenous groups.

The president is likely to escape legal consequences for the other claims, too. The report looks at two kinds of misdeed: “ordinary crimes”, which can be prosecuted in the courts, and “crimes of responsibility”, for which the president might be impeached. To try the president in court requires the approval of the attorney-general, an ally. An impeachment needs the nod of the head of the lower house of Congress, who is also close to the president.

Even so, the inquiry will hurt Mr Bolsonaro. Since it started in April, the president’s approval rating has fallen from 33% to 22%, according to Datafolha, a polling firm. During the six months the proceedings were broadcast live, half a million viewers regularly tuned in.

Having lost support from the middle classes, Mr Bolsonaro had hoped to shore up his base with poorer Brazilians, who benefited from emergency aid during the pandemic. But fully 14% of Brazilians are unemployed, the central bank is increasing interest rates and rising prices, up more than 10% over the past year, are eating into wages. Energy rationing, which the government may soon have to introduce as a result of the global energy crisis, would further erode his popularity.

Mr Bolsonaro’s attempt to boost support by increasing social welfare—a common tactic for Brazilian presidents seeking re-election—is not without problems. On October 19th, the announcement of the “Auxílio Brasil” cash-transfer programme, which replaces and doubles an existing welfare programme, was suspended after the proposals spooked investors and Ibovespa, Brazil’s main stockmarket index, fell by 3%. The proposal had split the government; Paulo Guedes, the economy minister, is against it. Yet the following day Mr Bolsonaro confirmed that the monthly benefits of 400 reais ($71) to Brazil’s poorest would go ahead—without, he claimed, violating spending limits.

Mr Bolsonaro may pride himself on his Teflon qualities. He has remained in power despite his abysmal handling of covid-19 which, according to *The Economist*’s calculations, has resulted in 680,000 excess deaths in Brazil. But this week’s news might dent even the toughest of egos. Mr Bolsonaro and members of his family are already being investigated for spreading fake news and corruption, all of which they deny. Even if the latest accusations do not stick, next year Mr Bolsonaro may be fighting both an election and jailtime. ■

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.*

Not ageing gracefully

# As Mexico ages, public services are not keeping up

*Ill health is widespread; care homes are rare*

Oct 23rd 2021 | Veracruz


IN A SUNLIT room in Mexico City a group of old people sit round a whiteboard. Some are asleep; others are playing a game. They shout out words, starting with the syllable that the previous one ends with: “Taco!” “Comal!” A bubbly young worker leads them along.

It is a rare sight in Mexico, where facilities for old people are sparse. Emma Tapia founded the home, Casa Alicia, in 2017. It has space for 20 female residents; the day centre is open to men as well. “Demand is growing very quickly,” she says.

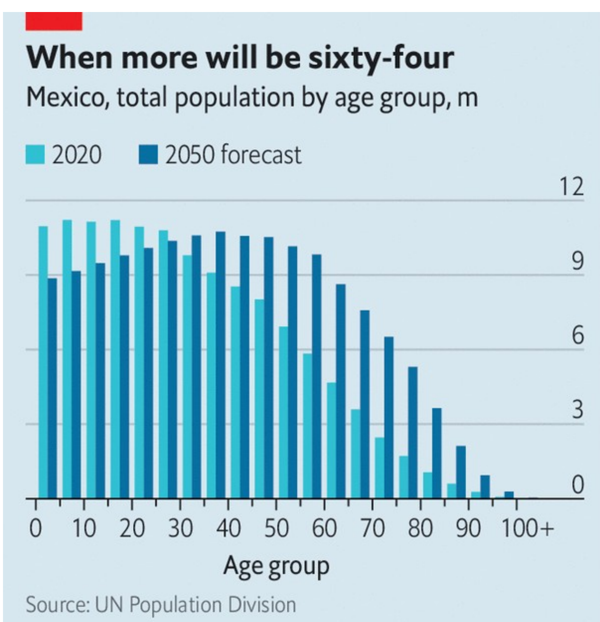
Mexico is ageing fast. The proportion of its people who are under 20 peaked in 2010. The birth rate has been falling. In 1960 the average Mexican woman could expect to have seven children; now the figure is two. Life expectancy has soared from 57 to 75 over the same period, putting Mexico on a par with China or Lithuania. Today 12% of Mexicans are over 60, up from 9% in 2010; by 2050 they will be around a quarter of the population. “Mexico’s population pyramid is no longer so clearly a pyramid,” says

Baruch Sanginés, a demographer. Covid-19, which according to *The Economist*'s calculations has resulted in over half a million excess deaths in Mexico, may have slowed down this trend, but only slightly.

Most countries that are grey are also rich, and so can afford good public services for the elderly. For not-yet-rich countries like Mexico, rapid ageing presents trickier problems. Mexican policy-makers are starting to take note of the situation and grapple with it, but too slowly, says Luis Miguel Gutiérrez Robledo of the National Institute of Geriatrics, a government research body.

Mexico's old people, unfortunately, are not in good shape. Nearly a third of those over the age of 50 are obese, compared with one-fifth in 1995, according to the national statistical agency. Not surprisingly, diabetes and heart disease are widespread. As people live longer, dementia is becoming more common, too.

On top of this, Mexico's public health-care system is fragmented. A survey from 2018 found that 12% of old people lacked access to any medical service, whether in private or public clinics. There are 700 geriatric specialists in the country, serving a population of 126m. In the United States there are ten times as many (for a population nearly three times the size).




The Economist

For many Mexicans care homes have "negative connotations", says Ms Tapia. As in many other Latin countries, most think the elderly should be cared for at home, surrounded by their relatives and loved ones. But this creates a burden that many middle-aged Mexicans find hard to shoulder. More women work outside the home, so have less time and perhaps less inclination to take on the traditional role of caregiver. In 1990 34% of women were in the workforce; 46% are now.

In a sunny patio filled with cactuses, Ramón Jordan explains that his mother, 100-year-old Amalia Rocha Hernández, moved in with him after being passed between his siblings, each of whom grew tired of looking after her. Mr Jordan is 66. "*Híjole*, he's old too!" says Ms Rocha, looking up from her sewing. Mr Jordan says his mother is no burden, but then lists a litany of difficulties he faces, from her wanting to talk too much to her knocking on his door at night.

Help is hard to come by. There is no comprehensive public system of carers and private ones cost a lot. Mr Jordan relies on his son and daughter-in-law to help. The National Institute of Geriatrics reckons there are only 1,490 care homes, offering 40,000 places, in the whole of Mexico. Almost all are private and costly. Casa Alicia charges 16,000 pesos ($793) a month for residents, and 9,500 pesos for those who use the day centre.

## Will you still feed me

An estimated 38% of old people are poor, by an official measure that includes not only income but access to services. No universal social-security system exists in Mexico. Since most jobs are informal, less than half of Mexicans have a pension. Pedro Vásquez Colmenares, the author of a book on the subject, describes the lack of universal pensions as the country's "biggest failure since the Mexican Revolution".

President Andrés Manuel López Obrador has increased cash handouts to the elderly. But even if these bungs outlast his time in office (he is stepping down in 2024), it is not clear that they are sustainable, as the number of old people grows.

A few states are trying to provide more care. In Veracruz, which is ageing faster than all but two of Mexico's 32 states, the local health authority runs three public homes that look after 120 people. And some private firms are stepping in, too, by hiring the elderly, whom they praise as enthusiastic and diligent. Walmart, an American supermarket chain with branches in Mexico, hires over-60s to bag groceries. When Walmart said it would end the practice in the pandemic, the elderly packers protested. They are now back at the checkouts, doubled-masked.■

# Middle East & Africa

**When things fall apart**

# How kidnappers, zealots and rebels are making Nigeria ungovernable

*President Buhari has allowed the rot to deepen*

Oct 21st 2021 | ABUJA AND ENUGU

Sean Sutton/Panos Pictures

ONE EVENING in March Emmanuel was in bed, about to doze off. The next moment, armed men burst into his college dormitory in north-west Nigeria and dragged him and 38 other panicked, half-dressed students outside and deep into a forest. “We were tortured,” says Emmanuel. One bandit would film as others beat the screaming students, who were forced to call their parents to demand a total ransom of 500m naira ($1.2m). Emmanuel’s father sold his car to find the cash.

“Security [in Nigeria] is at its worst since the civil war,” says Cheta Nwanze of SBM Intelligence, a consultancy in Lagos. This is a startling claim. The Biafran war of 1967-70, when the Igbos of the oil-rich south-east tried but failed to secede from Nigeria, claimed an estimated 1m lives. Since then, Nigeria has held together. The country of 200m people has had mountains of problems, from corruption and ethnic strife to a string of military dictators. But it has been democratic since 1999. And parts of it are thriving, especially in the south-west. Lagos, the commercial capital, is home to vigorous banks, a hip technology scene and a flourishing film industry, Nollywood.

Yet Mr Nwanze is right. Much of the country is sliding towards ungovernability. A jihadist insurgency in the north-east is spreading. Rebellion is brewing once more in the south-east. And across most of the country rich and poor alike live in fear of kidnappers, warlords or cattle rustlers. Even the sea provides no haven: the Gulf of Guinea is the world's hotspot for piracy.

The country is growing ever harder to live or work in. The share of adults who tell Gallup that they want to emigrate for good has risen from 41% in 2012 to 48% in 2018. Among the young, a clear majority wish to leave. Shell, an oil giant that was long Nigeria's biggest foreign investor, and which stuck around during the grimmest years of military rule, recently said it would pull out, citing the threat of violence. The army has now been deployed to every one of Nigeria's 36 states, says Mr Nwanze.

Nigeria is not yet a failed state, but large parts of it are failing. This matters not only because one sub-Saharan African in six is Nigerian. The country also has Africa's largest economy, whose dreadful performance holds the continent back. And its conflicts are spilling across borders, destabilising fragile neighbours such as Niger and Chad and amplifying the jihadist threat across the Sahel.

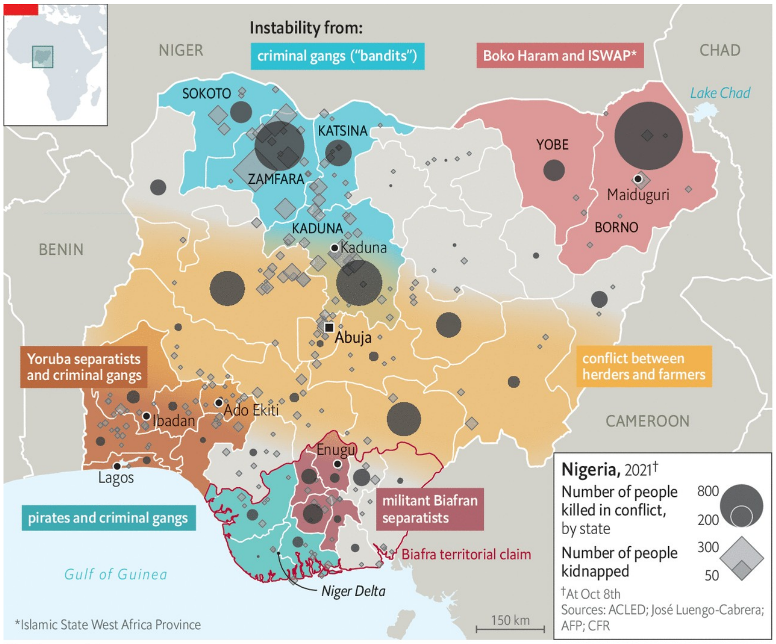
Nigeria's instability is largely born of poor governance. Britain, the colonial power, lumped together many groups in one country: Muslims in the north, Christians in the south, numerous and overlapping ethnic groups in different regions. Politics has long been a tussle to grab petrodollars, the source of about half of government revenues. All groups gripe that they are short-changed. Most are right—a corrupt elite grabs a huge portion, leaving only scraps for ordinary Nigerians of any group. Since politics is the swiftest route to wealth, it is a violent business, cursed by candidates who drum up ethnic or religious strife to win support.

What has changed in recent years is that the government has grown so rotten that it struggles to control wide swathes of territory. To understand how, start in the north-east. In 2009 a jihadist insurgency erupted there. The jihadists called themselves Boko Haram ("Western education is sinful"). They were fed up with predatory government, eager to establish a theocracy, and not averse to seizing loot and women. Their insurgency has directly cost some 35,000 lives, plus another 314,000 from war-induced disease and hunger, estimates the UN. In 2015 they nearly captured Maiduguri, the biggest city in the north-east. A force of mercenaries, reinforced by Nigeria's army, pushed them back into isolated swamps and forests.

Muhammadu Buhari, a former general and military ruler, was elected president that year after vowing to restore peace. Alas, he has failed. Over the past six years the jihadists have regrouped in the countryside, hoisting their black flags over village after village. They are once more threatening Maiduguri, this time under the banner of Islamic State West Africa Province (ISWAP), an offshoot of Boko Haram that now outguns it.

ISWAP is "much more dangerous" to the Nigerian state, says Vincent Foucher of the International Crisis Group (ICG), a Brussels-based think-tank. The number of Nigerian soldiers being killed by jihadists is rising. Their morale is falling. The fight is not entirely one-sided. Nigeria claimed this week that one of ISWAP's leaders, Abu Musab al-Barnawi, is dead. Officials gave no specifics, however, and have a habit of claiming to have killed jihadists who turn out still to be alive.

The Nigerian government also boasts that thousands of Boko Haram insurgents have recently surrendered. Yet this is because of fighting between Boko Haram and ISWAP, rather than successes by Nigeria's army, says Mr Foucher. Despite having similar aims, the groups hate each other.




The Economist

Nigeria's unofficial strategy now seems to be to contain the jihadists, rather than defeat them. The government has deployed enough force to control the biggest towns and escort convoys along the main roads, but not enough to hold, much less govern, the smaller towns and villages. The army is thinly stretched. Trying to pacify the north-east is only one of its problems.

This year more people were killed by criminal gangs in the north-west than by jihadists in the north-east. Bandits, as they are known, roar into villages on motorbikes to steal cattle and anything else of value. They threaten to torch houses unless villagers pay protection money. They murder anyone suspected of being a snitch. In Zamfara state in June bandits shot dead 41 farmers as they were planting crops. The governor of neighbouring Katsina state told voters not to rely on the police or army to protect them but to fight back "even with your teeth".

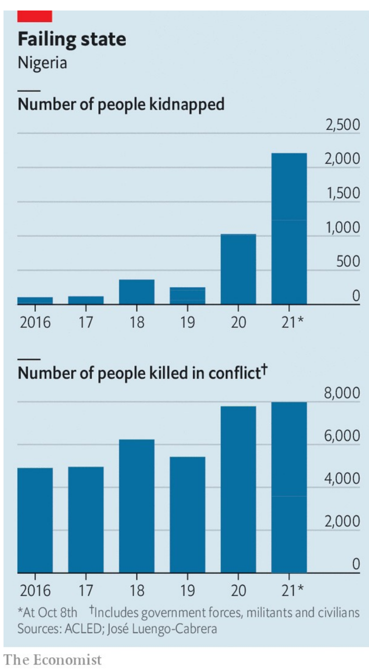
Violence begets violence. One 42-year-old former bandit says he lived in an area where a long-running ethnic conflict pitted Hausa farmers against Fulani nomadic herders. After gunmen stole his cows, he became a bandit. "We were left with nothing, so we went and joined them—we kidnapped people." He and some of his gang took up an amnesty offer from the state government, but some have already gone back to banditry, he says.

## No sanctuary

Kidnappers have made life perilous in much of Nigeria. In July gunmen shot up a hospital in Kaduna and kidnapped ten people, including two babies. In August, audacious bandits attacked the Nigerian Defence Academy, killing two soldiers and grabbing a major.

A startling 1,400 schoolchildren and students have been kidnapped this year. After one such incident in September, schools and markets were closed across Zamfara. The government also shut telephone networks and imposed a curfew. All told, about 1m Nigerian students are out of school because of insecurity. Most of the rest are nervous. A security guard at a university in south-west Nigeria checked the boot of your correspondent's taxi. It is "in case we kidnapped students", explained the driver.

The army is trying to fight back, especially in Zamfara. But it often does so indiscriminately—for example, by calling in air strikes. "One of our greatest fears," says Emmanuel, the kidnap victim mentioned at the beginning of this article, was "being bombed by our own government."




The war on banditry is not going well. Twice as many people were kidnapped in the first nine months of this year as in all of 2020, reckons José

Luengo-Cabrera, a security analyst (see chart). Driving between cities is dangerous. Abdulkareem Baba Aminu, a former newspaper editor, is still haunted by an evening three years ago when flashlights flagged him down and ill-dressed men in army uniforms suddenly blocked the road in front of him. He hit the accelerator, let the car take the bullets, and somehow escaped. Politicians are furiously lobbying airlines to add flights so they can fly to their home states from Abuja, the capital, rather than brave the bandit-infested roads.

Nigeria's third big security threat is in the south-east, where separatists want to revive Biafra, a would-be state inhabited largely by Igbos (about a sixth of Nigeria's population). Many Igbos feel neglected and ill treated by the central government—as do most Nigerians. The main separatist group, the Indigenous Peoples of Biafra (IPOB), calls for a Biafra that includes all Nigeria's main oil-producing states, even those where Igbos are a minority.

The rest of Nigeria will not let one group walk off with all the oil, any more than it did half a century ago. Still, blood is being spilt in pursuit of this fantasy. Nnamdi Kanu, IPOB's leader, grew popular with inflammatory radio broadcasts denouncing "all those who delight in shedding the blood of Biafrans". In December he launched an armed wing. That was followed by attacks in the south-east on police stations, electoral-commission offices and a prison, from which 1,800 inmates escaped. Mr Kanu claims his red-beret-wearing fighters are not attacking the state but defending Igbos against Fulani herders—a debatable claim.

Security forces raided Mr Kanu's house in 2017, leaving its walls riddled with bullet holes. (The army denies it was behind the raid.) In June the government arrested him abroad and flew him to Abuja. That is a blow to IPOB—few can match his charisma or fundraising prowess—yet his followers remain defiant. They have threatened to "handle" those they hold responsible for his arrest, naming a federal minister and a state governor. If his trial is seen as unfair, Igbos will feel even more aggrieved.

After Mr Kanu's arrest IPOB told followers to stay at home in protest every Monday. Later, it told them to protest just on days when Mr Kanu was to appear in court. Even so, streets in the region have been eerily quiet on Mondays. Those who venture out have sometimes been killed. A survey by

SBM Intelligence found that just 25% of people in the south-east opposed the stay-at-home protests.

IPOB supporters are easy to find in the south-east. They want to “wipe us out” but “we are not mosquitoes” to be swatted, shouts Kelvin, a 36-year-old, gesturing angrily at nearby soldiers. “If Nigeria doesn’t want to leave, if they want violence, we will go for violence.” Ferocious security crackdowns drive young men to join the rebels. In May Usman Baba, now Nigeria’s inspector-general of police, told officers going after IPOB that “if anyone accuses you of human-rights violation, the report will come to my table and you know what I will do. So…kill them all.”

Seun Bakare of Amnesty International, a watchdog, estimates that the police and army have killed hundreds of young Igbos. The senate minority leader, Enyinnaya Abaribe, an Igbo, says “elements of the federal government” want to commit genocide. This is surely hyperbole, but Mr Buhari does little to dispel it. Earlier this year he alluded to the civil war and threatened to treat Igbo rebels in “language they understand”. The danger is that young men will hear such fighting talk and conclude that fighting is their only choice. “Nobody sits down and says I want war,” says Osita Chidoka, a south-easterner who was aviation minister in the previous administration. “But sometimes just playing with fire can lead to an explosion.”

Even in the south-west, the most prosperous part of Nigeria (bar the capital), separatist feelings are starting to spread. At a rally a few months ago, Sunday Igboho, a Yoruba separatist, clambered onto the roof of a truck, surrounded by thousands of raucous fans, and repeated his demand for independence. The next step, he said, is “entering the bush to chase away these Fulani herders”, perhaps a veiled reference to Mr Buhari, whose father was Fulani. In July security forces swooped on Mr Igboho’s house at night, killing two of his guards. Mr Igboho escaped. The security forces reportedly took away his cats, in case he had turned into a tabby. It seems not; weeks later he was seized in neighbouring Benin. As his lawyers fought extradition, protesters marched in Ibadan, one of the biggest cities of the south-west.

## Not single spies but in battalions

These disparate crises are in some ways connected. Climate change has pushed Muslim Fulani herders farther south, where they clash with settled farmers of other faiths and ethnic groups. Such clashes have claimed thousands of lives since 2018. Some herders have turned to kidnapping. Igbo and Yoruba separatists justify taking up arms by playing up the dangers posed by some Fulani herders.

A mixture of neglect and sporadic brutality by the government makes matters worse. Boko Haram became more extreme after its original leader, Muhammad Yusuf, was shot dead while in police custody. The arrest in 2015 of Mr Kanu raised his profile. After a raid on his house in 2017, IPOB grew more violent. With each tit-for-tat, “Pandora’s box creaks open a little wider,” says Matthew Page of Chatham House, a think-tank in London.

A dire economy makes taking up arms more tempting. In 2019 some 80m Nigerians lived on less than $2 a day. More than half of Nigerians are unemployed or underemployed. Food inflation is 21%. Bad policies, such as closing land borders to goods entirely in 2019 in the hope of spurring local production, have deepened the pain. The government has made little effort to wean itself off oil, or to prepare for a future when cleaner forms of energy ultimately replace it.

The violence, in turn, deepens the economic crisis. Mallam Dauda sells bags of grain from his perch on a plastic chair at a market in Zamfara. These days some farmers have nothing to sell, he frets. “Some were chased away from their villages and others have been denied access to their farms,” he explains. Now the government has closed markets across Zamfara, too.

With so many forces pulling Nigeria apart, some may wonder how it has held together. One reason is that most Nigerians feel a strong sense of nationalism. “We are stronger together,” says Chukwuemeka, a south-easterner, though he also says that “Buhari has put a knife in what unites us.” In some ways, tolerance has improved, polls suggest. In 1990 almost a third of Nigerians said they would object to having a neighbour of a different race or ethnicity. But by 2020 that had fallen to 16%.

Oil-fuelled corruption can foster division, since different groups fight for a slice of unearned wealth. But it also gives elites from all groups a stake in preserving the system. There is “too much corruption among the elites holding Nigeria together” for it to fall apart, says Nnamdi Obasi of the ICG. Non-oil-producing states cannot easily secede because they would lose their share of the petro-pie. Oil states will not be allowed to secede, for the same reason.

Another cause for optimism is that millions of Nigerians still manage to thrive, despite the chaos. Some start businesses to get around the government’s failures. Security firms, unsurprisingly, are booming. So are startups. Lagos boasts three fintech companies worth over $1bn each. Most Nigerians would rather earn a living peacefully than fight.

Yet even countries that seem permanent can fall apart, if the bonds between citizen and state disintegrate. It happened to Yugoslavia. It seems to be happening in Ethiopia, long seen as a model for development in Africa, and perhaps in Cameroon, which had been peaceful for decades before a separatist war forced more than 1m people to flee their homes. It would be complacent to assume that Nigeria is uniquely immune to the poison being injected daily into it by jihadism, separatism and warlordism. “Violence is a slippery slope,”warns Bulama Bukarti of the Tony Blair Institute for Global Change. “Once one starts getting into it, then nobody knows where it will end.”■

*An early version of this article was published online on October 19th 2021*

**Capital cities**

# Three places that dream of becoming Africa's Singapore

*But plans for international financial centres worry tax campaigners*

Oct 23rd 2021 | KAMPALA


SMALL, LANDLOCKED and with few natural resources, Rwanda lacks an obvious route to riches. But a new international financial centre in Kigali, its capital, offers a clue to the government's strategy. It has passed new laws to encourage investment and signed agreements with financial centres as far afield as Morocco and Belgium. The idea is to "position Rwanda as a gateway to the rest of Africa", says Nick Barigye, chief executive of Rwanda Finance Limited, the agency that is driving the project.

Kigali (pictured) is one of several cities in continental Africa that are trying to become financial hubs to capture some of the business that currently flows through offshore centres such as Mauritius. Kenyan officials signed an agreement with the City of London as part of a plan to launch a financial centre in Nairobi. Ghana is drafting laws to create one of its own; Sampson Akligoh, an adviser to the finance minister, says Accra can become a hub for everything from pension funds to private-equity firms, like a Singapore for west Africa.

Jet-setting financiers have spread the gospel of free-flowing capital and low taxes through consultancy reports and study trips. Advice also comes from donors such as CDC Group, the British government's development-finance arm. Colin Buckley, its head of external affairs, argues that this is good for development because foreigners are more confident about investing in countries that have strong financial centres. Locals can also learn new skills.

The architects of these would-be hubs talk of building a financial "ecosystem", with expertise in law, accountancy and business services. "We've tried to move away from the notion that this is just a business precinct or an iconic tower," says Vincent Rague, the chairman of the Nairobi International Financial Centre. It boasts that Prudential, a British insurer, will be the first firm to set up shop in the hub. A thriving local centre, he points out, would make it easier for borrowers in the region to issue bonds close to home. Its partnership with the City, meanwhile, would help firms listed on the Kenyan stock exchange access foreign capital by allowing them to also list their shares in London.

But nurturing this sort of ecosystem takes time, expertise and political will. Kenya has been talking about a financial centre for nearly a decade. The presence of established hubs serving Africa, whether in Mauritius or Casablanca, makes it harder for new entrants to break into the market. "The competition is not only African," says a partner at a private-equity fund focused on Africa. "It is global."

One way centres compete is by slashing taxes on the companies that move into them. But this can trigger "a race to the bottom", warns Chenai Mukumba of Tax Justice Network Africa, a pan-African campaign group. It is going to court to challenge the tax breaks offered by Rwanda and is calling for a temporary halt to Kenya's centre until its rules on tax and transparency are strengthened. When Ghana first tried to open an "offshore" banking centre in the late 2000s the project collapsed and the country was blacklisted by the Financial Action Task Force, an international money-laundering watchdog. None of the three countries is among the 130 that recently signed up to a plan by the OECD, a club mostly of rich countries, to set a 15% floor on corporation tax.

Each centre is offering its own package of investment incentives. In Rwanda that includes a basic 15% corporate tax rate that can drop to as low as 3%. It does not tax dividends, interest or royalty payments. Mr Barigye says that investments will be “clean and compliant [with] global standards”. The government has strengthened its money-laundering laws. Investors will have to show that they are doing more than just putting up letter boxes, but are establishing a genuine presence in the country.

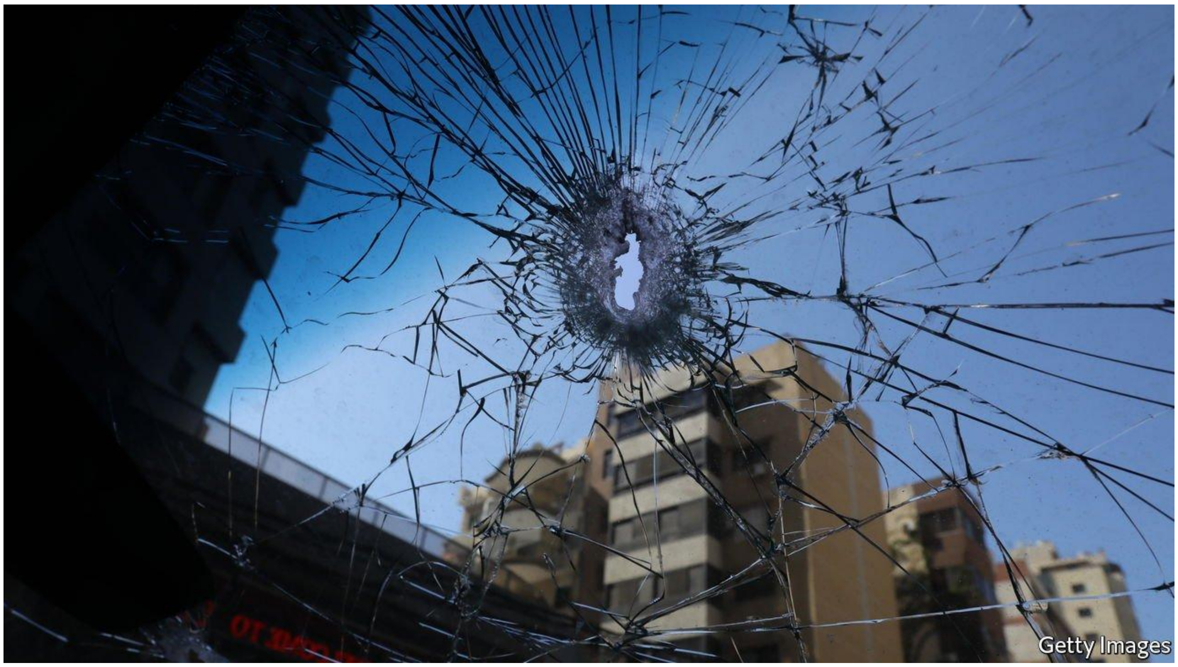
Even with the lure of tax breaks, the odds seem stacked against the new centres. A fund manager at a European bank doubts that Africa’s new financial centres “will grow super-big”. But Mr Rague points out that it took cities like London hundreds of years to become the global leaders in finance they are today. If these projects succeed, he says, “we’ll be contributing to Africa’s coming of age.” ■

**Probing too deep**

# How an investigation led to a gun battle in Lebanon

***Most politicians do not want the probe of Beirut's port explosion to find answers***

Oct 23rd 2021 | DUBAI




IT WAS SUPPOSED to be a speech to celebrate a Muslim holiday, yet Hassan Nasrallah devoted a striking amount of it to a Christian politician, Samir Geagea. There was not much cause for celebration anyway. The leader of Hizbullah, a Shia political party-cum-militia, was speaking on October 18th, four days after an hours-long gun battle in Beirut that killed seven people. It was the worst street violence in Lebanon's capital since 2008. Mr Nasrallah blames Mr Geagea.

In Mr Nasrallah's telling, the Lebanese Forces (LF), the right-wing Christian party led by Mr Geagea, was trying to spark a civil war. Hizbullah, he added, has 100,000 fighters trained for battle, a claim that is impossible to verify but probably exaggerated. Still, the warning was clear. "Don't miscalculate," Mr Nasrallah told his rival. "Be wise and behave."

The shoot-out on October 14th was centred on a protest against Tarek al-Bitar, the judge investigating the massive explosion at Beirut's port just over a year ago. Hizbullah and Amal, another Shia party that co-sponsored the protest, said that snipers fired on demonstrators. The LF denied any role. A CCTV video, meanwhile, showed a Lebanese soldier firing at protesters, which the army says it is investigating.

However the shooting started, for many Lebanese the scenes in Beirut harked back to the 15-year civil war, which ended in 1990. Hizbullah and Amal have spent months using legal and political pressure to stall the port investigation. Now the spectre of violence hangs over it as well.

Mr Bitar has arguably the hardest job in Lebanon. The explosion, one of the largest non-nuclear blasts in history, killed 218 people and wrecked much of the city centre. It was caused by 2,750 tonnes of ammonium nitrate that arrived by ship in 2013 and was stored improperly for years. Many of Lebanon's leaders were aware of the stuff and did nothing to make it safe. That leaves them reluctant to support the probe. The president, Michel Aoun, says he backs Mr Bitar but has barred him from interviewing Tony Saliba, the director-general of state security (who is, like Mr Aoun, a Christian). Hassan Diab, the prime minister at the time of the blast, ignored a summons for questioning last month and jetted off to America.

But it is Hizbullah and Amal that have done most to sabotage the probe. Mr Nasrallah has called for the judge to step down, accusing him of bias. A Lebanese reporter says Wafiq Safa, Hizbullah's security chief, gave her a threat to pass to Mr Bitar. "We have had enough of you," it is supposed to have read. "We will go to the end of the legal path, and if that does not work, we will remove you by force." Former ministers from Amal have filed lawsuits (later dismissed) seeking Mr Bitar's dismissal.

Families of the victims have long supported Mr Bitar. A day after the clashes, however, Ibrahim Hoteit, the spokesman for the families, released a bizarre video in which he called for Mr Bitar's removal and denounced "American interference" in the probe. The message contradicted his past statements. Many Lebanese believe it was coerced; at one point Mr Hoteit glances away from the camera, seemingly at someone in the room with him.

Najib Mikati, the prime minister, has said he will not convene his cabinet (which includes Hizbullah and Amal) until there is a "solution" to the dispute. He took office in September after more than a year without a proper government (two other men tried and failed to form a cabinet during that time). His predecessor, Mr Diab, spent most of his tenure as a feckless caretaker.

Meanwhile, the country plunged into an economic crisis that the World Bank ranks as one of the worst anywhere since the mid-1800s. The economy shrank by an estimated 25% last year. The Lebanese pound, long pegged at 1,500 to the dollar, now trades around 21,000; annual inflation exceeds 100%.

Mr Mikati needs to negotiate a rescue package with the IMF, among many other tasks. He will not have long. Elections had been expected in May. On October 19th parliament voted to bring them forward to March, ostensibly to avoid candidates having to campaign during Ramadan. This will harden views on the port investigation. Mr Geagea, for example, will use his backing of Mr Bitar to drum up support among his Christian base (many of the worst-hit districts near the port in east Beirut are historically Christian).

There is no logic in trying to restart the civil war. Hizbullah is by far the strongest faction in Lebanon, better equipped even than the army. Foes lack the muscle to challenge it. If war is unlikely, however, so is stability. Thousands of soldiers have reportedly deserted the army, where conscripts now take home just $60 a month (compared with $800 two years ago). The crisis has created a vast pool of unemployed, angry young men. Mr Nasrallah may be confident that his militia can fend off rival warlords. But if the cabinet does not move quickly to arrest Lebanon's collapse—which Hizbullah and Amal are making harder to do—no one will be able to keep the peace. ■

**Andy Warhol and the ayatollahs**

# Iran’s impressive collection of Western art

*A museum from the shah’s era reopens*

Oct 23rd 2021

DAYS BEFORE Ebrahim Raisi, a hardline cleric, won Iran’s presidential election in June, the Tehran Museum of Contemporary Art reopened to the public after a long refurbishment. It made for a strange juxtaposition. Mr Raisi celebrates the decline of American influence; his culture minister rails against “the deviation and secularism” of Iran’s art scene. Yet the museum welcomed back visitors with a retrospective of Andy Warhol, the American pop-artist. Fashionable men and *chador*-clad women gazed at portraits of Marilyn Monroe, the blonde seductress, and a mocking rendition of Mao Zedong, the Chinese dictator (pictured, from an old exhibition).

Warhol was a favourite of Farah Pahlavi, wife of Muhammad Reza Pahlavi, the late shah. The old regime built the museum in part to enhance Iran’s stature. When it opened in 1977 it showed works by Claude Monet, Pablo Picasso and Mark Rothko, bought under Mrs Pahlavi’s supervision during Iran’s oil boom.

For years after the shah was ousted by the clerics in 1979, the collection, worth billions of dollars, sat in its vaults. Most of the paintings were neither damaged nor sold, though a portrait of Mrs Pahlavi by Warhol was slashed with a knife. And the museum exchanged “Woman III”, by Willem de Kooning, for a rare volume of the “Shahnameh”, an ancient Persian poetry book. The painting, too risqué for the authorities, was later sold for $138m.

Many of the museum’s works have been brought out in recent decades, not without controversy. A panel from Francis Bacon’s “Two Figures Lying on a Bed with Attendants”, with gay overtones, was deemed offensive and removed. Today, apart from the museum’s nudes (such as Pierre-Auguste Renoir’s “Gabrielle With Open Blouse”) and Warhol’s portraits of the Pahlavis, anything goes, says a museum official. There are two works by Henry Moore in the sculpture park and an exhibition of Alexander Calder, which coincided with a show of the American sculptor’s work in Israel.

The culture minister, Mohammad Esmaili, has not batted an eyelid at the Warhol retrospective, says the official. Newspapers loyal to the regime have even praised it. Some observers say the government, faced with covid-19 and a struggling economy, has no time for such trifles. Others say it wants to prove that cultural life in Iran is on a par with that of its Gulf neighbours, such as the United Arab Emirates (UAE), which is building world-class art and cultural institutions.

Art and architecture schools are flourishing in Iran, with mostly female students. New private galleries in Tehran buzz with young crowds. But exhibits require licences; curators are often summoned for questioning. When the Tehran museum opened 44 years ago, “Iran was the most progressive country in Asia and Dubai [part of the UAE] had just two supermarkets—owned by Iranians,” says Kamran Diba, the exiled architect and founding director of the museum. “Look at them now—and look at Iran.”

# Europe

Winter is coming

# Ukrainians are coping stoically with Russian aggression

*But Vladimir Putin's gas diplomacy terrifies them*

Oct 21st 2021 | PAVLOPIL


AS AN ICY wind rattles the windows of his office, Sergei Shapkin dips a biscuit in honey and ponders the art of survival. He is the mayor of Pavlopil, a village in eastern Ukraine. When Vladimir Putin started grabbing Ukrainian territory in February 2014, Mr Shapkin knew his village was in danger. On one side were pro-Russian separatists, armed by the Kremlin. On the other were loyalist forces. If they fought over Pavlopil, villagers would die.

So Mr Shapkin, a cardigan-wearing former history teacher, talked to the men with guns. His village was of no strategic value, but it had shops. He suggested that the separatists enter in the morning, unarmed and on foot, to buy food and cigarettes. The Ukrainian army could do the same each afternoon. That way, they would not bump into each other and start shooting. It worked—there was no fighting in Pavlopil, and the locals stayed alive, apart from one whose tractor hit a mine.

Ceasefires have come and gone since September 2014, and sporadic shooting continues in eastern Ukraine. Just on October 12th, the day of an EU-Ukraine summit in Kyiv, monitors counted nearly 300 ceasefire violations, including 77 explosions. "Everyone has a shelter," says Mr Shapkin. "We're all prepared with candles, hammers and torches. And we all have bags packed in case we suddenly have to move."

Mr Putin wrote an essay in July expanding his argument that Russia and Ukraine are a single nation. Since he has already annexed Crimea, a Ukrainian peninsula, and sponsored the takeover of a big chunk of eastern Ukraine by ethnic Russian separatists, Ukrainians take his threats seriously. In March and April he massed more than 100,000 troops on the border, before pulling them back. Now, as winter approaches, Ukrainians have another worry: that Russia will turn off the gas again.

In 2009 it shut off the flow of gas through Ukraine for two weeks. This cost Russia a fortune, since its gas needs to pass through Ukraine to reach customers in Europe. Soon, though, it may be able to pump gas to Germany via a new pipeline, Nord Stream 2, that bypasses Ukraine. Once it opens—which could be soon, though it is subject to legal and diplomatic challenges—Mr Putin will be able to choke off supplies to Ukraine almost at will.

Technically Ukraine does not buy gas directly from Russia, but from downstream countries such as Hungary. In reality, it takes Russian gas in the east and substitutes its own gas, which is produced in the west of Ukraine, for transmission onwards. So if the flow through Ukraine were to stop, the east of the country would be in trouble. "We're gas hostages," says Vadim Boichenko, the mayor of Mariupol, a port city 25km south of Pavlopil.

On October 12th in Kyiv Ursula von der Leyen, the president of the European Commission, assured Ukrainians that Europe would protect their energy independence. They are not reassured. President Volodymyr Zelensky seeks shelter for his country inside NATO and the EU. But this is a non-starter. NATO members do not want to extend their principle of "an attack on one is an attack on all" to a country Russia has already attacked. And the EU has enough trouble integrating corrupt ex-communist states such as Hungary without admitting a grubbier, bigger one like Ukraine.

Trust is lacking on both sides. Mr Zelensky's first taste of geopolitics was when President Donald Trump urged him to supply dirt on Joe Biden, with a veiled threat that American support for Ukraine's security might depend on it. President Biden has not been much better, from a Ukrainian perspective. To cement relations with Germany, in May he waived sanctions that might have blocked Nord Stream 2.


The Economist

The West would like to support reform in Ukraine, but it is not easy. Corruption is rife. Oligarchs dominate the economy, control two of the bigger political parties and put other lawmakers on retainer. The IMF hesitates to throw money at a state from which billions have been stolen with apparent impunity.

The oligarchs are entrenched in public life in complex ways. Consider Mariupol, which nearly fell to pro-Kremlin forces during the war. The conscripts who were supposed to defend it were about to flee. The city was saved when the local steel baron, Rinat Akhmetov, urged his staff onto the streets and another oligarch, Ihor Kolomoisky, armed a militia. Seeing that the militiamen were ready to fight, Ukrainian soldiers stayed, too. Since then, Mariupol has become a haven for fugitives from the fighting: 100,000 out of a population of 540,000. The city looks far nicer than it did in 2014.

Hefty investment has improved its buses, roads, parks and rubbish collection. A new airport and university are planned.

Public opinion has shifted, too. Before the war two-thirds of people in Mariupol supported a pro-Russia political party. That share has fallen by half. Mr Putin's aggression has alienated the people he claims to defend. So the kind of "hybrid warfare" that worked in Donbas, where Russia stirred up local ethnic Russians to demand secession, will not work in Mariupol, says Mr Boichenko. Yet Russia still has a hand on Mariupol's throat. The amount of cargo processed in its port has fallen by half since 2012, first because of the war, then because Mr Putin made it harder for big ships to reach it from the Black Sea. Critics wonder if it is healthy for a city to depend so much on one tycoon. Mr Akhmetov is said to be Ukraine's richest man.

Mr Zelensky, a former comedian, has vowed to cut Ukraine's oligarchs down to size. He is expected to sign a new law soon that would allow a panel he appoints to label as "oligarchs" anyone who is very rich, finances a political party and controls media assets. This would make it harder for anyone so labelled to raise capital.

Critics note that Mr Zelensky has close ties to Mr Kolomoisky, one of the most controversial oligarchs, whose television channel hosted the show that propelled the president to stardom. They worry that the law might give Mr Zelensky too much discretion to cow his enemies and force them to sell their television channels to his friends. "It's to make oligarchs behave, politically," says Daria Kaleniuk of the Anti-Corruption Action Centre, an NGO. "Not to stop them from being oligarchs."

One illustration of how oligarchs weaken Ukraine is the retail market for gas. Many homes get their gas from companies controlled by Dmitry Firtash, a tycoon with Russian ties who is living in Vienna and fighting extradition to America for alleged corruption. His firms have huge unpaid debts to Naftogaz, the state wholesale supplier. This is money that could have been invested to increase domestic gas production. Meanwhile, a new Naftogaz CEO appointed by Mr Zelensky agreed to pay the state a fat dividend out of the firm's frosty-day fund. This will help Mr Zelensky build roads, which are popular, but will leave less in the kitty for Ukraine to buy emergency supplies should Mr Putin ramp up his pipeline power politics. ■

*An early version of this article was published online on October 17th 2021*

**The unexpected challenger**

# A small-town mayor takes on Hungary’s prime minister, Viktor Orban

*Peter Marki-Zay has unexpectedly won the opposition primary*

Oct 21st 2021 | BERLIN


UNTIL A FEW weeks ago only political junkies knew who Peter Marki-Zay was. That changed with his unexpected victory on October 17th in the run-off of the first-ever primary for the Hungarian opposition. The 49-year-old mayor of Hodmezovasarhely, a smallish and almost unpronounceable town in south-eastern Hungary, was elected by supporters of six parties as their candidate to try to replace Viktor Orban, Hungary’s prime minister, at parliamentary elections next April.

“We won the battle, but we need to win the war,” said Mr Marki-Zay, a conservative Catholic not affiliated with any party, at a rally in Budapest. Several politicians stood next to him, as did several relatives (he is a father of seven). Notably absent was his rival, Klara Dobrev, a vice-president of the European Parliament. Ms Dobrev merely acknowledged her defeat and pledged to support Mr Marki-Zay in his quest to remove Mr Orban from power.

Ms Dobrev won the first round of the primaries last month and Mr Marki-Zay had come third after Gergely Karacsony, the mayor of Budapest. Yet (after some hesitation) Mr Karacsony withdrew in Mr Marki-Zay's favour. Both reckoned that Ms Dobrev could not beat Mr Orban, mainly because she is married to Ferenc Gyurcsany, a wildly unpopular former prime minister who faced riots in 2006 after revelations that he had repeatedly lied about the state of the economy.

Now comes the harder part. The six opposition parties that range from leftist and liberal parties such as Momentum and Democratic Coalition to Jobbik, a former far-right party that has become more moderate in recent years, need to maintain their united front. As well as electing a common candidate for prime minister they have picked one unified candidate for each of Hungary's 106 constituencies. But even before the run-off they had started bickering. The small-town mayor accused Ms Dobrev of blackmailing politicians into voting for her. Ms Dobrev accused Mr Marki-Zay of methods reminiscent of Mr Orban and Donald Trump.

The opposition still needs to do a lot to win a majority, especially in smaller cities, says Robert Laszlo of Political Capital, a research outfit in Budapest. Forging a single joint list for the 93 proportionally elected seats will be the main source of conflict, he predicts; but he also worries about a fight for dominance between the allied parties. Moreover, Fidesz, the party of Mr Orban, will do whatever it can to drive wedges between the allies.

Mr Orban, who controls a two-thirds majority in parliament, will use every tool in his box to defeat his rival. He would have preferred to fight Mr Karacsony or Ms Dobrev, as the claim that the opposition is a puppet of Mr Gyurcsany will not be effective against a rural, conservative mayor. He will probably attack Mr Marki-Zay's hectic manner, his unpredictability and his penchant for long speeches. He will no doubt label him an "American agent", since he once worked for a car-parts firm in America, and that is all the evidence a conspiracy-monger like Mr Orban needs.

The prime minister is diligently wooing voters with their own money. He promises to send $2bn on a tax refund for families early next year. Pensioners will get a special bung in November and two weeks of extra state-pension payments in January. The minimum wage will rise.

Mr Orban’s friends control most media outlets. He can also count on the support of the various oligarchs who became rich on his watch. Yet despite all the prime minister’s advantages, polls put his challenger neck-and-neck with him. If the opposition alliance wins, Mr Marki-Zay has promised to mend fences with the European Union. He wants Hungary to join the European Public Prosecutor’s Office, which can investigate the theft of EU funds—a huge problem in Hungary. He also wants to prepare his country to adopt the euro.

Mr Marki-Zay has already surprised observers twice, first by winning the mayor’s office in a town previously loyal to Fidesz, and then by prevailing in the primary. A third upset—beating the man who made Hungary a byword for demagoguery—will be harder still. But it is not impossible. ■

**Liberty lady**

# Isabel Díaz Ayuso, the new hope of Spain's right

***Where will Madrid's leader go next?***

Oct 21st 2021 | MADRID


WHEN OWNERS of cafés and bars in Madrid wanted to honour the regional boss, Isabel Díaz Ayuso, after the hardest months of the pandemic were over, several offered dishes *a lo Ayuso*, *con dos huevos*, or with two eggs; a reference to the expression's other meaning: "with a pair of balls".

Ms Ayuso is riding a wave. In 2019 she was elected president of the Madrid region (including the city and surrounding towns, with 6.6m people), representing the centre-right People's Party (PP). Just a year later she faced a brutal first wave of the coronavirus, and heavy criticism for its toll on Madrid. Nonetheless, over the ensuing year, she fought to keep the region's businesses open—earning the gratitude of *madrileños* such as those bar owners. Today her face adorns signs in shops ("We Are All Ayuso"), and even socks depicting her as a Catholic saint.

Most important, in a snap election in May (after a falling out with her coalition partner), she romped to a second victory. The Socialists, who lead the national government, limped to third place. Pablo Iglesias, the leader of

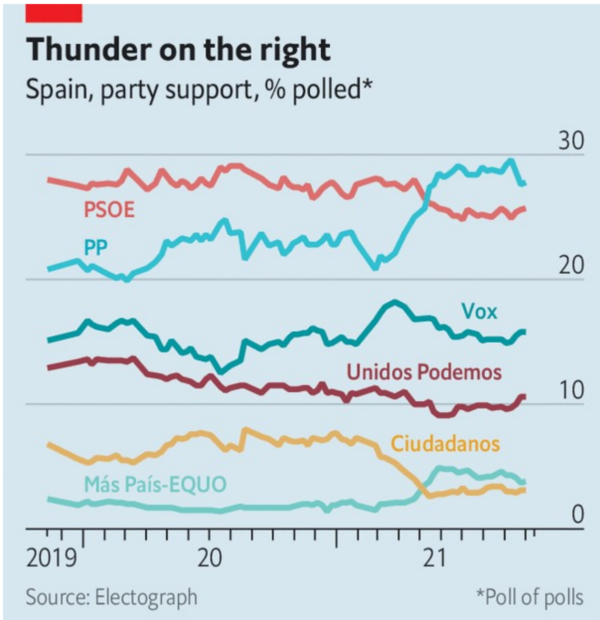
Podemos, a radical-left party that governs with the Socialists nationally, took a risk and left the cabinet to fight the Madrid elections. His fifth-place result led him to quit politics.

Ms Ayuso's victory came with a slogan simple to the point of crudity: "Liberty or communism". But freedom is a note she sounds again and again. "Madrid is liberty, or else it isn't Madrid," she tells *The Economist*, returning to the theme no matter what she is asked about. Madrid prospers when people are left alone to run businesses, do with their property as they will and live as they choose. Asked what government can do besides get out of the way, her answer is to give people more freedom of choice, for example in work schedules.

This is reflected in her economic policy. Her chief economic adviser, Javier Fernández-Lasquetty, gives credit to €53bn ($62bn) worth of tax cuts since 2004 for helping bring Madrid's once-sluggish growth rate above the national average. Madrid now has Spain's biggest regional economy, ahead of Catalonia's. In early September she scrapped the region's last independent tax, making it the only region under Spain's usual fiscal arrangements to lack any such levies. She praises economic rivalry between Spain's regions: "When has competition ever been a bad thing?"

This has led to carping. Ximo Puig, the Socialist president of Valencia, complained recently that Madrid's position as the capital brought jobs its government had done little to earn, allowing it to engage in "fiscal dumping". Ms Ayuso retorts that "this is the discourse of the politicians who cross their arms and do nothing." Neutral observers note that Madrid has been the capital since the 16th century; its economic rise is far more recent.

The party has seemed unsure how to handle its rising star. When she said she would run for the PP presidency in Madrid, the leadership acted startled, saying the regional party should be run by someone not also running a government. Ms Ayuso quipped: "I'm a woman and can do two things at once." (In every other region the PP governs, the jobs are held by the same person.) The press pitted her against Pablo Casado, the PP's national leader, in a trivial spat that lasted weeks.



The Economist

Mr Casado's attacks on Pedro Sánchez, the prime minister, are wearyingly predictable. His party leads in many polls (see chart), but Mr Casado's own ratings are poor. By contrast, Ms Ayuso is spontaneous and genuine, meaning that she makes headlines, if also gaffes. Asked whether she supported Mr Sánchez's proposal to ban prostitution, her criticism of the government included the line "They only want to destroy jobs." But her moment in the spotlight has led to speculation about a national future. For a time she did little to discourage it. She opened a Madrid office tasked with exploiting the global standing of Spanish to boost business, something more appropriate for the national government. Her repeated wanderings into issues beyond the remit of a regional leader—and a trip to Washington and New York to meet politicians and think-tankers at the height of the PP's internal spat—fuelled talk about her ambitions.

At the party's recent conference in Valencia, though, she pointedly thanked Mr Casado for assisting her career, and said "My place is Madrid." This will not end speculation. Unlike some of the party's barons, she comes from the middle class and has risen far. Critics who say she is no intellectual nonetheless concede her cleverness. Others say she was lucky, rather than brilliant, to share *madrileños'* desire not to be ordered to stay at home in the pandemic. Just 43, childless, churchless, single (so "you can tell the market is bare," she has joked) and even bearing a tattoo on her forearm, she is hardly an obvious leader of Spain’s traditional conservative party. But she proudly declares herself a liberal, not a conservative, saying the PP has room for both. Madrid is her place for now. But Spaniards are watching to see whether her style has room to grow. ■

Green-lit

# Olaf Scholz's "traffic-light" coalition is taking shape

*The broad outline has been agreed; details still to come*

Oct 23rd 2021 | BERLIN


ONE THING seemed clear during Germany's topsy-turvy election campaign. Whatever the result, the negotiations required to form the first government of the post-Angela Merkel era would be complex, difficult and extremely long. A fragmented electorate was likely to force Germany into its first three-way coalition since the 1950s, binding together parties previously united only by distrust and disagreement. Mrs Merkel, mused some, would have to don one of her famous coloured blazers for one last New Year's speech as chancellor, as the coalition talks ground into January.

The election result was indeed messy. Yet less than a month later matters have progressed more smoothly than anyone dared hope. The Social Democrats (SPD), who won a narrow victory over Mrs Merkel's conservative Christian Democratic bloc, are discussing a "traffic-light" coalition (the name comes from the parties' colours). with the Greens and Free Democrats (FDP), a pro-business outfit. The parties' negotiators spent a week huddled in a Berlin exhibition hall thrashing out their differences. So far, they appear to have got along swimmingly.

On October 15th the three parties issued a 12-page paper with the results of their deliberations so far. The FDP, the odd man out in what will otherwise be a left-leaning coalition, has won guarantees of no tax rises on personal or corporate income, and that Germany's deficit-limiting "debt brake", enshrined in the constitution, will not be touched. These are concessions to reality as much as to the FDP. The progressive parties could not hope to get tax increases or constitutional changes through the Bundesrat, Germany's upper house.

Seeking to prove that their putative alliance can be more than the sum of its parts, its members are promoting a narrative of "modernisation". This finds expression in commitments to halve the approval time for infrastructure schemes, accelerate digitalisation, loosen immigration laws, increase R&D spending and reduce the voting age to 16. There are also pledges to boost house building, tackle child poverty and to lift the hourly minimum wage to €12 ($14), the signature policy of Olaf Scholz, the SPD's candidate for chancellor.

Yet the paper is vague, or silent, on the trickiest issues. Its proposed tweaks to the creaking public-pension system will not suffice to see off a coming demographic crunch. Its ambivalent statement on the European Union's fiscal rules, over which governments will scrap early next year, "just shows that we couldn't agree on anything consistent", says Sven Giegold, a Green MEP involved in the negotiations.

The biggest open question is how the government can hope to fund the huge investments needed for Germany's promised energy and digital transitions. Pundits are buzzing with ideas, including the establishment of public companies or complex off-budget vehicles. But for now the parties promise merely to "ensure the necessary investments…within the framework of the constitutional debt brake". Threading this needle may be the trickiest part of the formal coalition talks to come.

Almost 300 negotiators, spread across 22 working groups, will now spend the coming weeks thrashing out the details. Their bosses must manage the delicate question of apportioning government jobs: the FDP and Greens both have their eye on the finance ministry, currently occupied by Mr Scholz. (After the surprise resignation of Jens Weidmann on October 20th, they must also agree on a new president of the Bundesbank.) All being well, the parties will conclude a formal coalition agreement—likely to be the length of a small book—in December. Assuming it is approved by the Green membership, and perhaps that of the SPD, Mr Scholz will be granted his wish of being anointed chancellor before Christmas, and Mrs Merkel hers of leaving her blazer in the wardrobe on December 31st. ■

*For more coverage of the German elections, visit our dedicated hub*

Trouble and knife

# Europe is in a muddle over ritual slaughter

*A patchwork of conflicting laws leaves Jews, Muslims and vegans confused*

Oct 21st 2021


EUROPE’S BUREAUCRATS are not usually shy about prescribing how exactly to prepare and present food. Yet there is one ultra-sensitive matter they prefer not to touch: whether Jews and Muslims should be allowed to slaughter animals as their faith usually requires, with just a swipe of a super-sharp knife that causes blood to cascade from the veins. American bodies that promote religious freedom have called the legal mess disgraceful; animal-rights activists and secular-minded organisations agree, for exactly opposite reasons.

A mess there is. Most EU members allow a religious exception to the general rule that animals should be stunned before slaughter. But Denmark, Sweden and Slovenia do not. Finland says that slaughter and stunning can be simultaneous. The Dutch decree that the animal must not be sentient for more than 40 seconds after its throat being cut. In fractious Belgium, the Dutch- and French-speaking regions ban non-stun slaughter.

Administratively separate Brussels, where many ethnic Moroccans live, has no such ban. This has prompted lawsuits by Jewish and Muslim groups; the latest has just been rejected by Belgium's constitutional court. Two Muslim bodies may take the matter to the European Court of Human Rights.

Jewish groups were also disappointed when, on October 5th, the European Commission laid out a strategy against anti-Semitism. While proposing ways to foster Jewish life and promote Holocaust remembrance, it ducked how to guarantee time-honoured Jewish customs, says Pinchas Goldschmidt of the Conference of European Rabbis. By refusing to spell out a right to kosher slaughter, Europe's institutions are sending an unfriendly message to Jews already fretting over their safety, says the rabbi. "This has more to do with two-legged animals than four-legged animals," he says. Bans on religious slaughter have a dark history in Europe: they were imposed in Switzerland in the 1890s to stop Jews immigrating and in Germany in the 1930s to make them leave.

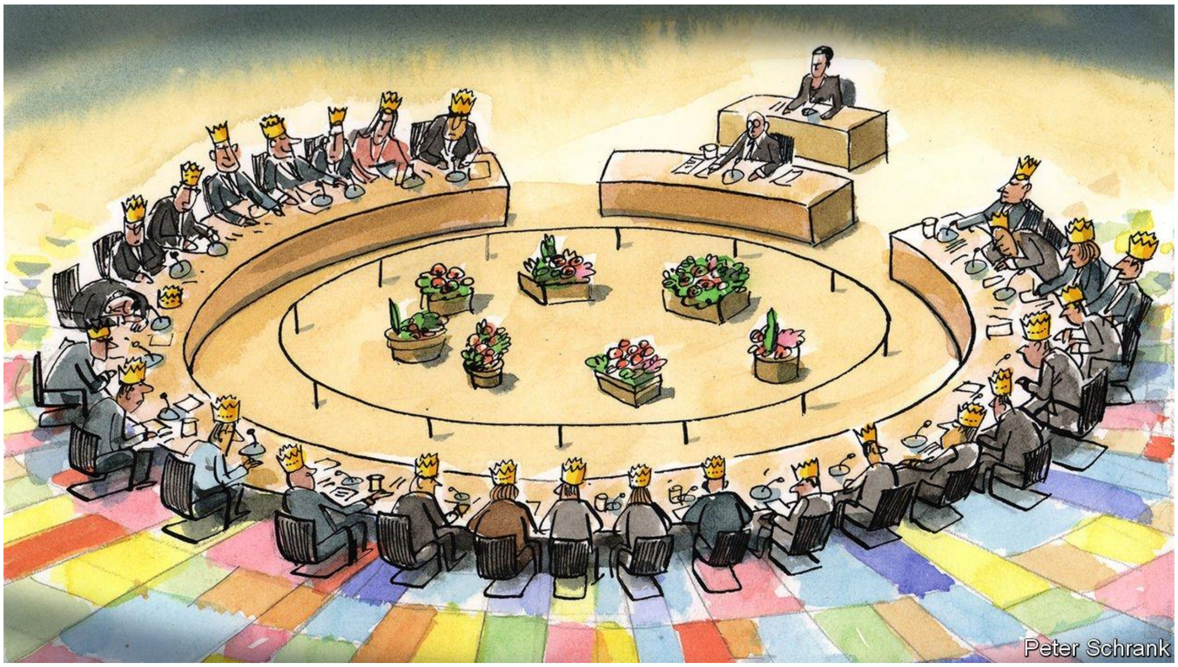
In Britain, where halal food is big business, the authorities are prevaricating. Religiously slaughtered meat should at least be clearly labelled so that the non-religious, as well as the devout, can follow their consciences, says Stephen Evans of the National Secular Society.

## Charlemagne

# In the EU, every leader becomes a monarch

### *The European Council hands leaders too much power*

Oct 23rd 2021




CORONATIONS HAVE taken many forms throughout European history. Spanish kings received a golden apple. French kings were doused in sacred oils from the Holy Ampulla in Reims. Napoleon went for a variation on a theme, oiling up and then crowning himself in the presence of a pope. Polish kings endured the alarming spectacle of waking up to an archbishop in their bedchamber on the big day.

Coronations of a different sort happen whenever the EU's 27 leaders gather for the European Council, the club's top institution, which began a two-day summit on October 21st. The Europa Building—a glass cube encasing a fluorescent oval nicknamed the "space egg" which hosts the gathering—may lack the pomp of Reims cathedral. Yet once presidents or prime ministers enter the ovum, they in effect become elected monarchs. For the next few hours, each leader abides by a royalist creed: *l'état, c'est moi,* with 27 national governments reduced to 27 individuals.

Invented in 1974 as an informal gentlemen's dining club (it was all gentlemen, back then), the European Council was a place for leaders to discuss continental issues in private. It sat outside the EU's treaties. Valéry Giscard d'Estaing, the French president who invented the forum, christened it with a regal flourish: "Le Sommet est mort. Vive le Conseil Européen!" (The summit is dead, long live the European Council). Skip forward five decades and it stands as the most powerful EU institution, settling every major question, whether constitutional or merely controversial.

As a result, the European Council hands vast powers to the individual leaders who sit on it. For some countries this is no big deal. In France, Emmanuel Macron sits atop a system that hands the president huge powers compared with his fellow leaders. For those with weaker executives, it is awkward. Italy has a carousel of changing leaders, with some there through talent and others via dumb luck. It has rattled through eight heads of government in Angela Merkel's 16 years as German chancellor. In an intimate setting like the European Council, where personality collides with power, this is a weakness. Why cut a deal with someone, if he or she will be replaced in a few months?

Unlike an actual king, EU leaders do have to worry about voters and parliaments at home. Sometimes this is tactics. Conjuring up the spectre of frothing MPs at home is a good way of winning concessions from peers. Some parliaments, particularly Scandinavian ones, do keep their leaders on a short leash—a tactic legislators in other countries would do well to follow. All leaders are aware of each others' domestic constraints.But the European Council exists to forge compromise. How to reach it ultimately comes down to the individuals at the table.

Once a decision is taken by the individual leaders, it is difficult to unpick. If 27 have agreed to do it, then 27 have to agree to undo it. Inertia is a powerful force in EU politics. Once the club sets off in a certain direction, it is hard to stop. For that reason, the European Council is supposed to be far-sighted, like a company board. While the EU's management does the day-to-day, heads of government should meet a few times a year to set the general direction. A few sentences are usually enough for the grandest schemes. Huge proposals, such as monetary union, begin life as a few lines in a European Council communiqué.

The European Council is explicitly not a legislator, according to the EU's treaties. Yet it increasingly finds itself in effect producing laws. Line-by-line haggling once reserved for major constitutional moments such as treaty change is now common when devising specific policies. In July 2020 leaders spent five days locked in argument over €1.8trn ($2.1trn) of spending, including the make-up of a €750bn package of new jointly guaranteed debt. Fractions of a percent of gross national income were fiddled with until the early hours. Since the European Council's conclusions are seen as a royal proclamation, it gives little leeway for the EU's actual legislators to fiddle again, if instructions are too specific.

To its defenders, the European Council is the most democratic EU institution. Leaders are household names. But the EU suffers from an attention deficit rather than a democratic one. On paper, the EU is a parliamentary system: an executive is beholden to a directly elected chamber, while national governments act collectively as co-legislators. Summits suck attention, and with it legitimacy, from the rest of the system, where MEPs and ministers grind out EU law. Leaders would rather do it themselves than delegate. The upshot? More meetings. In the 1990s, leaders gathered three or four times a year; in the 2010s, they met twice as often. If able to muster via video, the temptation is to convene even more.

## King for a day

Even the format of summits has drawbacks. The European Council is nimble, but narrow. The largest states shrink to the small clutch of advisers who make the trip. Decisions are made in deliberately stressful circumstances. Summits start late and end late because physical exhaustion mixes with social pressure to get deals over the line. It embeds the misleading idea that progress in the EU is possible only in crisis, even if artificially created. A tool that works well in emergencies is relied on for the everyday, a bit like using a fire extinguisher to fill a kettle.

Since individuals wield so much power, personality counts for a lot in the court of kings. France under François Hollande was rather meek. Mr Macron is happiest performing in a continental arena, pushing French ideas onto a much wider realm. Sheer force of character can lend even the smallest country clout. In such a forum a change of personnel can lead to a change of policy. The departure of Mrs Merkel, who this week was attending what may be her last such meeting, will change the dynamic at the EU’s top table. Another monarch will be along soon enough. The queen is dead. Long live the next one. ■

# Britain

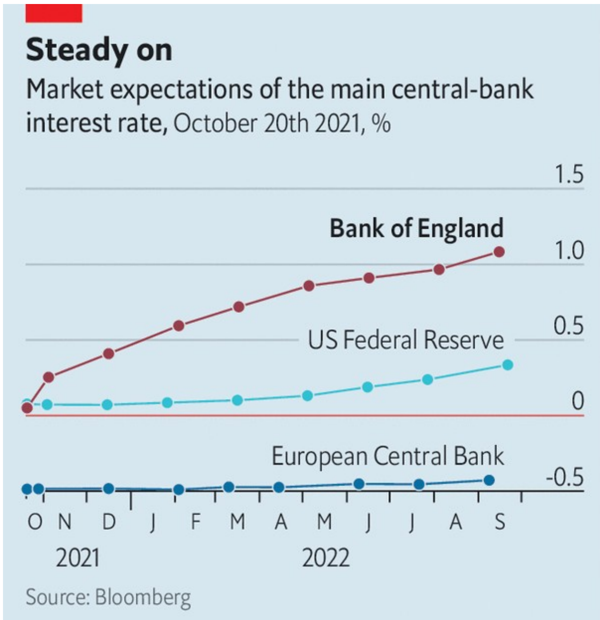
**Ready for a leap in the dark**

# Why the Bank of England is looking unusually hawkish

*Among other issues, policymakers fret about their credibility*

Oct 23rd 2021


THE BANK OF ENGLAND is an outlier. Investors expect it to raise interest rates before the end of the year and then to 1% by August 2022—faster than either the European Central Bank or the Federal Reserve (see chart). It may even start to do so before it finishes its programme of bond buying, known as quantitative easing. The bank's leaders feel themselves to be in an exceptionally tricky position. Ben Broadbent, the deputy governor and a member of its monetary-policy committee for a decade, reckons it is "the most challenging period for monetary policy of any I've seen".




The Economist

Some of the discomfort is shared across central banks. After the covid-19 pandemic struck, underlying inflation did not fall by as much as expected, as supply struggled to keep up with seismic shifts in demand. More recently snarled supply chains and energy shocks have kept prices buoyant. Britain's consumer-price index rose by 3.1% in the year to September, and the Bank of England expects it to climb above 4% later this year. Meanwhile, in September annual inflation soared to more than 5% in America and to 3.4% in the euro area.

Policymakers insist these pressures will fade. But as inflation is likely to persist well into next year, the risk is that people will start to factor it into their wage demands, generating a spiral of climbing prices and wages. The chances of that happening depend on the underlying strength of the real economy—about which there is little certainty. If policymakers overestimate its strength and contract credit too quickly, they will further wound it. If they underestimate its strength and offer loose credit conditions for too long, they risk exacerbating an inflation problem.

Given the circumstances, the Bank of England might be expected to be on the cautious end of the spectrum. The IMF predicts that America's economy will this year be bigger in real terms than it was in 2019, whereas Britain's will only reach that milestone in 2022. It also expects the British government to tighten fiscal policy more quickly than America or the euro area. Rishi Sunak, the chancellor of the exchequer, has trumpeted his rectitude in advance of the budget on October 27th. As he has put it: “Stacking up bills for future generations to pay is not just economically irresponsible—it is immoral.”

It is possible investors are overestimating the Bank of England’s hawkishness, after a decade of doing just that. The recent surge in confidence that a rate rise is due came after a speech on October 17th by Andrew Bailey, the Bank of England’s governor, in which he said “we will have to act”. But he added that action would only be in response to “a risk, particularly to medium-term inflation and to medium-term inflation expectations”. He did not specify that these conditions had been met.

A lack of data on Britain’s labour market after the withdrawal of pandemic wage support makes it unlikely that the Bank of England will raise rates as soon as November. But, despite the bank’s confusing communications strategy, the overall hawkish tilt is clear. Notably, Mr Bailey chose not to push back against growing expectations of a coming rate rise.

One reason Britain may pull away from its rich-world peers is that it suffered the double whammy of the pandemic and Brexit. The combination makes the health of the economy difficult to decipher, offering cause for caution. But the additional damage may also hasten the point at which underlying inflation becomes a problem.

A decision to raise interest rates would reflect credibility concerns. As a smaller and more open economy, Britain is especially vulnerable to shocks. Investors’ expectations of inflation in the next five years have been creeping up. Household expectations of inflation in the next five to ten years are at their highest since 2013.

Inflation expectations have been rising in America and the euro area, too. But the policy context is different. The Fed and the European Central Bank both see the 2010s as a period in which monetary policy was too tight, and inflation expectations were too soggy. Both have updated their inflation-fighting frameworks to allow for inflation higher than 2%. The Bank of England came much closer to its target and thus has not revised it. That leaves policymakers more antsy about any overshoot. In other words, the Bank of England is a victim of its past success.

The political mood in Britain further complicates things. In July the House of Lords economic-affairs select committee berated the bank for its lack of transparency about post-pandemic bond buying. Its schedule of bond purchases was strikingly similar to the Treasury's own schedule for bond sales, raising suspicions of blurred lines between the monetary and fiscal authorities. If outsiders start to believe that the Bank of England is more interested in propping up the Treasury than in curbing inflation—of which there is no good evidence to date—it would compound any credibility problems.

## All bark, no bite

The hawkish chatter may be a ploy to persuade markets to do the Bank of England's dirty work. If investors believe that monetary policy will tighten, then credit conditions in the real economy will tighten regardless of what the bank actually does. On October 14th Catherine Mann, a member of the monetary-policy committee, suggested that the increase in long-term interest rates reduced the need for rate-setters to follow through.

Plenty of sceptics do not believe anything more than tough talk is warranted. High household inflation expectations have not fed through to higher wages for at least 15 years, says Samuel Tombs of Pantheon Macroeconomics, a research firm. Andrew Goodwin of Oxford Economics, another research house, says that aside from some small sectors generating headlines, the story of much of today's labour market is in fact a glut of workers.

Britain's monetary policymakers may also struggle to push against the global forces that have dragged down interest rates over the past two decades, says Dario Perkins of TS Lombard, a research outfit. "Whenever one central bank has tried to break out of that over the past 20 years, they have ended up having to reverse it," he notes. Investors may expect the monetary-policy committee to strike out on its own, but it would still be a bold move. ■

Making a pig's ear of it

# The British government belatedly tries to prevent a porcine tragedy

*It faces a number of barriers, including the problem of "boar taint"*

Oct 23rd 2021


A PIG ARRIVES at an abattoir panicking. It enters a chamber full of carbon dioxide, which knocks it out. Then comes the disassembly line. Slaughtermen hang the hog upside down, slit its throat and remove the guts. Boners split it up with mechanical saws. Deboners slice muscle from bone. Trimmers ready the meat for packing. The work is hard, bloody and miserable. It can also take three years to master.

Across the country, these skilled workers are in short supply. The National Pig Association thinks there are 125,000 to 150,000 pigs waiting to be turned into pork. Boris Johnson, the prime minister, had sought to minimise the problem. But on October 14th the government relented to pressure, announcing 800 new six-month visas for butchers. They will have to get chopping fast to stop hundred of thousands of pigs from going to waste.

The problem started in China, where nearly half of British pork exports were sent last year, and which has a taste for basic cuts. With Chinese farms recovering from African swine fever, demand for imports has dropped this year—meaning more advanced abattoir workers are required. “When exporting to China you could send a whole leg...Here you need to make it all the way down to a loin steak,” explains Bethan Wilkins of the Agriculture and Horticulture Development Board, a quango.

This has affected farms across Europe, but those in Britain face additional problems. In September a carbon-dioxide shortage added to backlogs (the gas is used for packing meat as well as stunning). Post-Brexit immigration rules, particularly language ones, are also starting to bite. Most slaughterhouse butchers “wanted to work with their hands so probably [weren’t] top of their class,” says Nick Allen of the British Meat Producers Association. “Our HR people aren’t sure they’d pass this test in their own language.”

Modern pig farming is vulnerable to disruption. As Mr Allen notes: “Your holy grail is to produce the same number of pigs, week in week out regardless of season.” Welfare laws demand swine be given enough space to turn and lie down freely. A backlog makes this tricky. Even if farmers can find the space, they face other problems, too. Feed prices are high and slaughtering large pigs expensive. Boar taint, an odd taste in older, uncastrated male pigs, is an issue.

If the beasts cannot be killed in abattoirs, they will be killed on farms, which renders them legally unfit for human consumption. Though industry insiders welcome the visas, they reckon Britain needs more than 10,000 skilled butchers. The government will also establish a “private storage aid” scheme to store carcasses for three to six months, and will drop a levy on pork products. In the long run, the aim is to encourage more Britons into the industry. The problem is they are an animal-loving bunch.

Decarbonising Britain

# Britain has ambitious climate-change plans—and two problems

*Unfortunately, they are the most powerful government department and the prime minister*

Oct 23rd 2021


WHEN IT COMES to tackling climate change, the British government lacks neither ambition nor self-regard. In 2019 it enacted a law committing itself to reaching net zero greenhouse-gas emissions by 2050. A medium-sized country that accounts for 1% of global emissions believes it can pull the rest of the world along at a UN climate conference next month in Glasgow. But is Britain serious about keeping its own promises? A flurry of government plans released this week suggest not.

The net-zero strategy contains many bold targets, which often come with caveats. By 2035 Britain will be powered entirely by green electricity, “subject to security of supply”. By the same year, every new home-heating system installed should be an efficient electric-heat pump or a hydrogen boiler, so long as the costs of such things fall to a reasonable level. Tree-planting will more than double in speed.

Wisely, the government recognises that there are many ways to reach net-zero emissions. Britain may move quickly away from fossil fuels and to electricity provided by wind turbines and new nuclear-power stations. Alternatively, it could rely on hydrogen, capturing the carbon released when it is created from natural gas. The government will spray money at lots of tech—hydrogen production, small nuclear reactors, devices that take carbon from the air—in the hope that some work cheaply.

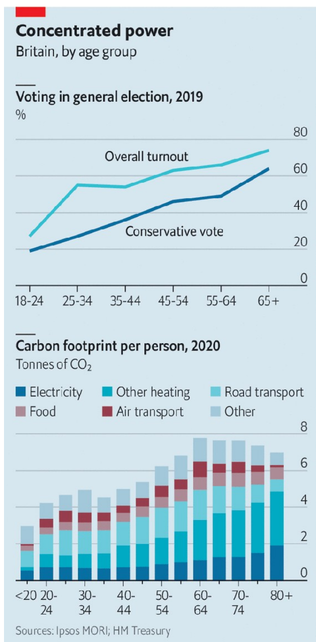
"It's more detailed and ambitious than anything you'll find elsewhere in the world," says Chris Stark, chief executive of the Climate Change Committee, an official watchdog. Inevitably, some government departments (such as business and transport) have bolder, more detailed plans than others (such as agriculture). But it is useful to know which are the laggards. Encouragingly, most political critics of the plans argued that the government should do more, not less.

Yet getting to net zero, or even close, is so difficult that Britain must do everything right. And there are two weak links in the chain that connects dreams to accomplishments. Unfortunately, these are the two strongest institutions in the government.

The first is the Treasury. The problem is not so much that it might have provided more money to speed the green transition, although that is true. A much-touted £450m ($620m) subsidy scheme for heat pumps may cover only 30,000 installations a year, for example. The larger problem is what Jill Rutter, a former Treasury official who now works at the Institute for Government, a think-tank, calls the department's "wholly owned, proprietorial approach" to tax.

The Treasury sees its job as collecting money from the public and distributing it to other departments, to be spent (often unwisely, it fears) on their projects. It does not regard taxes as devices to help departments achieve their objectives. So the transport department must try to decarbonise the roads by subsidising electric cars and banning the sale of petrol- and diesel-powered ones. The more obvious (and economically efficient) route of taxing fuel more highly is out of the question.

The second weak link is the prime minister, Boris Johnson. This week he shilled for his government's green plans with typical bonhomie. He cheerfully misquoted Gordon Gekko from the film "Wall Street", likened himself to Moses and assured readers of the *Sun* newspaper that the "greenshirts of the boiler police" would not "kick in your door with their sandal-clad feet" and seize their gas-fired devices.



The Economist

Political salesmanship and cheer are good things. The trouble with Mr Johnson is that he cannot bear to deliver bad news. The government's net-zero strategy contains soothing words about working with the grain of consumer choice. There is, as the prime minister puts it, not "a hair shirt in sight". But if Britain is to reach net zero, many noses must be put out of joint.

Especially noses belonging to people on whose votes Mr Johnson depends. The old have bigger carbon footprints than the young, largely because they tend to live alone or with one other person. Their consumption patterns will have to change. Yet the Conservative government relies on older voters (see charts). Nasty geographical patterns exacerbate the problem. Installing a heat pump costs around 7% of average net housing wealth across the Midlands and north of England, where the Conservatives won many new votes at the general election in 2019, but less than 3% in London, where the party has given up.

Mr Johnson could be bolder. A poll for *The Economist* by Ipsos MORI finds not only that 83% of Britons are concerned about climate change, but also that 51% believe the cost of tackling it will, in a year's time, be larger than any savings from things like lower heating bills and cheaper petrol. Only 9% think the savings will be higher than the costs. People expect the trade-off to be more favourable in ten years' time. Britons seem to be prepared for hair shirts. They just don't want to wear them forever.■

*For more coverage of climate change, register for The Climate Issue, our fortnightly newsletter, or visit our climate-change hub*

**Doffing the cap**

# The government wants pension funds to help with levelling up

*That will take more than a tweak to fee rules*

Oct 23rd 2021


EVEN BY THE standards of the OECD, a club of mostly rich countries, Britain has quite a nest-egg. In 2020 the organisation's pensions report valued the country's pot at $3.6trn, second only to America out of the 37 members. A sizeable chunk of that is set aside for workers who will not retire for decades, and who hope it will have grown by the time they do. So how should it be invested in the meantime?

In recent years, regulation has focused on keeping down costs. In 2016, wary of fund managers eating up workers' retirement savings with outsized charges, the government introduced a cap. Workplace pensions were restricted to investing in funds with annual fees of 0.75% or less.

That seems set to change. Spying a chance to redirect pension assets towards the government's "levelling up" ambitions, in August the prime minister and chancellor of the exchequer wrote to pension trustees to encourage them to start an “investment big bang”. By investing in unlisted British assets like green infrastructure and early-stage, innovative firms, trustees could ensure their savers were “benefiting from the fruits of UK ingenuity and enterprise”, securing better returns and backing British success stories at the same time.

In practice, this would mean pension schemes investing less in listed equities and bonds, and more in venture capital and infrastructure funds. The snag is the fee cap. Such funds tend to charge more than 0.75% per year, plus a share of the profits once returns beat a “hurdle” rate. And so Treasury officials are reportedly looking at ways to loosen the cap.

There is certainly room for more investment. A report by the government-funded British Business Bank (BBB) found that less than a fifth of British venture-capital funding between 2010 and 2019 came from pension funds. That compares with over 70% in America. Much of the funding gap was plugged by agencies like the European Investment Fund and the BBB.

Meanwhile, workers saving for retirement are missing out on an asset class that yields higher returns. The British Private Equity & Venture Capital Association, an industry body, reckons that funds managed by its members returned an average of 14% a year over the decade to 2019. That compares with an average of 8% a year by the FTSE All-Share index of British listed equities. Yet two-thirds of defined-contribution schemes, the most common type of workplace pension, do not invest in such assets at all.

That said, raising the fee cap is unlikely to trigger a rush of pension-fund investment, cautions Raj Mody of PwC, a consultancy. The workers most likely to benefit from high-risk, high-growth investments like venture capital are those furthest from retirement. Such savers also tend to have the smallest pots. And simply raising the cap will not solve the problem of unlisted funds’ performance fees, which can be volatile and depend on returns. “It is an enabling step, not a solution,” says Mr Mody.

Part of the reason American pension schemes can invest in venture capital at scale is their sheer size: the largest five funds have combined assets of $1.8trn. That gives them leverage to negotiate fees, and makes it economical to hire specialist teams. The closest thing Britain has to this scale is the

£276bn ($382bn) of pension assets in its Local Government Pension Scheme—which is split into 90 separate funds. A big bang might require more concentration of the Treasury's firepower. ■

**Railing against modernity**

# A plan to revive Britain's rural railways gathers steam

### *The poetry makes more sense than the economics*

Oct 23rd 2021 | Okehampton


IN THE SILENT ticket office, beneath the half-moon windows of the booths, a large green sign announces "OKEHAMPTON" to an empty room. On the platform, a faded poster reads "DEVON—Travel by rail". Those reading it have had little chance to do so. The last passenger train left Okehampton on June 3rd 1972. The town turned out to mourn: the mayor stood by, holding a wreath. On the line, between the sleepers, the grass started to grow.

But Okehampton is changing. New steel tracks gleam beneath the platform; diggers toil in the car park. The station is being reopened as part of the government's "Restoring Your Railway" fund, launched in January last year to keep a manifesto promise. The aim of the scheme is, as the transport secretary Grant Shapps explained, to "reverse catastrophic cuts to the rail network primarily led by the Beeching axe". Some 141 bids have been made; 25 have been successful. Okehampton is the first to reopen. Eleven miles of track have been laid with Brunellian briskness in four weeks. The first train arrives on November 20th at 7.10am.

In 1963 a report by Richard Beeching, chairman of the British Railways Board, earmarked 5,000 miles of track and 2,363 stations for closure. To this day, it is seen less as a piece of bureaucracy than as an act of “infamy”; its cuts “a wound that hasn’t healed”, according to Stewart Francis, a former chairman of the Rail Passengers’ Council. On the Beeching “wound”, Okehampton’s 11 miles of shiny new track are a mere sticking plaster.

But to see this in terms of pure numbers is to miss the point. More than sleepers and steel were lost. “Railways have a strange position in the British psyche,” says John Preston, a professor of rail transport at the University of Southampton. “A lot of rural lines disappeared that were emblematic of a way of life…for which there was a lot of nostalgia,” he notes.

The new line is less about travelling through Devon than about travelling through time. Lots of infrastructure is prosaic. In Britain trains become poetry, their lines not just crossing the land, but running on into the literature of Robert Louis Stevenson, John Betjeman and W.H. Auden. Restoring railways nods to this fictional England, a place of branch lines and straight backs, railway porters and station masters; an England paused, like the train in Edward Thomas’s poem “Adlestrop”, in the late June of national memory.

But poetry, while nice, has never been particularly profitable. It remains to be seen whether these lines will be. There could hardly be a worse time for them to open: in the first covid-19 lockdown passenger numbers fell by around 90% and “the post-covid demand path is not yet clear”, says Mr Preston. Still, in Okehampton the locals seem pleased. Becky Tipper, the Network Rail manager in charge of the reopening, was surprised when, as her workers started laying the track, “a crowd of people” turned out once again. This time, no wreaths. Instead, says Ms Tipper, they started clapping. ■

**Call in the troops, again**

# The British state is becoming worryingly reliant on its armed forces

*Covid-19 has accelerated an existing trend*

Oct 23rd 2021

BRITISH SOLDIERS have few battles to fight. But they have plenty else to do. On October 4th, after hurried training, nearly 200 hit the road, delivering petrol to the country's parched forecourts. The deployment came soon after others had been sent to Northern Ireland and Scotland—to drive ambulances, work in accident-and-emergency wards and run covid-19 testing facilities—and soon before some were sent to Wales. Within days, squaddies were off to help the struggling Home Office collect information about Afghan refugees.

When the state is in trouble, the armed forces step in—and they are being called upon increasingly often. According to the Ministry of Defence, there were 359 instances of civilian aid last year and there have been 237 in the year to date. That is up from 120 or so in the four previous years and fewer than 80 in 2015. Numbers are not available further back, but are expected to have been lower. As a former Tory cabinet minister notes, although governments have long got the armed forces to help out in a crisis, "calling in the troops seems to have become almost second nature now".

The trend reflects covid, changing military attitudes and the denuded capacity of the state. Legally the armed forces have no responsibility to prepare for civil crises—the task is left to local authorities, the health service, the police and so on. Military intervention is meant for niche jobs where building expertise is impractical (such as bomb disposal) or when capacity is overwhelmed. "In other words, it's last-resort stuff", explains Air Marshal Edward Stringer, who ran military operations at the Ministry of Defence from 2015 to 2017. It is a principle designed to stop the rest of the state from relying too much on military help, and to keep the armed forces focused on their actual job.

Things began to change under David Cameron, prime minister from 2010 to 2016. In 2012 troops provided security (and filled empty seats) at the Olympics after a private contractor, G4S, slipped up. When water levels rose a few years later, Mr Cameron's attitude was: "We're going to be dealing with some pretty horrendous floods. Why the hell are soldiers still sitting in barracks?" recalls Air Marshal Stringer. Local-authority budgets fell by a fifth in real terms in the decade to 2020. Councils became less reticent about calling for help, and a new precedent was set.

Covid accelerated the trend. Soldiers were called back from overseas operations, only to be pressed into work at home. The military's response—known as "Operation Rescript"—placed 20,000 troops on standby at covid's height, and built emergency hospitals, tested entire cities and delivered jabs. The armed forces took this as proof of their adaptability. But there was also a less palatable reason for their enlistment. "You can order a squaddie to work through the night. They don't do the working-time directive or indeed the minimum wage," notes the former minister. "You have a pool of manpower that is not unionised."

More sophisticated work often reflected deficiencies elsewhere. Logistics specialists built considerable expertise in Iraq and Afghanistan, and were well-suited to sorting out problems in PPE supply chains, for instance. Meanwhile resilience forums, which were supposed to co-ordinate local responses, turned out to be of wildly varying quality. At least 300 military planners were sent to government departments and local authorities to help. “They are the unsung heroes of the pandemic,” says Elisabeth Braw of the American Enterprise Institute, a think-tank. “Most civil servants don’t have any experience in contingency planning or planning under duress.”

The armed forces have a mixed attitude to domestic work. It is not what those on the ground signed up for. As a reservist notes, the Olympics were in summer and in London, which helped. “The COP summit is going to be in winter in Scotland; that’s slightly less appealing,” he admits. Yet the demand has come at a helpful time for the higher-ups. “Afghanistan and Iraq have wound down, and so there’s more and more forces lying around,” says Rod Thornton of King’s College London. “If they’re just lying around doing nothing, they will get cut.”

That the armed forces are still involved in the covid response—nearly two years into the crisis—demonstrates they are no longer a back-up option. “We’ve become complacent because we have said, if anything comes along, ‘We’ve got the British army’,” says Ms Braw. “It signals to countries that want to harm the UK that, if something were to happen, we have no clue.” As the pandemic recedes and things get back to normal, there will be less capability to take on extra work, says an official at the Ministry of Defence. It is a lot to ask of a shrinking organisation. The number of armed-forces personnel has fallen by more than 10% since 2012, and further cuts are planned in the next few years.

## You and whose army?

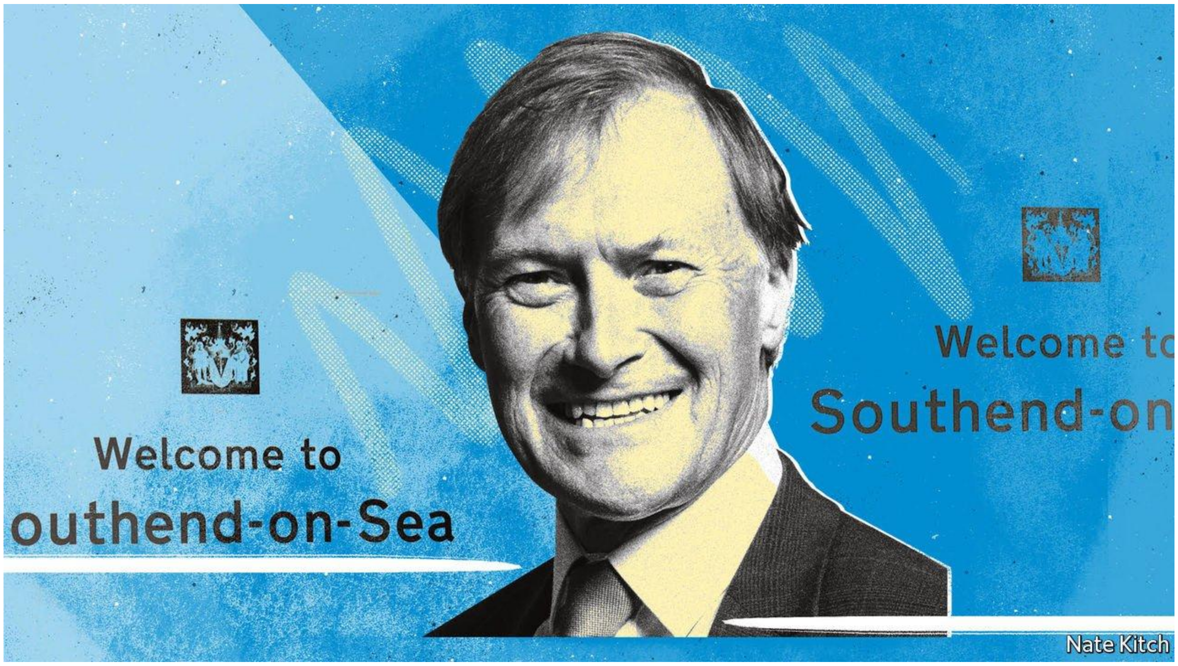
The so-called “integrated review” of Britain’s foreign, defence and aid policy, published in March, sets course for a Scandinavian-style “whole-of-society” approach. It includes a proposal to bring in a new team of civilian reservists, with outside expertise. Along with cuts to troop numbers, it is part of what Ben Wallace, the secretary of state for defence, has characterised as a transition from “mass mobilisation to information-age speed”. This may spell trouble. It seems unlikely that a shrunken armed forces—stuffed with coders, scientists and technology experts—will be particularly enthused by the prospect of driving fuel tankers. ■

Bagehot

# The death of Sir David Amess holds lessons for British politics

*So, too, does his life*

Oct 20th 2021




MPS GATHERED in the Palace of Westminster on October 18th, first in the House of Commons and then in St Margaret's Church, to celebrate the life of one of their own. They told stories about the man with the widest grin in Westminster: how this lifelong Roman Catholic had once got the pope to bless a boiled sweet by mistake and how this inveterate campaigner for city status for Southend deluged the authorities with proof of the place's worthiness, such as the fact that it held the world record for the number of triangles played simultaneously. They also hinted at serious questions about what his murder meant for British democracy. How could potential murderers be spotted before they struck? What should be done about internet trolls who spew hatred? And would MPs have to retreat behind armed guards or fortified screens when meeting their constituents?

Sir David Amess was never one of Parliament's high-flyers—indeed, he might well be described as a low-flyer. The furthest he climbed up the greasy pole was as a PPS (personal private secretary). But he was nevertheless a far more significant figure than many famous MPs. He was the embodiment of perhaps the most important political trend of the past 40 years: the rise of “Essex man”, that upwardly mobile figure who, thanks to his combination of self-reliance and truculence, drove the Thatcherite revolution of the 1980s and the Brexit revolution of the past decade.

His parents were Cockneys who moved to Essex in order to start a family. He was brought up in modest circumstances, with “an outside toilet and a tin bath hanging on the wall”, but nevertheless decided to become an MP in the same year that he passed the 11-plus test for the local grammar school. In the late 1970s he appeared in a political advertisement with Margaret Thatcher, who became his lifelong heroine. In 1983 he stood successfully for Basildon, then a swing seat that shifted to the Conservative column. And in 1997, after boundary changes, he switched to another Essex seat, Southend West. The constituency had been a pocket borough for the Guinness-Channon dynasty for more than a century, starting with Rupert Guinness, then passing to his wife, Gwendolyn, then to his son-in-law, the socialite diarist Henry “Chips” Channon, and finally to Chips’s son, Paul Channon. Sir David’s arrival was yet more proof that the party of the old aristocracy was becoming the party of the Essex man.

Sir David was also the quintessential local MP who believed that the highest calling of an elected member was to represent the people to the state rather than the state to the people. He gloried in the House of Commons in all its magnificent quirkiness, hanging an ornamental sword on his peg in the cloakroom, in deference to the tradition that swords had to be abandoned before entering the chamber. He disliked almost every change to the institution, not because he was a fuddy-duddy—or not just because he was a fuddy-duddy—but because they weakened Parliament’s power to oversee the executive. The end of late-night sittings was eroding camaraderie. The rise of professional politicians was turning Parliament into a rubber stamp. (He was particularly contemptuous of Tony Blair, “the biggest egotistical maniac I’ve ever met” and “sickeningly smooth” with it.) His proudest achievements were all local—keeping schools and hospitals open and preventing a forest of silver birches from being razed to the ground.

Sir David was happiest with his constituents. He relished the flummery of constituency life such as judging dog shows and raising money for a statue of Dame Vera Lynn, a popular wartime singer. But he didn't just relish the Friday constituency surgeries where MPs meet constituents to hear their problems. He regarded them as key to the sacred bond between elected politician and electors. He pooh-poohed threats which, like all too many MPs, he received, and held his surgeries in local community centres to make himself accessible. It was while he was holding one of these surgeries in a Methodist church that he was stabbed to death.

The atrocity has provoked an agonised debate about how to stop future attacks. Politicians from the prime minister down have insisted the best way to honour Sir David's legacy is to remain open to the public. But this is a little blasé. Sir David is the second MP to be killed at work in five years (the first being Jo Cox, a Labour MP who was murdered on her way to a surgery by a neo-Nazi). Many politicians are considering posting police officers and security guards in their surgeries. Policymakers are also discussing the question of how to identify potential assailants before they make it to surgeries. William Shawcross, who is reviewing the government's counter-terrorism Prevent strategy, to which the suspect was referred, is likely to argue that MI5 should have more say as to whether potential extremists are placed in anti-extremism programmes. Policy Exchange, an influential think-tank, urges the authorities to combat the grievance culture that poisons the minds of some young Muslims rather than waiting until they show signs of violent intent.

## In memoriam

The physical defence of MPs needs to be linked to a wider defence of their calling. There is a tendency in popular culture to demonise politicians as self-seeking parasites who do not care about the common good. But if you are interested in fiddling your way to wealth there are easier ways to do it than to put yourself in the public spotlight. There is a tendency among historians to treat the history of Parliament as a sideshow. But in fact the House of Commons has played a crucial role in providing a civilised outlet for social divisions that elsewhere result in violence. It is fitting that the queen should have honoured one of Sir David's quixotic causes by making Southend a city. It would be even more fitting if the political nation—

journalists and academics, as well as politicians—were to devote more energy to seeing the virtues as well as the failings of the institution to which he devoted his life. ■

*An early version of this article was published online on October 20th 2021*

# International

- [Climate change: Heated debates]

A reckoning in Glasgow

# Broken promises, energy shortages and covid-19 will hamper COP26

*It is the most important climate conference in years*

Oct 23rd 2021


LAST-MINUTE APPEALS are common in the weeks preceding the COP, the UN’s annual climate summit. Green groups urge world leaders to promise bold action. Poor countries ask rich ones for money. Ahead of this year’s event, which starts in Glasgow on October 31st, a group representing indigenous people is asking for donations of jackets, wellies and waterproofs. It notes that Amazonian indigenous folk who plan to attend “have not experienced a climate like a Scottish winter”.

This year’s summit is COP26—the 26th Conference of the Parties to the UN Framework Convention on Climate Change. It marks the most important climate talks since 2015, when the Paris agreement was signed. That is largely because of what countries promised they would do by this point. All countries are supposed to have announced tough new targets for reducing emissions. Rich countries are supposed to be helping poor ones finance green schemes. On both fronts, the world is coming up short. The proceedings in Glasgow may be chilly indeed.

The Paris agreement was adopted by the vast majority of countries. They promised to try to keep the increase in the Earth's mean surface temperature to "well below" 2°C compared with pre-industrial levels, and ideally to no more than 1.5°C. In terms of the detrimental impact of global warming, the gap between those two targets is large. But temperatures have already risen by 1.1-1.3°C since the invention of the steam engine. So limiting heating to 1.5°C is a colossal task. To have a good chance of achieving it, the world must make net emissions of carbon dioxide 45% lower in 2030 than they were in 2010, and reduce them to zero by the middle of this century.

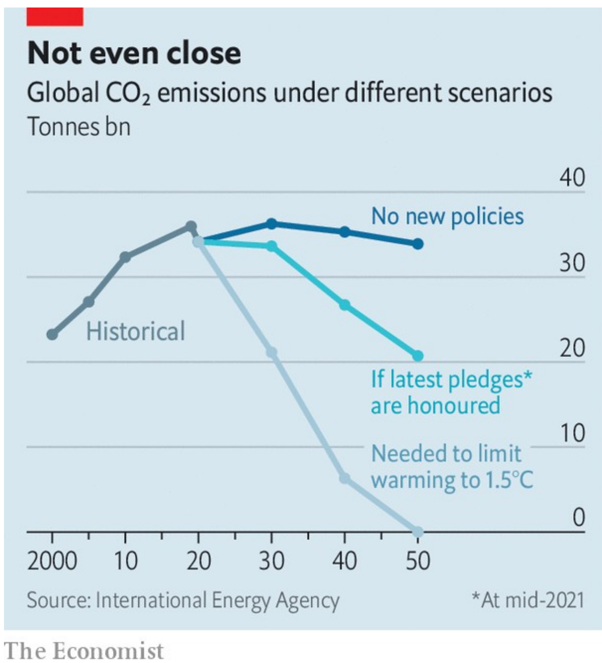
The Paris agreement did not demand such cuts—nor could it have done so. Instead countries pledged themselves to emission-reduction strategies known as Nationally Determined Contributions (NDCs). The NDCs brought to the table in Paris did not match the agreement's lofty aims. They put the world on track to be around 3°C hotter than the pre-industrial baseline by 2100. But the treaty required that every five years all parties should up their game with new, more ambitious NDCs. The Glasgow conference (which is taking place a year later than planned, because of covid-19) is the due date for the first round of beefed-up pledges.

Governments began announcing new pledges last year. Rich countries have been more ambitious than poor ones. The European Union (EU) promises that by the end of the decade it will have cut emissions by 55% compared with 1990 levels. It had previously promised only a 40% decline. America says that by 2030 it will have cut emissions by 50-52% from 2005 levels. It had previously proposed only a 26-28% cut by 2025. These two parties account for 23% of the world's carbon-dioxide emissions.

## A lot of hot air

Australia is an outlier among rich countries. Its original NDC was not particularly ambitious. Nor is its new one. Meanwhile many emerging economies have set lax targets. Russia and Indonesia are promising no new effort. By employing some creative carbon accounting, Mexico and Brazil have produced new strategies that are less ambitious than their original plans.

India, which is responsible for 7% of carbon-dioxide emissions, has not yet published a fresh climate strategy. Nor has China, which accounts for 28%. Last year it said that it planned to make its emissions peak "before" 2030, having previously said only that it would reach this milestone "around" that time. Many would like it to bring this date forward, but Li Shuo of Greenpeace thinks that is unlikely to happen soon. He says there is more chance China might strengthen its pledge by declaring an absolute figure above which its annual emissions will not rise.




Taken together, the new targets underwhelm. Promises made by the middle of this year givea 50% chance of keeping warming below 2.1°C but only a 5% chance of keeping it under 1.5°C, according to the International Energy Agency (IEA), a forecaster (see chart). And this assumes that all the pledges are honoured, which is far from guaranteed.

On the tail of these lacklustre announcements is a failure relating to funding for developing countries. In 2009 rich countries vowed that by 2020 they would be providing poor ones with $100bn in climate finance each year. Roughly equal amounts were to go towards adaptation and to reducing emissions. The figure is a fraction of the $2trn annual investment that the IEA believes developing countries need. But the promise is supposed to signal the willingness of richer countries to make sacrifices for the good of the planet.

In 2019 only $80bn was provided, according to the OECD, a club of rich countries. This year a last-minute whip-round could perhaps see the total rise above $100bn before the conference. But poor countries are miffed. The original deadline was 2020—when, because of the pandemic, the total was probably lower even than in 2019. And only about 25% of the cash is financing ways of adapting to climate change, instead of the 50% promised.

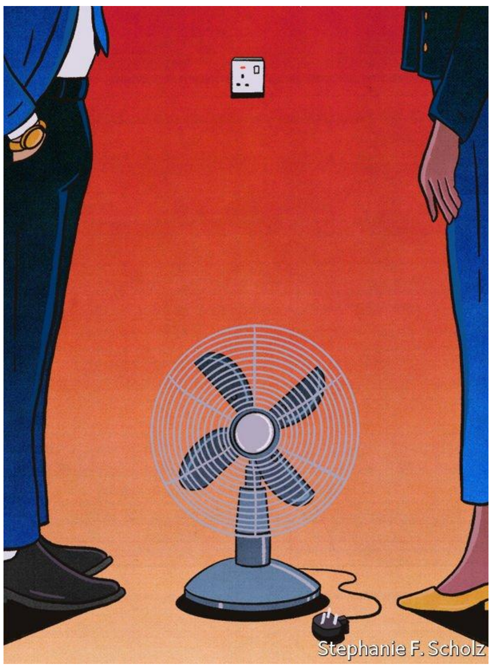
All these disappointments will cause hand-wringing at the summit. Rich countries may re-emphasise their willingness to lend. They may offer an aggregate figure over several years, such as $500bn between 2020 and 2025. But no country is likely to swiftly adjust its new NDC. Designing them takes months of work and co-ordination across government departments.

Instead, progress in Glasgow will probably have to come from agreements struck in narrower debates, the outcomes of which will help countries implement their existing climate strategies, and make them more likely to increase their ambitions in the future. One job is to agree on rules for international carbon markets, such as what double-counting means when it comes to carbon credits.

A second debate is about "loss and damage", meaning how far countries that will suffer most from climate change should receive compensation. The topic is taboo among rich countries. In Paris they eventually allowed the concept to be mentioned in the agreement, but resisted language that might actually lead to something being done. Poor countries hope to move it up the agenda and to lay the groundwork for more concrete discussions in the future.

Third comes the effort to get governments to sign up to sector-level pledges, such as to stop burning coal, ban the sale of internal-combustion engines and halt deforestation. The Global Methane Pledge, a promising new pact, calls for cutting global methane emissions by at least 30% from 2020 levels by 2030. Its backers include America and the EU. Measured over 20 years, a tonne of methane causes 86 times more warming than a tonne of carbon dioxide but the gas is naturally removed from the atmosphere much faster than $CO_2$. The Climate and Clean Air Coalition, made up of governments and lobby groups, says cutting human-made methane emissions in half by 2050 could lower temperatures by about 0.2°C.

The fourth topic is what Helen Mountford of the World Resources Institute, a think-tank, calls "keeping 1.5°C alive". Green groups and some governments want countries to acknowledge that the world is failing to slow global warming, and to state explicitly that they wish to keep the increase under 1.5°C. China and India refused to back a similar statement at the G20 summit in July. They feel that if the temperature targets are revised the same should happen to the climate-finance goals.




A global energy shortage provides an unfortunate backdrop to the discussions. In Asia coal shortages are forcing factories to curb output. European gas and power prices have gone berserk. Governments are watching Joe Biden try to get legislation containing support for clean-energy firms through Congress. The wrangling is a reminder of the difficulties democratic countries face when they seek to enact big climate reforms.

Covid-19 has increased the costs and risks of getting negotiators to the summit. Poor countries, in particular, may send fewer than usual. Even in normal times they are at a disadvantage to rich places, which can send hordes of technocrats. The fact that many rich countries appear to be past the worst of the pandemic, while poor ones are still struggling through it, will only make such inequalities rankle more.

## Block parties

All this could deepen the usual factionalism. Delegations attending the COP typically form three blocks. Poor countries ask rich ones for more ambition and more money. Rich countries try to convince emerging ones, which account for the lion's share of the growth in emissions, to pollute less. And emerging economies try to tell rich countries that they are in fact part of the poor and vulnerable group, while also reminding rich countries that they got where they are today by polluting.

Yet there are some signs that these old alliances are loosening. Emerging economies have less excuse for inaction than they did when Donald Trump was in the White House, says Laurence Tubiana of the European Climate Foundation, a lobby group (Mr Trump pulled America out of the Paris agreement; it rejoined in February). Some, such as South Africa, are becoming more ambitious. In September China said it would no longer finance new coal-fired power stations outside its borders. Natural disasters in rich countries, such as floods in Germany that killed almost 200 people, may bring a new sense of urgency.

Any progress made at COP26 will probably be incremental, not a "big leap" of the sort John Kerry, America's climate envoy, has promised. That will enrage grassroots activists. And it hardly matches the scale of the challenge. Two years from now a "Global Stocktake" scheduled under the Paris agreement will examine how well governments are implementing their climate plans. If their most recent climate promises are any indication, the stocktake could reveal a rather bare cupboard.■

*For more coverage of climate change, register for The Climate Issue, our fortnightly newsletter, or visit our climate-change hub*

# Business

The third star

# Samsung Electronics wants to dominate cutting-edge chipmaking

***The South Korean dynasty's third generation is taking on TSMC and Intel. Can it succeed?***

Oct 21st 2021


SAMSUNG ELECTRONICS (SE) is a behemoth. The South Korean tech company is the crown jewel of the mighty Samsung *chaebol*, as the country's conglomerates are known. It makes more smartphones than any other company in the world, as well as home-entertainment systems and appliances. It dominates the manufacturing of memory chips, which are used to store data on electronic devices and whose price has been pushed up by the global semiconductor shortage. SE's annual revenues of $200bn are not much lower than those of Apple, the most valuable firm in history, and it is sitting on a cash pile of $100bn.

Now both SE and its parent group, whose name means "three stars", are entering a critical new chapter. In August Lee Jae-yong, the scion of the family which founded Samsung in 1938, was released from prison, where he spent two stints after a conviction for his involvement in a bribery scandal.

He is finally taking full control of the empire from his late father, Lee Kun-hee, who died last year. Succession was complicated first by the elder Lee's six-year coma, then by his son's bribery conviction, linked to SE's efforts to win the government's backing for a merger of two Samsung subsidiaries that would cement his control.

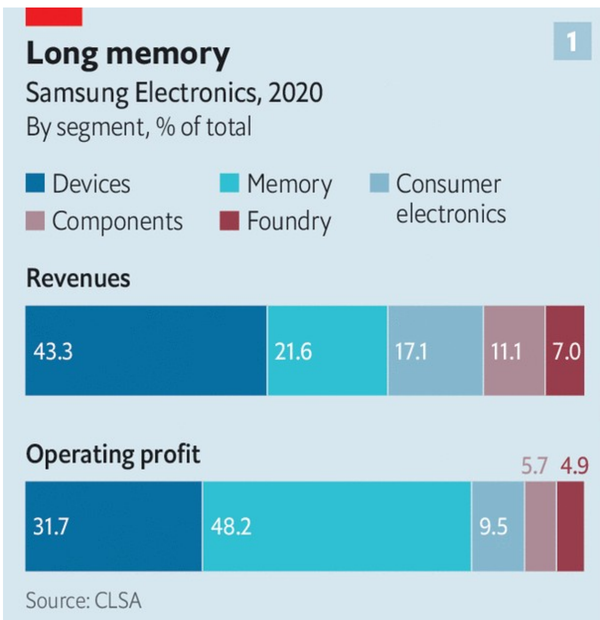
Free at last, Mr Lee has grand plans for the company, which he wants to become as dominant in cutting-edge logic chips, used for processing information, as it already is in memory and smartphones. That will pit SE head-to-head with chipmaking powerhouses such as TSMC of Taiwan and America's Intel, and thrust it into a fierce global contest over one of the world's most strategic industries.

On October 7th SE confirmed it will manufacture some of the world's most advanced logic microprocessors, based on its novel "gate-all-around" architecture with transistors measuring three nanometres (billionths of a metre), in 2022. It also surprised analysts by announcing a plan to mass-produce two-nanometre chips from 2025. It is forecast to invest an eye-watering $37bn or so in capital expenditure across its businesses this year. And it is winning new customers, such as Nvidia, an American chip designer, and Tesla, an electric-car maker.

The outcome of Mr Lee's gamble will have profound consequences—and not just for Samsung. It matters to South Korea, whose president justified Mr Lee's parole as being in the national interest, given the *chaebol'*s importance to the economy. And it will influence the global semiconductor industry, the critical nature of which has been underscored by the worldwide chip shortage. To ensure success, the man whom acquaintances describe as shy, decent and astute must also summon a degree of ruthlessness.

SE is a complex corporate creature with a strategic challenge and underwhelming stockmarket performance. It is best understood as divided into two main businesses. The first makes "sets": smartphones, televisions and household appliances. The second produces "components", which go into Samsung's own sets, as well as being sold to external customers like Apple. Samsung splits its sets business further into two divisions: TVs and appliances such as washing machines, and digital devices (chiefly smartphones). The component business, meanwhile, comprises semiconductors and displays.

The sets business is not a growth engine. In Mr Lee's hierarchy of SE operations, say people close to the company, home appliances sit at the bottom, below the TV unit with similarly low margins but a bigger role in reinforcing SE's valuable brand. Next comes the handset business, which in the early 2010s contributed over half of profits. Although its obituary has been written several times before, it continues to generate lots of cash and, thanks to a new fast-selling range of phones with foldable screens, some fresh optimism.



The Economist

Atop the hierarchy sit semiconductors. Historically, SE has focused on memory chips, where it has 44% of the global market for DRAM chips (used for temporary storage in desktops) and 36% in NAND devices (used for permanent storage in mobiles). The memory business brings in just over 20% of revenues but nearly half of operating profits (see chart 1). Everything else is potentially expendable in the service of its juicy margins. If a "set" business has a disagreement with a components unit over pricing or other terms, insiders say, the component business takes precedence. According to the company, its unique ecosystem benefits from having diverse businesses which allow internal innovation while providing stability through the ups and downs of industry cycles.

## Late-onset memory loss

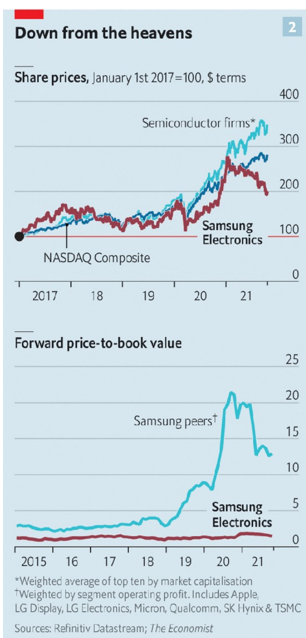
Analysts reckon that SE's memory-making has plenty of life left in it. Because such chips are critical for storing data across industries, it is "only going in one direction: up", says Nicolas Gaudois of UBS, a bank. Omdia, a research firm, predicts that the global memory-chip market will expand at double-digit rates each year between 2020 and 2025. It is now less cyclical thanks to surging demand from data centres and, on the supply side, consolidation in the industry where ever more extreme miniaturisation means that rivals can no longer step up production as easily as before. SE says that it has proven an ability to innovate and extract value in established businesses. Internally, though, certain SE executives worry that memory is a mature operation. And some investors fret that demand for memory chips may soften towards the end of the year.

One option would be to follow Apple and develop a services business, which has grown from 8% of the iPhone-maker's revenues in 2012 to a fifth. However, despite a few successes, notably in payments and health apps, SE's efforts to add software and services to its world-beating hardware have been sporadic.

This is partly because SE's hardware-first approach is deeply rooted in its culture. It will probably be reinforced by Mr Lee's character and experience. "His disposition is very cautious and conservative, more so than his father," says a former SE executive. This innate conservatism may have been strengthened by his first big endeavour after attending Harvard Business School. In the late 1990s, at the height of the dotcom bubble, he invested in eSamsung, a venture-capital firm. Watching the subsequent bust left Mr Lee sceptical of Korean software engineers, says the former executive; eSamsung was shut down.

Going big on services could also jeopardise SE's long-standing and successful partnerships with software giants such as Google and Microsoft. In 2014 SE launched a music-streaming service called Milk Music, which despite its success was scrapped two years later. "Google viewed Samsung's software efforts as fragmenting the Android ecosystem and felt threatened," recalls a former executive. "I feel pretty sure that Samsung has given up on software and services," he sighs. He worries about a big missed opportunity. Even if the firm talks about making another run at it, he adds, this would probably be merely to keep Google and other partners honest.

Another problem is China. The country is an important source of demand for both memory and logic chips. To help satisfy it, SE is finishing its second memory-chip plant in the western city of Xi'an this year. Despite rising tensions between China and the West, in particular America, neither SE nor any other South Korean chipmaker is likely to give up on their giant neighbour, which is likely to remain a big buyer for many years (especially for the technically more complex DRAM chips). This means that SE must walk a fine line to keep Chinese clients while not relinquishing American customers.



The Economist

This array of complications and risks helps explain SE's underperformance relative to other giants, both in consumer technology (Apple and Xiaomi of China) and chipmaking (TSMC and Intel). Because it combines several relatively distinct businesses, the company suffers from a conglomerate discount. It is listed only in Seoul, where limits on exposure to individual stocks have in the past pushed local investors to sell SE, which accounts for nearly a fifth of the KOSPI stockmarket index, whenever its share price spiked. And SE's enormous cash pile depresses returns.

As a result, despite solid operating performance SE's shares have traded between one and one-and-a-half times forward book value, far below its peers. Increasing its dividend from 22% of net profit in 2018 to 78% in 2020 helped more than double SE's market value in the two years to January. But Apple's nearly trebled in the same period. A strong outlook for semiconductors and lower cyclicality in memory chips have yet to translate into a richer valuation. Having surged by nearly half in late 2020, SE's market capitalisation has declined by 13% since the start of the year, while New York's tech-heavy NASDAQ index and a basket of global chipmakers have made gains (see chart 2).

## The logical move

Mr Lee's bet on cutting-edge logic chips is designed to reverse the underperformance. The idea is to win a big slice of a fast-growing and lucrative market for non-memory chips, which account for 70% of the $550bn global semiconductor market. Mr Lee has set out a goal to match SE's roughly 40% market share in memory in the "foundry" business of manufacturing processors for customers.

The Samsung scion has his work cut out. SE's foundry division took a hit in 2016 when Apple moved all its business for the A-series processor for the iPhone to TSMC. That shock offered a stark example of how SE's complex structure throws up possible conflicts of interest with key customers. Half of SE's foundry output goes to its sets divisions, with the rest supplying outside customers. Apple preferred TSMC, a pure foundry firm, to SE, with which it competes in smartphones.

So far progress towards Mr Lee's ambitious target, first signalled a few years ago, has been slow. The firm has around 15% of the foundry market, compared with more than 50% for TSMC, which plans to spend $100bn over the next three years on new capacity. SE's non-memory chip revenues make up only 7% of total sales (though that is up from nothing in 2005 and the company also makes some other specialised processors for sensors and the like). The share of profits is even lower.

Perceived conflicts of interest are not its only challenge. Although the memory and logic businesses share some commonalities and overheads, they differ in important ways. Producing memory chips is chiefly about speed, volume and economies of scale. Making high-end logic processors is much more complex technologically, with engineering done at nanoscopic scales and customers increasingly desiring silicon customised for their purposes.

On technology SE (and, to be fair, just about everyone else) has fallen behind TSMC in at least the last two generations of cutting-edge processors. Part of that may be down to sensible caution. But reticence can further complicate relations with customers, many of which are reluctant to place orders unless they can get capacity guarantees, says a semiconductor executive at another firm. Rather than anticipating their needs, SE has been reactive, says the executive.

Cognisant of these problems, Mr Lee clearly wants to accelerate SE's transformation. The company is using its research-and-development (R&D) prowess to take some risks on next-generation logic chips, for example with its new advanced chip architecture. The company does not break out how much of its capital spending is going to memory chips and how much to logic. According to CLSA, a broker, there is an emphasis on logic chips, which are also more R&D intensive.

## An expanding constellation

SE is also mulling a $17bn factory to manufacture cutting-edge logic chips in Texas, to appease America's desire to bring more chipmaking back home from Asia (and, possibly, to partake in a delayed $52bn subsidy splurge on the semiconductor industry that Congress is considering). And the new customers it is courting, such as Nvidia and Tesla, have no overlap with its other businesses, notes Sanjeev Rana of CLSA.

Help could come from the fraught geopolitics of semiconductors. Although rising technonationalism over chip design and manufacture makes governments favour domestic production and local champions, it may nevertheless end up benefiting SE. As China ratchets up military pressure on Taiwan, which it considers part of its territory, fears are growing over TSMC's future. According to another semiconductor executive, many firms that use TSMC are scrambling to reduce exposure to the Taiwanese company, just in case. As TSMC's closest rival, Samsung could be a big beneficiary. SE has the biggest industrial complex of semiconductor fabs and engineers in the world, and some of the best chip technology, says Mark Newman, a former Samsung group executive who is the chief commercial officer of Nyobolt, a battery startup.

One way to turbocharge the transition would be to split SE into its constituent businesses, as investment bankers have long recommended. This would also eliminate the potential conflicts of interest that have hampered SE's foundry division. A dual listing in America, meanwhile, could help with the KOSPI-related drag.

Neither a break-up nor another listing looks likely, however. Mr Lee seems reluctant to countenance the radical first option. One attempt at persuading SE into the second around 2016, as part of an activist campaign by Elliott Management, an American hedge fund which had taken a stake, failed. Aware of this, shareholders are therefore putting pressure on SE to at least do something about its unused cash. One idea would be to pay out 100% of free cashflow to them. Alternatively, SE could do a big acquisition. The company states that "the founding family is clearly aligned with all other shareholders in its objectives to create maximum value and see that value properly reflected in the market."

To make a material difference to SE's financial performance any deal would have to be big. Mr Lee's predisposition and preferences make such a gamble improbable in software and services. That leaves chipmaking as the place where the firm's cash could be spent. One potential takeover target is NXP Semiconductors, a Dutch firm that specialises in the fast-growing market for automotive chips. With a market value of $50bn it would be a heavy lift, but not an impossible one.

If Samsung Electronics is to become a logic-chip star to rival TSMC, Mr Lee had better get lifting. Last year he vowed not to hand management of SE to his children (though the Lees are likely to retain the biggest stake in the company through various family-controlled vehicles). The promise to be the last Lee to run the firm, combined with what insiders say are other improvements to corporate governance, clears the path to the top for its multitude of talented executives. They must be hoping that Mr Lee leaves them a legacy that is less complicated than his father's. ■

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*An early version of this article was published online on October 17th 2021*

About-face

# Facebook's rumoured name-change reflects ambition—and weakness

*The company is more than a social network. It also has a reputation problem*

Oct 21st 2021


WORTH NEARLY $1TRN, Facebook is the world's sixth-most-valuable company. Its revenues have grown by 56% in the past year, and its share price by more than a quarter. Nearly 3bn people use its products every month. Why would such a glittering success change its name, as the *Verge*, a news site, reports it plans to within days?

The likely official reason for the rebranding, which Facebook has not confirmed, is that the firm has outgrown the social network that Mark Zuckerberg started 17 years ago in a Harvard dorm. Today it encompasses other social apps (Instagram, WhatsApp, Messenger) and video hardware (Oculus, Portal). It has launched a digital wallet (Novi) and may yet offer a currency (Diem). Mr Zuckerberg expects people eventually to associate his firm more with the "metaverse", a virtual space for work, play and more, than with social media. This week Facebook said it would hire 10,000 people to work on the metaverse.

If the Facebook network is to take a back seat, there may be a case for regrouping under a new name. Facebook wouldn't be the first tech titan to do so. In 2015 Google set up Alphabet, a holding company for the search engine and its many side projects. Under this model, Facebook would become just another app within a wider family, albeit by far its biggest earner.

There is another, less flattering possible motive for a makeover. For all its pecuniary success, the Facebook brand has become tarnished. The social network is blamed for stoking everything from teenage anorexia to insurrection at the US Capitol. This month Frances Haugen, a former employee, told Congress that Facebook was failing to moderate content on its platform and covering up a drop in young American users (it denies this). Public trust in it is lower than in most tech giants, and falling. Although two years ago the firm started branding its apps as being "from Facebook", its new "smart glasses", which can record video and take phone calls, feature only the logo of its partner, Ray-Ban.

Facebook investors seem untroubled. But its social apps' growing toxicity threaten to poison its other projects. On October 19th Democratic senators signed a letter arguing that Novi and Diem should be scrapped, since "Facebook cannot be trusted to manage a payment system or digital currency when its existing ability to manage risks and keep consumers safe has proven wholly insufficient."

Mr Zuckerberg himself has been a lightning rod for much of the criticism of Facebook, and of bossy tech firms more generally. As the all-powerful founder, he has a higher profile than his opposite numbers at TikTok, YouTube and other social networks. Normally, a brand facing a reputational crisis might dump its unpopular CEO. But Mr Zuckerberg's position is unassailable, which may explain why he would want to dump the brand instead. ■

*An early version of this article was published online on October 20th 2021*

**Bartleby**

# The meaning of mission statements

***Investors can learn a lot from the way that companies describe their goals***

Oct 23rd 2021


Paul Blow

"WE ARE A community company committed to maximum global impact. Our mission is to elevate the world's consciousness." The opening lines of WeWork's prospectus for its planned initial public offering in 2019 seem to confirm the worst about mission statements. People sit in a room earnestly discussing the differences between their purpose, their vision and their mission. There are whiteboards and bottles of kombucha. Nonsense ensues.

But even guff has meaning. For investors in young companies in particular, the mission statement sends useful signals. It articulates what a firm does and gives clues to where its priorities lie. Such information matters all the more when founders exercise outsized voting power. The WeWork prospectus helped elevate the consciousness of investors that the property company had lost its marbles. WeWork ended up scrapping both its listing and its boss.

To see why mission statements deserve more than an eye-roll, look first at entities that lack them. Of the 58 prospectuses filed with America's

Securities and Exchange Commission in the first two weeks of this month, more than a third were for special purpose acquisition companies. SPACs are a type of shell company whose goal is to raise money for an unspecified future deal. They are purposelessness incarnate.

“We have not identified any potential business combination target, and we have not, nor has anyone on our behalf, initiated any substantive discussions, directly or indirectly, with any potential business combination target,” runs a typical SPAC filing blurb. Investors have been warned: their money could end up pretty much anywhere.

Mission statements contain multitudes in comparison. They can tell you which stakeholders matter most to a firm. A tiny handful of the non-SPACs to have filed this month say their objective is shareholder returns (call it a Milton statement). Most couch their goals in terms of meeting customer needs.

Lulu’s Fashion Lounge says that its vision is to be the most beloved women’s brand for affordable luxury fashion. AirSculpt Technologies, a “body-contouring” firm, aims to produce the best results for its patients. This may be the age of purpose, but giving people what they want, whether they are looking for clothes or a “Brazilian butt-lift procedure”, is mission enough for many entrepreneurs.

The mission statement can also tell investors something about how technologically sophisticated a company is. Among this month’s filers there is a marked lack of flannel from GlobalFoundaries, a big semiconductor firm. But for simpler products and services, it is not enough to describe what an enterprise does. “We aim to help the customers in our communities live a good life by inspiring moments that create lasting memories,” burbles Solo Brands, whose biggest seller is a stainless-steel fire pit.

Similarly, you may have been under the impression that Krispy Kreme, which returned to public markets earlier in the summer, sells doughnuts. Wrong. “As an affordable indulgence enjoyed across cultures, races, and income levels, we believe that Krispy Kreme has the potential to deliver joyful experiences across the world.” That’s not icing on your face, it’s euphoria.

A mission statement also illuminates crispness of thinking. Of the firms to have filed this month, NerdWallet, a firm that provides reviews and comparisons of financial products, deserves most plaudits. “Our mission is to provide clarity for all of life’s financial decisions,” runs the prospectus. That is ambitious without being absurd, informative without being constraining.

Others are woollier. The prospectus for Rivian, an electric-vehicle manufacturer, says that it wants “to keep the world adventurous forever”. Prospective investors are told that “the part of us that seeks to explore the world is also the secret to making sure it remains a world worth exploring.” Yet the company’s near-term revenues depend on a big order from Amazon for its electric delivery van. The part of us that plans never to leave the house again may be the secret to Rivian thriving.

As for WeWork, it is back and chastened. Its public debut, via a merger with a SPAC called BowX, was due on October 21st. In a proxy statement issued by BowX in September, WeWork says it was founded in 2010 with a vision “to create environments where people and companies come together and do their best work”. No mission creep this time.

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**There is gas in them hills**

# All manner of industries are piling into the hydrogen rush

***Including some grubby ones***

Oct 23rd 2021


"WE ARE BUILDING the energy company of the future…like Tesla did," declares Seifi Ghasemi, chairman of Air Products. Comparing yourself to the electric-car darling may seem Napoleonic for a purveyor of industrial gases. But Mr Ghasemi, who has thought about one gas in particular, hydrogen, for 30 years, insists the comparison is apt.

He is not alone. Hydrogen is expected to play a big role in greening hard-to-decarbonise sectors such as cement and steel, as well as in long-term energy storage. Today's smallish and, because almost all the stuff is made from fossil fuels in a carbon-intensive way, dirtyish hydrogen business is forecast to grow into a much cleaner trillion-dollar industry in a few decades. Governments are spending tens of billions of dollars a year to kickstart a clean-hydrogen revolution. A posse of hydrogen-curious firms are keen for a piece of the action.

Maheep Mandloi of Credit Suisse, a bank, sees the natural-gas industry as a template for the development of hydrogen, which is already used in refining. The rise of liquefied natural gas took the sort of capital and expertise that only the integrated global energy giants had. Small wonder big oil is taking an interest. In September Chevron, an American oil titan, unveiled a $10bn strategy for "new energy" that bets big on low-carbon hydrogen.

The other supermajors—BP, ExxonMobil, Royal Dutch Shell and TotalEnergies—have also announced investments in hydrogen clusters and technologies. Ahmad al-Khowaiter, chief technology officer of Saudi Aramco, says that the state-controlled oil colossus intends to be the world leader in fossil-derived low-carbon hydrogen in the 2030s. The kingdom's hope is also to maintain its energy superpowerdom as oil's prospects fade by exporting hydrogen made using its world-class solar and wind resources.

Aaron Denman of Bain, a consultancy, calls such bets a quest for "growth engine number two" in case the firms' core fossil-fuel business falters. The same rationale may underlie the hydrogen efforts of other sectors with a spotty environmental record. On October 11th Andrew Forrest, a mining tycoon and Australia's richest man, who controls Fortescue Metals Group, unveiled plans to build the world's biggest factory for electrolyser machines, needed to produce green hydrogen from water.

Not all $H_2$ prospectors come from grubby industries trying to burnish their image in an ever more climate-conscious world. Given the much wider range of potential applications for hydrogen, various other sectors could strike gaseous gold. Mr Ghasemi, for one, is confident that his company will beat the commodities giants, which he sees as complacent. "They think hydrocarbons are here for ever and don't think anybody can disrupt them."

Air Products is trying to prove them wrong. It is developing several hydrogen megaprojects around the world, including a $5bn initiative to produce renewable hydrogen in Saudi Arabia for export. James West of Evercore, an investment bank, reckons industrial-gas firms could become the first supermajors of the hydrogen era. Big oil won't take that lying down. ■

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Chinese business

# Zhongwang, a Chinese aluminium giant, resists American pressure

*But buckle under domestic power cuts*

Oct 23rd 2021 | Hong Kong


Janet Jarmen/Redux/Eyevine

LIU ZHONGTIAN has been called Asia's "aluminium king". His firm, Zhongwang Group, is one of the world's largest makers of aluminium products. At one point he was the richest man in China's north-eastern rust belt, where the company is based. In America, Mr Liu has a different reputation. Firms controlled by the 57-year-old were convicted in late August of orchestrating one of the most brazen tariff-avoidance schemes in history. Now his empire appears to be coming undone, not at the hands of American prosecutors but owing to domestic economic woes.

Zhongwang's long, hollow metal rods are a key component in everything from cars to homes and bridges. They have undergirded China's building and manufacturing boom. Literally at times: Zhongwang grabbed big contracts with the construction groups behind the 2008 Beijing Olympics and the World Expo in Shanghai in 2010. An initial public offering in Hong Kong in 2009 made Mr Liu one of China's richest industrialists.

Mr Liu's fortunes turned in 2019. He was indicted by America's Department of Justice (DoJ) for running a scheme whereby shell companies shipped in products subject to import duties disguised as crudely welded aluminium pallets. Prosecutors say that Mr Liu arranged for these pallets, 2.2m of which his firm had stockpiled in its American warehouses, to be turned into other things at melting facilities in America. The conviction in August found American firms he controls guilty of trying to evade $1.8bn in tariffs. The sentence, expected in December, may allow the DoJ to go after Zhongwang's American assets. Days after the ruling Zhongwang froze the trading of its shares in Hong Kong, ostensibly pending the delayed release of results for the first half of 2021.

All debilitating, to be sure. But probably not fatal. The firm remains the world's second-biggest aluminium-extruder with a vast home market. Disclosure delays are common in Hong Kong and may be unrelated to the DoJ case. And China's government, itself in a tussle with America over trade and geopolitics, might even help shield Zhongwang from the DoJ's lawmen.

Then, on October 15th, the firm divulged that two important subsidiaries in China were facing severe difficulties "due to major losses". Analysts reckon that without a bailout Mr Liu's group could collapse. The company has offered little explanation. But like many Chinese firms it has been paralysed by power cuts, which could cause the country's industry to run at 5-10% below its usual capacity until the end of the year. In order to prevent blackouts, local governments are permitting some energy-intensive manufacturers to operate only ten days a month, says Johnson Wan of Jefferies, an investment bank.

Aluminium extrusion requires lots of energy, so power cuts and surging electricity costs have hit Zhongwang hard. Having sold its smelter business in 2020 the firm faces rocketing prices for aluminium, as other smelters raise prices to help offset their own rising bills amid shortages of the metal. As Zhongwang's home province of Liaoning braces for a bitter-cold winter, manufacturers are in for more disruptions as coal is burned to heat homes rather than produce industrial electricity. For Mr Liu, escaping the clutches of American law must feel like cold comfort. ■

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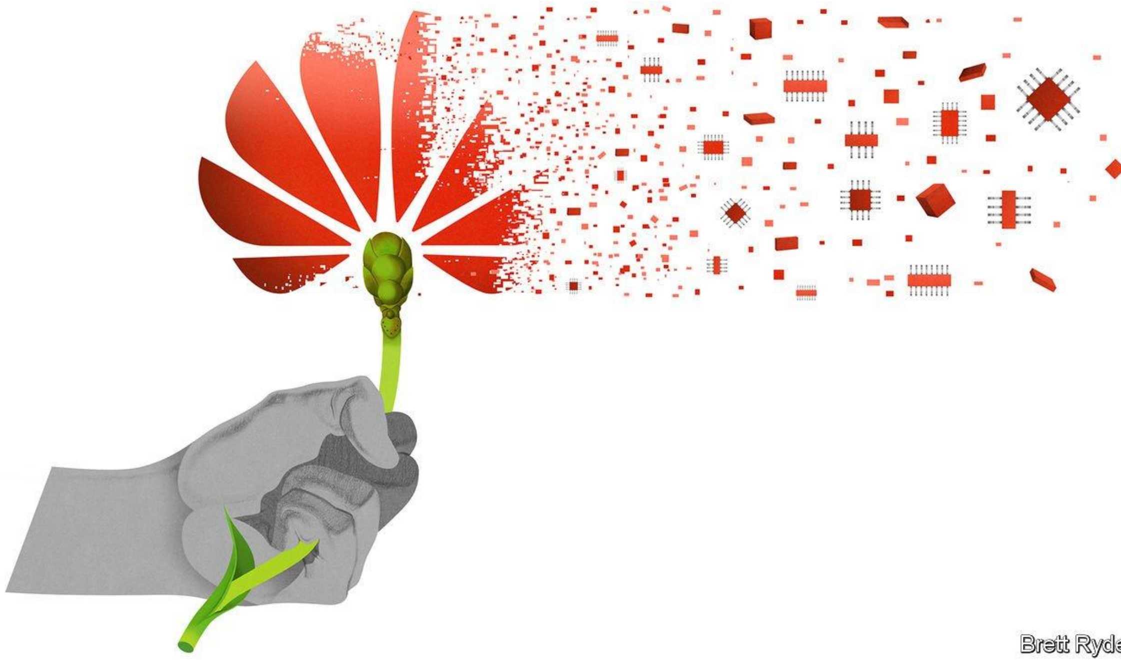
Schumpeter

# Huawei should dissolve, disperse and seed China’s high-tech future

*It is too prominent to be able to reinvent itself*

Oct 23rd 2021




HUAWEI, A CHINESE firm emblematic of the breakdown in Sino-American relations, makes for a perfect business-school case study. Less than two years ago the company, based in the southern boom town of Shenzhen, had not only surpassed Nokia and Ericsson, its Nordic rivals, to become the world’s leading supplier of telecoms infrastructure. It had also overtaken Samsung to become the biggest seller of mobile phones. Like all good case studies, it has vivid characters, from its founder, Ren Zhengfei, a former army officer and engineer, to his daughter, Meng Wanzhou, just freed from a starring role in the first prisoner-exchange drama of the tech cold war. It is a groundbreaking firm. Like Japan’s Sony in the 1980s, it helped change the perception of its home country from one of cheap knock-offs to eye-catching innovation. And its very future may be in peril. With the long arm of American law enforcement around its neck, it is being throttled by a lack access to cutting-edge technology, such as 5G smartphone chips.

The question is what Huawei ought to do next. Should it tough out American sanctions and hope, as Victor Zhang, its global vice-president, puts it, that its research and development (R&D) budget, a whopping $21.8bn last year, can “fertilise” a new array of business activities that will redefine its future? Or should it instead quietly break itself up, dispersing a 105,000-strong army of engineers to seed a flurry of new ventures? In short, should it remain a tall poppy or let a hundred smaller flowers bloom?

It is a fairly safe bet that Huawei will take the first option. After all, it is an employee-owned company with a fierce self-belief. It has a never-say-die business culture; its salespeople are renowned for drinking anyone under the table in pursuit of a deal. It could become a national champion for President Xi Jinping’s mission to make the country more self-reliant in technology. And the government in Beijing would hate the idea of it wilting under pressure from Uncle Sam.

The tough-it-out approach is strewn with difficulties, though. Since America’s government branded Huawei’s 5G gear a national-security threat in 2019, and a year later curtailed the firm’s access to chips made with American equipment, its smartphone business, which in 2020 generated more than half of revenues, has cratered. Sales have tumbled from more than 60m units in the last three months of 2019 to about 15m units in the third quarter of 2021, according to Dan Wang of Gavekal Dragenomics, a research firm. In China its latest phones lack 5G connectivity.

Although Huawei remains the world’s number-one supplier of telecoms gear, its sales and market share are shrinking as America’s allies bar it from their 5G networks and other customers fret about its long-term viability. Huawei is putting on a brave face, nonetheless. It is in its “second startup phase”, in Mr Zhang’s words. Each year it pours at least a tenth of its revenues into R&D (in 2020 the share reached almost 16%). This, Mr Zhang adds, will help build up new core ventures. It is expanding in areas from making cars smarter and helping coal mines become semi-autonomous to infrastructure for cloud-computing and regulating power supply in energy markets. None of these opportunities depends on cutting-edge semiconductors.

Promoting that startup culture in-house may work. But the new endeavours do not generate anything like the revenues of Huawei's smartphone and networks businesses. One analyst describes the coal venture as "a dying company meets a dying industry". A better, bolder way forward would be to embrace the Schumpetarian creed of "creative destruction": let the old firm die so that new ones could emerge, dispersing capital, ideas and talent.

Silicon Valley provides a striking precedent. In 1957 the so-called "traitorous eight" walked out of Shockley Semiconductor Laboratory to found Fairchild Semiconductor. The "Fairchildren" became the backbone of the area's high-tech, risk-taking culture, establishing Intel, a chip giant, and scores of other firms, including venture-capital veterans like Kleiner Perkins. Huawei's engineers at HiSilicon, its chip-design unit, could do something similar. That could advance China's growing ambitions in the chip industry, illustrated by the unveiling on October 19th by Alibaba, a tech giant, of a new, custom-built, state-of-the-art server chip.

Huawei has no plans for a HiSilicon spin-off, Mr Zhang says. The firm's tactical retreat in the smartphone business illustrates what it may and may not be able to do. Last year it sold Honor, a niche smartphone brand, to give it the freedom to evade American export controls. Honor's new phones now have access to American chips and the software and services of Google, an American tech giant, that Huawei still does not. Despite the backing of Shenzhen's government, which invites questions about just how entrepreneurial Honor will be, the industry's reaction to the divestiture has been "really positive" both inside and outside China, reports Ben Stanton of Canalys, a telecoms-research firm. Moreover, he reckons, Huawei's best smartphone engineers have moved to Honor, keeping alive the older firm's engineering and sales culture.

## Tall-poppy syndrome

Unsurprisingly, Honor has also attracted the attention of America's foreign-policy hawks, including Marco Rubio, a Republican senator who on October 14th called it an "arm of the Chinese Communist Party" and a foreign-policy threat, and urged President Joe Biden's administration to blacklist it. This is a reminder of how hard it will be for any firm in Huawei's shadow to shake off such accusations, whether true or not. Better for its engineers to roam free instead. They are likely to be more creative within small groups than inside a corporation—all the more so if what Mr Wang calls "China's Sputnik moment" engenders a burst of domestic innovation. Huawei's liberated brain-boxes may then also teach America a lesson in how counterproductive knee-jerk technonationalism can be. ■

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## Finance & economics

**From the sublime to the subpar**

# A triple shock slows China’s growth

*Coal shortages, covid-19 and a construction slowdown all take their toll*

Oct 21st 2021 | HONG KONG

Edward Burtynsky, courtesy Flowers Gallery, London / Nicholas Metivier Gallery, Toronto

IN A SCENE from “Manufactured Landscapes”, a documentary released in 2006, Edward Burtynsky, a landscape photographer, seeks permission to take pictures of the black mountains of Chinese coal awaiting shipment in Tianjin, an industrial city near Beijing. “Through his camera lens, through his eyes, it will appear beautiful,” Mr Burtynsky’s assistant assures his sceptical host. That turns out to be not quite true. Through the photographer’s lens, the piles of coal have a dark, satanic geometry—not beautiful exactly, but awe-inspiring in their immensity.

Looking at those pictures (one of which is shown above), it is hard to imagine China could ever run short of this fuel. But in recent months, the black pyramids have been not quite immense enough. A scarcity of coal, which accounts for almost two-thirds of China’s electricity generation, has contributed to the worst power cuts in a decade. And the blackouts have, in turn, hurt growth. “Our economy is developing very fast,” Mr Burtynsky’s host tells him, so as to excuse the gloom and dirt in the air. But that is not quite true any more either.

The Economist

The Chinese economy has been hit by a triple shock, stemming not only from the power cuts but also the pandemic and a property slowdown exacerbated by the financial woes of Evergrande, a developer. Figures published on October 18th showed that economic growth slowed to 4.9% in the third quarter, compared with a year earlier (see chart). Industrial production expanded by only 3.1% year-on-year in September, slower than in any month during the global financial crisis. More than a year and a half after covid-19 first struck, China is reporting growth rates that were unheard of before the pandemic.

Consider the energy crunch first. The causes of the coal shortage fall into two categories: structural and incidental. The unlucky contingencies include floods in Henan province in July and in Shanxi this month, which forced some mines to close. In addition, in Inner Mongolia, which accounts for about a quarter of China's coal output, an investigation into corruption has implicated and hamstrung some of the officials who might previously have approved expansions in coal mining. Shaanxi province, China's third-largest producer of coal, slowed production to keep the skies clear for a national athletics event in September, which President Xi Jinping attended. And coal expansion has also been inhibited by safety inspectors, who have scrutinised 976 mines, after more than 100 industrial accidents nationwide last year.

The deeper reason for the coal crunch is China's efforts to reduce its dependence on the fuel, which is responsible for a big share of the country's carbon emissions. The authorities have been reluctant to approve new mines or the expansion of existing ones in recent years, because "it's clearly driving the bus in the wrong direction", says David Fishman of The Lantau Group, an energy consultancy.

When supply is tight, prices are supposed to rise, obliging customers to economise on their consumption. But as the price of coal shot up, power stations were unable to pass their higher costs on. The amount they could charge the grid company that buys the bulk of their power could rise only up to 10% above a regulated price, which was changed infrequently. And the tariff paid by end-users was based on a catalogue of prices that was similarly inflexible. Some power stations simply stopped operating, refusing to generate at a loss.

Another shock to the economy came from the pandemic. Outbreaks of covid-19, such as a cluster that began in Nanjing in July, prompted strict, localised lockdowns, depressing retail spending, especially catering, and travel. According to Flight Master, a travel site, airlines were operating at less than half their full capacity in August and at only two-thirds of it in September.

The final shock was to the country's property sector, a perennial engine of growth, employment, leverage and anxiety. Regulators are trying to curb speculative demand for flats and limit the excessive borrowing of homebuilders. That effort to limit financial risk has brought some existing dangers to a head. Evergrande, huge firm with $300bn in liabilities, missed a payment on a dollar bond on September 24th, and has been followed by others. Some homebuyers are now understandably nervous about handing over their cash to any developer who may not be in business long enough to finish the projects they are selling.

Against this backdrop, China's developers started 13.5% fewer homes this September than they had a year earlier and their sales, measured by floorspace, fell by a similar percentage. China also reported sharp falls in the production of cement (down by 13% in September compared with last year) and steel (which fell by 14.8%).

On October 15th China's central bank described Evergrande as an idiosyncratic case in a generally healthy industry. That should have been reassuring, except that policymakers will not come to the property sector's rescue until they are sufficiently worried about its plight. Anxiety among regulators may be a necessary condition for alleviating the anxiety of homebuilders and their creditors.

Most economists think China's year-on-year growth will slow even further in the last three months of the year. Bank of America has forecast growth of 2.5% in a base case. China will maintain its vigilance against covid-19, and the property downturn has further to run. But one of the three whammies should at least pack less of a punch in the remainder of the year. Power stations, unlike property developers, have won belated relief from higher authorities. Mines have been ordered to expand production. And China's principal planning body threatened on October 19th to step in if coal prices remain punishingly high, prompting a sharp sell-off of coal futures.

That threat of intervention in upstream pricing followed a big step towards liberalisation further downstream. The government will give power stations more freedom to pass on higher costs to the grid company. It will also force industrial and commercial customers (but not households or farmers) to pay power prices negotiated in the market, not those set down in a catalogue. These reforms have been in the works for a long time. But it took an acute crisis to force the issue. Policymakers might once have preferred a "measured roll-out of market reforms", notes Mr Fishman. But things changed "when the lights started to go out in factories across the country". China likes to cross rivers by feeling for the stones. But when a stone gives way, it is time to take a leap. ■

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*An early version of this article was published online on October 18th 2021*

Evergrande plans

# Time for orderly resolution for Evergrande is running out

*If the state has a grand plan, it will need to make it known soon*

Oct 23rd 2021 | HONG KONG


HOMEBUYERS, investors and analysts have been waiting for months for a peep from China's regulators on a plan for Evergrande, a massive homebuilder on the brink of collapse. But when the central bank at last chimed in on October 15th to say that the risks were controllable, few took comfort.

The situation in recent weeks has become only more unwieldy. Evergrande has already missed several offshore-bond payments and could, after a 30-day grace period, officially default on October 23rd. A plan to raise $2.6bn by selling a stake in its property-services arm has fallen through. Confidence in China's housing market has been jolted. A handful of other developers have either missed or say they plan to miss offshore-bond payments. Sinic became the latest to default on October 19th.

Many investors fear that the authorities are running out of time to avert greater turmoil in the housing market. The main concern is that Evergrande and other troubled developers will not be able to complete the homes they have already sold to ordinary Chinese people. (Evergrande alone owes an estimated 1.4m pre-sold units to buyers.) That would further drain confidence from the housing market and deliver a devastating shock to already weak economic growth.

Averting broader fallout will depend on two things. The first is opening the channels of finance, in order to keep building sites buzzing with workers and suppliers. Here things do not look good. Many industry-watchers had expected the central government to capitulate to the crisis and command banks to lend more to developers. But that has not happened so far. The situation in the bond market is worse. The distress at Evergrande has helped fuel a cash crunch for other high-yield-bond issuers, shutting even non-property firms out of the market for desperately needed dollars.

Developers were once able to bring in lots of liquidity by pre-selling homes. But now activity is slowing down. Developers' spending on capital expenditure and land purchases fell by 3.5% in September, compared with a year earlier. Home starts and sales by value have continued to slide. House prices fell in September, the first monthly decline since 2015.

Help could also come in a second form: a grand restructuring plan. But that would take time. Evergrande alone has more than 1,000 projects across China; other developers will only add more to the count. If the projects are to be kept running, local governments will probably need to take over their operation, requiring complex negotiations in hundreds of cities. Whether all this can be pulled off is far from clear. Yet failing to deliver on projects that have already been purchased would be catastrophic for the government, given that Xi Jinping, the president, has promised a new era of social equality. If the state has a plan, it will need to make it known soon.

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Go with the float

# What to make of the new bitcoin-linked exchange-traded fund

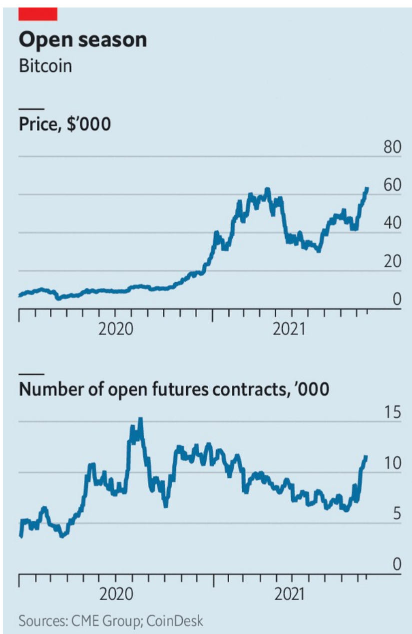
***Depending on whom you ask it is either a breakthrough or a disappointment***

Oct 21st 2021


CRYPTO SEASONS are not what they used to be. In 2017, just as bitcoin was nearing $20,000 for the first time, a regulatory crackdown triggered a crypto "winter"—a period of depressed prices—that lasted nearly three years. In May this year frost set in after China clamped down on crypto transactions, bringing bitcoin down by half from its peak of $64,900. But after just a few icy months, things are warming up again. On October 20th bitcoin briefly crossed $67,000—a new record.

The latest heat reflects a much-awaited event: the listing of America's first bitcoin-linked exchange-traded fund (ETF) on the New York Stock Exchange. Run by ProShares, a maker of specialist investment products, it got a green light of sorts after the Securities and Exchange Commission (SEC), America's main markets watchdog, let a deadline to approve or reject it lapse without objection. The listed fund offers investors exposure not to the cryptocurrency itself but to bitcoin futures, and specifically to contracts traded on the Chicago Mercantile Exchange (CME). Depending on whom you ask, the launch is either a landmark, a way for regulators to retain control, or a disappointment.

For crypto entrepreneurs and conventional financiers, the launch is a breakthrough. Over the past decade many sought approval for all manner of bitcoin ETFs, only to be denied or fobbed off. But in August Gary Gensler, the SEC's boss, signalled that he would favour funds that tracked futures, which led to a wave of filings. Two could start trading later this month. Others, including ones run by giant asset managers, could follow.



The Economist

In expectation of all this, existing crypto investors have poured into derivatives markets (see chart). "Open interest"—the capital tied up in futures contracts—is at an all-time high. The bet is that ETFs will lure retail investors, who are numerous, and institutions, which have big money. The former, long put off by the hassle of opening an account at crypto-exchanges, now only need one with an ordinary broker. The latter, nervous about the custody of digital assets, no longer have to own any in order to sell exposure to their clients. There was certainly early enthusiasm: the price of shares in the ETF rose by 4% on its debut.

Still, new investors may not come in the droves that bulls expect. For years now individuals have been able to buy bitcoin through mobile wallets, such as PayPal, or brokers, such as Robinhood. Institutions can gain exposure through vehicles like the Grayscale Bitcoin Trust, a private fund that allows investors to trade shares in trusts that own bitcoin, and which manages $40bn. A growing cast of firms, including Wall Street stalwarts such as BNY Mellon and State Street, are lining up to offer institutional-grade bitcoin custody.

Purists, meanwhile, would have preferred an ETF that holds bitcoin directly. A futures-linked fund needs to roll forward futures contracts as existing ones expire, which is costly; so is the requirement to park hefty collateral at the CME. Both will eat into returns. A straight bitcoin ETF, however, is some way off. Permitting futures funds allows the SEC to direct investors to regulated exchanges like the CME, which enables the watchdog to intervene to prevent wrongdoing. By contrast, bitcoin trades in a variety of venues, many of which are out of the SEC's reach, and is notoriously volatile. Crypto spring it may be, but the weather can always turn. ■

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*An early version of this article was published online on October 20th 2021*

**Hawk descending**

# Jens Weidmann steps down from the Bundesbank

*His resignation comes at a delicate moment for the euro zone*

Oct 20th 2021 | BERLIN

IN 2012 MARIO DRAGHI, then head of the European Central Bank (ECB), vowed to do “whatever it takes” to keep Europe’s single currency together. His biggest foe in this endeavour was not the bond vigilantes sending yields spiralling in Greece and Italy—they were soon cowed—but a sceptical colleague. Jens Weidmann, who as head of the Bundesbank was one of the strongest voices on the ECB’s governing council (where central-bank governors from euro-zone members sit), responded to Mr Draghi’s gambit with a homily on the dangers of money-printing drawn from Goethe’s *Faust*. He threatened to resign.

Nine years later, he has done so. On October 20th, just two years into his second eight-year term as Bundesbank president, Mr Weidmann unexpectedly announced that he would step down at the end of the year. His departing statement, which warned about the side-effects of loose monetary policy, hinted at his unhappiness about the ECB’s bond-buying. Mr

Weidmann has long feared that the bank's activism underplayed inflationary risks and eased pressure on indebted southern European countries to reform.

Such positions often left Mr Weidmann in a hawkish minority. He had hoped to take over from Mr Draghi in 2019, but the EU's leaders gave the job to Christine Lagarde, a former French finance minister. Mr Weidmann's unease extended to the ECB's decision later that year to restart quantitative easing. But he backed the results of the bank's strategy review, as well as a €1.85trn ($2.15trn) bond-buying programme set up at the start of the pandemic, and Ms Lagarde's growing focus on climate change. Sharp, well-briefed and courteous, Mr Weidmann found favour even among his doveish colleagues.

Mr Weidmann's replacement at the Bundesbank will take over at a crucial moment. In December the ECB may confirm that its pandemic purchase scheme will expire in March. But the council is undecided on how much flexibility and firepower to grant an older bond-buying scheme in its place. Beyond that lie deeper divisions over how to interpret inflation, now running at 3.4% in the euro area. Rate rises are not imminent, but unease is growing—especially in Germany, where energy-price spikes are helping push inflation towards 5%.

Germans who valued Mr Weidmann's leanings lamented his decision. Others say his reluctance to defend the ECB's policies to a sceptical German public sapped their potency. "A new head of the Bundesbank willing to take on Germany's conservative consensus would help give the ECB cover in the critical months ahead," says Christian Odendahl of the Centre for European Reform, a think-tank in Berlin.

Mr Weidmann delayed announcing his decision until after Germany's election in September. Appointing his replacement will fall to the next government. Possible names include Isabel Schnabel, a member of the ECB's board; and Claudia Buch, Mr Weidmann's deputy. The resignation injects an extra degree of complexity into the coalition talks just beginning in Berlin. ■

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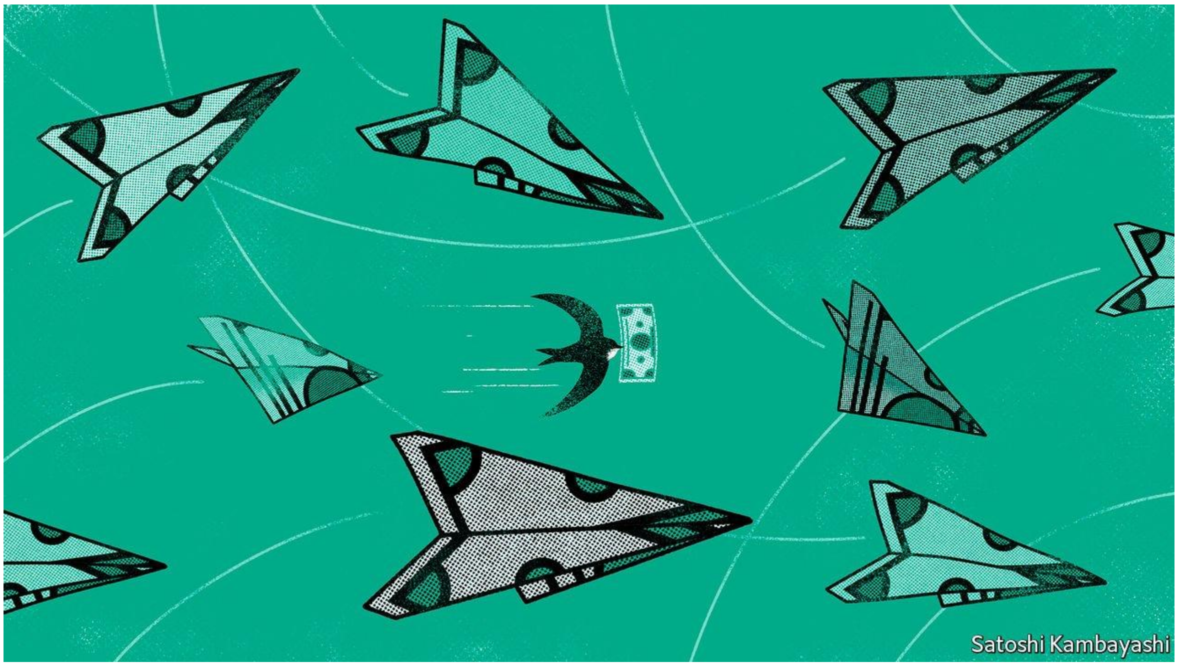
*An early version of this article was published online on October 20th 2021*

Message in a battle

# The race to redefine cross-border finance

***SWIFT enabled a surge in global payments over the decades. Now it faces threats from challengers—and is fighting back***

Oct 21st 2021




IN 1977 A string of 12 characters ushered in a new age of global finance. Until then a bank wiring money abroad needed to relay up to ten instructions on public phone lines, which were then typed into forms, taking time and causing errors. Then payments began to be facilitated by a code and secure network created by the Society for Worldwide Interbank Financial Telecommunications (SWIFT), a club of 500-odd banks. A surge in global trade and investment followed. More than $140trn has been transmitted across borders in the past year, equivalent to 152% of global GDP. Analysts reckon about 90% of that went through SWIFT. Its 11,000 members in 200 countries ping each other 42m times a day.

The Economist

Now SWIFT confronts another financial revolution. Customers want faster payments. Fintechs, banks and governments are vying to rival the network. Facebook is muscling in: on October 19th it began a trial of its digital-currency wallet. SWIFT, for its part, is fighting back. On October 14th it said 100 banks had signed up to SWIFT Go, its high-speed transfer service. It is seeking to link instant-payment networks across countries, in order to make transfers seamless. Whoever wins the race to redefine cross-border payments will determine the future shape of the financial system—and who holds sway over it.

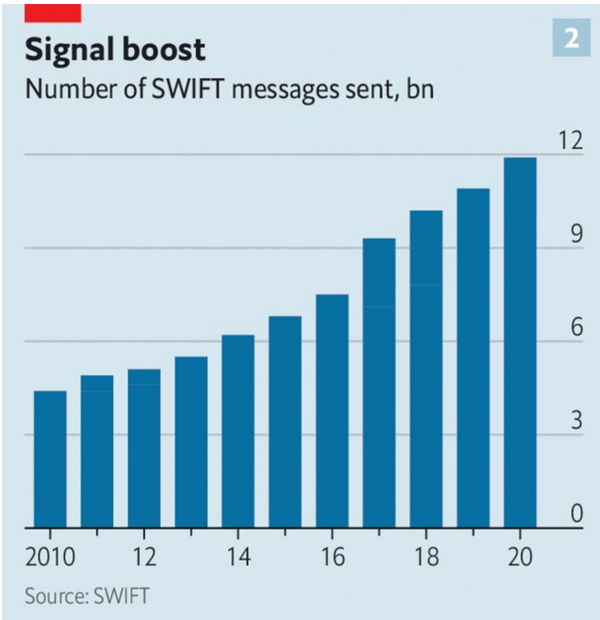
The system of correspondent banking through which cross-border payments flow works like air transport: when two faraway banks do not have a direct relationship, money travelling from one to the other stops over at banks in between. SWIFT provides the radio signal directing the money. The Belgium-based network, which is owned by its members, provides the standards and services that allow firms to exchange information on transactions.

In recent years, however, SWIFT has faced three criticisms. One is that it is technologically backward, making transfers slow and costly. Here the problem lies with correspondent banking, not SWIFT. Time differences and banks' limited opening hours hold back processing. Checks have intensified along with the fight against dirty money, adding to costs and delays.

Security is another concern. In 2016 North Korean hackers stole the SWIFT credentials for the Central Bank of Bangladesh's account at the New York Federal Reserve and sent transfer requests to various banks. Most were blocked, but $81m slipped through. A third gripe is that SWIFT is no longer a neutral part of the financial plumbing. In 2011 America leant on it to exclude Iranian banks by making various threats, including that of sanctions on the network itself, says a former official close to the talks. SWIFT eventually complied. It also came under pressure to cut off Russian banks after the invasion of Crimea in 2014. Although they remained connected, America's foes now know that relying on SWIFT makes them vulnerable.

SWIFT has gone some way towards placating its critics. It has bolstered its security defences, and its international governance, it says, reinforces its neutral status. In 2017 it launched SWIFT Global Payments Innovation (GPI), a network that allows banks to process wholesale (ie, high-value) payments more quickly and to track transfers. It now accounts for three-quarters of SWIFT payments. Today 92% of these reach their destinations in less than 24 hours. In July it launched SWIFT Go, a similar service for retail (low-value) payments.

All this may help neutralise the threat from fintech firms. Many do not bypass SWIFT entirely: they aggregate payments at one end and net them off against transactions going the opposite way, so as to make just one, smaller cross-border transfer, and then use fast local networks to channel the money. That means fewer payments and less access to transaction data for SWIFT. Ripple, a more radical disrupter, evades the network altogether, and uses a cryptocurrency to facilitate transactions.




The Economist

Yet fintechs so far play a minuscule role in cross-border payments. Data crunched by FXC Intelligence, a consultancy, for *The Economist* suggest that the share of cross-border payments by value going through SWIFT has remained broadly unchanged since 2019. The number of messages sent across the network has risen steadily. Ripple, by contrast, has struggled to gain traction. Last year it settled just $2.4bn.

Instead the bigger threats to SWIFT come from bigger beasts. Credit-card giants are building the infrastructure to process retail "push" payments (those initiated by the sender, rather than the receiver, as is usually the case with credit cards) that will run largely parallel to SWIFT. Both Visa and Mastercard, whose networks have over 15,000 member banks each, have bought startups that facilitate account-to-account transfers. Facebook's wallet could make cross-border payments cheaper.

Big banks are developing payment networks to serve wholesale clients. Earlier this year JPMorgan Chase, which accounts for a quarter of dollar payments going through SWIFT, teamed up with DBS, a Singaporean bank, and Temasek, Singapore's sovereign-wealth fund, to launch Partior. This is a network that aims to get around the flaws of correspondent banking by recording transfers on "permissioned" blockchain ledgers, where only members can validate transactions. The network will allow for instant, transparent and "programmable" payments (ie, the funds move only if certain conditions are met).

Another threat is state-sponsored. Many central banks are developing [their own digital currencies](#) (known as CBDCs). Over time these could allow banks to conduct overseas transactions across a shared ledger, undercutting SWIFT. America's foes are building new plumbing. In 2015 China launched its Cross Border Interbank System (CIPS), which offers clearing and settlement for renminbi payments. The system, which processed $7trn in 2020, uses SWIFT as its main messaging channel, but has the tools to become a rival.

SWIFT has responded by schmoozing with central banks and running experiments of its own, in the hope of securing a place at the heart of any cross-border CBDC infrastructure. In February it also formed a tie-up with CIPS and China's central bank. And sheer force of habit could mean international finance continues to be bound by its current nervous system, even if the institutional muscle and monetary blood that compose it evolve, says Markos Zachariadis, the co-author of a book on SWIFT.

But it is also possible to imagine a scenario in which banks gravitate towards a new platform. Most are not especially loyal to SWIFT: America's biggest banks feel they have no voice, says an executive at one of them. Just two American lenders sit on its board, only one of which—Citigroup—is a major bank. Meanwhile Partior, which aims in time to host both central-bank and commercial-bank digital money, is in talks to recruit core settlement banks for euro, renminbi and yen payments, says one of its sponsors. China is touting CIPS's messaging skills, says Eswar Prasad, a former official at the IMF. SWIFT may not be in immediate danger, but the next decade is full of uncertainty. An epic battle over how money travels is just beginning. ■

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*An early version of this article was published online on October 19th 2021*

**Buttonwood**

# Why it matters when trades settle

*There is a case for redundancy in the settlement process*

Oct 23rd 2021


THE PAEANS that followed the recent retirement of KKR founders Henry Kravis and George Roberts, formerly private equity's barbarians-in-chief, are a reminder that the story of Wall Street is one of big deals, bold trades and the people behind them. Those further behind them, in the "back offices" of banks, brokers and buy-out firms, barely get a look in. Understandably so: their world is colourless compliance and "post-trade" processes, like clearing and settlement. They are the plumbers of finance, toiling behind the scenes to ensure that the pipework, well, works. Every so often, however, there's a gurgling noise loud enough to unsettle even those cocksure colleagues out front.

The system for settling stock trades—ensuring the buyer gets her security and the seller his cash—came under strain during the covid-induced volatility of March 2020. It creaked again early this year amid the meme-trading frenzy in GameStop shares. A report by regulators into that episode, published on October 18th, noted drily that post-trade processes, "normally in the background, entered the public debate". It was thanks to spiking margin calls and volatility-induced settlement risks that Robinhood, a retail broker, restricted trading in GameStop stock, causing uproar.

Risk is a function of time. The longer between trade execution and completion, the bigger the "counterparty" risk, or the chance that one side or the other fails to pony up—as anyone caught mid-trade when Lehman Brothers or Archegos Capital collapsed can attest. And, therefore, the heftier the margin payments that brokers and investors have to post with clearing-houses.

Hence the long-running push to bring down trade-processing times—from 14 days ("T+14" in the parlance) in the 18th century, when certificates were carried on horseback and ship; to under a week following reforms in the wake of the 1968 Wall Street paperwork crunch, when a trading boom forced exchanges to close one day a week for months to allow the backroom boys to catch up; to T+5, then T+3, and, four years ago, T+2.

Still, a lot can happen in two days on Wall Street, so why stop there? Spurred by the market gyrations of last year, a group representing banks, investors and clearers has been studying a move to T+1 and is expected within weeks to unveil a plan for how to get there. The signs are that the Securities and Exchange Commission will bless it. If so, the halving of settlement time could kick in as early as 2023. Europe, for one, would probably follow suit.

Lest anyone think the titans of finance are going soft, it should be pointed out that they are not pushing this solely for the greater good. They are as interested in cutting their own costs as systemic risks. During last year's market turmoil, overall margin demanded by the DTCC, America's clearing agency for stocks, jumped five-fold, to more than $30bn daily. Hundreds of billions more a year are tied up by "fails-to-deliver", delays owing to settlement failures (the causes of which range from mistyping errors to more sinister practices such as failing deliberately in order to manipulate the price of a stock). Freeing up this capital would leave financial firms with a lot more to invest profitably.

Why then stop at one-day settlement? Evangelists for so-called distributed-ledger technology are touting the possibility of going to T+0, known as "atomic" settlement. This looks technically feasible; indeed, some broker-to-broker trades at the DTCC are already settled on a near-instantaneous basis.

But is it desirable? There is a big difference between reducing settlement time and eliminating it. In the latter, the buyer would have to be pre-funded and the seller immediately ready to swap. Every bit of a complex process would need to be synchronised, with no room for error. It may also require a wrenching restructuring of the giant securities-lending market, which is designed to fit with settlement with a time lag.

Cue cries of "Luddite!" But Buttonwood is in good company in advocating keeping some redundancy in the process. Ken Griffin, boss of Citadel, one of America's largest marketmakers, and thus no techno-slouch, has described real-time settlement as "a bridge too far" because it requires "everything [to] work perfectly in a world where there's still people involved". The message is clear: pushing things too far could replace one set of risks with another, scarier one, in which a small number of failed trades set off a chain-reaction across back offices worldwide. Atomic indeed.

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**Free exchange**

# How soaring energy costs could hobble the covid-19 recovery

*Past shocks have raised inflation and induced economic slumps*

Oct 23rd 2021


FUEL PRICES over the past month show the same vertiginous upward slope as a covid-19 case count during a particularly brutal wave. Coal and gas prices have touched all-time highs. Asian spot prices for gas have jumped by nearly 1,000% in the past year. The cost of oil has soared as shortages of other fuels have pushed up demand for crude.

Surging energy costs are in many respects an expression of the same phenomenon driving supply-chain backlogs all over the world. An unexpectedly strong rebound in demand has run headlong into stagnant supply. Disruptions, such as shortfalls in hydroelectric-power production caused by droughts, have exacerbated the shortages. So has the rush to boost low inventories in response to the energy crunch. But surging fuel prices are also more ominous than supply-chain woes. Past energy shocks have been associated not only with inflation, but deep recessions, too, as exemplified by the economic travails of the 1970s. What does the latest crunch hold in store?

The inflationary consequences of costly energy are already apparent. In the euro area, headline annual inflation jumped to 3.4% in September, thanks to a 17.4% leap in energy costs. Underlying "core" inflation (which excludes food and energy prices) rose by a more modest 1.9%. In America underlying inflation ran hotter in September, at 4%. But a 24.8% increase in energy costs pushed the headline rate up even higher, to 5.4%. These figures are likely to rise further in coming months, since rocketing fuel prices in October have not yet made their way into the statistics.

The contribution of energy to inflation will begin to fade once prices plateau—as they may in coming months, and even sooner if winter proves no colder than usual. Recent analysis by economists at Goldman Sachs, a bank, suggests that the effect of energy costs on America's year-on-year inflation rate stood at 2.15 percentage points in September and will likely rise to 2.5 percentage points by the end of this year—taking the headline rate to 5.8%, holding other components constant—before eventually turning slightly negative by the end of 2022.

What about the damage to growth? The predominant factor, in the near term at least, is the effect on consumption and investment. Over short time horizons, households and firms cannot easily cut energy use in response to rising costs, leaving less to spend on other goods and services. This effect, according to work by Paul Edelstein of State Street, a bank, and Lutz Kilian of the Federal Reserve Bank of Dallas, is concentrated in the consumption of durable goods; a rise of 10% in the price of energy is associated with a 4.7% decline in spending on durables (and a particularly large drop in purchases of vehicles).

Yet the researchers also note that consumption tends to fall by more in response to rising fuel costs than you might expect given the share of energy in budgets. That seems to be because energy shocks tend to depress sentiment. James Hamilton of the University of California, San Diego, studies historical oil shocks and finds that a 20% rise in the real price of energy is associated with a 15-point drop in an index of consumer confidence. (A gauge of American sentiment collected by the University of Michigan has fallen by nearly 17 points since April 2021.)

An energy-induced slump could be mitigated if consumers meet higher bills by drawing on savings. By the end of 2020, households across large rich economies had accumulated “excess”, or above-normal, savings equivalent to more than 6% of GDP. Nonetheless, analysts at Goldman reckon that costly energy will reduce the growth rate of consumption in America by 0.4 percentage points this year, and by 0.5 points in 2022. Those inclined to see the petrol tank as half full may note that slower consumption growth could help ease strains on supply chains, which have been stressed by especially strong demand for durable goods. Those who grumble that it is half empty may worry that power cuts in places like China could result in still more shortages.

Crucially, the toll of the shock will depend on how central banks respond. Fuel prices tend to feed through to households’ expectations of inflation. That will be unwelcome news for central bankers, who are already worrying about high inflation. Research by Mr Kilian and Xiaoqing Zhou, also of the Dallas Fed, suggests that energy prices mainly influence short-term expectations, rather than those further out. Those expectations could adjust just as quickly when energy prices fall. Some central banks, such as the Bank of England, may nevertheless worry that the energy shock worsens the risk that inflation expectations become unmoored from their targets. But the dilemma is that, if they overreact, they depress consumption further and induce deflationary pressure, just as energy prices return to earth.

## A pity, the fuels

The longer prices stay high, the more their effects evolve. Households and firms will become better able to reduce their exposure to energy. Indeed, work by John Hassler, Per Krusell and Conny Olovsson of the Institute for International Economic Studies in Stockholm suggests that costly energy affects the nature of innovation. Firms direct inventive efforts so as to economise on scarce inputs. When energy is abundant, they focus on capital- or labour-saving innovation. When energy is scarce, by contrast, firms do more to improve the energy-efficiency of production, and innovation suffers —as it did in the 1970s.

The extent to which history repeats, however, also depends on what governments do. They could shield customers from higher energy prices, which would be politically popular but delay the moment of transition from dirty fuels. Or they could encourage more investment in renewable-power capacity, so that energy constraints bind less. Such bold action could end the threat posed by expensive coal, gas and oil, once and for all. ■

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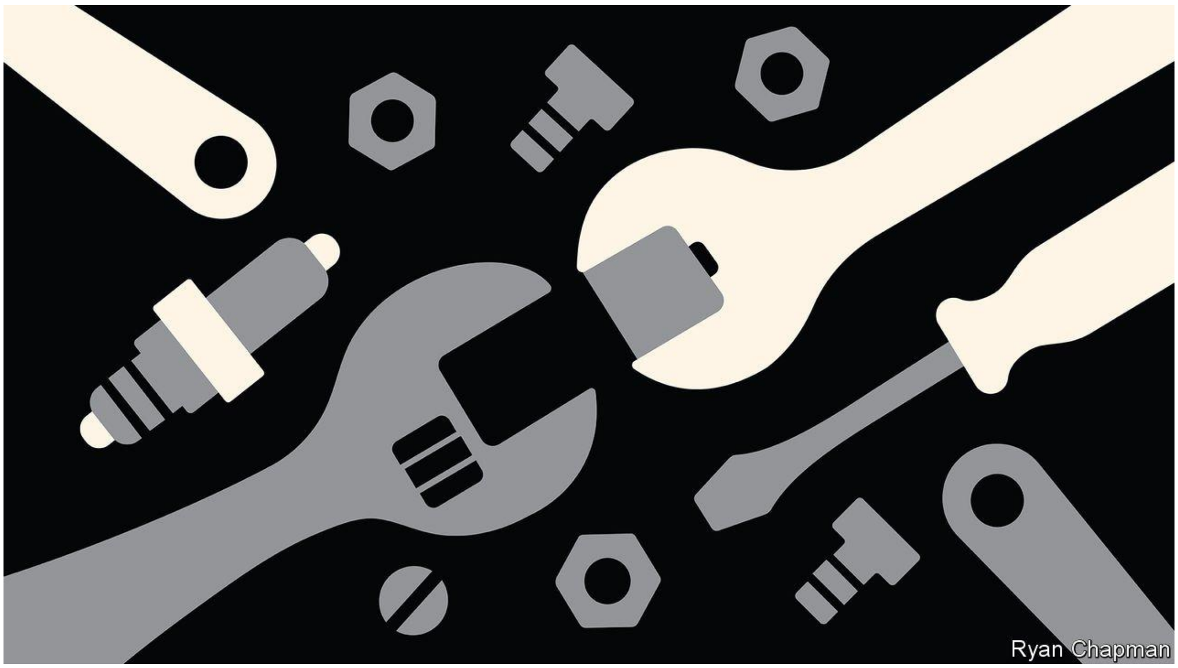
## Science & technology

**Inside the garage of the future**

# Servicing and repairing electric cars requires new skills

*Many workshops will be out of a job*

Oct 21st 2021




AS A STRING of high-performance cars thunder round the twists and turns of Hockenheimring F1 circuit, in south-west Germany, a stripped-down vehicle at an adjacent Porsche customer centre offers a peek inside a speedy but far quieter way of getting round the track. Christian Brügger, a product engineer with Porsche, a sports-car maker that is part of the Volkswagen group, points to the edge of a large black box in the centre of the vehicle's chassis. "This", he says, "is where the knife goes in."

The box is a 93kWh battery. The chassis belongs to a 260kph Taycan, Porsche's first fully electric vehicle (EV). Cables, bright orange in warning, snake across it to a pair of motors and other electronic gubbins. As many a mechanic, professional and amateur, knows, fiddling with the 12V system of a typical internal-combustion engine (ICE) can give you a nasty electrical jolt. But this battery delivers 800V. Though it is fitted with safety systems, that is enough for a knockout punch that could kill you.

The knife Mr Brügger talks of is special. It has a blunt vibrating blade, like those used by doctors to remove plaster casts without damaging the patient. After some 160 bolts have been removed it can be slid under the edge of the battery's cover to cut away the glue used to seal it tight. This reveals 33 modules containing the lithium-ion cells that constitute most EV batteries. With the cover off, a faulty module can be swapped for a new one.

## Assault and battery

The battery is the most costly component in an EV. It typically represents about 30% of the value of the car when new. At present, if something goes wrong with a battery it is usually replaced with a new one because dealers' service centres do not have the ability to undertake internal repairs. As a replacement battery can cost $20,000 or so for some EVs, that is an expensive proposition. If the car is fairly new and the battery still under its warranty (which usually lasts around eight years), the manufacturer picks up the tab. But as EVs get older and fall in value, many owners may decide to scrap their cars prematurely, rather than fork out such sums.

Some 45% of $CO_2$ emissions involved in making an EV arise from producing the battery, so it makes sense to repair them and keep the vehicle on the road. Porsche reckons this can be done for about 20% of the cost of fitting a new battery. Most faults are caused by the failure of an individual module or cell. If fixed properly, the company reckons, they can provide many more years of service. Eventually, batteries will give up the ghost. When that happens carmakers aim to recycle them, in order to recover the valuable materials they contain and then use those to make new batteries.

Reparable batteries are good news for EV owners, but for garages they mean investing in specialist equipment, and also training technicians to do the work. Some of this investment is necessary to carry out even routine work on EVs. But as the skills required have more to do with electrical engineering, computing and software than wielding a spanner, there are other industries competing for this talent.

A looming shortage of EV technicians is causing concern in many countries. On October 18th, for example, the Institute of the Motor Industry, which represents Britain's motor trade, said some 90,000 new automotive technicians will be required to service and repair EVs by 2030. As of last year, just 6.5% of Britain's mechanics were qualified to do such work. Steve Nash, the institute's boss, says that with the pace at which EVs are being adopted accelerating, government support is needed to boost training programmes and avoid a big skills gap.

The specialist equipment required, including high-voltage tools, computer diagnostics and safety gear, is expensive. Reportedly, Cadillac, part of General Motors, has told its American dealerships they will need to spend an average of $200,000 on tools and training if they want to stay with the marque as it becomes all-electric. Industry reports say some have thrown in the towel, but others see a chance to expand.

Many garages, especially small operators who look after older cars, may be reluctant to invest such sums. EVs are unlikely to make them as much money as cars with ICEs. Having fewer moving parts to wear out, EVs are more reliable and require less maintenance than ICE vehicles. A typical ICE drive-train (engine, gearbox and transmission) might contain 2,000 moving parts. An EV's equivalent has 20.

All this could have a big impact on garages' revenues. McKinsey, a consultancy, thinks EVs may reduce spending on spare parts at American dealerships by as much as 40%. With no oil to change or spark plugs to replace, income from routine servicing will also be lower. Porsche's Taycan, for one, is reckoned to need 30% less maintenance than if it was an ICE vehicle. And fewer items on the service sheet will require a trip to the dealership at all, as an increasing number of fixes are carried out with over-the-air software updates.

Repairing batteries should go some way to compensating for lower service revenues, says Peter Reck, an after-sales manager at Porsche. He says the company is introducing three qualification levels for technicians who work on EVs. Those on the first level can carry out routine maintenance and those on the second can remove batteries, but only technicians trained at the highest level will be able to open them up for repair. In this way, the company thinks, some dealerships, staffed by members of this elite, can serve as regional battery-repair hubs for garages who have only level-one and -two technicians. Porsche also plans to provide a “flying doctor” service of mobile high-voltage technicians who can visit garages if needed.

As vehicle technologies advance, garages will face more changes. As is happening on some aircraft, the increasing number of sensors in vehicles will more closely monitor performance and automatically book them in for preventive maintenance before faults occur. Although fully autonomous vehicles are still some way off (see box), the day may come when EVs drive themselves to a service centre.

## Cell-by date

Technological disruption like this does, though, provide an opportunity for new entrants. Elon Musk, after all, was an industry outsider when he set up Tesla, his (for now) Californian carmaker, which launched its first EV, the Roadster, in 2008. Already there are signs that companies from other areas are looking to enter the EV-servicing business.

After buying a Roadster, Pete Gruber started repairing them in 2013. His company, Gruber Motor, based in Phoenix, Arizona, has grown into an independent Tesla service centre. The firm has developed its own tools and test equipment to repair the individual components in the electronics and batteries of Tesla cars. This is possible, says Mr Gruber, because he has also had more than 30 years experience running a company that repairs high-voltage power systems in data centres, meaning the technology was familiar. But Mr Gruber, whose garage has its own R&D lab, has a warning: “This is not the sort of work the average mechanic can transition to.” Grease monkeys, beware. Your days are numbered. ■

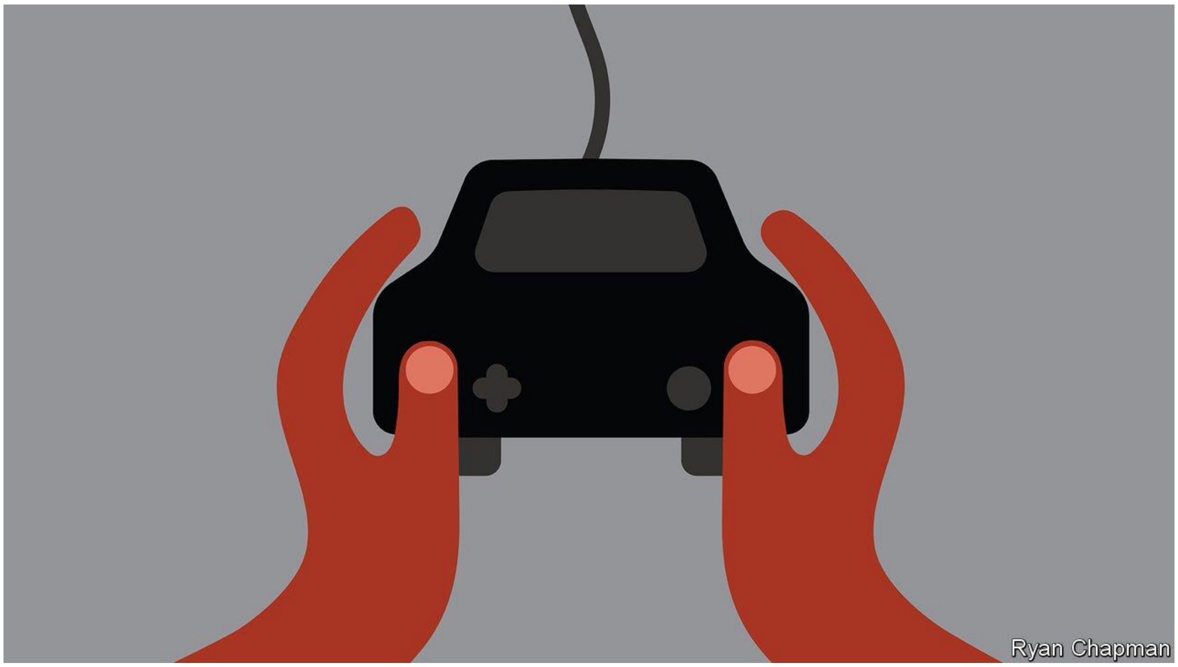
*An early version of this article was published online on October 20th 2021*

**Hands off the wheel**

# The hard job of teaching autonomous cars to drive

## *Computer games help*

Oct 20th 2021




WHEN DRIVING, Clara-Marina Martinez makes a note of any unusual behaviour she sees on the road. She then feeds these into machine-learning algorithms, a form of AI, which she is helping develop for Porsche Engineering, a division of the eponymous German sports-car company.

Those algorithms are intended to produce a system reliable enough for a car to drive itself. Such a fully autonomous car, known in the industry as Level 5, should be able to complete an entire journey without any intervention from the driver, and cope with all situations on the road. But this is proving hard to achieve, and many attempts to do so are being scaled back. Last year, for instance, Uber, a ride-hailing service, sold off its unit developing self-driving cars.

Autonomous vehicles are touted as being not just convenient but potentially safer. However, just as people take time to learn how to drive safely, so do machines. And machines are not as quick on the uptake. The RAND Corporation, an American think-tank, calculates that to develop a system

20% safer than a human driver, a fleet of 100 self-driving cars would have to operate 24 hours a day, 365 days a year, and cover 14bn kilometres. At average road speeds, that would take about 400 years.

Carmakers such as Porsche therefore accelerate the development process using simulators. These teach software about hazards only rarely encountered in reality. Dr Martinez and her colleagues employ “game engines”, the programs that generate photorealistic images in computer games, to do this. These are used to create virtual worlds through which the software can drive.

Objects in these virtual worlds are assigned their physical characteristics (ie, buildings are hard, people are soft) so that the sensors in vehicles, such as cameras, radar, lidar (a form of radar that uses light) and ultrasound transceivers respond in the appropriate way. Once the software has been trained, it is tested in real autonomous vehicles by re-creating those situations on a test track.

How quickly, if ever, all this will translate into reality remains to be seen. Both regulators and customers will need to overcome scepticism that a software driver really can be safer than a wetware one. From Porsche’s point of view, though, there is one other pertinent question. Given that much of the reason for owning a sports car is for owners to show off what they perceive to be their driving skills, just how big a market will there be for a version where software takes those bragging rights away?

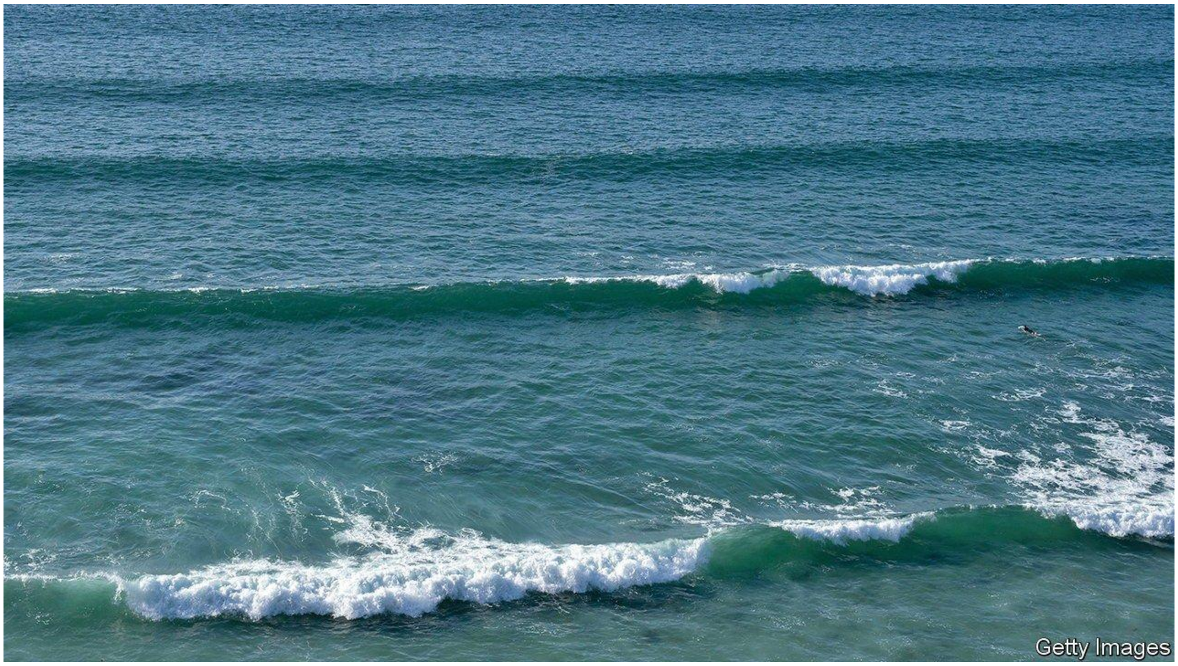
*An early version of this article was published online on October 20th 2021*

Wave energy

# A simple but ingenious mechanism may give wave power a boost

*It is inspired by a party trick and clockwork*

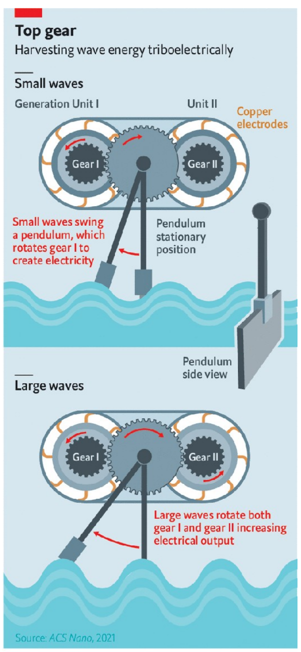
Oct 21st 2021




IN A WORLD where new technology is dominated by the movement of electrons and the manipulation of biomolecules, it is good to know that old-fashioned mechanics can sometimes get a look-in, too. Admittedly, electron movement is also involved in the device dreamed up by Wang Zhonglin of the Beijing Institute of Nanoenergy. But its true ingenuity lies in a mechanical arrangement that would have delighted an 18th-century watchmaker.

Dr Wang, who has just published a description of his device in ACS *Nano*, is interested in using ocean waves to generate electricity. That is not a new idea, but it has not taken off in the way that wind and solar power have. There are many reasons why. One is the hostile environment. Seawater is chemically corrosive and the very waves which provide the power can become destructive during a storm. A second is that servicing and maintaining a piece of floating engineering is difficult and costly. And a third is that waves are even more variable as sources of energy than wind or sunlight.

These challenges mean wind and solar have left wave-power far behind. But some still hanker to change that, and Dr Wang is one. In particular, his invention addresses the third point—waves' variability as a power source. As he observes, existing designs are optimised to extract energy from large waves. But, though such waves are individually powerful, small waves collectively carry a lot of energy too. So a sensible generator would harness both.



The Economist

Dr Wang's answer to the problem is also twofold. First, he ditches the conventional approach to electricity generation, which is to move a coil of wire through a magnetic field, in favour of what he calls triboelectricity. The coil-and-magnet method requires the coil to move rapidly, which is fine for capturing energy from big waves, but useless when waves are small. Triboelectricity can cope with slower movements, too. It is like the party trick of rubbing a balloon on a woollen pullover to generate static electricity, except that in this case the balloon is a set of plastic strips and the pullover is a series of copper electrodes, which conduct the electricity away as soon as it is generated.

Second, he uses an elegant piece of clockwork to regulate the process. Instead of having a single triboelectric generator in each unit, there are two, each rotated by a small cogwheel. These cogs are rotated by a larger one attached to a pendulum with a paddle on its other end.

This paddle is immersed in the water on which the device floats, so is wafted to and fro by passing waves, rotating the central cog as it swings. That, in turn, rotates the generator cogs. But not necessarily both of them, for the central cog has a gap in its teeth. This gap means it is continuously engaged with only one of the generator cogs, so that when the ocean swell is small, the transmitted force is not dissipated by having to rotate too much machinery. Only when a wave of large amplitude passes does the pendulum swing far enough for the central cog to engage the second generator, thus applying the extra force now available to boost the power output.

This arrangement therefore extracts energy from waves both great and small, significantly increasing its potential. Admittedly, the yield of a single unit is minuscule, for the units themselves are tiny by the standards of electricity generation. Minus pendulum and paddle, Dr Wang's prototype measures 23 x 11 x 10cm. But he imagines an arrangement that would carpet areas of sea measured in hectares, if not square kilometres, with rafts composed of arrays of these devices, much as a battery is composed of individual cells.

Back-of-the-envelope calculations suggest this arrangement would match the output of other designs for wave-power generators in areas where waves are predominantly large, while handily outcompeting them in places where they are of variable size. That would greatly extend the range of places where wave-powered generation could be considered.

Whether such a scale-up is feasible is a different question. Dr Wang's design does not overcome the environmental-hostility and ease-of-servicing problems. But his new approach certainly shows that wave power's supporters have not lost their enthusiasm for the fray. ■

*An early version of this article was published online on October 20th 2021*

Tuberculosis

# Most resistance-causing mutations in TB have now been identified

*That will permit personalised treatment of the disease*

Oct 19th 2021


UNTIL SARS-CoV-2 emerged, the most destructive pathogen on the planet was *Mycobacterium tuberculosis*, the bug that causes TB. In 2020, according to the latest report from the World Health Organisation, published on October 14th, this organism cut short 1.5m lives—a figure 100,000 higher than the previous year (and the first annual rise since 2005), mainly because of disruptions to health services caused by covid-19. People whose immune systems have been wrecked by HIV are particularly at risk. Some 200,000 of the 680,000 annual AIDS deaths are a result of secondary TB infections.

More than a dozen antibiotics and other drugs are used to treat TB. But strains of *M. tuberculosis* that are not susceptible to one or more of these have emerged and are spreading at an alarming rate. Nearly 500,000 of the 10m cases of tuberculosis in 2019, for example, were drug-resistant. Good news, however, emerged on October 19th, when the Comprehensive Resistance Prediction for Tuberculosis International Consortium (CRyPTIC, for short), an international collaboration that has been searching for quick ways to diagnose resistant strains, published the fruits of its labours. The result of the consortium's analysis of more than 15,000 samples from patients in 27 countries is a way of detecting any and every resistance-inducing mutation in a particular bacterium's genome.

At the moment, determining whether the strain causing a particular case of TB is resistant to a particular drug is tricky. One common approach, now more than 100 years old, involves culturing microbes from a sputum sample in a Petri dish until they are abundant enough to form a visible plaque. A drug or drugs can then be sprinkled on this plaque, to see if the germs stop proliferating. But *M. tuberculosis* reproduces notoriously slowly in laboratory conditions. It takes two to six weeks to grow enough of it for a test, and up to three further weeks for that test to yield a result. Even then, the result may not be easy to interpret. The answer as to whether the drugs have worked is literally in the eye of the beholder—and different pairs of eyes often behold different answers.

About 15 years ago, however, researchers using new gene-sequencing technology began identifying specific, resistance-conferring mutations in *M. tuberculosis*'s genome. That led to the employment of a test called the polymerase chain reaction (PCR) to search samples for these mutations. PCR testing requires only a small amount of the bacterium, so it can be completed within hours. PCR tests are therefore now widely used to identify resistance-conferring mutations to rifampicin, one of the most effective anti-TB drugs.

CRyPTIC's researchers proposed extending PCR testing's scope by identifying all possible combinations of mutations that confer resistance to any combination of drugs, and also by assessing mutation-related levels of resistance to different doses of a drug. Instead of Petri dishes, participating laboratories used culture plates with 96 wells to grow the bacteria. The wells contained various amounts of 13 tuberculosis drugs. After the drugs had had time to act, the plates were photographed. The images were then entered into a database, for examination.

That part of the process, though, still required human eyeballs. These were supplied by 9,000 crowdsourced "citizen scientists", with each plate being examined independently by about 15 such volunteers. Comparing the results of these examinations with full-genome sequences of each sample let CRyPTIC's researchers discover what combinations of gene changes were correlated with which forms of drug resistance.

## Decryption

Some of their findings are surprising. It turns out, for example, that a resistance-conferring mutation may co-exist with another that cancels that effect out. But they are confident they have identified almost all combinations of mutations that matter. The resulting catalogue will, they hope, be used to design better PCR tests. And, as rapid whole-genome sequencing becomes increasingly available, it will also identify the combination of drugs most likely to cure a particular patient.

This will enable personalised treatment for tuberculosis. It will also make treatment less gruelling. The current standard is a cocktail of several antibiotics that must be taken for at least six months—a regimen with harsh side-effects. Getting the prescription wrong and having to try another combination of drugs is hard on patients. Many drop out of treatment.

On top of all that, the CRyPTIC approach could serve as a template for investigations of drug resistance in other pathogens. This could help head off the spread of such resistance, which has accompanied the promiscuous and sloppy use of antibiotics around the world. If precise diagnosis can stop this spread in its tracks, CRyPTIC's results will have implications for public as well as personal health. ■

*An early version of this article was published online on October 19th 2021*

**Evolution in action**

# The Mozambique civil war created tuskless elephants

***The genetics of how this happened have just been unravelled***

Oct 23rd 2021


EVOLUTION ENSURES that animals are well-adapted to their circumstances. Sometimes, as with predators and prey, those circumstances include the behaviour of other creatures. And, as a paper just published in *Science* describes, that includes the behaviour of human beings, which can force drastic changes on a species in an evolutionary eyeblink.

Shane Campbell-Staton, a biologist at Princeton University, studies how animals adapt to human creations like cities and pollution. His interest was piqued by a film about the tuskless female elephants of Gorongosa National Park, in Mozambique. Their lack of tusks was thought to be a consequence of another human creation—the Mozambican civil war, which lasted from 1977 to 1992 and was partly paid for by the killing of elephants for their ivory. Around 90% of the pachyderms living in Gorongosa are thought to have been killed. Biologists therefore wondered if rising tusklessness might be an adaptation to make elephants less attractive to human hunters.

It was a plausible theory, says Dr Campbell-Staton, but no one had actually tested it. Through a mix of old video footage and surveys, he and his colleagues concluded that around 18% of the female elephants in Gorongosa lacked tusks before the war. Three decades later, after it was over, that number had risen to 50%. Computer simulations suggested that the likelihood of such a rapid change happening by chance, even in a diminished population, was tiny.

Besides confirming the change, the researchers managed to unravel its genetic roots. Tusklessness is caused by a mutation in a gene on the elephantine X chromosome. (As with humans, two X chromosomes make a female, while an X and a Y make a male.) Unfortunately for males, the mutation is a package deal, coming with changes to nearby genes that interfere with embryonic development. Males who inherit the mutant gene die before birth. Females can avoid the lethal side-effects if one of their two X chromosomes contains a non-mutated gene—but they will still grow up without tusks.

Fortunately for the females, the specifics of how the mutant gene is inherited make it impossible for them to inherit two copies. Since mutant males die before being born, those which survive to reproductive age carry only non-mutated versions of the X chromosome, ensuring that their daughters will have at least one copy too.

At the moment, the continual reintroduction of non-mutant X chromosomes from males puts a limit on how far tusklessness can spread through the female population. But, given time and genetic recombination, says Dr Campbell-Staton, evolution might disentangle the mutation for tusklessness from the maladaptive mutations in its neighbouring genes, opening the door for males to shed their tusks, too. There are occasional rumours, he says, of tuskless male elephants in the wild, but—so far at least—no firm evidence.

Finding one now seems unlikely. With the war over, the evolutionary pressure from poaching has eased. Tusks have gone back to being useful tools, helping their owners strip bark from trees and dig for water. In recent years the prevalence of tuskless females has fallen, to around 33%. But the speed of the change is a reminder that wars can alter evolutionary history as well as the human sort. ■

## Books & arts

**Entertainment in the Arab world**

# Streaming services are helping Arab producers liven up television

*They can reach wider audiences—and tell untold stories*

Oct 23rd 2021 | DUBAI


AT LEAST FOR its first few seconds, “AlRawabi School for Girls” seems set to be just another teen drama. As piano chords ring out in the background, a teenage girl dressed in pink strolls past a school bus. “School was always my favourite place,” she says. Then her classmates assault her. The set-up will be familiar to anyone who has seen “Mean Girls”, an American film of 2004.

The context is not, though. Produced in Jordan and directed by a Jordanian woman, Tima Shomali, “Rawabi” (pictured) is not only about students being vicious to one another, but also about the patriarchal society that surrounds them. They are shaped by it, and they unwittingly reinforce it: the show ends, six episodes later, with a gunshot, after a teenage revenge plot spirals into an “honour killing” (a widespread problem in the Arab world).

Soon after its premiere in August, “Rawabi” jumped to the top of the Netflix chart in Jordan. Viewers praised it for tackling difficult issues—and for portraying the lives of girls, whom Arabic-language television often overlooks. It received valid criticism, too: some noted that the setting, an elite private school, is a rarefied world few Jordanians experience. Many complaints were of the more tendentious sort, though. Saleh al-Armouti, an MP, asked the prime minister why the authorities had granted a licence for a show that “spreads moral and educational decadence”.

There will be more carping to come. After a slow start, streaming services are taking off in the Arab world. Netflix now has about 5m subscribers in the Middle East. Shahid, which is run by MBC, a Saudi-owned media company, has grown 20-fold since its relaunch last year, to 2m subscribers. To expand further—Netflix aims to double its Arab customers within five years—these outfits are investing heavily in original content. Some of it will bust the taboos of Arabic film and television, not only in the ways you might expect.

The salacious stuff often grabs the headlines. Take “Jinn” (also made in Jordan), which in 2019 became the first original Arabic drama on Netflix. It was not very good; critics panned the writing and acting. But the loudest public criticism focused on a smooch between two youthful characters. As love scenes go, this one was chaste, just a quick peck on the lips. Still, it was enough for Jordan’s top prosecutor to ask the government to ban the series.

That sort of debate is neither new nor unusual, however. “Chicago Street”, a Syrian drama broadcast last year, featured actors kissing not only on-screen but in its advertising campaign. “Newton’s Cradle”, which aired in Egypt this spring, was praised for its depiction of relationships and sex, particularly a scene that tackled marital rape. Despite the occasional outburst from the clerical set, Arab producers find ways to explore these issues.

Two other constraints chafe more tightly than public morality. First, politics: governments do not want television programmes to challenge them. Second, commercial imperatives. Traditional studio bosses want shows to fit a well-worn model, typically aimed at middle-aged women—rather than the younger viewers who are a prized audience elsewhere.

Even on streaming services, the political restrictions are hard to dodge. Asked to ban “Jinn”, Jordan’s media regulator said it had no jurisdiction over Netflix. Other governments disagree. In 2018 Netflix pulled an episode of “Patriot Act with Hasan Minhaj”, an American comedy show, from its catalogue in Saudi Arabia. The episode criticised the kingdom over the war in Yemen and the murder of Jamal Khashoggi, a Saudi journalist. Saudi Arabia said the show violated its cyber-crime laws.

Commercial barriers may be easier to surmount. For decades the centrepiece of Arabic television has been the Ramadan serial, which airs one episode each night during the holy month, and is meant for families glued to the tube in a post-prandial stupor. These are expensive—production can take a whole year—and face stiff competition. The format is restrictive, since it often requires around 30 episodes (imagine the first three years of “Game of Thrones” squeezed into a month). For many media companies, Ramadan brings in 15-20% of annual revenues.

## Paranormal activity

With so much at stake, producers play safe. They prefer established stars, because advertising is easy when you can slap a well-known face on a billboard. The dramatic range is narrow: historical sagas, mindless action fare, slapstick comedy. Other genres have been overlooked. Arab fans of science fiction, for example, often bemoan a dearth of screen offerings. That is not for lack of material: one of Egypt’s best-loved 20th-century authors, Ahmed Khaled Tawfik, churned out scores of horror and sci-fi novels,despite objections from publishers who wanted crime stories.

That background made “Paranormal” all the more, well, abnormal when it was released on Netflix last year. Egypt’s first original series on the platform, the supernatural anthology show is based on Tawfik’s novels. Its protagonist, Refaat Ismail, is a chain-smoking haematologist from Cairo played by Ahmed Amin—previously known for sketch comedy and YouTube videos he produced himself. The first season ran for just six episodes.

None of this fitted the traditional mould of Arabic television, but viewers lapped it up. A few clunky special effects aside, “Paranormal” earned rave reviews from local audiences, with Mr Amin (pictured) drawing praise for his brooding portrayal of the hero. It spent ten weeks in Netflix's top-ten chart in Egypt and shorter periods in those of other Arab countries; a second season is due in November. Its success proves that, though the Ramadan serial will endure, there are now more ways to make prestige Arabic TV—some of them involving relatively unknown performers and experimental formats.

Crucially, instead of targeting their fare at middle-aged domestic viewers, Arab directors, like those elsewhere, can now reach a dispersed and larger audience. "Paranormal" was deeply Egyptian, and not only in the vintage Nefertiti cigarettes Ismail smokes. The fourth episode dealt with the legendary *naddaha*, a female spectre that lures men to their deaths in the Nile. Viewers eventually learn that the ghost was the victim of an honour killing. Yet the series was well-received far beyond Egypt. *Variety* magazine called it one of the best international shows of 2020. Foreign reviewers likened it to "The X-Files".

Doctor Who?

Other innovative ideas are in the works. In September Shahid launched a series called "Hell's Gate", set 30 years in the future and depicting a dystopian Beirut that is controlled by a gang of oligarchs. It was billed as the platform's first science-fiction drama (given recent events in Lebanon, calling it fiction may seem facetious). Last year Netflix released "Six Windows in the Desert", a run of short films by directors in Saudi Arabia, and "Whispers", a mystery series. It has signed several deals with Saudi production houses to make original feature films and animated shows, in a country where cinemas were only legalised in 2018 after a 35-year ban.

Not all these productions will break boundaries. Netflix is working on a musical drama with Amr Diab, an ageless Egyptian pop star. Some rules will stand: no one in Cairo is likely to pitch an Egyptian version of "Yes Minister", lampooning the workings of Abdel-Fattah al-Sisi's government. But streaming services are helping do for Arabic television what HBO did for America's 20 years ago—bringing stories to life that would otherwise go untold. ■

# Endangered foods

# Human diets are becoming less diverse, a new book warns

***Dan Saladino tells delicious tales of rare foods and the people trying to save them***

Oct 23rd 2021


Eating to Extinction. By Dan Saladino. *Farrar, Straus and Giroux; 464 pages; $26.99. Jonathan Cape; £25*

THE FRENCH eat foie gras, the Icelandic devour *hakarl (*fermented fish with an aroma of urine), Americans give thanks by baking tinned pumpkin in a pie. The range of human foods is not just a source of epicurean joy but a reflection of ecological and anthropological variety—the consequence of tens of thousands of years of parallel yet independent cultural evolution.

And yet, as choice has proliferated in other ways, diets have been squeezed and standardised. Even Parisians eventually let Starbucks onto their boulevards. Dan Saladino, a food journalist at the BBC, reminds readers of what stands to be lost. In "Eating to Extinction" he travels far and wide to find "the world's rarest foods". These include the murnong, "a radish-like root with a crisp bite and the taste of sweet coconut"; for millennia it was a primary food for Australia's Aboriginals, before almost vanishing. The unpasteurised version of English Stilton, meanwhile, was salvaged from hygiene rules by an American enthusiast who renamed it Stichelton.

The book's overarching theme is the rapid decline in the diversity of human foods over the past century. Inside the stomach of a man who died 2,500 years ago, and whose body was preserved when it sank into a Danish peat bog, researchers found the remains of his last meal: "a porridge made with barley, flax and the seeds of 40 different plants". In east Africa, the Hadza, one of the last remaining hunter-gatherer tribes, "eat from a potential wild menu that consists of more than 800 plant and animal species". By contrast, most humans now get 75% of their calorie intake from just eight foods: rice, wheat, maize, potatoes, barley, palm oil, soya and sugar.

Even within each of those food groups there is homogenisation. Decades of selective breeding and the pressures of global food markets mean that farms everywhere grow the same varieties of cereals and raise the same breeds of livestock.

Why should anyone care about having 25 varieties of wheat when a single one can be optimised to produce more grain, in more reliable fashion and with a guarantee of the same taste, year after year? For the same reason that fund managers seek to diversify their assets. In an ever-changing world, diversity is an insurance policy. The pressures of climate change and rapidly spreading diseases make that insurance all the more important.

The unhappy fate of the Large White pig is a case in point. Picture the quintessential farmed swine—pink, long-bodied, almost cartoonlike—and you will probably be imagining a Large White. Originating in England in the 19th century, the Large White quickly put on weight (ie, meat) and could be kept inside or out. From England, it was exported to Europe, Australia, Argentina, Canada, Russia, America and China. Today, it fills the world's biggest industrial pig farms.

But in the past few years African swine fever has swept through such farms, from China to South-East Asia, Mongolia and India. By summer 2020 it had reached Europe—and may have killed nearly half of China's pigs and a quarter of the world's. Homogeneity made the planet's piggy population a pathogen's playground.

Such stories remind readers of the stakes, but the real delicacies in Mr Saladino's book are its tales of people who have tried to resist the shrinkage of diets, sometimes heroically. Nikolai Vavilov, for example, founded the world's first seed bank, in Leningrad (now St Petersburg). He and his disciples gathered more than 150,000 seed samples before he was sent to a prison camp under Stalin. In 1943 Vavilov "was claimed by the very thing he had spent his life working to prevent: starvation".

His seed collection, however, lives on thanks to the immense sacrifice of the conservationists he inspired. Under siege by the Nazis, and with Vavilov stuck in prison, they moved hundreds of boxes to a freezing basement and took turns standing guard over their trove of genetic diversity. "By the end of the 900-day siege", writes Mr Saladino, "nine of them had died of starvation." Among them was the curator of the rice collection, found dead "at his desk, surrounded by bags of rice".

Mr Saladino offers many wonderful vignettes of indigenous food cultures. The most enchanting involves the symbiosis between the Hadza (pictured) and a feathered collaborator, which evolved over thousands of years. He witnesses an elaborate singalong between his host and a small black-and-white bird—and realises that the exchange is guiding his party to a baobab tree, at the top of which is a honeybee hive. The bird can find the nest, but "can't get to the wax it wants to eat without being stung to death". For their part, the humans "struggle to find the nest but armed with smoke can pacify the bees".

Later that day, Mr Saladino's group arrives at an isolated hut beside a well. Inside are branded biscuits and sugary pop—tokens of a global food industry that continues its relentless march. ■

## The coast of dystopia

# A cautionary tale from the streets of San Francisco

### *A new book shows how well-meaning urban policies have backfired*

Oct 23rd 2021


San Fransicko. By Michael Shellenberger. *Harper; 416 pages: $28.99 and £20*

"THERE'S A CRUELTY here that I don't think I've ever seen," said Leilani Farha, then the UN's special rapporteur on adequate housing, in San Francisco in 2018. Visitors are routinely dismayed by the desperation of those living on the streets of the wealthy west-coast city. From 2005 to 2020 the estimated number of unsheltered homeless people nearly doubled, even as homelessness declined nationwide. How can a place brimming with resources and good intentions fail so flagrantly to meet the basic needs of the population?

This question and its uncomfortable answers form the spine of "San Fransicko" by Michael Shellenberger, a former journalist who runs Environmental Progress, a non-profit group. He blames San Francisco's woes on a culture of permissive lawlessness and a mistaken view of what constitutes moral policymaking. For example, many on the left believe the lax prosecution of laws is compassionate. As a result, the city mostly does not enforce drug laws, even against dealers—at a mounting cost to addicts. Last year 713 people died of accidental drug overdoses, more than double the toll of covid-19. “What kind of city regulates ice-cream stores more strictly than drug-dealers who kill 713 of its citizens in a single year?” Mr Shellenberger asks.

Oddly, a countercultural metropolis famed for innovation has been beset by groupthink. Activists claim San Francisco simply needs to spend more to house the homeless, without scrutinising the funds that the city already doles out to a web of unaccountable non-profits, or reckoning with the magnetic effect of its permissive policies on troubled folk elsewhere. Around 30% of the homeless population of San Francisco say they were homeless before they arrived.

Mr Shellenberger’s urge to tell the truth is brave. Those who challenge the policies espoused by advocates for the homeless are often attacked as inhumane—even though the same policies have contributed to so many unfortunates lacking access to shelter altogether. Mr Shellenberger thinks they are on the streets in part because of a “housing-first” approach, which holds out for permanent, individual homes at the expense of building enough temporary accommodation. In a pricey city, where long-term residents routinely oppose new construction, that is unrealistic.

At its best, “San Fransicko” has the air of a spirited dinner-party conversation, as Mr Shellenberger recounts his intellectual duels with well-intentioned but wrong-headed opponents. Depressing statistics abound. Between 2014 and 2018, for instance, the number of complaints about human faeces to the city helpline doubled. There are 50% more injection drug-users in San Francisco than there are students enrolled at its public high schools.

Yet what the book offers in data, it lacks in characters. Readers are left without a strong sense of the personalities and backgrounds of Mr Shellenberger’s interlocutors. Nor is there enough analysis of the city’s dysfunctional governance. He omits to mention it, but San Francisco is the focus of an FBI probe that has already charged three former City Hall officials with wrongdoing. Could his hometown be even sicker than he suggests? The definitive book on modern San Francisco has still to be written. ■

# Spies and the stage

# A new book explores the symbiosis of espionage and entertainment

***They have a lot in common—including personnel***

**Oct 23rd 2021**


Stars and Spies. By Christopher Andrew and Julius Green. *Bodley Head; 512 pages; £20*

AT THE HEIGHT of his powers in the late 18th century, there was no more feted dramatist in Europe than Pierre-Augustin Caron de Beaumarchais, the author of "Le Barbier de Seville" and "Le Mariage de Figaro". He was also an extraordinarily successful spy, an agent of the French king's personal intelligence agency, the Secret du roi. Sent to London in 1775 to negotiate a deal with a rogue French agent—a flamboyant transvestite *chevalier* called d'Eon de Beaumont—Beaumarchais reported to Louis XVI's foreign minister, the Comte de Vergennes, that pessimism was in the air over the war to keep the American colonies.

To hasten Britain's defeat, Vergennes authorised Beaumarchais to set up a front company to supply arms to the American rebels. By early 1777, while he was rehearsing a production in Le Havre, Beaumarchais managed to send nine shiploads of weapons to George Washington's army. Remarkably, his fame was not an impediment to his clandestine activities, and may even have helped him avoid suspicion. The CIA's Centre for the Study of Intelligence concluded that his efforts had helped bring "the infant United States through the most critical period of its birth".

The interplay between show business and espionage was already well-established before the exploits of Beaumarchais. Since stars seek the limelight and spies lurk in the shadows, the symbiosis is not at first obvious, acknowledge Christopher Andrew (the official historian of Britain's Security Service, MI5) and Julius Green (a theatre historian and producer). But, they argue, the two professions require similar skills: deception, role-playing and the ability to create and stick to scripts. Both attract characters at ease with the transitory lifestyle common to itinerant entertainers and undercover agents.

Dubbed the second-oldest profession, spying has always found entertainment a useful cover. King Alfred penetrated a Danish camp pretending to be a harpist; legend had it that the troubadour Blondel used his licence to wander across Europe to find the place of Richard I's imprisonment. But this delightful history begins with the extraordinary intelligence network established by Elizabeth I's spymaster, Sir Francis Walsingham. Catholic sympathisers, such as the lutenist John Dowland and the exiled adventurer Anthony Standen, were "turned" to work for the Protestant state. Standen was an accomplished actor and, posing as "Pompeo Pellegrini", provided vital information about Spain's invasion plans; Dowland infiltrated the Danish court. Christopher Marlowe, a playwright and poet, also spied for Walsingham.

In the 17th century the dramatist Aphra Behn became the first British woman to earn her living as a writer—and to be officially recruited as a spy by the British government. In 1666, after the outbreak of the second Anglo-Dutch war, she was sent to Antwerp to persuade a former lover and Dutch agent to switch sides in a classic honeytrap operation. The book then speeds through the age of revolution and counter-revolution with quick-fire anecdotes and a huge cast of larger-than-life characters. They include the libertine and memoirist Giacomo Casanova, who was probably the first professional spy to describe himself as a "secret agent".

Espionage in the 20th century is the book's main focus. Before the first world war, the authors relate, spy dramas were all the rage in both novels and on the London stage. The first head of MI5, an engagingly theatrical naval officer called Mansfield Cumming (known as "C"), employed a West End costumier, Willy Clarkson, to provide him with a succession of disguises. During the war, the most celebrated agents were women. The most famous of all, the upmarket Dutch stripper Mata Hari, spied, not very effectively, for the Germans—until her capture and execution.

## Stage fright

A far more successful spy was Mistinguett, a singer, dancer and film star who extracted from a Prussian prince, her one-time lover, the location of the final German offensive in 1918—in Champagne, not on the Somme as had been expected. Her successor in the second world war was the great African-American entertainer Josephine Baker (pictured), who, after moving to France, carried out numerous missions for her adopted country's Deuxieme Bureau, winning Charles de Gaulle's gratitude.

During the second world war, SIGINT, or signals intelligence, was mostly more valuable than HUMINT, the human kind. But theatre intruded even at Britain's code-breaking centre at Bletchley Park. Before the war its deputy director, Frank Birch, had a stellar career as a pantomime dame, particularly as an acclaimed Widow Twankey in "Aladdin". Initially Britain's main HUMINT mission was to help persuade America to enter the fight. The head of the MI6 (foreign-intelligence) station in New York, William Stephenson, recruited a galaxy of stars as influence agents, including Roald Dahl and Noel Coward.

Another of Stephenson's recruits was Eric Maschwitz, a Hollywood screenwriter and lyricist. He produced a forged map purporting to reveal a Nazi master plan for taking over South America. President Franklin Roosevelt was completely fooled. Maschwitz went on to become head of light entertainment at BBC television.

The book has its faults. Surprisingly, for instance, it omits the spies and adventurers who played the "Great Game" between Britain and Russia in the 19th century. At times, the stylistic joins between the two authors are a little too visible. But anyone who loves a good spy story will find and enjoy hundreds of them here. ■

# Economic & financial indicators

- [Economic data, commodities and markets]

# Indicators

# Economic data, commodities and markets

Oct 23rd 2021

## Economic data

1 of 2

| | Gross domestic product % change on year ago: latest | | quarter* | 2021† | Consumer prices % change on year ago: latest | | 2021† | Unemployment rate % | |
|---|---|---|---|---|---|---|---|---|---|
| United States | 12.2 | Q2 | 6.7 | 6.0 | 5.4 | Sep | 4.3 | 4.8 | Sep |
| China | 4.9 | Q3 | 0.8 | 7.9 | 0.7 | Sep | 1.0 | 4.9 | Sep‡§ |
| Japan | 7.6 | Q2 | 1.9 | 2.3 | -0.4 | Aug | -0.2 | 2.8 | Aug |
| Britain | 23.6 | Q2 | 23.9 | 6.4 | 3.1 | Sep | 2.8 | 4.5 | Jul†† |
| Canada | 12.7 | Q2 | -1.1 | 5.4 | 4.4 | Sep | 3.0 | 6.9 | Sep |
| Euro area | 14.2 | Q2 | 8.7 | 4.8 | 3.4 | Sep | 1.9 | 7.5 | Aug |
| Austria | 12.8 | Q2 | 24.6 | 3.1 | 3.2 | Sep | 2.4 | 6.1 | Aug |
| Belgium | 15.1 | Q2 | 7.1 | 5.0 | 2.9 | Sep | 2.3 | 6.4 | Aug |
| France | 18.7 | Q2 | 4.5 | 5.5 | 2.2 | Sep | 1.6 | 8.0 | Aug |
| Germany | 9.4 | Q2 | 6.7 | 3.1 | 4.1 | Sep | 2.5 | 3.6 | Aug |
| Greece | 16.4 | Q2 | 14.5 | 6.5 | 2.2 | Sep | 0.1 | 13.2 | Aug |
| Italy | 17.2 | Q2 | 11.2 | 6.0 | 2.5 | Sep | 1.6 | 9.3 | Aug |
| Netherlands | 10.4 | Q2 | 15.9 | 3.9 | 2.7 | Sep | 2.2 | 3.2 | Aug |
| Spain | 17.6 | Q2 | 4.3 | 6.1 | 4.0 | Sep | 2.4 | 14.0 | Aug |
| Czech Republic | 8.8 | Q2 | 3.9 | 3.4 | 4.9 | Sep | 3.6 | 3.0 | Aug‡ |
| Denmark | 10.0 | Q2 | 11.7 | 3.2 | 2.2 | Sep | 1.7 | 3.6 | Aug |
| Norway | 6.1 | Q2 | 4.4 | 3.0 | 4.1 | Sep | 3.0 | 4.2 | Jul†† |
| Poland | 11.2 | Q2 | 8.7 | 5.3 | 5.9 | Sep | 4.1 | 5.6 | Sep§ |
| Russia | 10.5 | Q2 | na | 3.8 | 7.4 | Sep | 5.9 | 4.4 | Aug§ |
| Sweden | 9.5 | Q2 | 3.6 | 4.0 | 2.5 | Sep | 1.9 | 8.5 | Aug§ |
| Switzerland | 7.7 | Q2 | 7.4 | 3.5 | 0.9 | Sep | 0.3 | 2.8 | Sep |
| Turkey | 21.7 | Q2 | na | 8.0 | 19.6 | Sep | 17.1 | 12.0 | Aug§ |
| Australia | 9.6 | Q2 | 2.7 | 4.2 | 3.8 | Q2 | 2.4 | 4.6 | Sep |
| Hong Kong | 7.6 | Q2 | -3.7 | 6.2 | 1.6 | Aug | 1.6 | 4.7 | Aug‡‡ |
| India | 20.1 | Q2 | -41.2 | 8.2 | 4.3 | Sep | 5.4 | 6.9 | Sep |
| Indonesia | 7.1 | Q2 | na | 3.0 | 1.6 | Sep | 1.7 | 6.3 | Q1§ |
| Malaysia | 16.1 | Q2 | na | 3.8 | 2.0 | Aug | 2.4 | 4.6 | Aug§ |
| Pakistan | 4.7 | 2021** | na | 3.8 | 9.0 | Sep | 9.2 | 6.9 | 2019 |
| Philippines | 11.8 | Q2 | -5.1 | 4.3 | 4.8 | Sep | 4.1 | 6.9 | Q3§ |
| Singapore | 6.5 | Q3 | 3.4 | 5.4 | 2.4 | Aug | 1.9 | 2.7 | Q2 |
| South Korea | 6.0 | Q2 | 3.1 | 4.0 | 2.5 | Sep | 2.2 | 2.7 | Sep§ |
| Taiwan | 7.4 | Q2 | -4.2 | 5.7 | 2.6 | Sep | 2.0 | 4.1 | Aug |
| Thailand | 7.5 | Q2 | 1.5 | 1.4 | 1.7 | Sep | 0.8 | 1.5 | Dec§ |
| Argentina | 17.9 | Q2 | -5.5 | 8.1 | 52.5 | Sep | 47.3 | 9.6 | Q2§ |
| Brazil | 12.4 | Q2 | -0.2 | 5.0 | 10.2 | Sep | 8.0 | 13.7 | Jul§‡‡ |
| Chile | 18.1 | Q2 | 4.2 | 10.3 | 5.3 | Sep | 3.9 | 8.5 | Aug§‡‡ |
| Colombia | 17.0 | Q2 | -9.2 | 9.8 | 4.5 | Sep | 3.4 | 12.3 | Aug§ |
| Mexico | 19.6 | Q2 | 6.0 | 6.4 | 6.0 | Sep | 5.3 | 4.1 | Aug |
| Peru | 41.9 | Q2 | 3.5 | 12.6 | 5.2 | Sep | 4.2 | 10.1 | Sep§ |
| Egypt | 7.7 | Q2 | na | 3.3 | 6.6 | Sep | 5.4 | 7.3 | Q2§ |
| Israel | 17.5 | Q2 | 16.6 | 5.3 | 2.5 | Sep | 1.7 | 5.0 | Aug |
| Saudi Arabia | -4.1 | 2020 | na | 2.2 | 0.7 | Sep | 3.1 | 6.6 | Q2 |
| South Africa | 19.3 | Q2 | 4.7 | 4.5 | 5.1 | Sep | 4.4 | 34.4 | Q2§ |

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.

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## 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 $ Oct 20th | % change on year ago |
|---|---|---|---|---|---|---|---|
| United States | -3.4 | -12.6 | 1.6 | | 84.0 | - | |
| China | 1.9 | -4.9 | 2.9 | §§ | -23.0 | 6.39 | 4.5 |
| Japan | 3.4 | -8.9 | nil | | -8.0 | 114 | -7.7 |
| Britain | -3.9 | -10.9 | 1.1 | | 87.0 | 0.72 | 6.9 |
| Canada | -2.6 | -9.4 | 1.6 | | 104 | 1.23 | 6.5 |
| Euro area | 3.3 | -7.2 | -0.1 | | 48.0 | 0.86 | -1.2 |
| Austria | 2.7 | -7.7 | 0.1 | | 53.0 | 0.86 | -1.2 |
| Belgium | 1.1 | -7.1 | 0.2 | | 53.0 | 0.86 | -1.2 |
| France | -1.4 | -8.7 | 0.2 | | 55.0 | 0.86 | -1.2 |
| Germany | 6.7 | -5.7 | -0.1 | | 48.0 | 0.86 | -1.2 |
| Greece | -4.4 | -9.6 | 1.0 | | 6.0 | 0.86 | -1.2 |
| Italy | 3.8 | -9.6 | 0.9 | | 19.0 | 0.86 | -1.2 |
| Netherlands | 9.8 | -4.7 | -0.1 | | 44.0 | 0.86 | -1.2 |
| Spain | 0.9 | -8.9 | 0.5 | | 35.0 | 0.86 | -1.2 |
| Czech Republic | 3.2 | -8.3 | 2.5 | | 152 | 21.9 | 4.7 |
| Denmark | 7.5 | -0.3 | 0.1 | | 62.0 | 6.39 | -1.6 |
| Norway | 6.9 | -3.0 | 1.4 | | 76.0 | 8.35 | 10.9 |
| Poland | 2.3 | -6.6 | 2.7 | | 145 | 3.94 | -2.0 |
| Russia | 4.5 | -1.8 | 7.6 | | 140 | 70.9 | 9.4 |
| Sweden | 4.3 | -1.9 | 0.4 | | 48.0 | 8.59 | 1.9 |
| Switzerland | 6.8 | -3.8 | -0.1 | | 46.0 | 0.92 | -1.1 |
| Turkey | -3.0 | -3.2 | 19.1 | | 606 | 9.24 | -14.8 |
| Australia | 1.8 | -5.9 | 1.8 | | 105 | 1.33 | 6.8 |
| Hong Kong | 2.9 | -4.2 | 1.5 | | 95.0 | 7.78 | -0.4 |
| India | -0.9 | -7.2 | 6.4 | | 44.0 | 74.9 | -1.9 |
| Indonesia | -0.2 | -6.0 | 6.2 | | -45.0 | 14,078 | 4.1 |
| Malaysia | 2.6 | -6.0 | 3.6 | | 100 | 4.16 | -0.2 |
| Pakistan | -3.3 | -7.2 | 10.9 | ††† | 75.0 | 173 | -6.3 |
| Philippines | -0.9 | -7.5 | 5.0 | | 201 | 50.8 | -4.3 |
| Singapore | 19.1 | -4.2 | 1.8 | | 90.0 | 1.34 | 1.5 |
| South Korea | 4.7 | -4.4 | 2.4 | | 93.0 | 1,174 | -3.0 |
| Taiwan | 15.2 | -1.2 | 0.5 | | 17.0 | 27.9 | 2.8 |
| Thailand | -0.9 | -7.5 | 1.9 | | 72.0 | 33.4 | -6.2 |
| Argentina | 1.6 | -5.7 | na | | na | 99.3 | -21.9 |
| Brazil | 0.5 | -5.4 | 11.7 | | 427 | 5.55 | 0.5 |
| Chile | -1.5 | -6.7 | 6.5 | | 380 | 810 | -2.8 |
| Colombia | -4.1 | -8.5 | 7.5 | | 240 | 3,775 | 1.6 |
| Mexico | 1.8 | -3.3 | 7.5 | | 165 | 20.2 | 4.5 |
| Peru | -3.4 | -4.4 | 5.9 | | 171 | 3.94 | -8.9 |
| Egypt | -4.4 | -8.0 | na | | na | 15.7 | nil |
| Israel | 4.3 | -6.5 | 1.2 | | 44.0 | 3.21 | 5.3 |
| Saudi Arabia | 4.5 | -2.0 | na | | na | 3.75 | nil |
| South Africa | 1.8 | -9.0 | 9.4 | | 6.0 | 14.4 | 14.1 |

Source: Haver Analytics. §§5-year yield. †††Dollar-denominated bonds.

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Markets

| In local currency | Index Oct 20th | % change on: one week | Dec 31st 2020 |
|---|---|---|---|
| **United States** S&P 500 | 4,536.2 | 4.0 | 20.8 |
| **United States** NAScomp | 15,121.7 | 3.8 | 17.3 |
| **China** Shanghai Comp | 3,587.0 | 0.7 | 3.3 |
| **China** Shenzhen Comp | 2,420.0 | 1.1 | 3.9 |
| **Japan** Nikkei 225 | 29,255.6 | 4.0 | 6.6 |
| **Japan** Topix | 2,027.7 | 2.7 | 12.4 |
| **Britain** FTSE 100 | 7,223.1 | 1.1 | 11.8 |
| **Canada** S&P TSX | 21,188.2 | 2.8 | 21.5 |
| **Euro area** EURO STOXX 50 | 4,172.2 | 2.2 | 17.4 |
| **France** CAC 40 | 6,705.6 | 1.6 | 20.8 |
| **Germany** DAX* | 15,522.9 | 1.8 | 13.2 |
| **Italy** FTSE/MIB | 26,581.8 | 2.4 | 19.6 |
| **Netherlands** AEX | 805.5 | 3.6 | 29.0 |
| **Spain** IBEX 35 | 9,017.9 | 1.5 | 11.7 |
| **Poland** WIG | 74,222.4 | -0.1 | 30.2 |
| **Russia** RTS, $ terms | 1,904.8 | 2.7 | 37.3 |
| **Switzerland** SMI | 12,013.2 | 1.7 | 12.2 |
| **Turkey** BIST | 1,432.8 | 1.4 | -3.0 |
| **Australia** All Ord. | 7,727.2 | 2.1 | 12.8 |
| **Hong Kong** Hang Seng | 26,136.0 | 4.7 | -4.0 |
| **India** BSE | 61,260.0 | 0.9 | 28.3 |
| **Indonesia** IDX | 6,656.0 | 1.8 | 11.3 |
| **Malaysia** KLSE | 1,606.3 | 0.4 | -1.3 |
| **Pakistan** KSE | 45,499.5 | 5.3 | 4.0 |
| **Singapore** STI | 3,198.1 | 1.3 | 12.5 |
| **South Korea** KOSPI | 3,013.1 | 2.3 | 4.9 |
| **Taiwan** TWI | 16,887.8 | 3.3 | 14.6 |
| **Thailand** SET | 1,637.6 | -0.4 | 13.0 |
| **Argentina** MERV | 87,055.7 | 11.0 | 69.9 |
| **Brazil** BVSP | 110,786.4 | -2.4 | -6.9 |
| **Mexico** IPC | 52,298.2 | 0.9 | 18.7 |
| **Egypt** EGX 30 | 11,132.1 | 2.3 | 2.6 |
| **Israel** TA-125 | 1,913.1 | 1.1 | 22.0 |
| **Saudi Arabia** Tadawul | 11,903.7 | 2.4 | 37.0 |
| **South Africa** JSE AS | 66,894.8 | 1.3 | 12.6 |
| **World, dev'd** MSCI | 3,147.7 | 3.6 | 17.0 |
| **Emerging markets** MSCI | 1,301.1 | 3.2 | 0.8 |

**US corporate bonds,** spread over Treasuries

| Basis points | latest | Dec 31st 2020 |
|---|---|---|
| **Investment grade** | 111 | 136 |
| **High-yield** | 325 | 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 | Oct 12th | Oct 19th* | % change on month | year |
|---|---|---|---|---|
| **Dollar Index** | | | | |
| All Items | 158.0 | 160.9 | 12.1 | 24.9 |
| Food | 127.7 | 130.1 | 2.6 | 22.9 |
| **Industrials** | | | | |
| All | 186.4 | 189.6 | 19.2 | 26.2 |
| Non-food agriculturals | 149.8 | 150.7 | 8.1 | 43.0 |
| Metals | 197.2 | 201.2 | 22.0 | 23.0 |
| **Sterling Index** | | | | |
| All items | 177.3 | 178.0 | 10.9 | 17.3 |
| **Euro Index** | | | | |
| All items | 151.8 | 153.2 | 12.9 | 26.9 |
| **Gold** | | | | |
| $ per oz | 1,763.2 | 1,772.6 | -0.4 | -7.1 |
| **Brent** | | | | |
| $ per barrel | 83.5 | 85.2 | 14.1 | 97.2 |

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.

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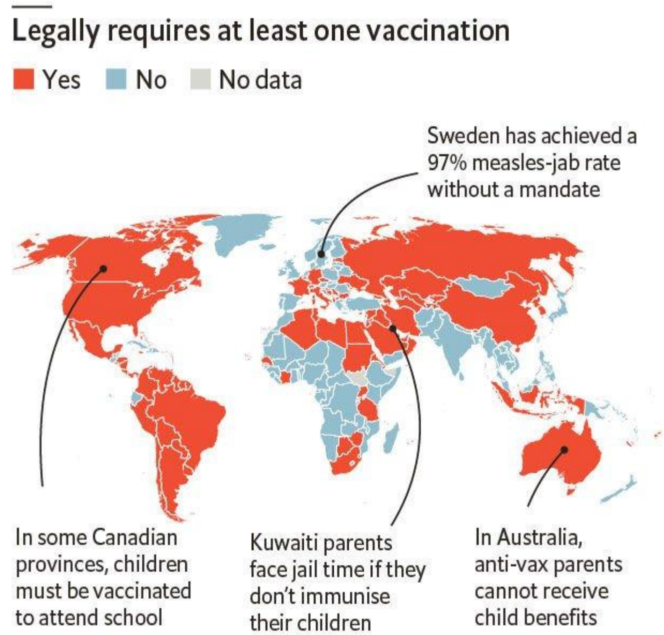
## Graphic detail

Strictly come jabbing

# The impact of vaccine mandates is modest, but potentially crucial

*Allowing exceptions sharply reduces mandates' effectiveness*

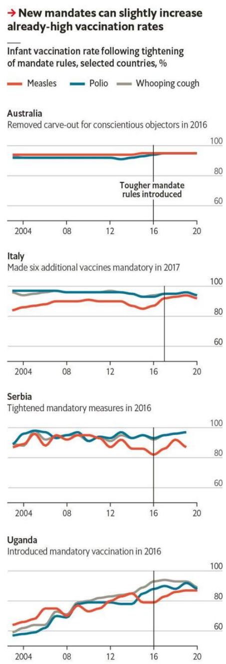
Oct 23rd 2021




IN THE 24 hours after France announced that it would require proof of vaccination or a negative covid-19 test to enter many public spaces, 1m people signed up for jabs. Other countries are following suit: Italy imposed a vaccine-or-test policy last week.

How effective will such rules be? The response in France was robust, but many of those people might have sought jabs anyway. In American polls, most unvaccinated people say they do not intend to get shots.

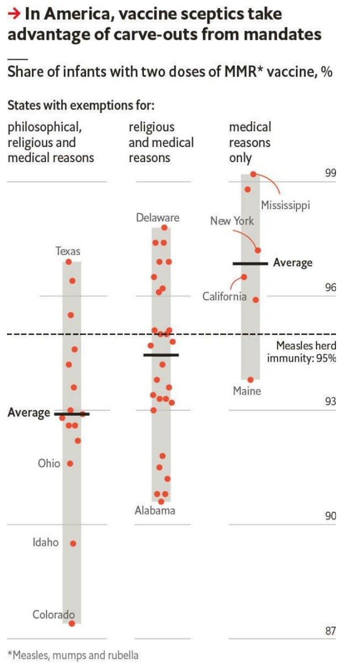
Because jabs for covid-19 are new, the impact of mandating them will probably differ from that of requiring children to get well-established vaccines. However, history still offers relevant data on hardline refuseniks' susceptibility to legal fiat.




The link between mandates and uptake of standard vaccines in childhood is murky. Much of Europe enjoys broad coverage without mandates, whereas poor countries' edicts are often honoured in the breach. Even among countries with similar GDP per person, those with mandates do not vaccinate more—perhaps because only places with low uptake resort to coercion.

Another way to assess impact is studying changes over time when new mandates come in. Uganda's long-run upward trend in jab rates actually flattened out after the country imposed a mandate. However, it only began requiring vaccines once 80% of children were already getting them.

In rich countries mandates have helped a bit. In 2016 Australia ended an exemption for conscientious objectors. Its jab rate for polio rose by three percentage points. After imposing new mandates in 2017-18 following outbreaks of vaccine-preventable diseases, Italy saw gains in measles shots, and France in meningitis-C jabs. In six countries that have stiffened rules since 2000, the average gain was 2.2 percentage points.




The best evidence that mandates matter comes from America. Some states offer carve-outs from mandates only for medical reasons; others also recognise religious or philosophical ones. After adjusting for demographic and political characteristics that also affect jab rates, uptake in states with the fewest exceptions is 1.1 percentage points higher than in those with the most.

These effects sound small. But since jab rates cannot exceed 100%, mandates can only do so much if uptake is already high. Moreover, for diseases like measles, 95% of people need protection to reach herd immunity. A few percentage points can determine if outbreaks take off or fizzle out.■

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]().*

# Obituary

A soldier in Washington

# Obituary: Colin Powell thought America should tread carefully in the world

*The four-star general and secretary of state died on October 18th, aged 84*

Oct 23rd 2021


Rick Friedman/Polaris/Eyevine

AMONG THE best lessons Colin Powell learned in his life (and he was fond of uplifting lists of aphorisms, mottoes and rules), two came from his after-school job at Sickser's toy and baby-furniture store on Westchester Avenue, in the Bronx. The first was the fun of putting something together, in this case disassembled cribs, from unpromising heaps of parts. The second was the importance of a cool, sound head. His boss spoke Yiddish, like many of the customers, and taught him the phrase *Gesund dein kepple*, "Keep a healthy head". That seemed a good principle to live by.

Yet no one, least of all him, a New Deal kid kicking a football round the run-down streets of Hunts Point, could have guessed that his soundness would be tested at the highest levels of government, as America's top diplomat and adviser to its presidents, and the commander and promoter of its wars. For a time, after victory in the first Gulf war in 1991, he was the most popular man in the country. In the presidential elections of both 1996 and 2000 his name was floated, though he didn't bite. His wife Alma would not like the life, he said, and he was not that keen on it himself.

Instead his passion was the army, in which he firmly stayed until, in 1993, he was deployed to the State Department. It was his first love, from the moment when at 17 he put on the olive-green jacket, brown shirt and brass-buckle belt of the Reserve Officer Training Corps, and liked what he saw. The army gave him a place, a structure, and the same cheery confidence his brisk, fedora-wearing father had. ("Don't take counsel of your fears" became one of his 13 rules of leadership; another, "Perpetual optimism is a force multiplier.") In the ROTC, his grades soared. What would he have been without it? A bus driver, probably, he thought.

As a military man, eventually a four-star general and chairman of the joint chiefs of staff, he was a difficult fit in politics: in the Reagan and Bush administrations a dove among the hawks, in the Clinton administration a realist among starry-eyed liberal internationalists. Sometimes he voted as a Republican, sometimes as a Democrat. He approached problems not as an academic, for he'd maintained a fine C-average all through school and college, but as an infantry officer, sent out to assess a situation first and see if it could be fixed. He was not a thinker but a practitioner, moving carefully through the elephant grass as he had on patrols in Vietnam, searching for an enemy who was usually invisible, and liable to be tripped up at any minute, as he was, by the wild pain of a poisoned *punji* stick through his foot. The military might of America had been humbled there, undermined by lies and self-deceptions and by an enemy in black pyjamas with sandals cut from old tyres, like the first dead Viet Cong fighter he had seen.

His rules for going to war, which other people called the Powell Doctrine, were coloured by that experience, as well as the need for cool, cautious heads. Had everything else been tried? Was it in the national interest? Was there a clear objective, worth risking lives for? (In Vietnam, over two tours and with a row of medals for bravery, he never knew why he was there.) Did America have the resources to do the job fast and well? Had the consequences been considered? (When there was talk of surgical strikes, he headed for the bunker.) Did allies, and the American people, support it? And was there a strategy for leaving?

The first Gulf war fulfilled most of those criteria. Other episodes did not. A strike against a terrorist in Mogadishu in 1993 failed because it was done without gunships and tanks. Then came Iraq all over again. As secretary of state he argued against the invasion, but the president took the decision and, as a good soldier, he followed unblinking. He then sold the war to the world at the United Nations, relying on grainy photographs and false intelligence. It was a blot on his record and a pain that did not go away.

At least the aim in Iraq had been clear, to topple Saddam Hussein and bring democracy. But he concluded that the Iraqis had to do that second part themselves.Any surge of troops would just put a heavier lid on a pot of boiling sectarian stew. He felt the same about Afghanistan: it was good to go in with overwhelming force, but a mistake to pile in more troops later, as Barack Obama did. He was proud that America largely held the moral high ground in the world, and that he could boastfully show off its missile fields and submarines to his Russian opposite number, but it could not set everything straight. As he told Madeleine Albright once, when she screamed at him to help in Bosnia, American GIs were not toy soldiers to be moved around on a board.

Because he was the first black chairman of the joint chiefs and the first black national security adviser, people assumed that racism was another battle he had fought. He did not see it quite that way. In the Bronx everyone was a minority, whether Pole, Jew, Greek or Jamaican like himself, dancing (badly) to calypso and dining on rice and peas. In the army, only valour and merit counted. Certainly he faced prejudice, especially on trips to army training in the segregated South, when almost all motels, bars and even restrooms were closed to him. But he took that as a challenge. (“Get mad, then get over it” was another of his 13 rules.) Since he did not define himself by colour, the point was not whether he was the first black this or that. He hoped, of course, that his ascent opened doors for others. What mattered most, though, was to be an American, a soldier and the best man at the job.

The complexity of the world he was trying to sort out often frustrated him. He found himself almost nostalgic, sometimes, for the starker simplicities of the cold war and zero-sum games of power. But if he wanted to have a cool, clear head again, he could do what he had done at Sickser’s toy store, just put things together or take them apart. As secretary of state and chairman of the JCS his greatest fun was to haul home old Volvos, long presumed dead, and find the one part—a new distributor cap, say—that would bring them back to life. And as he did so, the perpetual optimist could not help feeling that in the broken world, too, some simple solution might put a lot of things right. ■

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