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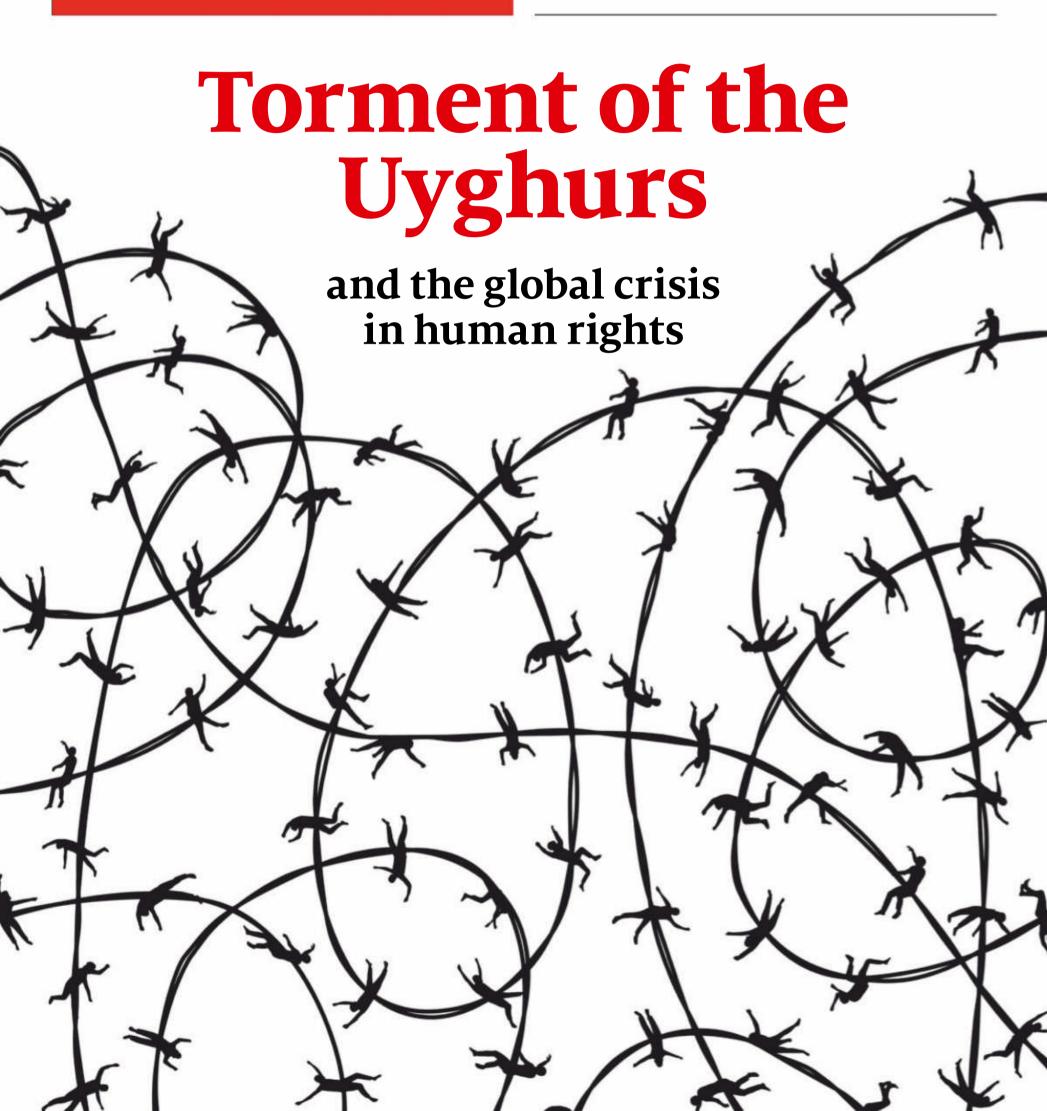
Our verdict on Trumponomics

Lessons from the Vision Fund

Does Britain need another lockdown?

Thailand's battle royal

OCTOBER 17TH-23RD 2020



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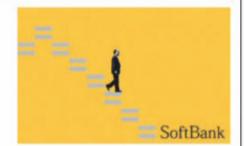
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to take part in "a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."

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The world this week Politics



More European countries reapplied tight restrictions on social life to counter a rise in covid-19 infections. Emmanuel Macron imposed a 9pm curfew on Paris and eight other **French** cities, saying that this was not the time for convivialitv. A new three-tiered system for local restrictions was introduced in England, which caused outrage in the Liverpool region, the first area to be put in the highest tier. London was due to be placed in the secondhighest tier. Pressure increased on the government to impose a nationwide "circuitbreaker" strict lockdown of two weeks or more. Many fear that would crush the nascent economic recovery.

Germany announced a curfew on visiting bars and restaurants in hotspots. "We are already in a phase of exponential growth," said Angela Merkel, the chancellor. Daily cases have risen above 6,000 for the first time since April.

A ceasefire went into effect in **Nagorno-Karabakh**, a disputed enclave inside Azerbaijan that is run by ethnic Armenians. There were reports of some violations.

A state of emergency was declared in **Thailand**, allowing police to crack down on protesters calling for a new constitution, fresh elections and a more circumscribed role for the king. The decree said that the demonstrators had tried to obstruct the royal motorcade; they had made gestures at a car carrying the queen.

Donald Trump said that all American forces would leave **Afghanistan** by Christmas. His national security adviser had said the number of us troops would fall to 2,500 in early 2021. Taliban fighters besieged Lashkar Gah, the capital of Helmand province.

Kyrgyzstan's president, Sooronbay Jeyenbekov, resigned after ten days of political turmoil following a disputed election. Supporters of the new prime minister, Sadyr Japarov, a convicted kidnapper, urged the Speaker of parliament to resign so that Mr Japarov could become acting president. Liberal politicians are warning of a descent into mob rule.

Anwar Ibrahim, the leader of the opposition in **Malaysia**, reiterated his claim to have enough support in parliament to form a government. The king, who appoints prime ministers, said Mr Anwar had still not supplied him with a list of names.

China's leader, Xi Jinping, visited Shenzhen, a city bordering Hong Kong, to mark its 40th anniversary as a "special economic zone". He said the world had entered a "period of turbulent change" and urged greater reliance on the domestic market.

Israel approved a plan to admit 2,000 **Ethiopian Jews**. Thousands more remain in Ethiopia, most of them waiting, some for years, to emigrate.

Thousands protested in **Nigeria** after the killing of a young man by a police unit often accused of such things. The government said it would disband the Special Anti-Robbery Squad.

Donald Trump's doctor said that the president had tested negative for covid-19 and is "not infectious", a week after he left hospital having contracted the disease. Mr Trump returned to the campaign trail with a rally in Florida.

The second **debate** between America's presidential candidates was cancelled. The commission that oversees such events wanted a virtual one, given the risk of covid-19. Mr Trump refused to take part.

Amy Coney Barrett, Mr Trump's choice to replace Ruth Bader Ginsburg on the **Supreme Court**, gave an assured performance when she was questioned by the Senate Judiciary Committee at her confirmation hearing. It was a world away from the ruckus of Brett Kavanaugh's hearing in 2018.

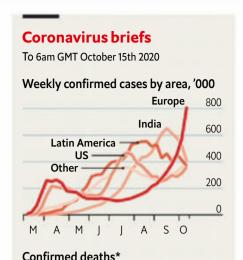
Eight countries, including America, Britain and Japan, became the first signatories to the Artemis accords, an initiative by NASA to establish principles for the sustainable and peaceful exploration of **the**Moon. Those countries can participate in the Artemis programme, which will send two astronauts, one of them a woman, to the Moon in 2024.

A **Colombian** court freed Álvaro Uribe, a conservative former president who is the political patron of the current one, Iván Duque, from house arrest. The country's Supreme Court had ordered his arrest during an investigation into allegations that he had tampered with witnesses in a case against a left-wing politician.

Some 100,000 Venezuelans who returned to their country during the pandemic have been quarantined in unsafe and abusive conditions, according to an NGO report. Quarantine centres lack medical care, food and water. Because covid-19 tests are often delayed, many inmates must remain quarantined longer than the standard 14 days.

Holocaust denial is to be banned on Facebook.

A jury in **Slovakia** endured an eight-hour speech by a farright politician, who was on trial for promoting neo-Nazism after handing out cheques for €1,488. The numbers 14 and 88 are code; 88 stands for "Heil Hitler", as "h" is the eighth letter of the alphabet. A coincidence, he claimed. He was found guilty.



Pei	100k	Total	This week
Peru	101.4	33,419	505
Belgium	88.7	10,278	170
Bolivia	71.8	8,377	185
Spain	71.5	33,413	851
Brazil	71.4	151,747	3,519
Chile	70.2	13,415	325
Ecuador	69.5	12,264	521
Mexico	65.8	84,898	2,172
United States	s 65.3	216,049	5,030
Britain	63.6	43,155	640

Sources: Johns Hopkins University CSSE; UN; The Economist *Definitions differ by country

Iran shattered its single-day record for cases and deaths. The government said masks must be worn outdoors in Tehran. It had previously shut schools, mosques and other public spaces. But contact-tracing has been a challenge and many Iranians are ignoring the state's restrictions.

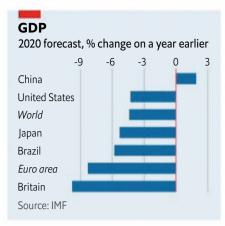
After the discovery of a dozen coronavirus cases in the **Chinese** port of Qingdao, city authorities launched an effort to test all of its 9m people in five days. There had been no reports of domestically transmitted infections since early August.

The **Czech Republic** announced that schools, restaurants and bars would shut for three weeks. A national partial lockdown was introduced in the **Netherlands**.

The number of daily cases in **India** started to climb again. They had fallen to 55,000, the lowest figure since August.

→ For our latest coverage of the virus and its consequences please visit economist.com/ coronavirus or download the Economist app.

• The world this week Business



The IMF now thinks that the world economy will shrink by 4.4% this year, an improvement on its previous estimate, and grow by 5.2% next year. The fund warned that although the outlook is improving, "prospects have worsened significantly" in some emerging and developing economies, with extreme poverty rising for the first time in two decades. It echoed the World Health Organisation in calling for a multilateral approach to distributing vaccines for covid-19 when they become available.

Chinese exports and imports in September rose at the fastest rate in 2020, year on year and in dollar terms. And sales of cars have rebounded in China, registering a quarter of growth for the first time in two years, according to the passenger-car association. Forthcoming data are expected to show that China's GDP growth rate has returned to pre-covid levels.

Singapore's economy shrank by 7% in the third quarter, year on year. But compared with the second quarter it grew by 7.9%, rebounding from a sequential contraction of 13%.

As the initial covid jobs-retention scheme in **Britain** winds down, and a new, leaner plan is put in place, the outlook for jobseekers is grim. Unemployment claims have doubled since the initial lockdown, to 2.7m. Areas hit hardest by the new restrictions tend to have higher unemployment rates. Liverpool, which is under the severest controls, already has a claimant count of 9%.

The Democrats in America's House of Representatives, rejected an improved offer on stimulus spending from the White House that would have provided \$1.8trn for various measures. Democrats have passed their own \$2.2trn bill. A deal seems out of reach; most Republicans in Congress want the legislation to be capped at around \$1trn.

America's big banks announced their earnings for the third quarter. JPMorgan Chase reported a surprise bump in net profit compared with the same quarter last year, to \$9.4bn. Citigroup's net income of \$3.2bn was better than expected, as was Bank of America's \$4.9bn. Surging revenues drove an almost doubling of profit at Goldman Sachs, to \$3.6bn. Most banks have benefited from trading in equities.

Passive pleasure

BlackRock is also having a good pandemic. Revenue surged in the third quarter at the world's biggest fund manager, generating a sharp rise in profit. The company's assets under management leapt to a record \$7.8trn.

The **London Stock Exchange** Group agreed to sell Milan's **Borsa Italiana**, which it took over in 2007, to **Euronext**. The LSE hopes the divestment will smooth the thorny regulatory path of its \$27bn acquisition of Refinitiv, a data and trading company, which was announced in August 2019.

Losing Cruz control

Alex Cruz was ousted as chief executive of **British Airways**, to be replaced by Sean Doyle, the boss of Aer Lingus. Mr Doyle spent 20 years in management roles at BA before moving to the Irish airline. The shake-up comes a month after Luis Gallego took charge at IAG, the parent company of both BA and Aer Lingus. Mr Cruz's tenure at BA was marked by cutbacks that soured relations with workers, especially during the pandemic.

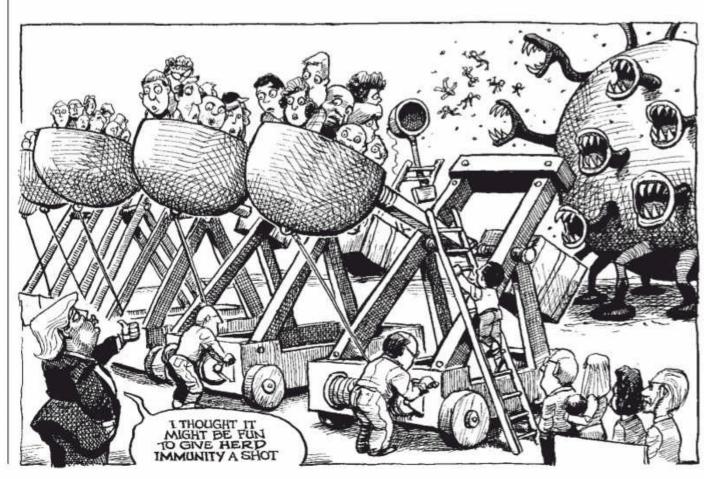
Passenger revenue slumped by 83% at **Delta Air Lines** for the three months ending September 30th, year on year. Like BA and others it has been hit particularly hard by the loss of lucrative business travel. **United Airlines** reported a bigger-than-expected quarterly loss of \$1.8bn.

Scientists created a material that can conduct electricity with perfect efficiency at ambient temperatures, around 15°C. **Superconductors** that are available today, used in medi-

cal scanners and maglev trains, need to be cooled to hundreds of degrees below zero and are thus expensive to build and operate. The downside of the new substance, a combination of sulphur, carbon and hydrogen, is that it needs to be compressed to 267 gigapascals, about a million times the pressure of a typical car tyre.

AMC, the world's biggest chain of cinemas, which also owns the Odeon and UCI brands, warned that it was running out of cash. Attendance is down by 85% at its American venues compared with a year ago because of social distancing. Cinemas remain shut in some cities, notably New York. The industry has also taken a hit from the delayed release of blockbuster films, which may be postponed again after the dismal performance of "Tenet". which cost \$205m to produce but has made just \$50m over seven weeks in North America.

With cinemas facing a daunting future, **Disney** reorganised its media and entertainment business to give priority to streaming, noting the "rapid success" of its Disney+ service. "There is a seismic shift happening" in how content is viewed, said Bob Chapek, Disney's chief executive.



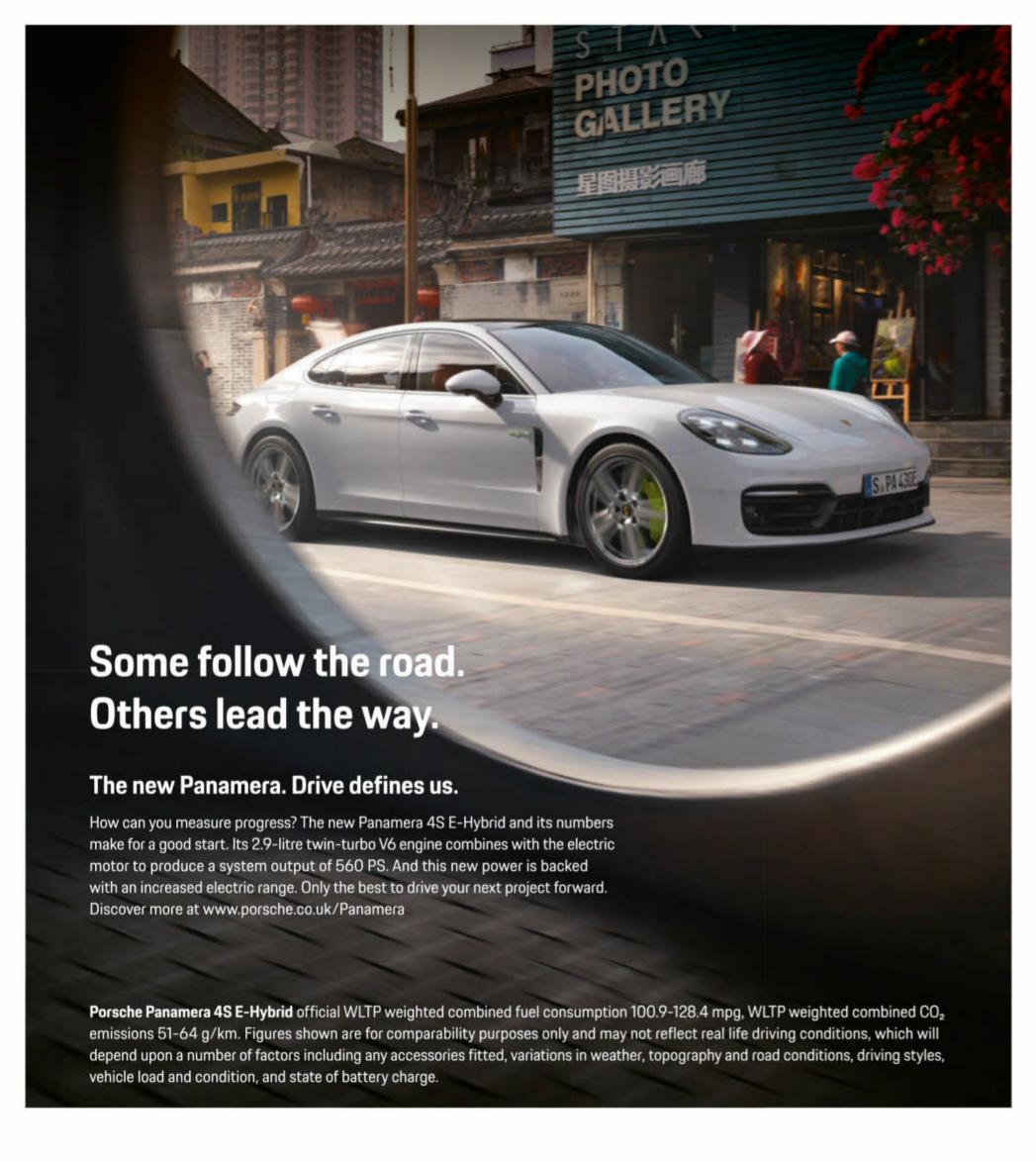




Arceau, L'heure de la lune Time flies to the moon.









SAMSUNG

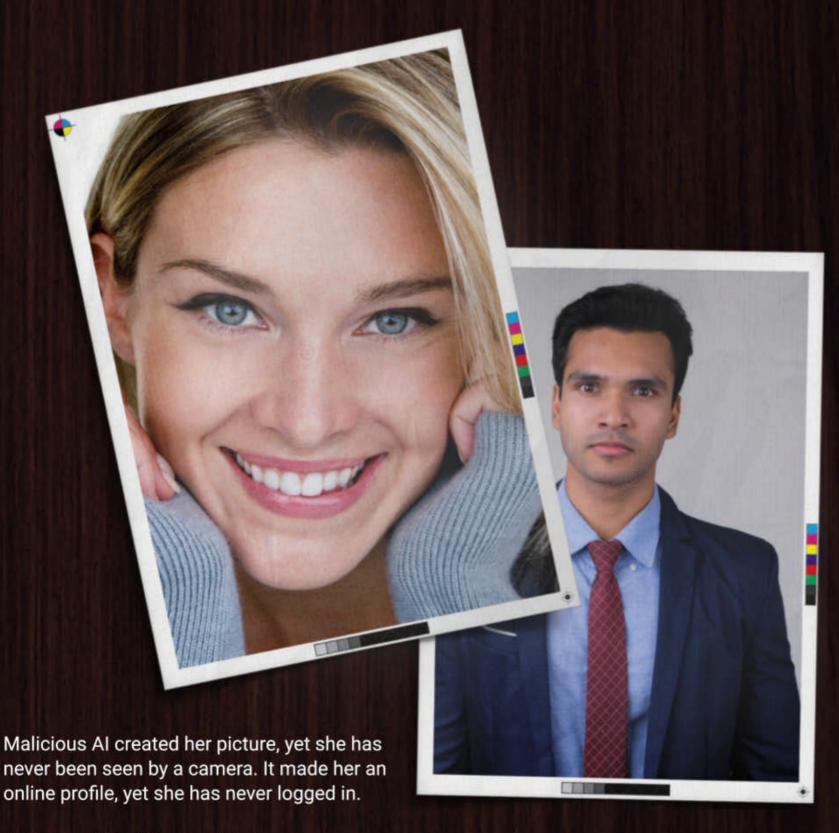
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Torment of the Uyghurs

The persecution of Xinjiang's Muslims is a crime against humanity. It is part of a worldwide attack on human rights

The First stories from Xinjiang were hard to believe. Surely the Chinese government was not running a gulag for Muslims? Surely Uyghurs were not being branded "extremists" and locked up simply for praying in public or growing long beards? Yet, as we report in this week's China section, the evidence of a campaign against the Uyghurs at home and abroad becomes more shocking with each scouring of the satellite evidence, each leak of official documents and each survivor's pitiful account.

In 2018 the government pivoted from denying the camps' existence to calling them "vocational education and training centres"—a kindly effort to help backward people gain marketable skills. The world should instead heed Uyghur victims of China's coercive indoctrination. Month after month, inmates say, they are drilled to renounce extremism and put their faith in "Xi Jinping Thought" rather than the Koran. One told us that guards ask prisoners if there is a God, and beat those who say there is. And the camps are only part of a vast system of social control.

China's 12m Uyghurs are a small, disaffected minority. Their Turkic language is distant from Chinese. They are mostly Muslim. A tiny handful have carried out terrorist attacks, including a bombing in a market in 2014 that left 43 people dead. No terrorist incidents have occurred since 2017: proof, the government says, that tighter security and anti-extremism classes have made Xin-

jiang safe again. That is one way of putting it. Another is that, rather than catching the violent few, the government has in effect put all Uyghurs into an open-air prison. The aim appears to be to crush the spirit of an entire people.

Even those outside the camps have to attend indoctrination sessions. Any who fail to gush about China's president risk internment. Families must watch other families, and report sus-

picious behaviour. New evidence suggests that hundreds of thousands of Uyghur children may have been separated from one or both detained parents. Many of these temporary orphans are in boarding schools, where they are punished for speaking their own language. Party cadres, usually Han Chinese, are stationed in Uyghur homes, a policy known as "becoming kin".

Rules against having too many children are strictly enforced on Uyghur women; some are sterilised. Official data show that in two prefectures the Uyghur birth rate fell by more than 60% from 2015 to 2018. Uyghur women are urged to marry Han Chinese men and rewarded if they do with a flat, a job or even a relative being spared the camps. Intimidation extends beyond China's borders. Because all contact with the outside world is deemed suspect, Uyghurs abroad fear calling home lest they cause a loved one to be arrested, as a harrowing report in 1843, our sister magazine, describes (http://economist.com/1843/uyghurs).

The persecution of the Uyghurs is a crime against humanity: it entails the forced transfer of people, the imprisonment of an identifiable group and the disappearance of individuals. Systematically imposed by a government, it is the most extensive violation in the world today of the principle that individuals have a right to liberty and dignity simply because they are people.

China's ruling party has no truck with this concept of individ-

ual rights. It claims legitimacy from its record of providing stability and economic growth to the many. Its appeal to the majority may well command popular support. Accurate polling is all but impossible in a dictatorship, and censorship insulates ordinary Chinese from the truth about their rulers. But many Chinese people clearly do back their government, especially since to object is deemed unpatriotic (see Chaguan). Awkward minorities, such as Tibetans and Uyghurs, have no protection in such a system. Unbound by notions of individual rights, the regime has been determined to terrorise them into submission and force them to assimilate into the dominant Han culture.

China lies at the extreme of a worrying trend. Globally, democracy and human rights are in retreat. Although this began before covid-19, 80 countries have regressed since the pandemic began and only Malawi has improved, says Freedom House, a think-tank. Many people, when scared, yearn to be led to safety by a strong ruler. The virus offers governments an excuse to seize emergency powers and ban protests (see International section).

Abusive rulers often rally the majority against a minority. India's prime minister, Narendra Modi, espouses an aggressive Hindu nationalism and treats India's Muslims as if they were not really citizens. For this, he earns stellar approval ratings. So does Rodrigo Duterte in the Philippines, who urges the murder of

criminal suspects. Hungary's prime minister crushes democratic institutions and says his opponents are part of a Jewish plot. Brazil's president celebrates torture and claims that his foreign critics want to colonise the Amazon. In Thailand the king is turning a constitutional monarchy into an absolute one (see Briefing).

How can those who value liberty resist? Human rights are universal, but many associate

them with the West. So when the West's reputation took a battering, after the financial crisis of 2007-08 and the botched war in Iraq, respect for human rights did, too. Although America has imposed targeted sanctions over the Uyghurs, the suspicion that Western preaching was hypocritical has grown under Donald Trump. A transactional president, he has argued that national sovereignty should come first—and not only for America. That suits China just fine. It is working in international forums to redefine human rights as being about subsistence and development, not individual dignity and freedom. This week, along with Russia, it was elected to the UN Human Rights Council.

Start in Xinjiang

Resistance to the erosion of human rights should begin with the Uyghurs. If liberals say nothing about today's single worst violation outside a war zone, how can anyone believe their criticism of other, lesser crimes? Activists should expose and document abuse. Writers and artists can say why human dignity is precious. Companies can refuse to collude. There is talk of boycotts—including, even, of the 2022 Beijing Winter Olympics.

Ultimately, governments will need to act. They should offer asylum to Uyghurs and, like America, slap targeted sanctions on abusive officials and ban goods made with forced Uyghur labour.

▶ They should speak up, too. China's regime is not impervious to shame. If it were proud of its harsh actions in Xinjiang, it would not try to hide them. Nor would it lean on smaller countries to sign statements endorsing its policies there. As the scale of the horror emerges, its propaganda has grown less effective: 15 majority-Muslim countries that had signed such statements have changed their mind. China's image has grown darker in many countries in recent years, polls suggest: 86% of Japanese and 85% of Swedes now have an unfavourable view of the country. For a government that seeks to project soft power, this is a worry.

Some say the West would lose too much by lecturing about human rights—China won't change, and the acrimony will stymie talks about trade, pandemics and climate change. True, keeping human rights separate from such things is impossible, and China will try to convince other countries that moral candour will cause them economic harm. Nonetheless, liberal democracies have an obligation to call a gulag a gulag. In an age of growing global competition, that is what makes them different. If they fail to stand up for liberal values they should not be surprised if others do not respect them, either.

The American election

Grading Trumponomics

How to judge the president's economic record

PRESIDENT DONALD TRUMP says Americans should re-elect him because of his record on the economy. Before covid-19, America enjoyed its lowest unemployment rate in 50 years, fast annual wage growth of almost 5% among the lowest-paid workers and a buoyant stockmarket. Mr Trump attributes all this to his three-pronged strategy of tax cuts, deregulation and confrontational trade policy, and says more of the same will revive the economy after the pandemic. Many voters agree. The economy is one issue where Mr Trump does not face a big deficit in the polls.

Yet his administration's economic record from before the pandemic is mixed. It got one thing right: when Mr Trump took office the economy was still in need of stimulus, which tax cuts and more spending helped provide. But that success has also helped conceal the damage done by his protectionism.

Trumponomics has not achieved what its proponents forecast. While campaigning in 2016 Mr Trump predicted economic growth of 4% or more; in office the target was cut to 3%. Between

the start of 2017 and the end of 2019 America grew by an annual average of 2.5%, barely faster than the 2.4% growth of the three preceding years. The Trump administration argued that tax cuts would pay for themselves and that cutting red tape for business would spur investment. In reality the budget deficit rose from 4.4% to 6.3% of GDP, on the IMF's measure, and although deregulation did help boost business

confidence there was no sustained jump in investment growth.

Both regulatory and tax reform have reined in some bad policies, such as trimming tax deductions for mortgage interest and state and local taxes. But improvements like this are, relative to the size of the economy, small. In the three years to 2019 the administration says that it eliminated \$51bn of regulatory costs, which is only about 0.2% of one year's GDP and ignores any public benefits from regulation. Most estimates suggest the long-term boost to growth from Mr Trump's tax reform will be about a tenth of a percentage point per year or less.

What was exceptional about America's pre-pandemic economy was not, therefore, its supply side, nor even its jobs boom, which was replicated across the rich world. It was that as global economic growth slowed sharply in 2018 and 2019, America's growth fell only relatively gently (see United States section). That was because it was temporarily propped up by a bigger budget deficit. Mr Trump can take some satisfaction from his pump-

priming. In 2017 many economists argued that it was a bad time for stimulus because the economy and the labour market had reached their limits; in 2018 the Federal Reserve, coming to a similar judgment, raised interest rates four times. It turned out that there was still plenty of slack. As a result the fiscal splurge caused faster growth than seen elsewhere in the rich world without provoking much inflation. Interest rates came down again, making public debt more affordable.

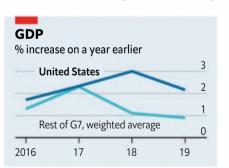
The irony is that a crude stimulus to growth might not have been necessary were it not for Mr Trump's trade war and tariffs, which hurt confidence and weighed on global growth. Before the pandemic the IMF estimated that the fight between America and China might wipe nearly 1% off global output. America offset this drag, rather than escaping it altogether. Recent research suggests that Mr Trump's tariffs destroyed more American manufacturing jobs than they created, by making imported parts more expensive and prompting other countries to retaliate by targeting

American goods. Manufacturing employment barely grew in 2019. At the same time tariffs are pushing up consumer prices by perhaps 0.5%, enough to reduce average real household income by nearly \$1,300.

Taken together, the various strands of Trumponomics offer three lessons. First, there are big benefits to running the economy hot and keeping the job market tight, particularly for

poor workers. Policy should be aimed at restoring these conditions as quickly as possible after the pandemic. If that means running large deficits while interest rates are low, so be it (although given the parlous state of America's infrastructure, the money would be better spent on growth-boosting investments than on regressive tax cuts). Second, in already deregulated economies supply-side reforms may not always show up much in GDP growth. That does not make them undesirable—it is good to eliminate tax breaks—but it does mean politicians should not make wild promises about growth, which is weighed down by immutable forces such as the population ageing. The third lesson is that tariffs are usually a self-defeating way to promote manufacturing, and harm growth and consumers.

In 2019 Mr Trump presided over the best labour-market conditions America had seen in several decades. He deserves some of the credit. Despite that, he is overselling Trumponomics. It was both a help and a hindrance.





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Going full circuit

Britain would be wrong to return to national lockdown, even a short, sharp one

In one sense it marks the return of politics as usual; in another it is a sign of looming crisis. On October 13th Britain's opposition Labour Party split sharply from the government, calling for a "circuit-breaker", a two- or three-week national lockdown to cut the spread of covid-19. As Europe and America struggle with a surge in cases, other governments may also come under pressure to do the same. It would be a mistake. The benefits of a national lockdown no longer justify the costs. At this stage of the pandemic governments should focus on local measures.

The impulse to do something is understandable. New reported daily cases in Britain are at a record seven-day average of over 15,000 and are doubling every two weeks. Local leaders are an-

gered by confusing orders from Whitehall (see Britain section). No wonder Labour has seized on Boris Johnson's faltering performance.

Backers of a short, sharp lockdown say it would save lives—perhaps 7,000 or so according to modelling for scientists advising the government. By cutting the virus's spread, the National Health Service would be spared the sort of overload that caused so many deaths in Italy earlier

in the year. Once the epidemic had been reset at a lower level, the tracing system might be able to deal more promptly with the daily burden of new cases, helping to lower the rate of infections.

A national lockdown makes sense only if a country is completely overwhelmed and underprepared—as at the start of the pandemic. Neither is true of Britain today. Although the recorded number of cases in Britain is over three times its peak in April, the comparison is misleading. For all the system's faults, the daily volume of tests is over 20 times what it was then. Mild cases that would have gone unreported six months ago are now picked up (see chart). This helps explain why deaths, at around 450 last week, are still just 8% of what they were in April. The fatality rate

will increase, because it lags behind cases by three to four weeks. But better treatments are also saving lives. In choosing to act, deaths are more important than cases.

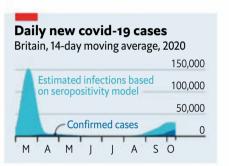
It is not clear that a national circuit-breaker would have lasting benefits. The disease would start to accelerate again as soon as it was lifted. As the year draws on, people will spend more time indoors, where the virus spreads easily. The burden of proof is on the proponents of a circuit-breaker to show that the well-documented shortcomings of Britain's tracing system could be fixed by a three-week reorganisation or by a temporarily lower case-load. Compliance is also in doubt. Although polls support tough action, Britons seem to make an exception for themselves. A re-

cent paper finds that just 18% of those who should have isolated themselves in the summer stuck strictly to the rules. If people flout them, the circuit-breaker may be kept for longer than three weeks, lowering compliance still further.

It would also be economically ruinous. In April, at the height of the first lockdown, Britain's output was one-quarter lower than it had been in February. The IMF argues that lock-

downs may be worth it if they create an economy that can fully reopen for business. But nobody is suggesting that a short circuit-breaker could suppress the virus to that extent. And the trade-off would be even less worthwhile if you factor in the toll on mental health, the delay in treating other illnesses and the effects on long-term employment and education.

To get covid-19 under control Britain should focus on sustainable local measures: identifying vulnerable groups, finding ways to protect them, identifying trade-offs, instigating local testing and recruiting leaders to generate local support. A circuit-breaker sounds like a scientific solution to a runaway problem. The reality would be a costly mess.



Transgender rights

A question of sport

Letting trans women play in women's sports is often unfair

ON OCTOBER 9TH World Rugby, the global governing body for rugby union, announced that it would bar transgender women—people born male, but who identify as women—from playing in the international women's game. The decision drew condemnation from some quarters and praise from others; England's rugby authorities have already said they will carry on allowing trans women to play at all other levels of the game within England. It puts World Rugby at odds with the International Olympic Committee (IOC), whose rules allow trans women to compete in women's Olympic events, and with several other sports that have followed the IOC's guidance. Trans women competitors have enjoyed success in sports including weightlifting, cycling and athletics. Yet World Rugby's decision to exclude

them was the right one. Other sports should follow its lead.

The first thing they should note is how the decision was made. The debate over transgender rights, especially online, can be extremely bad-tempered and poisonous. World Rugby brought scientists, ethicists, athletes and lawyers together in person, to present calmer arguments directly to the sport's administrators. Those presentations were made public, in the interests of transparency. And the decision relied, as far as possible, on the evidence.

They should also note what that evidence shows (see Science section). It came in two strands. One confirmed what everyday experience suggests. Most males are bigger, faster and stronger than most females; some males are bigger, faster or stronger

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AM JEN EASTERLY

Global Head of the Fusion Resilience Center

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¹Cybintsolutions, "13 Alarming Cybersecurity Stats and Facts," December 2018 © 2020 Morgan Stanley & Co. LLC and Morgan Stanley Smith Barney LLC. Members SIPC. CRC 2708333 09/19 ▶ than any female. The second concerned the role of testosterone, the male sex hormone and anabolic steroid that is responsible for much of that sporting advantage. The IOC permits trans women to compete in women's events only if they suppress the amount of testosterone circulating in their blood.

The evidence presented to World Rugby was not perfect, but it was enough to suggest strongly that this compromise does not work. Suppressing testosterone appears to have only a minor impact on strength—too small to undo the advantages bestowed by male puberty. And no amount of hormone therapy can shrink skeletons. That was enough for World Rugby to decide that the risk posed by trans women to other players in the women's game would be too great. It has said it is ready to fund more research and will review its decision regularly. But in a risky sport already worried about the long-term impact of common injuries like concussion, its conclusion makes sense.

That evidence matters for non-contact sports, too, for it also concerns fairness. Women's sport exists precisely to exclude males. That is true at both the elite level, where rewards are greatest, and at the recreational one, where the vast majority of

sport is actually played. Without it, half the population would be left struggling against an insurmountable advantage granted by mere biological chance to the other half. If testosterone suppression cannot remove that advantage, then it is unjust for those who still possess it to compete against those who never did. (It is worth noting that this leaves room for trans men—those born female—to play in men's sports if they wish, since they possess no biological advantage, and in contact sports are unlikely to pose a danger to their fellow competitors.)

Advocates for trans women often argue that inclusion should trump such worries. But sport is a zero-sum game, which means inclusion cuts both ways. If trans women possess a biological advantage, then allowing them to compete risks depriving others of victories they might otherwise have won, or a place in a team they might otherwise have earned. Most sports acknowledge that trade-off, at least in principle. The IOC itself notes that "the overriding sporting objective is and remains the guarantee of fair competition." It is, in the end, simply a question of fact whether testosterone suppression can guarantee that fair competition in practice. And the evidence so far suggests it cannot.

Tech investing and the Vision Fund

A vision in hindsight

The lessons from Son Masayoshi's super-sized tech experiment

Whole technology world." So declared Son Masayoshi four years ago, on a trip to the Middle East to drum up cash for a new investment vehicle to take on Silicon Valley's venture capitalists (vcs). His Vision Fund eventually raised \$98.6bn and bought stakes in some of the world's most exciting companies, including ByteDance and Uber. Yet as we explain this week, Mr Son's mission has so far had mixed results (see Business section). Performance has been soggy, despite a boom in tech stocks, as the strategy of pouring money into private firms has at times become rather like spoiling perpetual adolescents. Instead, the Vision Fund's most striking legacy may be that it has marked the

start of a new era in which American capital and startups no longer call all the shots.

For decades an elite of vc funds in San Francisco have spotted promising startups and nurtured them to adulthood, in the form of a stockmarket listing or a takeover. The Vision Fund played by different rules. It dragged vc out of its Californian cul-de-sac. Its anchor investor was a Saudi Arabian sovereign-wealth fund, it was

controlled from Tokyo and it paid as much attention to Asia's tech scene as to America's. It viewed capital as a weapon in a winner-takes-all struggle. By channelling vast sums to startups you could speed up time and help them reach critical mass more quickly while intimidating their rivals. The Vision Fund also tried to reinvent governance. It let firms stay in private hands for longer, as part of its global family of startups which could share ideas and co-operate or fight it out—the fund has bought stakes in 92 firms, some of which compete with each other.

How has the experiment fared? Having invested \$82.6bn, the Vision Fund has so far made net gains of \$8bn. Mr Son's optimism about tech was spot-on but his fund has lagged far behind

the NASDAQ tech index, which has risen by 99% since May 2017, when the fund was officially launched. That underperformance reflects flaws in its strategy. Throwing cash at firms raised valuations and encouraged entrepreneurs to fight damaging price wars, from ride-sharing to food-delivery. Mr Son's freewheeling view of governance was a mistake. Without the scrutiny of public markets, egotistical founders went astray, most obviously at We-Work, a property firm. Bad bets had cost the Vision Fund \$14.5bn by June this year. It proved hard to get the portfolio of firms to cooperate, or merge, especially given geopolitical tensions.

The tech industry is now rushing in a different direction, taking firms public so they can raise capital from diverse sources

and face the discipline of institutional investors. Of the top 30 "unicorns"—private tech firms worth over \$1bn—in 2018, over half have listed or are about to, including Ant Group and Airbnb. Many have used alternative techniques to go public, such as direct listings, which avoid the clunky initial-public-offering process. Mr Son's fund will benefit as its firms leap into the public market at high valuations. But his second

fund, Vision Fund 2, reflects a chastened reality, with only \$3bn of assets and 13 investments so far, many of them small.

Although it has failed to turn tech investing into alchemy, the Vision Fund has shown that the vc establishment does not have a monopoly in dealmaking—so far this year 82% of vc deals in America have involved non-traditional investors, including sovereign-wealth funds and companies. And most important, by taking a global view and placing giant bets in India, South-East Asia and China, it has underlined that the future of technology lies as much in Asia as on America's west coast. Like many startups, the Vision Fund has helped change the world—just not in the way it originally expected to.





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20 Letters The Economist October 17th 2020

The rules of the debate

Lexington described the Commission on Presidential Debates as "non-partisan" (October 3rd). It is more accurately bi-partisan, run by Democrats and Republicans. The presidential debates used to be organised by a non-partisan group, the League of Women Voters, which in 1976, 1980 and 1984 chose the dates, locations and moderators. In 1980 the league let John Anderson, an independent candidate, participate in the forum.

But in 1988 Democrats and Republicans presented a list of demands to take control of the debates. The league's trustees decided to pull out, because the parties wanted to select the questioners, the composition of the audience, access for the press and other issues. It described the ultimatum as "a fraud on the American voter...it has become clear to us that the candidates' organisations aim to add debates to their list of campaign-trail charades devoid of substance, spontaneity and honest answers to tough questions". The two parties then formed the Commission on Presidential Debates, giving themselves power over all aspects of the forum that the league had rejected. The parties established a rule that no other political party could participate unless it polled at least 5% before the debates, the selection of polls to be decided by the commission. However, in 1992, when Ross Perot's Reform Party, did poll above 5% and he was included, the commission increased the threshold to the current 15%. STEVE RESZ Reston, Virginia

Ireland's support for Germany

I enjoyed the article on Germany's growing leadership role in Europe, but you should note that Felipe González was not the only European leader to support German reunification ("Waking Europe's sleeping giant", October 3rd). The Irish presidency of the EU under Charles Haughey in 1990 was

instrumental in securing backing for German unity by assuaging French and British concerns. Helmut Kohl recognised this, saying in 1996 that he would "never forget how in a dramatic meeting of the European Union in December 1989, it was not least the Irish prime minister who supported us Germans and myself in a very difficult situation".

For Ireland, German unification was a geopolitical Goldlöckchen, neither too big for Europe, nor too small for the world, but just right.
ALEXANDER CONWAY
Groningen, Netherlands

Energy issues

Your leader on the future of energy did not have much to say about Africa and Asia outside China, continents where the real battle over fossil-fuel use and carbon emissions will play out over the next century ("Power in the 21st century", September 19th). The practical big win would be to get Asian countries to develop natural gas instead of coal in their next phase of development. This will not appeal to climate-change purists.

Africa will come next.
Goma, in the east of the Democratic Republic of Congo, relies almost entirely on woodsourced fuel. Environmentally, for climate change, and for human health, wood is worse than coal. Practical progress here will not start with high-tech solutions. Instead, it would be beneficial to encourage replacing wood with liquid propane gas, which has been happening in India.

As for wind power, the turbines naturally are at locations and altitudes frequented by migratory birds. The threat to raptors is particularly acute.

R. PAUL DRAKE
Professor emeritus of climate and space sciences and engineering at the University of Michigan

Gaylord, Michigan

Companies everywhere "need to step up their action against climate change", you say in your special report on what business should do to tackle emissions (September 19th). One way would be to leave meat off the company menu. In 2018, WeWork decided no longer to offer meat at its events and stopped reimbursing staff for meals that included meat. It estimated that this will save 202m kilograms of carbon-dioxide emissions by 2023. WeWork's ban took effect overnight. What other measure could shrink a company's carbon footprint so quickly? NICK BRELAND Pensacola, Florida

Another "green machine" that helps tackle climate change is the paper book, a good replacement for electronic books. Paper books store carbon and are recyclable. Unlike e-books they require no energy to operate. Moreover, they are safe from hacking and are more difficult for governments to censor.

STEPHEN BORKOWSKI Pittsburg, Texas

The police in Colombia

The synchronised destruction of 95 police facilities, vandalism, looting and arson that took place after the death of a taxi driver can hardly be categorised as a natural expression of citizens' rage ("Fight crime, not war", September 19th). Legitimate protests that broke out after the clearly excessive use of force by the police (seven of whom were immediately suspended) soon turned to chaos. The violence was organised, some by members of the FARC dissident guerrilla group.

The National Police of Colombia is an institution dedicated to law and order, forged in the decades-long fight against the drug cartels and the criminal activities of the insurgents. The reprehensible actions of a few does not define the professionalism of its 167,000 men and women. Last year Colombia had its lowest homicide rate since 1976 and its lowest kidnapping rate since 1984. There has been a steep decrease in crimes like extortion and burglary.

That said, there is always

room for improvement. President Iván Duque has launched the Citizen Security Framework Policy, which aims to improve police performance in areas such as education and training, recruitment, transparency and integrity.

ANTONIO J. ARDILA G
Ambassador of Colombia
London

A culture strain

Yes, the idea of yogurt as strategic is idiotic, but Charlemagne missed the point from his lofty perspective on trade policy (October 3rd). Business is not only global; it affects ordinary life in important ways, which are often ignored by politicians and journalists. The Frenchness of Danone is important to French people, however silly that might appear to everyone else. In Britain there are dark suspicions that Doc Martens boots are of lower quality since most of their manufacture was moved from Northampton to Asia. Norwich is bereft without Colman's mustard. After the strategic-yogurt imbroglio in 2005, the British were told how grown-up they were for letting Cadbury's be sold to Kraft. But the American food company changed all the wrappers on Roses chocolates, which many of us thought was a worse blight on Christmas 2016 than Brexit plus Donald Trump combined. KIERON O'HARA The Hague

Scorched earth

It would be quicker to list the institutions that Boris Johnson and Dominic Cummings are not at war with (Bagehot, September 19th). After Battersea Dogs & Cats Home and the National Trust one tends to run out.

ROD TIPPLE

Cambridge, Cambridgeshire

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Executive focus 21



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Briefing Ruling Thailand



Battle royal

King Maha Vajiralongkorn is taking Thailand back towards an absolute monarchy. A new state of emergency will make it harder to resist him

The monuments disappear in the dark. In April 2017 it was a small bronze plaque from Bangkok's Royal Plaza. It marked the spot where, in 1932, revolutionaries proclaimed the end of Thailand's absolute monarchy. In December 2018 a statue was hauled away. It commemorated the defeat of rebels who attempted a coup against those same revolutionaries. Last month activists installed a plaque in the heart of Bangkok's royal district to protest against the missing monuments. "The people have expressed the intention that this country belongs to the people, and not the

king", it stated. Within a day it was gone.

The world knows Thailand's King Maha Vajiralongkorn as a playboy who has churned through four wives, lives among lots of women in a German hotel and relishes skimpy crop tops that reveal elaborate temporary tattoos. For Thais, his four-year-old reign has been more sinister.

The king makes elderly advisers crawl before him, shaves the heads of courtiers who displease him and has disowned several of his children. Worse, he has steadily amassed power, taking personal control of "crown property", assuming direct com-

mand of troops and ordering changes to the constitution. He makes no secret of his hankering for the days of absolute monarchy (hence the disappearing monuments). But Thais began to protest in July. Can they prevent the removal not just of plaques, but of constitutional constraints?

On October 14th thousands of protesters marched through central Bangkok to camp outside Government House, where ministers' offices are located. They also formed human chains to carry away potted plants that blocked the way to the country's Democracy Monument. Not far away King Vajiralongkorn himself, in the country on a fleeting visit, passed by in a motorcade. Clusters of royalists gathered wearing yellow shirts to show their loyalty to him.

That night a spooked government issued an emergency decree banning gatherings of more than four people and prohibiting reporting on topics that could "harm national security" or "cause panic". The government warned that protesters who insulted the monarchy would be prosecuted. Several prominent leaders of the protest were arrested the following morning. Yet tensions increased as protests continued in defiance of the decree.

Thailand defines itself as a democracy with the king as head of state. The monarchy is revered. Photographs of royals adorn public buildings and private homes. Father's Day is celebrated on the previous king's birthday. Thais hear a royal anthem before films start at the cinema.

Technically King Vajiralongkorn rules as a constitutional monarch. But ancient structures have never entirely disappeared. The king used to sit at the apex of society in a semidivine role. Defenders of the vestiges of this order have long clashed with those claiming to represent an alternative source of authority: the Thai people.

The conflict helps explain why Thailand has endured 12 coups and 20 constitutions since 1932. Since the 1950s a symbiotic relationship between the army and the palace has bolstered the legitimacy of military regimes. For the past two decades the greatest foe of such elites has been Thaksin Shinawatra, a populist prime minister ousted by the army in 2006. His supporters, known as red shirts, battled their yellowshirted foes in the streets on several occasions in the years after he lost power.

The generals engineered a coup in 2014. The commander who led it, Prayuth Chanocha, remains prime minister. An armyfriendly constitution disadvantaged large parties, such as Mr Thaksin's flagship one, Pheu Thai, in an election last year.

One supposed reason why the army seized power six years ago was to ensure a steady succession between the ninth and tenth monarchs of the Chakri dynasty. King Vajiralongkorn's path to the throne

was not simple. Thailand's elites took against him while his popular father still lived. King Bhumibol Adulyadej was considered the richest monarch in the world, his wealth outstripping that of oil-endowed Middle Eastern rulers and Europe's royals with their castles and palaces.

Aristocratic types fretted because the crown prince, as Vajiralongkorn was previously known, caused so many scandals. Even his mother likened him to Don Juan. After leaving his first wife, a princess in her own right, he disowned four of his five children with his second wife, an actress, who eventually fled Thailand. When the relationship ended with his third wife—once filmed almost naked and crouching before her husband with birthday cake—several of her family members went to prison. The prince spent lavishly and indulged in eccentricity, elevating his beloved poodle, Foo Foo, to the rank of "air chief marshal".

Still, King Vajiralongkorn took over unimpeded after his father's death. Whereas the father was publicly loved, the son is privately loathed. His coronation last year attracted tiny crowds compared with those at the late king's funeral rites. Despite his cooperation with army regimes, millions of Thais felt King Bhumibol displayed the virtues expected of a Buddhist monarch.

King Vajiralongkorn does not even live in Thailand. He rules a country of 70m people from more than 5,000 miles away in Germany. One insider bluntly appraises his activities there: "Bike, fuck, eat. He does only those three things." The German government finds his presence awkward. "We have made it clear that politics concerning Thailand should not be conducted from German soil," the foreign minister, Heiko Maas, told the Bundestag on October 7th.

Money, money, money

The king's militaristic harem inspires embarrassing headlines around the world. Just months after his fourth marriage to a former air stewardess last year, he elevated one concubine, a former nurse, to the status of "royal noble consort". She is the first woman to hold this title since Thailand became a constitutional monarchy.

Sineenat Wongvajirapakdi fell from grace soon after her elevation. She disappeared from view. Then, in September, she was reinstated and declared "untainted". Chinese netizens have likened Ms Sineenat to a crafty concubine from a popular television series, "Empresses in the Palace".

In March 2012 permission from the Justice Department was published in the Royal Gazette for a temporary prison. A spartan map appears to show its location as possibly within the grounds of a palace owned by Vajiralongkorn. His bad books are a miserable place to be. Pictures allegedly of Srirasmi Suwadee, once his third wife, appeared in a German newspaper last year.

Head shaved and tearful, she was reported as being under house arrest.

Airing such dirty linen in public in Thailand, however, is perilous. The country's lèse-majesté law allows between three and 15 years in prison for insulting "the King, the Queen, the Heir-apparent or the Regent". King Vajiralongkorn has instructed the government not to use the law. But this hardly reflects newfound tolerance. Critics instead risk charges for sedition or computer crime, among others. In July one man was sent to a psychiatric hospital for wearing a T-shirt that stated: "I have lost all faith in the institution of monarchy".

Playboy antics distract from the more sinister feats of the monarch since he came to power. In political, financial and military matters King Vajiralongkorn has gained powers never possessed by his father. His interventions appear part of a larger strategy to push Thailand closer to absolute monarchy once more.

Take his finances. In 2017 he gained full control of the Crown Property Bureau (CPB), which manages royal investments (it was previously run by the ministry of finance). Its holdings are estimated to be worth \$40bn. In 2018 the CPB declared that its assets would be considered the king's personal property. As a result the monarch

A life less ordinary

King Maha Vajiralongkorn

1952 Born on July 28th

1966 Starts attending school in England

1972 Begins training at Australian military academy Given the title Crown Prince by his father, King Bhumibol Adulyadej, making him the official heir

1977 First marriage, to his cousin, Princess Soamsawali

1978 First child born, Princess Bajrakitiyabha

1979 Fathers five children with actress -87 Yuvadhida Polpraserth

1993 Divorces first wife, Princess Soamsawali

1994 Second marriage, to Yuvadhida Polpraserth

1996 Second wife flees Thailand; four sons disowned

2001 Third marriage, to Srirasmi Suwadee, a lady-in-waiting

2005 Birth of Prince Dipangkorn, currently the only officially recognised son

2007 Starts to spend large amounts of time in Germany

2013 Suthida Tidjai joins the palace guard and becomes commander of the king's security unit

2014 Srirasmi divorced and stripped of her royal title; nine of her relatives, including her parents, arrested for lèse-maiesté

2016 Vajiralongkorn inherits the throne after the death of King Bhumibol

Buys a villa in the Bavarian village of Tutzing

2019 Fourth marriage, to Suthida

Coronation

2020 Anti-monarchy protests begin

Amid pandemic, stays in a German hotel with an entourage of 20 women

Source: The Economist

has stakes in some of Thailand's corporate titans. He is the largest shareholder in Siam Cement Group, a conglomerate with revenues of almost \$14bn in 2019, with a third of its shares. The head of the CPB, long a stalwart in the king's circles, is a director of Siam Cement Group and of the 113-year-old Siam Commercial Bank, one of Thailand's biggest, in which the king also has a stake.

In addition to the king's private means, the Thai state showers the royal family with funds. For the 2021 fiscal year government agencies have drawn up budgets which allocate more than 37bn baht—over \$1.1bn—to the monarchy. The Royal Office will receive 9bn baht of that directly. Much of the rest goes to government agencies, the police and the defence ministry for security and for development projects. By comparison, Britain's Queen Elizabeth cost her taxpayers the equivalent of \$87m last year. Precise details on where the money goes are elusive. Huge sums go to pay for royal transport alone (there are many planes and helicopters to maintain).

King Vajiralongkorn's political interventions are another demonstration of his growing authority. In theory the monarch sits above parties, parliament and politics. But after a referendum in 2016, in which campaigners were banned from opposing the constitution put forward for approval, the monarch demanded changes to the charter. He altered it specifically to make ruling from afar easier.

He meddled even more audaciously ahead of last year's parliamentary election. Mr Thaksin persuaded the king's older sister to run as a putative prime ministerial candidate for a party with links to him. But the crown in effect came to the rescue of Mr Thaksin's military foes. The monarch declared his sister's ambitions "unconstitutional". He also stated that royals should stay out of politics—yet the night before the election, he urged Thais to vote for "good people", which was taken as an endorsement of Mr Prayuth and his allies.

Tomorrow belongs to me

This is just one example of how the palace and the barracks have continued to support each other since King Vajiralongkorn came to the throne. The king has a deep interest in military matters. Trained in an Australian academy, he holds the titles of admiral, field-marshal and air-marshal. The queen is a general and Ms Sineenat a major-general. The king has drawn military forces to his direct command. The Royal Command Guard has been created with some 5,000 soldiers. They are stationed in Bangkok, while other important army units, including an infantry regiment and a cavalry battalion which have facilitated past coups, have been moved out of the city. Overthrowing any government without advance co-ordination with royal troops ▶

• would prove extremely difficult.

Why has the army permitted such manoeuvres? Defence of the monarchy is one of its central reasons for existing. Both the powerful army commander who retired in September, and his replacement, are deeply loyal to the king. They also rose through the ranks of the King's Guard, in which Vajiralongkorn himself once served. Mr Prayuth and his closest allies, by contrast, emerged from the Queen's Guard within the Second Infantry Division.

The prime minister can hardly counter the monarch's power grabs. He depends on the king's support for a semblance of legitimacy. Whereas the middle and upper classes of many countries contain democratic champions, those of Thailand "have never needed mass support to advance or protect their interests", explains James Wise, a former Australian ambassador to Thailand, in his book "Thailand: History, Politics and the Rule of Law". These conservatives would not stand for an army-linked prime minister rebuffing the royal institution.

Mr Prayuth is also weak: he wrestles even with his allies in the ruling coalition and lacks personal popularity. That hinders his ability to tackle the difficulties Thailand faces. Growth was slowing even before the coronavirus pandemic struck (see chart). Now the central bank expects the economy to contract by more than 8% this year—worse than the crash in the Asian financial crisis in 1997.

Why should I wake up?

A very few opposition politicians have resisted King Vajiralongkorn's growing control. In October most MPs from the liberal Future Forward Party, founded in 2018, opposed an executive decree in the lower house of parliament. The decree, which passed anyway, facilitated the partial transfer of army units and related budget-



ary allocations to the Royal Command Guard. Even so, it was the first time that lawmakers had ever opposed a legal procedure linked to the monarchy.

Future Forward no longer exists. Its platform in favour of democratic freedoms and army reform, as well as the popularity of its charismatic leader, Thanathorn Juangroongruangkit, made it a threat to the establishment. The outfit grew from nothing to become the country's third-largest party in parliament in little more than a year. Legal cases against the institution and its leadership started to mount. In November Mr Thanathorn was stripped of his status as an MP. In February the party was dissolved by the constitutional court and its executives banned from politics for a decade. The judges decided that a loan Mr Thanathorn gave the party was an illegal breach of individual-donation limits.

Flash mobs mounted protests, though social-distancing measures soon put an end to them. The lull was temporary. Social media have provided an outlet for audacious criticisms. So widespread was moaning over the traffic jams caused by royal

motorcades, for example, that in January the king instructed police not to close entire roads for travelling royals.

Other grumbles could not so easily be sorted. In August, after legal threats from the Thai government, Facebook blocked access from Thailand to a 1m-member group criticising the monarchy. "Requests like this are severe, contravene international-human rights law, and have a chilling effect on people's ability to express themselves," the firm stated. It is preparing to mount a legal challenge.

Popular anger has moved from screens to streets. Since July protesters have gathered to call for the dissolution of the government, reform of the constitution and an end to the harassment of opposition activists. Students' demonstrations inspired a wider swathe of Thais to march, too. Their efforts mark an evolution from the feud between red shirts and yellow shirts. New battle lines are over democratic freedoms.

Maybe this time

The boldest protesters have called openly for reform of the monarchy. They object to the king's financial set-up and his consolidation of military power. Mr Thanathorn has also called for transparency about how state funds are spent on the monarchy.

The situation grew more serious as the protests swelled in size. The great fear is that the bloody treatment of student protesters in the 1970s will be repeated. In 1976 police, army and vigilante groups attacked students after they staged a mock hanging in protest against the killing of two pro-democracy activists. A story spread among royalists that the figure hanged resembled Crown Prince Vajiralongkorn. According to official figures, 46 students died and more than 3,000 were arrested.

So far the authorities have arrested a few dozen protest leaders. The government had claimed it wanted to talk to students about their grievances. "Having a peaceful and civil dialogue where we exchange our views is the best approach for moving forward," said the education minister. However, this week the establishment ran out of patience. If the prime minister cannot bring calm he may be replaced. Any drastic intervention is unlikely, however, without the monarch's foreknowledge.

But King Vajiralongkorn's clout has come at a price: open criticism of the monarchy. "The ghost is out of the bottle and you won't get it back again," reckons one diplomat in Bangkok. The more brazen the king's moves towards a more absolute form of rule, the more forceful the criticism. "We are trying to bring the king and monarchy under the constitution," explains one teenage protester. "We aren't trying to bring them down." King Vajiralongkorn's actions could determine whether Thailand continues to revere royalty, or starts to revile it.



Britain



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The second wave

Back into the storm

The virus is surging again; the prime minister is struggling

LTHOUGH BRITAIN'S covid-19 death A numbers are nowhere near their spring peak, they are climbing dangerously. Daily tolls are similar to mid-March. Things are particularly bad in the north. Field hospitals in Harrogate, Manchester and Sunderland are on standby. Under a new regime of regional lockdowns which went into effect on October 14th (see map on next page), gyms, bars and casinos in Liverpool will be closed, and non-essential travel in and out of the area discouraged. In much of northern England and part of the Midlands, members of different families will not be able to meet indoors, and the use of public transport will be discouraged; London is expected to be put under the same restrictions shortly.

Britain can probably withstand a second wave better than the first. It has the capacity to perform 13 times as many tests each day as in mid-April. Deaths and hospitalisations are rising more slowly than they

were in the spring. Doctors now know to place patients on their stomachs, to delay ventilator use and what drugs to use. There is plenty of protective kit for health-care workers, and the nation has got used to wearing masks and working from home.

Yet resilience, the buzzword for governments in the face of the pandemic, covers not only supply chains but also the ability to forge a political consensus around a strategy. On this measure, Mr Johnson enters the crisis much weaker than in March, when ministers, scientists, the opposition parties and public opinion were in close agreement. Even the Conservative Party's libertarian wing accepted the lockdown as a necessary evil. Mr Johnson's approval ratings surged.

That consensus has now crumbled. The government's policy of local lockdowns is being assailed from all sides.

In favour of greater caution are the government's own scientists, the Labour Party and the public. At a meeting on September 21st the Scientific Advisory Group for Emergencies (SAGE) recommended that the government implement a package of measures to bring the R number below one, including a "circuit breaker" short-term lockdown, closing bars, restaurants and cafes, halting face-to-face university teaching and advising all those who could do so to work from home. Mr Johnson plumped only for the last of those. On October 12th Chris Whitty, the government's chief medical officer, said that in his "professional view" the new tiered restrictions would be insufficient to contain the spread of the virus in the worstaffected areas.

Throughout the crisis, Sir Keir Starmer, Labour's leader, has backed the government's strategy and attacked its delivery. On October 13th he changed tack, calling for a "circuit breaker". Mr Johnson accuses Sir Keir of opportunism, but the prime minister is vulnerable: if Conservative opposition to lockdown legislation strengthens, he will need Sir Keir's support to pass any new measures.

The public is with Sir Keir: 42% think the current regime too lax, 34% think it is about right and 14% think it too strict. More than two-thirds of voters support the idea of a "circuit-breaker" over half-term, according to YouGov, a pollster.

On the other side, growing numbers of >>

PConservative MPS are angry that the government has imposed new measures without debate in Parliament. They want it to outline a plan for living with the virus in the long run. On October 13th, 42 of them voted against a number of restrictions, including a 10pm curfew on pubs. Chris Green, MP for Bolton West and Atherton, resigned as a government aide, saying the "attempted cure is worse than the disease". These MPS are supported by trio of rightwing newspapers—the Daily Telegraph, the Daily Mail and the Sun—that have the government's scientists in their cross-hairs.

There is also a growing divide between London and the regions. Mr Johnson's administration is good at combative campaigns, but lazy on the basic work of consensus-building. The new measures are opposed by a new generation of directlyelected mayors, who argue they have been imposed without consultation, don't reflect the reality of where and how the virus is spreading, and come with too little aid to support shuttered businesses. Andy Burnham, the mayor of Greater Manchester, argues that the restrictions designed by people in London are misdirected and ineffective. "They can only see numbers and blobs on the map, whereas we see names, communities, the full picture of what happens on the ground."

The mayors are also critical of the centralised test-and-trace system, run from Whitehall with the support of contractors. They argue local government public health teams would have done the job better for less money. The public is less likely to comply with a regime that their municipal leaders don't support, says Dan Jarvis, the mayor of the Sheffield City Region.

Mr Johnson faces this rising opposition with diminished authority. His approval ratings rose after the initial lockdown to a

Moved to tiers England, covid-19 alert levels October 14th 2020 Tier 1 (medium) Current restrictions remain in place Sunderland Tier 2 (high) Additional ban on Manchester mixing households -Harrogate indoors Sheffield Tier 3 (very high) Additional ban on mixing households Liverpool indoors, pubs/bars closed and travel outside area restricted Source: Department of Health and Social Care

net of 40%; they have since sunk to minus 22%. A reputation for incompetence dogs the government.

The prime minister's election victory in December ought to have banished the memory of Theresa May's hobbled premiership and rendered him dominant, but in Parliament on October 12th, wearily defending a small patch of ground against critics, estranged from both his expert advisers and his backbenchers, he bore more than a passing resemblance to his predecessor. Were he now still a newspaper columnist, he would doubtless be among those denouncing the flailing prime minister, the gloomster government scientists and loss of liberties, much as he put his name to all manner of eccentric fixes to the Brexit deadlock when it was opportune.

The first wave cost Mr Johnson a great deal of his political capital. If the government's record does not improve, the second could exhaust it.

The business of biography

Aide memoir

Political books are dislodging celebrity ones

James daunt used to grimace when another dreary politician's memoirs hit the shelves. "You would unpack the worthy brick that came from the publishers and then three months later you would put them all back in a box to go back whence they came," says the boss of Waterstones, a bookstore chain. The minutiae of long-ago cabinet meetings left the nation strangely unmoved. "Norman Fowler's memoirs didn't race out the door."

What the punters wanted were celebrity tell-alls. They devoured books by or about boy bands, athletes and people such as Katie Price, a model famous for being famous. A writer of "bucketloads" of these books says he twice bashed them out in 20 days.

Though the biggest celebrity biographies still outsell other non-fiction, the genre is on the wane. At their peak, in 2008, celebrity titles made up 55% of the biography and memoirs market, according to Nielsen, a research outfit, bringing in £77m (\$144m). That dwindled to £43m in 2019, or slightly more than a third of the market. Over the same period, biographies of politicians and historical figures climbed from less than a tenth of the market to nearly a sixth, making about £19m last year.

By the time the latest title, a life of Boris Johnson by the serial biographer Tom Bower, was published on October 15th, it was already climbing up Amazon's pre-order charts. "Diary of an MP's Wife", a gobsmackingly indiscreet behind-the-scenes account of David Cameron's government by Sasha Swire, is in high demand, too. "Jeepers," exclaims Mr Daunt. "We're ordering more and more and more."

Three factors explain the celebrity recession. First, thanks to social media the world already knows all about many putative subjects. Second, publications which once fought for first dibs on a book's gossip are poorer than they were. Newspapers that once paid £150,000 might now pay £50,000. A celebrity magazine that would have shelled out £30,000 would now offer £1,000 or so. Third, retailers are fewer and pickier than they once were. The record shops that once flogged thousands of pop biographies have closed down, and bookshops are run differently. Mr Daunt gives managers the power to stock their branches, rather than stuffing them with centrally chosen biographies. "The days are gone that you could give a celebrity £1m to have a book ghost-written that you knew would be piled up from one end of the land to the other," he says.

As for the boom in political books, it is less that Britons have grown more cerebral than that politics has become more entertaining. Mr Johnson and Jeremy Corbyn, the former Labour leader, are unusual characters. Britons are gripped by Donald Trump and the reaction against him. Books by Mary Trump, the president's niece, John Bolton, his former national security adviser, and James Comey, an ex-head of the FBI, have all sold well. Michelle Obama's autobiography kept the tills busy and her husband's latest book, published next month, is tipped to be a Christmas bestseller. Dysfunctional politics may make for an unhappy world, but publishers, at least, have smiles on their faces.



Sasha Swire laid a bestseller

Defence policy

Global swarming

PORTSMOUTH

Britain is putting technology at the heart of its defence plans

THE VAST hangar of HMS Prince of Wales, A Britain's newest aircraft-carrier, houses no warplanes yet. But there are plenty of drones. "If we wanted to see over a hill, we had to send someone up," explains a marine. Now, he says, pointing to a 7kg Puma drone that can be thrown into the air, "we can soak an area before we put lads on the ground". The Puma sits in the sky at 10,000 feet-too high to be seen or heard-beaming back footage detailed enough to see individual weapons. His colleague shows off the Hero, an Israeli-made suicide drone, light enough that two can be strapped on to a commando's back. Instead of watching things, it smashes into them.

The Royal Air Force (RAF) aims to go one better than this. In April it re-established 216 Squadron as an experimental unit responsible for testing not just individual drones but insect-like swarms of them. A swarm is not merely a mass of drones in one place: they work together to a common end. On October 7th Leonardo, an Italian arms company, said that, in partnership with the RAF, it had conducted a successful demonstration of just such a swarm.

The company already makes Coke-cansized electronic decoys, which mimic aircraft to fool enemy radar. These were in use on the now-retired Tornado jet two years ago. But whereas the Tornado simply spat out the decoys and let them glide away, in the new versions they are attached to multiple drones. The idea is that cheap, expendable swarms could overwhelm the radars of air-defence networks, clearing a path for more expensive warplanes.

Such swarms, which many countries are developing, are probably "some way from an operational capability", says Douglas Barrie of the International Institute for Strategic Studies, a think-tank. But the melding of drones and artificial intelligence (AI) to do dull, dirty and dangerous work fits well with plans to reshape the armed forces as part of a forthcoming "integrated review" of defence and foreign policy. A hint of where that review is heading was offered on September 30th, when the Ministry of Defence published an Integrated Operating Concept—essentially, a view of how war is changing.

Three themes stand out. One is the blurring of the boundary between peace and war, epitomised by Russian and Chinese tactics. To counter that, Britain's armed forces will be used more often in peace-



time, for both "covert and overt activity"—from surreptitious hacking to rapid troop deployments. A second is the need to use troops more widely around the world, particularly in Asia. That could have major diplomatic ramifications. Britain will "look beyond NATO to other alliances", for instance.

Technology is the third motif of the paper. New sensors, from satellites to smart watches, and the data they produce, "will make it extremely hard to hide today's military signature anywhere on the globe". Although the document tactfully shies away from mentioning aircraft carriers, it includes a line whose import is hard to miss: "expensive, crewed platforms that we cannot replace and can ill afford to lose will be increasingly vulnerable to swarms of selfco-ordinating smart munitions". Drones are part of both the problem and the answer. "The economics of warfare are changing the balance between...crewed and uncrewed systems.'

Accordingly, the RAF is not the only service shedding humans. In a speech aboard the *Prince of Wales* on October 8th Admiral Tony Radakin, Britain's first sea lord, boasted that his was "a navy confident enough to swap ships for drones". He pointed to experiments in Scotland with drone ships as "the first step in our plan to move to a fully autonomous minehunting capability".

"Some industrial-age capabilities will increasingly have to meet their sunset to create the space for capabilities needed for sunrise," acknowledged General Sir Nick Carter, Britain's chief of defence staff, when he launched the new operating concept. Traditionalists worry that this portends fewer ships, planes and tanks in an already-shrunken force. "The trick," says General Carter, "is how you find a path through the night."

Trade policy

Getting hormonal

Farmers, greens and animal-lovers make doing trade deals difficult

If the 14 Tory MPS who rebelled against the government in a vote on the agriculture bill on October 12th are given a hard time by party whips, they will get plenty of support elsewhere. Along with them, Jamie Oliver, a celebrity chef, and the National Farmers Union have teamed up with environmentalists and animal-welfare lobbyists to oppose the government.

The government won this vote, on an amendment that would have required food imports to meet British standards, but the fight is not over. Since the deal that the government has touted most—one with America—depends on opening trade in agricultural products, the vote is a measure of the difficulty the government will face in getting this done.

The pitch from Brexiteers was that, unshackled from the sovereignty-sapping EU, Britain's swashbuckling negotiators would zip around the world to agree new deals, so restoring a champion of free trade to its former glory. It has not proved so easy. There are trade deals to be done, of course. But the most urgent of these are supposed to stop old alliances from lapsing. In 2019 43% of Britain's exports went to the EU, and 14% to countries with which the EU has a trade deal. So far the Department for International Trade (DIT) has secured continuity deals with countries representing 10% of Britain's exports; Canada, Singapore and Mexico are among those still left to go.

The scramble to sustain the status quo is hardly in keeping with Britain's global branding. So the DIT has started negotiations with Australia, New Zealand and America, and plans eventually to bring Britain into the Comprehensive and Progressive Trans-Pacific Partnership, a deal with 11 countries around the Pacific Rim.

Britain's strategy for securing new deals has echoes of its past. When Joseph Chamberlain, a Conservative bigwig, argued for a tariff wall in 1903, he did so partly so that holes could be knocked through it, and "imperial preferences" given to Britain's colonial trading partners. Now, instead of slashing its tariffs unilaterally, Britain mostly modified or kept those of the EU. That leaves British negotiators with leverage in trade talks, as they can offer reductions in tariffs on, say, citrus fruit in exchange for market access elsewhere.

Imperial preferences allowed in cheap imports of Australian dairy and Canadian wheat. Joining the European project meant

In ditching them; leaving it could allow British consumers to enjoy the delights of cheaper food, not just from those countries but also from America. And a deal that facilitated those imports could also ease the path for British exports.

That prospect does not fill the British public with joy. American negotiators see a trade deal with Britain as an opportunity to unpick the EU's precautionary principle, which assumes risky things are dangerous until proven otherwise, and either overturn "unscientific" restrictions on imports of hormone-treated beef and chlorinated chicken or prevent future ones from emerging. Along with Mr Oliver, the farmers and the greens, more than 1m Britons have lent their signatures to a campaign demanding that imports meet Britain's domestic standards on food safety, animal welfare and the environment. "The us is asking the UK to import beef that's been puffed up with hormones, meat that's been washed with chemicals and crops that have been grown using vast quantities of pesticides," says Sam Lowe of the Centre for European Reform. "None of that is very appealing on paper."

Some deals can probably be done without much difficulty. Australia and New Zealand are unlikely to hold out for the concessions that the United States is demanding. But domestic politics could well scupper an American deal. Although glowing headlines and a handshake with America's president would be nice, the government may find the price too high.

Mixed martial arts

Class conflict

Mixed martial arts is on the rise, and on the right

Mansfield, a former mining town in the Midlands, tends to be ahead of the curve. In 2017, after 94 years under Labour control, it fell to the Conservative Party, foreshadowing the collapse of the "red wall" of northern Labour seats in 2019. It is also in the forefront of a sporting revolution sweeping former industrial towns, particularly in the north and the Midlands: the rise of mixed martial arts.

MMA fighters are locked in a cage and employ violent tactics to subdue their opponents. The sport has spread to Britain from America, home to the Ultimate Fighting Championship (UFC), the world's largest MMA promotion company. In 2007 the British Medical Association advised that the sport be banned on the grounds that it was too violent, but it has continued to



Good, clean fun

grow, and now boasts the same participation among 18-34-year-old men as cricket and rugby, according to Harris Interactive, a market researcher. In November 2019 the UFC opened a gym in Nottingham, the first of its kind in Europe, and earlier this month the BBC broadcast an MMA fight for the first time.

A focus on discipline, often combined with teetotalism, has won the sport a reputation for keeping young men in deprived areas on the straight and narrow. "It's discipline and respect, little things like that, that aren't much about nowadays," says Christian Smith, a former professional fighter who now runs Tap or Snap, one of Mansfield's 14 MMA gyms. Jimmy Hey, an MMA trainer who runs the Apex Gym in Great Harwood, Lancashire, says he would often drive around the area and spot his students acting up. "I'd catch them with an eight-pack of beer, getting ready to go home at 12 o'clock in the afternoon and just sit there and get drunk... So I used to drag them off the street and that. But they responded really well."

Brutality in the ring can turn cage fighters into celebrities with international reputations. Michael Bisping, from Clitheroe, Lancashire, worked in factories before moving to America where he became a world champion. "A lot of lads see it as a way out," says Mr Hey. Fans reject the idea that fighters are mere thugs. "It can look like mindless violence in a cage," admits one. "But I've heard it compared to highspeed chess, which I agree with."

On both sides of the Atlantic, the sport has political overtones. In America, Dana White, president of the UFC, and Colby Covington, a welterweight champion, are outspoken supporters of Donald Trump. Darren Till, a Liverpudlian fighter who has relocated to Brazil, is a cheer-leader for Jair Bolsonaro. In America and Germany, some MMA gyms are associated with the far right. The sport is a natural fit for extremists who want to co-opt it, says Alex Channon, a senior lecturer of sport at the University of Brighton. "The struggle for physical domination between men is pretty much central to fascist ideology."

Britain First, a fascist group, had an MMA instructor at a training camp in Erith, south-east London; that came to lightand to an end-when Paul Golding, the group's leader, was handed a suspended prison sentence in 2017 after headbutting the instructor in a nightclub. Mr Hey was questioned by anti-terror police after Hope Not Hate, an advocacy group, claimed he was training members of National Action, a banned group. He admits to having trained National Action members but says he did not realise they belonged to the group. A subgroup of MMA embraces cultural nationalism, claiming that martial arts were invented not by East Asians, but by ancient Celts. The majority of MMA enthusiasts regard them as eccentric.

The left is challenging right-wing domination of the sport, through so-called "red gyms". Some offer training to activists to fight fascists at protests; others, like Solstar in London, teach lefties about healthy living. Paula Lamont, a co-founder of Solstar, says she felt there needed to be a left-wing presence in MMA, though the club does its best to keep politics out of the cage. "We don't have political debate within the club," says Ms Lamont. "Otherwise everyone would just argue."

Actual investors think in decades. Not quarters.



Babies and covid-19

Hard labour

Too many hospitals keep partners from attending maternity services

When James returned from the hospital after the birth of the hospital and tal after the birth of his son, he was surprised to find a bottle of whisky and some cans of lager on his doorstep. The mystery was soon solved. Under covid-19 rules, James was allowed into the hospital where his partner Annie was due to give birth only once active labour had begun. Thirty-six hours after being admitted for an induction, Annie found herself on a delivery ward in the early hours of the morning desperately trying to rouse her sleeping husband by phone. When that failed, she resorted to ordering a delivery from a local off-licence in the hope that the doorbell would prove more effective. In the event, he woke before the booze arrived.

James made it to the hospital on time and all went well. Others have not been so lucky. "I've heard real horror stories of what women have had to face alone, whether it's awful news at a scan or going through a difficult birth without your partner there," says Joeli Brearley of Pregnant Then Screwed, a campaign group. As Britain locked down in March, hospitals limited the number of visitors allowed on their premises. Pregnant women had to attend 12- and 20-week scans, and go through much of the process of labour, alone. Nonessential retail reopened in June, followed by pubs and restaurants in July, but tight restrictions have remained in place limiting access to maternity services and postbirth visits by new fathers. A petition calling for the rules to be loosened across Britain has received over 440,000 signatures and the backing of 60 MPS.

The Royal College of Midwives, a trade union and professional body, acknowledges that "the support of a partner during scans and labour is important", but argues that restricting access to some services means that "maternity teams can continue to deliver good-quality, safe care, protecting pregnant women and the midwives who care for them." Others are less convinced. "It's important to remember that the vast majority of birth partners live with the woman giving birth," says Jeremy Davies of the Fatherhood Institute, a thinktank. "We haven't had a sudden spike in virgin conceptions." Evidence suggests the presence of partners leads to better medical outcomes, partly because it reduces stress and anxiety during birth.

In response to rising discontent the NHS issued new guidance for maternity



Where's daddy?

services on September 8th. But campaigners say that interpretations of the guidelines vary widely across the country and most services remain closed to partners. The concept of "active labour" is especially slippery. "It's not like this stuff runs on a timetable," says a midwife. As of late September, fewer than one in four hospital trusts were allowing partners to be present for the whole of labour and half were still banning women from being accompanied to their 12-week scan. As Ms Brearley says, "No one should have to find out they have miscarried alone."

Pearson

Marks for effort

The shift to online learning could boost a beleaguered British publisher

FEW BIG British companies have tested investors like Pearson. Over the past seven years the world's largest educational publisher has issued seven profit warnings. During that time its share price has fallen by more than half. On October 19th it gets a new boss: Andy Bird, a British businessman who spent 14 years running Disney's international outfit. Mr Bird will have to shore up confidence in the firm even as the pandemic turns education markets upside down.

In the 1990s Pearson was a bloated conglomerate that owned theme parks, TV production houses and a chunk of *The Economist*. It has since flogged these fripperies to focus on learning. But it has been hammered by a collapse in sales of university textbooks in America. In 2010 it sold 21m physical books to American students; that

had fallen to fewer than 4m by 2019.

Students still use printed textbooks, and Pearson's are still popular. But many learners now get hold of second-hand ones through rental services, which need not give Pearson a cut. Campus bookshops have always peddled dog-eared hand-medowns, but the ease of trading them online has made the secondary market massive. Pearson's beancounters have repeatedly underestimated the speed at which this would cause its sales to tank.

The pandemic has made things worse. On October 14th the company announced that sales in the first nine months of the year were down by 14%. Lockdowns have hit bits of the company that had been growing. Pearson had to close thousands of buildings it uses to provide assessments to adults, such as those taking driving-theory tests. Schools in Britain and America cancelled exams which Pearson is normally paid to supply. Few people are moving across borders, cutting demand for Pearson's languages tests.

But Pearson hopes to benefit from trends set off by covid-19. Recession should encourage more youngsters to stay in education and push career-changers to seek new qualifications. More online learning should benefit an arm of the group that helps universities put courses on the web. It is also boosting a wing of Pearson that helps trusts in America run fully virtual public schools. Enrolment in its 43 such institutions is up by 41% this year.

As for its textbooks, Pearson has long promised that it will resurrect sales by getting students to subscribe to digital course materials served up over the internetwhich, unlike paper books, cannot be resold. The plan is that these products will increasingly include interactive features such as online tests that help learners keep track of their progress. Skinflints using pirated copies would struggle to gain access to that extra stuff. Lecturers have not always welcomed the shift from books to "courseware", notes Thomas Singlehurst, an analyst at Citigroup; they fear that it will bring new costs and risks. Yet being forced to teach remotely during the pandemic is probably helping to make them keener.

The outgoing boss, John Fallon, is leaving after nearly eight years in charge. He has slashed costs and paid down debts. But Mr Bird's arrival has been soured by a row over pay. In September a third of shareholders voted against the deal Pearson has struck with him; it includes a basic salary of \$1.25m and a scheme under which Mr Bird will buy \$3.75m of shares but could receive an additional \$9.38m of them over three years. The episode has left some shareholders questioning the position of Sidney Taurel, the firm's chairman since 2016. After years of disappointment, Pearson's owners are a tetchy bunch.





BLANCPAIN



OPhotograph: Laurent Ballesta/Gombessa Project

Bagehot | Mad, bad and dangerous

Britain's political and social fabric is under unusual strain



THE BRITISH like to think that they have a genius for defusing conflicts. France's road to democracy lay through the Revolution and the Terror; Britain's through the Great Reform Act. Germany and Italy had Hitler and Mussolini. Britain had Oswald Mosley, who signed his political death warrant as soon as he donned a black shirt and took to walking oddly. In China and Russia Communism resulted in the loss of millions of lives. In Britain it caused a few misguided souls to waste their lives flogging copies of the Morning Star.

Yet this illusion is born of a short-sighted view of history and geography. On the island of Ireland British citizens have only just stopped murdering each other for sectarian reasons. Peace is a recent phenomenon on the British mainland, too. In the 17th century the Civil War claimed the lives of a higher proportion of men than did the first world war. The 18th century saw an epidemic of riots and public drunkenness. Boyd Hilton's volume of the Oxford History of England covering the years from 1783 to 1846 is entitled "A Mad, Bad and Dangerous People?".

Britain has enjoyed a stable couple of centuries not because the British people are a naturally pacific lot but because of a uniquely successful political settlement that prioritised compromise over conflict and assimilation over exclusion. The traditional ruling class had a genius for co-opting new social forces. Thomas Macaulay, the great historian of Britain's peaceable settlement, proclaimed that the country's aristocracy was the most democratic and its democracy the most aristocratic in the world. Its institutions have a genius for co-opting and civilising political divisions. The weekly Punch and Judy show that is prime minister's question time may be tedious, but it beats fighting in the streets.

Yet this settlement is beginning to fray. One of the stablest countries in Europe has become one of the most unpredictable. The box of surprises that produced Brexit may well lead to Scottish independence before the decade is out. France used to be the nation of street protests, but during the height of the Brexit frenzy Parliament Square was permanently occupied and the forces of Remain put 600,000 people on the streets. The British now hate their political elites with continental fervour. A ComRes poll in 2018 revealed that 81% of the respondents, and 91% of Leave voters, felt

most politicians didn't take into account the view of ordinary people. The country's disparate parts are also growing sick of each other, as the Scottish independence movement produces an aggressive English counter-reaction.

There is no shortage of explanations for these growing tensions. Left-wingers blame de-industrialisation for creating a dangerously unbalanced country one corner of which is much richer than the rest. Traditional conservatives blame popular capitalism: the masses want instant gratification and the elites can't be bothered to uphold cultural standards. (George Walden's recently republished "New Elites: A Career in the Masses" expounds this case brilliantly.) But two developments have contributed most.

The first is the rise of identity politics. "Brexitland", a new book by Maria Sobolewska and Robert Ford, argues that British politics, which used to be organised around class, has since the 1960s reordered itself around identity. "Identity liberals" are university graduates who pride themselves on their "open-minded" attitudes to immigration and ethnic minorities. "Identity conservatives" are older voters (who grew up when only 3% of people went to university) and people who left school with few qualifications; their economic interests do not always coincide, but they share a pride in Britain's traditional culture, they bristle at attempts to marginalise it and they set the tone of Boris Johnson's Conservative Party.

Identity politics, which seeks to drive a wedge between "us" and "them", is far more explosive than class politics: you can compromise over the division of the economic pie but not over the core of your being. Brexit demonstrated this painfully. Enlightened liberals, even less tolerant than cultural conservatives, behaved like middle-class passengers forced to sit next to a working-class hen party on an overcrowded Ryanair flight. And neither side could resist the temptation to taunt the other. David Lammy, a Labour MP, likened the Eurosceptic European Reform Group to the "Nazis" before correcting himself and saying that the comparison was not strong enough. Plenty of issues, from Scottish independence to historical monuments, are susceptible to that sort of treatment.

The second disruptive force, closely related to the first, is the rise of the meritocracy. In his prophetic book of that name Michael Young argued that meritocrats believe that they owe their positions to nothing but their own merit, while the unsuccessful either lash out against the system or turn in on themselves in despair. The six-fold expansion of the universities has deepened the divide. Britain's education system is now a giant sieve that selects the university-bound half of the population, depositing them in big cities, and lets the rest fall where they may, feeling unrepresented in Parliament or the media. White school-leavers are a particularly marginalised and volatile group, whose ranks are swelled by a new problem that Young didn't anticipate. Many of those who get a university education feel cheated by it, for rather than offering admission to the cognitive elite, it may lead only to a pile of debt and a future labouring in the "precariat". History suggests that the overeducated and underemployed are political tinder, as both the Bolsheviks and the Nazis demonstrated.

This might sound overexcited: the British system survived the 1930s not only intact but enhanced. The Conservative Party has done a good job of absorbing the raw energies of populism. The Labour Party is moving back to the centre after Jeremy Corbyn's insurgency. But Brexit and the pandemic are further discrediting the political class while shrinking the economy. The numbers of "mad, bad and dangerous" people are growing. The country's rulers need to think more seriously about how to civilise them.



An interview with Russia's opposition leader

The man who lived

BERLIN

By surviving an assassination attempt, Alexei Navalny may have become stronger than ever

LEXEI NAVALNY, Russia's charismatic $oldsymbol{A}$ opposition leader, has always had something of the Hollywood hero about him, and he likes to illustrate his speeches with references to popular movies. Reflecting on the journey he has made from Siberia, where he was poisoned with Novichok, a nerve agent, to a Berlin hospital, where he awoke after a three-week coma, he is conscious of the cinematic quality of the plot so far: a people's hero challenges an evil dictator who tries to kill him with a mysterious poison. But his loyal friends and his devoted wife bring him back to life. "It starts like a political thriller, then turns into a romantic comedy," he tells The Economist during an interview in Berlin.

The intubation scars on his neck, his gaunt look, the tremor in his hands and the insomnia are a little too real for a Hollywood movie, though. And the biggest changes are less visible. "Paradoxically, I have become more humane, maybe even

sentimental," he says. Watching the recent satellite footage of military drones hitting targets in the Azerbaijan-Armenia conflict, he surprised himself thinking: "Hang on a second, this black dot is a person who just probably lost his legs and is now staring into the sky...It is good for a politician to look into the face of death," he says.

Mr Navalny (pictured above, for *Der Spiegel*), who almost died on August 20th on board a flight from Siberia to Moscow, certainly did that. The heavy police presence outside the house in Berlin where he is recovering confirms he is still in danger

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from the man widely believed to have ordered or sanctioned his poisoning. Mr Navalny speaks his name loud and clear: Vladimir Putin, the president of Russia.

Start with the weapon. The toxin was identified by Germany as a new version of Novichok, a class of military-grade nerve agents. "There is no black market for Novichok," says Mr Navalny. "And the fact that this is a new variety means that Russia has an active programme in prohibited chemical weapons that could only be accessed by special services with Putin's approval."

The Kremlin's refusal to investigate the poisoning, and its willingness to shatter relations with Germany and the EU in order to cover it up, confirm Mr Putin's involvement, he argues. So does Mr Putin's explanation, in a conversation with Emmanuel Macron, the French president, that Mr Navalny poisoned himself to discredit the Kremlin. It was a line so insultingly absurd that Mr Macron leaked it to the media. "It shows that Putin cannot transfer responsibility for this," argues Mr Navalny.

His poisoning marks the transformation of the Russian regime "like that moment in 'Alien', when an egg shell breaks and a monster springs out...there are no more red lines," he says. A mysterious death from an invisible poison was intended to strike terror both at home and abroad. "Putin clearly revels in this idea of his mys-

▶ tique and deadly powers." The fact that Mr Navalny survived, largely thanks to the pilots who carried out an emergency landing in Omsk, does not change that message.

Mr Navalny is also clear about the motives, which he says are linked to his venturing beyond Moscow and into the regions, the bastion of the regime's power. He was in Siberia, mobilising voters against Mr Putin's ruling United Russia party, when he was poisoned. Having long lost the support of middle-class Moscow and St Petersburg, the Kremlin tolerated Mr Navalny's activism in those cities. Moving into the heartland spelled danger.

"The regime is held together by the perception of its solid support among the 'salt of the earth' people in the regions. Our main task was to destroy that myth," Mr Navalny says. To do it, he has built an extensive regional network. He has also orchestrated "smart voting": directing those who are fed up with the regime to the best-placed alternative party in order to consolidate protest votes and deprive United Russia of its majority. "Whatever control the Kremlin has over courts and security services, its party is the most basic instrument of its power," he notes.

Over the past two years the Kremlin has tried but failed to eradicate Mr Navalny's network by conventional means, including harassment, the arrest of activists on fabricated charges and the freezing of bank accounts. But when mass protests broke out almost simultaneously in far-eastern Khabarovsk and in Belarus on the western flank of the former Soviet empire, the perception of threat among Mr Putin's security men changed—and so did their tactics.

"They could not have told Putin that the protest in Khabarovsk was the result of broad discontent triggered by the arrest of a popular governor," says Mr Navalny. But they could and probably did tell him that this was part of a Western plan operating through Mr Navalny, with more to come. So permission for "special measures" was requested and granted, he reckons.

Yet if they hoped to neutralise Mr Navalny, they have achieved the opposite. He has gained the moral high ground and sympathy among those who did not previously support him. A hospital visit from Angela Merkel, the German chancellor, has greatly boosted his international standing.

The Kremlin seems desperate to stop him from coming back, alleging he has ties to the CIA and threatening treason charges. Mr Navalny is determined to return to Russia, challenging Mr Putin's legitimacy. "For all their mighty powers and their control over everything, they know that there is a broad historic process that is moving against them," he says. Mr Navalny knows the risks, but he has chosen a leading role in the drama, whether it ends as tragedy or with a Hollywood-style triumph.

Turkey

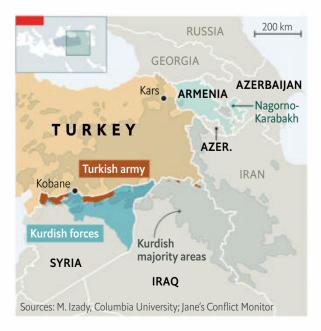
Wear a different chain

ISTANBUL

President Erdogan locks up Kurdish mayors

 $\mathbf{I}^{ ext{N}}$ CITIES ACROSS Turkey's east, it is no longer an unusual scene. The local mayor, clutching a bag stuffed with some clothes and a toothbrush, the bare necessities for a long spell in prison, emerges from his house before dawn, accompanied by a group of policemen, and disappears into a van. The scene played out most recently on September 25th in Kars, a city near the Armenian border, where police arrested Ayhan Bilgen, who was elected to office last vear. A small crowd gathered to sav goodbye. "Kars is proud of you," the chanting began. Dozens of other members of Turkey's biggest Kurdish party, the Peoples' Democratic Party (HDP), including three former parliamentarians, were rounded up the same day.

Turkey's president, Recep Tayyip Erdogan, believes he is close to burying the dream of Kurdish autonomy both inside and outside the country's borders. The army has dealt Kurdish insurgents, known as the Kurdistan Workers' Party (РКК), a series of heavy blows. State prosecutors have crippled Kurdish politics through the courts. Sixty-five mayors were elected on the HDP's ticket in local elections last year. At least 59 of them have been forced out of office or locked up, or both. Several former members of parliament are also behind bars. "The government...is using the judiciary to try to neutralise the HDP and to intimidate the whole opposition," writes Selahattin Demirtas, the party's former leader, from a prison in western Turkey, where he has languished since 2016. (Mr Demirtas communicates with the outside world through his lawyers.) "The situation we and our recently arrested friends face



has nothing to do with the law."

Officially, the charges against the HDP politicians rounded up over the past weeks date back to 2014, when the party called for protests after Islamic State forces besieged the Syrian border town of Kobane, populated mostly by Kurds, while Turkish tanks looked on from hundreds of metres away and Mr Erdogan sat on his hands. At least 37 people across Turkey were killed after Kurdish and Turkish nationalists took to the streets. The government has now decided to hold the entire HDP leadership responsible for the violence.

Its motives look largely political. "They want to prevent the HDP from functioning and to upset the structure of the opposition coalition," says Galip Dalay, a fellow at the Robert Bosch Academy in Berlin. As a de facto partner in an alliance led by Turkey's main secular party and nationalists who split from a party allied to Mr Erdogan, the Kurds helped propel the opposition to a string of victories in last year's local elections, most notably in the Istanbul mayoral race. Mr Erdogan now hopes to provoke a split within the alliance by exploiting his main opponents' reluctance to align openly with the HDP, which many Turks view as the PKK's political arm. (Turkey, America and the EU consider the PKK to be a terrorist group.) "If the rest of the opposition criticises the arrests, the government will say they're on the side of terrorists," says Vahap Coskun, an academic. "And if they don't, they risk being estranged from the HDP."

The crackdown at home has gone hand in hand with military interventions abroad. In the mountains of northern Iraq, Turkey has stepped up air and drone strikes against PKK strongholds. In northern Syria, it has launched three separate offensives against the group's offshoot, destroying its dream of a Kurdish statelet running the length of the Turkish border. Mr Erdogan is also enmeshed on other fronts. He has troops operating in Libya, and he is also deeply involved in the renewed conflict between Armenia and Azerbaijan over the disputed enclave of Nagorno-Karabakh. After almost two weeks of fighting in and around the enclave, a ceasefire is now in effect, though violations are reported.

Mr Erdogan thinks he has the PKK and the HDP on the ropes. "We've completely destroyed the morale of the terrorist group," his interior minister boasted last month. But the government has an intractable problem—the Kurds themselves. In every parliamentary election since 2015, the HDP has been able to count on the votes of 5m-6m people, the vast majority of them Kurds. Even today, with its leaders in prison, the party polls above 10%, enough to make it the third or fourth group in parliament. Mr Erdogan rules on the battlefield and in the courts. But he has no answer to the Kurds at the ballot box.



Berlin's new airport

It's built, but will they fly?

BERLIN

A long-delayed airport is finally opening—just as air travel collapses

HECK-IN FOR a flight to Antalya was going smoothly until airport staff saw *The* Economist's gun. This correspondent, a volunteer on a recent trial run for Berlin's new airport, had been handed a fake hunting-rifle to test the mettle of security staff. The police summoned to check told him he had "forgotten a crucial bit of documentation". After a fake ticking-off, permission to board was grudgingly granted.

It was a relatively mild slip in the long history of Germany's best-known infrastructure disaster. Ground was broken on Berlin Brandenburg Airport (BER) in 2006. It was supposed to take five years to build. After a second failed opening, in June 2012, a head-spinning catalogue of errors was revealed: fire-doors didn't open; miles of cables were mislaid; and "the Monster", a vast smoke-extraction system, was ineffective.

BER became a standing rebuke to Germany's reputation for get-it-done efficiency. Wags quipped that it would have been cheaper to demolish Berlin and rebuild it next to a functioning airport. Angela Merkel despaired. The failure had many fathers, including hubristic dreams of creating an aviation hub to rival Frankfurt, a complex ownership structure split between the federal government and two states, and politicians who thought they could manage projects better and more cheaply than the private sector.

Now, after six missed openings, countless lawsuits, a handful of corruption scandals and two parliamentary inquiries (one of them still going), and at a cost of around €7bn (\$8.2bn), BER will mark its official opening on October 31st with incoming

Like a fish needs a bicyclette

PARIS

Men should have no place in women's lives or minds, says a new book

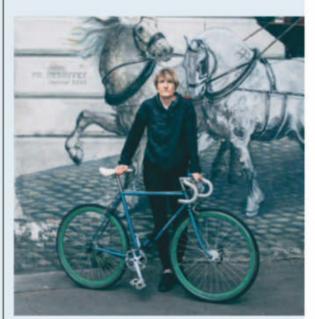
TO EMANCIPATE A woman is to re-I fuse to confine her to the relations she has to men, not to deny them to her." So wrote Simone de Beauvoir, the godmother of French feminism, in "The Second Sex" over 70 years ago. Not all French feminists today would agree. A new book, "Lesbian Genius", suggests that women should banish men from their lives. Its author, Alice Coffin, a lesbian activist and Paris city councillor, says she no longer reads books by men, nor watches films made by men, nor listens to music written by men. No more Voltaire, Truffaut or Daft Punk, then. We need, she declares, to "eliminate men from our minds".

The backlash was immediate. Not from men (who needs to hear from them?), but from other French feminists. Marlène Schiappa, formerly President Emmanuel Macron's minister for gender equality, accused Ms Coffin of advocating "a form of apartheid". Sonia Mabrouk, a radio host, asked the author if she was not promoting "obscurantism" and a "form of totalitarianism". The Catholic University of Paris, where Ms Coffin taught, declined to renew her contract.

France gave the world post-war feminist theory. But today unwritten codes about dress, seduction and femininity coexist with a lingering predatory sexual culture. #MeToo struggled to take off in France. The rate of féminicide, or murder by a domestic partner, is unusually high. A younger generation is fighting back. Many took to the streets earlier this year, enraged after a César, the French version of an Oscar, was awarded to Roman Polanski, who fled America after plead-

ing guilty to sex with a minor. Mr Macron has put in place measures to combat sexism and violence against women. Yet such efforts to promote mere equality are dismissed by radicals as timid. The veritable "war" waged by men against women, argues Ms Coffin, who honed her views while studying briefly in America, requires more militancy.

In her denunciation of the way power still protects predators, Ms Coffin is spearheading a new French feminism. But de Beauvoir would have found her crusade against men as a whole "ridiculous", says Agnès Poirier, the author of a book about Left Bank intellectuals. De Beauvoir, who was bisexual, lived for decades in an open relationship with Jean-Paul Sartre. She flouted convention and gave French women a voice, but defiantly kept both men and women in her bed—and in the conversation.



Alice in Onesexland

flights on Lufthansa and easyJet. It will incorporate a nearby airport as a low-cost terminal. Tegel, an eccentric airport in northwest Berlin, will close—much to the regret of locals who enjoyed the brisk 70-step journey from kerbside to security.

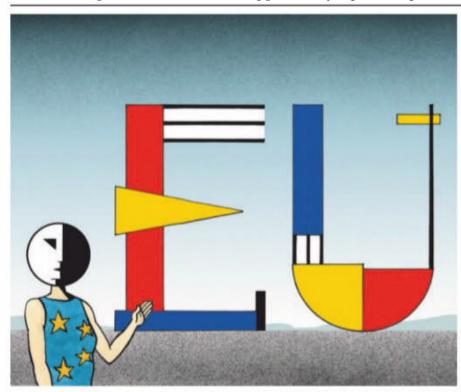
A year ago the fear was that surging passenger numbers would mean BER would be too small the moment it opened. Its owners had drawn up a "master plan" to expand capacity to 58m passengers by 2040. The pandemic put paid to that; overall numbers for Berlin may fall to 10m this year from 36m in 2019, and it is anyone's guess when-or if-they might approach their previous heights. But by solving (or at least postponing) one problem, covid-19 has created another. FBB, the company which

runs Berlin's airports, is in dire financial straits. Its state backers have promised €300m this year, and may be on the hook for more than half a billion in loans in 2021.

Yet some suspect the heavily indebted FBB is using covid as a smokescreen for deeper financial woes. One report found that a further €1.8bn may be needed by 2023 to avert insolvency. But subsidies must be approved by the EU, which will apply stringent state-aid tests. Private investors are said to be sniffing around, though politicians are wary of selling a stake too cheaply. Sceptics like Christoph Meyer, a Berlin MP, fear a "never-ending story" of taxpayers' money pouring into FBB. BER'S opening will finally spare Berliners' blushes. But the headaches it will cause are far from over.

Charlemagne | Learning to love the c-word

Or how European Union leaders stopped worrying and began to enjoy culture



BAUHAUS AND Brussels are an uneasy mix. Walter Gropius, the founder of the Bauhaus art school, which shaped design in the 20th century, declared that a building "must be true to itself, logically transparent, and virginal of lies or trivialities". A short stroll around the EU quarter in Brussels reveals buildings that happily violate all these rules. Post-modern monstrosities butt against merely ridiculous buildings with nicknames such as the Space Egg. Inside, things are often little better, with lurid colour schemes providing an absurd backdrop for serious discussion and layouts straight out of Maurits Escher's paintings of "impossible constructions". Bauhaus principles led to the iPhone, a triumph of simple design. EU design principles led to a building with floor numbers that go: 02, 01, 00, 10, 20, 35, 50, 60, 70, 80.

Ursula von der Leyen, the president of the European Commission, believes a bit of Bauhaus spirit is exactly what the EU needs. As part of the bloc's flagship "green deal" reforms, the EU will found a European Bauhaus movement to ape the influential design school that ran from 1919 to 1933 in Germany. "It needs to be a new cultural project for Europe," said Mrs von der Leyen, speaking last month in the European Parliament, which is nicknamed Le Caprice des Dieux due to its resemblance to a cheese of that name. Although it was still nebulous, Mrs von der Leyen spelled out a vision of architects, artists and engineers combining as they did a century ago in Weimar Germany, except this time to help stave off climate change as well as designing natty buildings. "We need to give our systemic change its own distinct aesthetic," she declared.

Such forays into the world of culture had become relatively rare for EU leaders. When European federalism was in its pomp, Jacques Delors, the commission president who oversaw the creation of the single market and the introduction of the Maastricht treaty in the 1980s and 1990s, warned that economic integration was not enough. "You cannot fall in love with the single market," he put it, repeatedly. But a decade of crisis then led to leaders trying to avoid divorce rather than increase romance. Until Mrs von der Leyen's speech, calls for a common culture were unusual. Officials in Brussels hide under the desk when someone mentions the c-word. Within the EU institutions, culture is often a punchbag. In "The Capital", a satire by Robert Menasse set in the Brussels bubble,

the main characters are frustrated officials in the commission's culture department. The EU's cultural efforts are easy to lampoon and the new Bauhaus is no exception. It can trigger a cartoonish image of fashionable men in expensive spectacles designing ecologically sound window frames in exchange for tax-free salaries.

For others, cultural projects are the missing part of an at-times-bloodless project. The EU was set up in part to stop proud European nations murdering each other. It did so via technocratic, economic and, frankly, rather dull means. When it comes to culture, there is a feeling of caution bordering on cowardice among European officials. For an example, pull out a wedge of euro notes. Rather than founding fathers or recognisable monuments that may inflame national jealousies, citizens are left with pictures of windows and bridges that do not exist (or did not until one enterprising town in the Netherlands recreated each bridge over a canal as a tourist attraction). It is better to have a row about who goes on bank notes than a pallid, purely economic relationship with an increasingly powerful institution, argues Giuliano da Empoli, director of Volta, a think-tank

Worrying about the appearance of bank notes rather than their value can appear divorced from reality. Yet the EU's critics have few qualms about fighting a culture war. In relative terms, the country that spends most on culture is not France, with its world-class museums and general fetish for intellectualism, but Hungary. Viktor Orban, the prime minister, rails against art that is pro-gay or antiruling party. His government spends a colossal 3% of annual GDP on "recreation, culture and religion", often on things such as the swanky football stadium next door to Mr Orban's country estate. For eurocrats to bang on about culture from an ugly building in Brussels during a pandemic may seem like a parody of disconnection. But if they avoid the topic, the EU's enemies will happily fill the gaps, argues Mr da Empoli. "A realist in Europe knows that it is not rationality that wins elections," he adds. "A realist is someone who knows that symbols are what carry the day."

Don't let the devil have all the best tunes

An emphasis on culture can come with a dark side. Hungary and other small countries, such as Estonia, which ranks second in the spending stakes on culture, invest so much because they worry about disappearing. Strip out language and culture and there is little left of small nations, points out one diplomat. They are no longer alone in this petrified world-view, which is found at the EU's highest levels. Eurocrats veer between hoping that the EU will be a global superpower and worrying that it will become an irrelevant peninsula. "This civilisation—Europe is a civilisation—could be clearly threatened by this geopolitical evolution," warned Josep Borrell, the bloc's foreign-policy chief, in a recent speech. It is a sentiment with which Mr Orban would agree. And that should make leaders pause. After all, a paranoid bloc is not a wise one.

If the EU is determined to embroil itself in a clash of civilisations, its leaders must ponder some simple but fundamental questions. What exactly is European culture? How, exactly, can transnational politics shape it? And what, exactly, is the point? After six decades of integration, the EU has created a relatively homogenous economic bloc. But creating a shared European culture is a completely different kind of challenge. Brussels can tinker, setting standards for buildings, shovelling money into theatres and helping small countries preserve their languages. But culture is a living thing, that evolves from the bottom up. It is beyond the capacity of any superstate to control.



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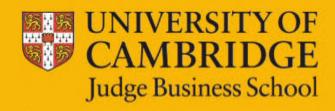
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Trumponomics

Watered with liberal tears

How the American economy did under Donald Trump

'N HIS NEW book Casey Mulligan offers an Lintriguing explanation for why President Donald Trump makes outlandish economic claims. Mr Trump knows he is hyperbolising when he says that America has enjoyed "the greatest economy in the history of the world" on his watch, suggests Mr Mulligan, who was until recently the chief economist on the president's Council of Economic Advisers. It is a "strategy for getting the press to cover a new fact, which is to exaggerate it so that the press might enjoy correcting him and unwittingly disseminate the intended finding". Journalists' dislike for Mr Trump, according to Mr Mulligan, blinds them to many of the administration's genuine economic successes. He may have a point.

Assessing leaders' economic records is fraught with difficulty. Presidents typically get credit when the economy is doing well and blame when it does badly—but short-term economic outcomes are usually more influenced by central banks, demography and what is happening in the rest of the world, among other factors. Even today, political scientists continue to argue over whether the economy in the 20th century

did better under Democratic or Republican administrations. All this is of little use to the American public, whose vote for a president must be based, in part, on a real-time assessment of economic competence.

Mr Trump came to power with unrealistic promises to create 25m jobs and supercharge economic growth, and to that end cut taxes and boosted spending, widening the fiscal deficit (see chart 1). Economists will continue to weigh up the specific costs and benefits of those policies. A true evaluation will take some time. At present, however, it is possible to assess whether the American economy overall did better or worse under Mr Trump. That involves comparing actual American economic performance, on the one hand, with what an impartial spectator could reasonably have expected, on the other. To that end The Economist has gathered a range of economic data, from business investment to wage growth, wherever possible comparing American economic performance to that of other rich countries.

The bulk of the analysis covers the period from 2017, when Mr Trump took office, to the end of 2019. We stop in 2019 in part

because some data are released only annually, and in part because the pandemic has turned economies across the world upside down. Our conclusion is that, in 2017-19, the American economy performed marginally better than expected. (That conclusion remains if we follow the practice of some political economists, who argue that the influence of presidents on the economy can be discerned only after a year in office, and limit our analysis to 2018-19.)

Take gross domestic product (GDP), a measure of output which is the most common yardstick of economic performance. GDP growth was somewhat faster in 2017-19 than it was in either Barack Obama's first or second term, according to official data. America also did well relative to other countries. The world economy peaked in 2017. In 2018 it slowed but America accelerated. In 2019 America slowed too, but stayed ahead of others.

Another way to look at this question is to assess whether America in 2017-19 exceeded or fell short of economists' expectations (see chart 2). In October 2012 the IMF forecast that in the subsequent four years (those of Mr Obama's second term), the American economy would grow by an annual average of 3%. In fact that proved to be too optimistic; it actually grew by closer to 2% a year. But the IMF was too pessimistic in its projections for 2017-19, released shortly before the election of 2016. In those years America outperformed the forecasts.

But if the American economy did better than expected in some respects, it disappointed in others. Take the corporate sector, which Mr Trump helped with lighter taxes. Corporation-tax cuts did increase post-tax earnings, one reason why the American stockmarket has done relatively well since Mr Trump came to power (see chart 3). America has also become a more favoured destination for foreign direct investment (see chart 4). But there is little evidence of the promised business-investment boom (see chart 5).

America's labour-market performance is similarly nuanced. Though Mr Trump particularly likes to boast about monthly employment figures, it is hard to make the case that in 2017-19 the jobs machine was whirring. Jobs growth was slower than it had been during Mr Obama's second term. In 2009-16 America's unemployment rate fell relative to the average for other G7 economies (see chart 6). Under Mr Trump

United States

15

2005

10

19

unemployment did fall to the lowest since the 1960s, but this was not internationally exceptional. America's improvement relative to employment in other countries stopped under Mr Trump.

The lot of working-class Americans, however, definitely improved in 2017-19. Comparing household incomes between countries is difficult, certainly for recent years. But though there is some dispute about the reliability of the data gathered in 2020, where the pandemic made it difficult for researchers to conduct surveys, there is clear evidence of an acceleration in the growth of America's median household income from 2017 onwards (see chart 7). A tight labour market also helped raise the wage growth of the lowest-paid Americans, relative to others, to a degree not seen since Bill Clinton was president (see chart 8).

And what of the economy in 2020? Mr Trump's loose fiscal policy before the pandemic left America with much higher debt going into the crisis. On top of that splurge, this year America has implemented the world's largest fiscal package (see chart 9), posting stimulus cheques worth up to \$1,200 per person and temporarily bumping up unemployment-insurance payments by \$600 a week. It is possible, though unlikely, that Congress will pass even more stimulus before the election. Even without another package, however, and even though it is enduring a deep recession, America will probably be the bestperforming G7 economy in 2020—perhaps by some margin. Just before the pandemic, the American economy looked slightly stronger than other rich countries. Before long, the gap may be more impressive. ■

The economic report of the president United States, selected economic indicators Government budget deficit **GDP** growth Stockmarkets As % of GDP Outturn v forecasts, % points Jan 1st 2005=100 0 2 300 S&P 500 ↑ Better than expected G6* median FTSE All World MSCI World

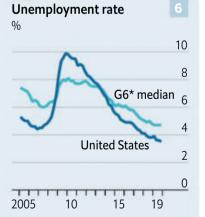
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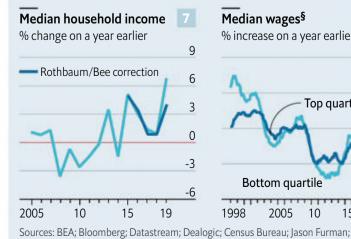


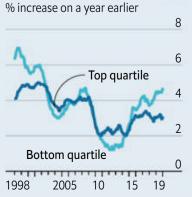


IMF; Federal Reserve Bank of Atlanta; Federal Reserve Bank of St. Louis; OECD;

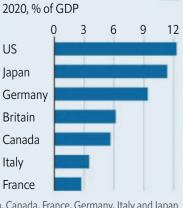
"Coronavirus Infects Surveys, Too", by J. Rothbaum and A. Bee; *The Economist*







Median wages§



Covid-19 fiscal measures

*Britain, Canada, France, Germany, Italy and Japan ‡Excludes oil and mining

Amy Coney Barrett

Hearing test

Soon-to-be Justice Barrett borrowed a tactic from Justice Ginsburg

C ENATE CONFIRMATION hearings for Supreme Court nominees are an odd mix: bloviation and softballs; hopeless yet relentless inquiries into controversial cases; deflections and mini civics lessons from jurists in the hot seat. Judge Amy Coney Barrett's endurance run before the Senate Judiciary Committee ticked these boxes. But President Donald Trump's nomination of a deeply conservative appeals-court judge to replace the late liberal justice Ruth Bader Ginsburg in the fraught last stage of a historically divisive general election campaign brought new pique to the Hart Senate Office Building.

Democrats had no chance of averting a committee vote in Ms Barrett's favour and—barring a quartet of new infections among Republicans-have little hope of stopping her when the full Senate votes in the coming weeks. But the ten Democrats on the 22-member committee put together an uncommonly unified resistance. Their message was aimed at voters rather than at Republican colleagues across the aisle.

The Affordable Care Act (ACA), the law Barack Obama signed in 2010, took centre stage. With a Supreme Court challenge to the ACA coming on November 10th. one week after the election, each Democrat probed Ms Barrett on whether she would vote to scrap it—and strip coverage from some 23m Americans—days after taking Ms Ginsburg's seat. The interrogation was accompanied by stories and photos of sick constituents with pre-existing conditions >> • who could be left without affordable coverage should the high court toss the law.

The line of attack is not without footing. In 2017, Ms Barrett criticised NFIB v Sebelius, the 2012 Supreme Court decision upholding the constitutionality of the law's requirement that most Americans buy health insurance. When Chief Justice John Roberts anchored a 5-4 majority interpreting the mandate as a tax within Congress's revenue-raising power, she wrote, he "pushed the Affordable Care Act beyond its plausible meaning to save the statute". Juxtaposing Chief Justice Roberts with "staunch textualists" such as her mentor, Antonin Scalia, Ms Barrett then used a footnote to detail several other cases in which the chief "depart[ed] from ostensibly clear text" in order to achieve his "preferable result". She also favourably quoted Mr Scalia's condemnation of Chief Justice Roberts in Sebelius and in King v Burwell, as having turned the ACA into "SCOTUSCARE".

Senator Amy Klobuchar paired this review of the Supreme Court's two rulings on the ACA with Mr Trump's 2015 tweet promising his judicial appointees would "do the right thing" and strike down the law. Ms Barrett insisted she had made Mr Trump no promises and was "not hostile" to Obamacare. She also pointed out that the new challenge, California v Texas, involves a question not at stake in the earlier cases: whether, if the now-toothless individual mandate (which fined people who chose to go uninsured) is unconstitutional, that pulls the rug out from under the entire ACA. Perhaps tellingly, in adjudicating a student-advocacy competition last month, she struck down the mandate but said it was "severable" from the rest of the law.

The perennial question of abortion rights also popped up. When Ms Ginsburg was asked about *Roe v Wade* in her hearings nearly three decades ago, she said the "decision whether or not to bear a child is central to a woman's life, to her well-being and dignity". If the government were to obstruct that decision, a woman would not be "a fully adult human, responsible for her own choices". By contrast, Ms Barrett believes life begins at conception. In 2006 she signed a letter condemning Roe's "barbaric legacy" and urging the restoration of "laws that protect the lives of unborn children". When Senator Dianne Feinstein asked if this means Roe should be reversed, Ms Barrett replied: "I don't have any agenda."

Other than in her openness on abortion, Ms Ginsburg was tight-lipped in 1993—a "no hints, no forecasts, no previews" strategy Ms Barrett emulated. But Mr Trump's third nominee may have dropped a few clues. She referred to half a dozen Supreme Court rulings as "super-precedents", that is cases "so well-established that it would be unthinkable that [they] would ever be overruled". Brown v Board of Education, the 1954

ruling that struck down segregation in public schools, is a super-precedent, she said. Roe is not-and is subject to reappraisal—because it remains controversial.

Ms Barrett was also asked about her likely role in election lawsuits. Declaring she would not be "used as a pawn to decide this election for the American people", she declined to recuse herself from litigation that could affect the result. And when Senator Cory Booker asked how she regards Mr Trump's let's-wait-and-see approach to transferring power peacefully, Ms Barrett could not be pinned down. That's "a political controversy right now", she said. "As a judge I want to stay out of it." And with that ACB was no longer merely emulating RBG. A senior judge who felt unable to utter some bromide in support of democracy for political reasons? It was unprecedented.

New York and covid-19

Pikuach nefesh

Restrictions and rebellion follow New York City's covid-19 surge

ALL IT THE bonfire of the masks. That was the centrepiece of a large protest on October 6th by ultra-Orthodox Jewish men in Brooklyn's Borough Park to protest against new state restrictions on mass gatherings. Some chanted "Jewish Lives Matter". A few hoisted Trump campaign signs. "We are at war," said Heshy Tischler, a neighbourhood populist running the city council who has been leading the agitation, the following night. He also allegedly set angry demonstrators on Jacob Kornbluh, a reporter for Jewish Insider, who was

attempting to cover the protests. He was called both a "Nazi" and a "moyser", a Yiddish word meaning informer.

This antipathy, which has of course gone viral on the internet, is mostly directed at Andrew Cuomo, New York's governor. Mr Cuomo has enforced a new lockdown plan to deal with the alarming rise in covid-19 infections in so-called micro-clusters of the city and state. Places in the "red zone" areas are home to 3% of the state's population but account for 18% of all positive cases last week. These are mainly in Brooklyn, Queens and a few towns upstate, home to ultra-Orthodox communities, who say they are being unfairly targeted. Bill de Blasio, New York City's mayor, calls the restrictions a "necessary rewind". Only essential businesses can stay open in red zones. Houses of worship are limited to 25% capacity or a maximum of ten people. Schools must switch to remote learning.

If Mr Cuomo seems overcautious, it is to avoid another outbreak and a return to the time when New York was America's covid-19 capital. Since March. New York City has seen 246,000 infections, 58,000 hospitalisations and more than 25,000 deaths from covid-19. At the pandemic's height in April, personal protective equipment became scarce. Nurses wore the same N-95 mask for as many as five consecutive shifts. Morgues overflowed. Sal Farenga, a Bronx undertaker, held 120 funerals, three times the norm. "There's nothing more awful than zipping someone up in a body bag," said Kelley Cabrera, a nurse, "and we had to do it over and over again."

Much attention has been devoted to the disproportionate impact the virus has had on poor, black and Hispanic New Yorkers. The toll on Orthodox Jews in New York is less well-known. It has killed rabbis and swept through families, which tend to be large and live in cramped apartments.



Circuit breakers

Thousands of Hasidim who caught the virus donated their plasma for antibody treatment. Despite that, adherence to social distancing has remained patchy. Police had to break up a large funeral held for a rabbi in April. In June, some Hasidim used bolt cutters to open closed playgrounds. The city closed several yeshivas, Jewish schools, for flouting social-distancing rules. Conversations with many ultra-Orthodox Jews suggest a widespread but mistaken belief that they have herd immunity. Similar misinformation spread last year during a measles outbreak in a Hasidic enclave in Brooklyn. Samuel Heilman, an expert on Orthodox Judaism at Queens College, points out that the Hasidim are a particularly insular sect with a strong mistrust of secular government. They are especially resistant to bans on gathering, given

how communal most activities are. "The idea of praying alone," he says, "they don't really know how to do that."

The risk is that unless the virus is contained in micro-clusters, it will build into a second wave. Another citywide shutdown would cripple the Big Apple, where unemployment is still at 16%. The city and state are already in fiscal distress.

Among elected officials, there is optimism about the new restrictions. Mr de Blasio said there has been "some levelling off" in communities afflicted by the recent spikes. Mr Tischler was charged with incitement to riot. Mr Cuomo reminded those opposing the restrictions of *pikuach nefesh*, the Jewish principle that the preservation of life overrides nearly every other religious rule. "The point here", he said, "is to save a life and not endanger others."

Elections in Maine

Shaken Collins

AUBURN, FARMINGTON AND WATERVILLE

Maine's Senate race reflects the declining appeal of bipartisanship

Sometimes senators decide matters of national importance, such as confirming a Supreme Court justice, or whether to convict an impeached president. Sometimes their concerns are more prosaic. At a ribbon-cutting ceremony for a new bell tower in Auburn, Susan Collins, a Republican seeking a fifth term as Maine's senator, reminds guests that she helped secure \$246,000 for the surrounding infrastructure. The previous day in Waterville, Mike Roy, the city manager, said Ms Collins secured funding to help improve its centre.

Ms Collins's Democratic opponent, Sara Gideon, the speaker of Maine's House of Representatives, hopes that national concerns prevail. At an outdoor dinner beneath a tent in Farmington, she told the crowd that "we feel very left behind" by Ms Collins's "decision...to side with" Donald Trump and Mitch McConnell. She discussed the Supreme Court and health care, and won applause for deriding the amount of money in politics and proposing a lifetime ban on members of Congress becoming lobbyists. Mr Trump currently trails his Democratic opponent by more than 13 points in Maine, so Ms Gideon's strategylashing Ms Collins to Mr Trump—makes sense. It also appears to be working: she leads Ms Collins, who won her last Senate race by 37 points, by 3.6. If that lead holds, Democrats will celebrate: they would probably need Ms Collins's seat to retake the Senate. In time, they may also come to rue the extinction of her kind of Republican.

Maine tends to elect centrist senators. William Cohen, a Republican, served in Bill Clinton's cabinet. Olympia Snowe, like Ms Collins, was a pro-choice Republican. Angus King, who serves with Ms Collins, is one of just two Independents in the Senate. And Ms Collins stresses her centrist credentials, often reminding Mainers that an annual study from Georgetown University has ranked her as the Senate's most bipartisan member for seven consecutive years.

Ms Gideon argues that this reputation is outdated—that Ms Collins "has lost her

way", is "putting someone else's interests above ours", and has become a rubber-stamp for the right. Though no Senate Republican has voted with Mr Trump less often than Ms Collins, she has become famous, in a country split between two camps, for her habit of neither condemning nor supporting the president. Many Mainers are still cross about her vote to confirm Brett Kavanaugh to the Supreme Court. Teresa Forster, who drove down to Farmington from a nearby town to see Ms Gideon, had previously supported Ms Collins, but "I didn't like her vote, and I didn't like her apology. She's trying to have it both ways."

The backlash to that vote sparked a wave of donations. Even before Ms Gideon won the nomination, national liberal groups had raised millions for Ms Collins's challenger. Ms Collins complains about out-of-state money, of which Ms Gideon has more, while Ms Gideon criticises Ms Collins for taking corporate donations, but both candidates keep writing cheques—with spending already reaching \$100m, this race is the most expensive in Maine's history.

Ms Gideon has made inroads among the sorts of independent-minded women who had long supported Ms Collins alongside Democratic candidates—in 2008, for instance, Barack Obama won Maine by 17 points, while Ms Collins saw off a Democratic challenger by 23—forcing Ms Collins to shore up her right flank. But she is heterodox, deliberative and socially liberal, making her an awkward fit for a Trumpified Republican Party.

Wave elections tend to wash party moderates out to sea. If Ms Collins is among the Republicans looking for a raft on November 4th, few Democratic tears will fall. But Mainers might miss what she does for them locally and the Senate her willingness to cross the aisle. The country might miss New England Republicanism.



The campaign in Maine turns largely on the blame

Far-right extremism

Making the world glow

CHICAGO

The threat from right-wing terror groups is more serious than for decades

TEDERAL AGENTS grow twitchy when $oldsymbol{\Gamma}$ they hear a would-be terrorist talk of using a "chemistry set". On September 12th Barry Croft, while meeting several other men in a rural redoubt in Michigan, referred to his set as the men tested an improvised explosive device. He taped coins around it, to see how the blast would send shrapnel flying into red human silhouettes painted on nearby boards. Neighbours later recalled hearing a bomb explode, but they shrugged it off—it was routine to hear heavy weaponry fired there.

The weekend was busy. The apparent leader, Adam Fox, told 11 others of a plan to kidnap Michigan's Democratic governor, Gretchen Whitmer, whose holiday home was nearby. He called her a "tyrant" and predicted fellow militiamen all over America would rise and topple other leaders, when "everybody takes their tyrants". That night the armed men, in three cars, drove to her lakeside house to do surveillance. They stopped en route to inspect and photograph a bridge they planned to blow up.

For months they had debated how to attack Mrs Whitmer. Pose as a food delivery service? Grab her from a car? Use a Taser? Some talked of sending "cakes" or "cupcakes", a euphemism for a bombing campaign. In June Mr Fox had proposed leading "200 men" to storm the state capitol in Lansing. Some talked of attacking police and trying to spark civil war. The plot, he insisted, must precede the elections in November. They would try her for "treason", perhaps in Wisconsin, over her efforts to contain coronavirus. Mr Fox was furious that his gym was shut. What would he achieve? He explained in July: "I just wanna make the world glow, dude...everything's gonna have to be annihilated, man.'

The anti-government plotters did more than just talk, but they inflicted no harm. Thankfully, they were riddled with FBI informants and spied on for months. On October 8th agents arrested 13 men and charged them over the kidnap scheme or the threats to the capitol. One defendant later added that Ralph Northam of Virginia, another Democratic governor, was also sized up for kidnapping. Among those arrested were members of a Michigan militia, the Wolverine Watchmen.

Their plot reflects a growing threat from right-wing domestic terror groups. Daryl Johnson, an analyst of far-right extremism, says what "really stands out" is how many



Shooting gallery

defendants collaborated and how long the plot ran on. It looked unusually sophisticated. When he was at the Department of Homeland Security (DHS), more spontaneous plots, or ones involving two or three men, were the norm. Each year, he says, extremist activity creeps up to new heights.

Christopher Wray, the head of the FBI, testified last month to Congress that domestic violent extremists, notably white supremacists, are the most persistent, lethal threat facing America. The DHS said the same last week in an annual report on terrorism. It called 2019, when 48 people were killed in 16 attacks, the "most lethal year for domestic violent extremism in the United States since the Oklahoma City bombing in 1995".

Pine-forest paranoia

"We have never seen so much as this," agrees Kathleen Belew, a historian of extremism. She counts "many reasons for alarm", tracking an upsurge of activity because of anger over states' coronavirus lockdowns, worries over unemployment, protests against racial justice and policing, bitter party-political confrontation, and the long-term (though largely neglected) impact of many veterans coming home from overseas wars. Another analyst calls it a "perfect storm of paranoia".

Donald Trump is also a cause. He boosted anti-government protests in April by tweeting "liberate Michigan", for example, then praised as "good people" armed prot-

esters who entered the state capitol. Rather than urging calm, he deflects invitations to condemn right-wing extremist groups. That thrills members of ragtag outfits like the Proud Boys, the Oath Keepers and the Three Percenters. "There's a surfeit of tensions right now, and the president is supercharging this," says Ms Belew.

Not all militias are terror groups in the making. Amy Cooter of Vanderbilt University estimates there are "two dozen real militias in Michigan, maybe 2,000 people", plus many more sympathisers and hangers-on, notably in the isolated Upper Peninsula of the state. Racial division, fondness for guns, large rural spaces and economic decline may all help explain why Michigan has more such groups than many states. But 90% of these are what she calls "constitutionalist" outfits, where middleaged men make a hobby of little more than wearing uniforms, shooting targets and moaning about big government.

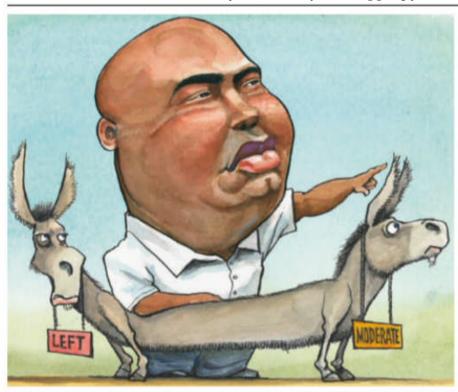
It is a small minority of "millenarian" and conspiracy-minded groups that are most extreme. She says these are prone to violence, for example when there are protests, as there could be if forthcoming elections are disputed. Her most pressing worry is that moderate militia groups may be drawn to align closer with extreme ones, as when they "bump elbows with overt neo-Nazis" or white supremacists at protests over the handling of coronavirus. In previous research in Michigan she saw how apolitical militias shunned racist groups. She is alarmed by signs that this is ending, as different outfits have grown closer in the past six months.

That suggests no one should expect tension to ease soon. Cynthia Miller-Idriss, of American University, has tracked an increase in hate groups in America at least since Barack Obama was elected in 2008. This is not a phenomenon only of the past four years. She also sees growing readiness to support the use of at least some violence to achieve a political goal. Pollsters say public backing for that (on both the left and right) has ticked up from 8%, three years ago to between 14% and 18% today. "That fringe is growing and is mobilised," she says, pointing to a global trend of more terrorist acts by right-wing groups.

In America, "everyone I know is worried about the potential for spontaneous violence", she says. Sales of firearms and munitions this year have broken records—by one estimate 16.7m firearms had been bought by September, already more than in any (full) year on record. Sales in September were 66% higher than a year earlier. Supplies of ammunition in some markets have run so short that recreational shooters are going without. That alone could stir fury in hunting-mad rural Michigan. All told, 5m Americans are thought to have bought a gun for the first time this year.

Lexington | The audacity of Jaime Harrison

The Democrats' latest crush is a former lobbyist scrapping for conservative votes in South Carolina



Jaime Harrison says his earliest political memories are of discussing the evening news with his grandfather in the rented condo in impoverished Orangeburg County, South Carolina, where his grandparents raised him. "That's where it started, I would pepper him with questions about the president and I became very interested in politics," recalled the amiable Democratic Senate candidate this week, after a long day on the virtual trail.

One thing led to another. Mr Harrison, who was born to a 16-year-old single mother, won a full scholarship to Yale. He then proceeded to law school and a job on the Hill with an early mentor, Jim Clyburn, South Carolina's first black congressman since the Reconstruction era. Yet his gritty approach to politics, including a willingness to compromise informed by his knowledge of the obstacles in the way of progress, still recalls Orangeburg's red-dirt roads and the grim stories—of cowering from Klan rallies and long walks to school—his grandparents told him. "I think I got my pragmatism from them," he said. "I know I'm not going to get everything I want. But anything gained is positive movement."

This hard-nosed view is antithetical to the activist left that was until recently said to have captured Mr Harrison's party. Indeed he opposes what many of its members consider essential: including Medicare-for-All, packing the Supreme Court and scrapping the Senate filibuster. Yet he, not Alexandria Ocasio-Cortez, is currently the Democrats' posterchild. The 44-year-old first-time candidate raised a record-smashing \$57m in the past three months and has turned his improbable tilt at Lindsey Graham, a Republican incumbent running for a fourth term, into a nail-biter. Recent polls point to a tied race. If Mr Harrison wins—an outcome this newspaper's forecasters consider unlikely but highly possible—it would be the second-most-momentous result of the night.

There is an interesting symmetry to this. When black South Carolinians resuscitated Joe Biden's candidacy eight months ago (following Mr Clyburn's dramatic endorsement of the former vice-president on the eve of the state's primary) they not only gave him a badly needed win. They also framed the argument for his unexciting but unobjectionable candidacy. Black voters—everywhere, but in the South especially—tend to vote for the sympathetic candidate they consider likeliest to win sufficiently broad support from

whites to get elected. And with President Donald Trump on the ticket, and South Carolina's electability specialists as their guide, this thinking suddenly made a lot of sense to Democrats outside the pampered coteries of Iowa and New Hampshire.

Mr Biden proceeded to win almost half the votes in the remaining primaries. Where Mr Obama was the first black president, his deputy might therefore be considered the first presidential nominee to have been expressly selected by black voters. Mr Harrison, a fresher face than Mr Biden but with much the same politics, is another sign of the pre-eminence of their approach.

Like Mr Biden, he emphasises unity over partisanship, practical solutions over big ideas and an old-fashioned regard for institutions as a fount of both of the above. Having been a shoo-in for the Democratic ticket—as a well-connected former chairman of the state party—Mr Harrison has been running campaign advertisements for a year, most of which focus on his inspiring personal story. "There's a general fatigue with chaos and division," he says.

His policy proposals are similarly soothing. He speaks of expanding rural broadband and making Medicaid available to more poor people, which most South Carolinians support. He also cites the importance of such unglamorous policies to explain his attachment to the filibuster. "Politics swings like a pendulum," he says. "But certain government programmes are necessary for the most vulnerable. How would we protect those programmes from those who would gut or eliminate them without the filibuster?"

Mr Biden's pragmatic pitch is based on a calculation, so far amply justified, that he can build a bigger coalition by rallying the country in opposition to Mr Trump than by revving up the left. Mr Harrison had no alternative to such moderation. No Democrat has been elected to the Senate from South Carolina for over two decades, because the state does not have nearly enough African-Americans and white moderates to make a majority. His electoral hopes therefore hinge on his ability to recruit a slither of Trump-voting conservatives who have had enough of Mr Graham.

This looks possible because the veteran senator is less popular in South Carolina than the president. A sometime moderate, who warned that there were not enough "angry white guys" in America to sustain an unreformed Republican Party, Mr Graham has latterly tried to fix that problem by adding himself to their ranks. Where once he pushed immigration reform, he now indulges in racist dog-whistling, while fulminating against Democrats and toadying to a president he formerly dismissed as a "race-baiting xenophobic bigot". It has been a humiliating performance by a once widely admired politician. Opinion polls suggest most South Carolinians consider him dishonest.

(South) Carolina in my mind

Conventional wisdom suggests the Democrats' current unity would not last much beyond a Biden victory. Yet the promise of Mr Harrison and other moderate Democrats—running strongly in Arizona, Montana and elsewhere—suggests that might underrate the dynamism of the moment. A big Democratic win would swell Congress with such figures; the centre-left would be the decisive vote on most new legislation. It is also just about possible to imagine Democrats learning the right lessons from their predicted success.

Even against opponents of Mr Trump's and Mr Graham's calibre, the quirks of the electoral system make it hard to win power from the left unless with Mr Biden's and Mr Harrison's expansive, pragmatic message. Instead of betting on their chances of changing the system, Democrats should stick with that message.

The Americas



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Bolivia

A consequential contest

LA PAZ

Elections are a chance to restore peace to a bitterly divided country

Last october, after an election marred by accusations of fraud, Joan Fernández joined thousands of Bolivians in protests that toppled the socialist government of Evo Morales. His joy quickly gave way to disillusion. After Mr Morales, who had been seeking a fourth term, resigned on November 10th and fled to Mexico, Jeanine Áñez, a right-wing senator, became president. Her only goal, she said, was to prepare fresh elections. Instead, she became a candidate, used the justice system to go after her rivals and flubbed the government's response to the pandemic.

"They used us to get rid of Evo and then they abandoned us," says Mr Fernández, a college student from Villa Armonía (Harmony Town), a working-class neighbourhood in La Paz, the administrative capital. With new elections scheduled for October 18th, the plaza is decorated with flags from rival political parties, a loudspeaker announces free rabies jabs and families chat as they wait with dogs on leads and cats in blankets. The harmonious scene is decep-

tive. People are stocking up on food in anticipation of post-election protests, says Mr Fernández, stroking his cocker spaniel.

Bolivia is again bitterly divided between supporters of Mr Morales's Movement to Socialism (MAS) and backers of Carlos Mesa, a centrist former president who ran last year. Polls predict a runoff, which would be held on November 29th. Mr Mesa would probably win that. But the MAS candidate, Luis Arce, an ex-finance minister, could win in the first round. Either result would give Bolivia a chance to lessen the rancour left by Mr Morales's 14-year rule and Ms Áñez's interregnum. "The only thing I want is stability," says Mr Fernández, who is betting on Mr Arce to deliver it. But the gulf is wide. An economic crisis will make it harder to narrow.

In 2016 Bolivians voted in a referendum to deny Mr Morales, the first indigenous president, the right to run again. He ignored them. On election night last October a pause in the rapid count fuelled suspicions of vote-rigging. An audit by the Organisation of American States (OAS) appeared to confirm an attempt to manipulate the results. Anger surged, and Mr Morales quit.

His backers say he was the victim of a right-wing coup. Several studies, including one by the Centre for Economic and Policy Research, a left-wing think-tank in Washington, DC, have questioned the OAS'S findings. "The OAS should leave our democracy alone," says Mr Arce. Most of the 36 people killed in protests after the elections were MAS supporters who died at the hands of the police or the army.

Ms Áñez did not bring harmony. Old tweets surfaced, in which she had called indigenous religion "satanic". Her government urged a pliant attorney-general's office to open scores of cases against former MAS officials for terrorism and sedition. "People were dragged from their homes for belonging to the MAS," says Mr Arce, who is being investigated for illicit enrichment. Mr Morales's chief of staff, charged with terrorism on the basis that she spoke to him by phone, received no health care in pre-trial detention and had a miscarriage.

In May the health minister was arrested on suspicion of corruption. The fight against the pandemic faltered. Ms Áñez "had one eye on the health crisis, and one eye on her campaign", says Mr Mesa.

Last month she withdrew, citing the need to unite the anti-MAS vote. That still leaves as a candidate Luis Fernando Camacho, the far-right leader of last year's prot-

▶ ests against Mr Morales. His base is Santa Cruz, Bolivia's most populous department, which has flirted with secession. Mr Camacho is not promoting unity. *Cruceños* are exchanging lists on WhatsApp of Mr Mesa's supporters, who are then ostracised.

Blaming the pandemic, Ms Áñez postponed the elections twice. That fuelled suspicion among MAS supporters that they would be stolen from them. Mr Arce told *The Economist* that he would respect the results of "transparent" elections, but has also said that "only fraud" would explain a victory by Mr Mesa. Less than half of Bolivians trust the Supreme Electoral Tribunal, according to a poll by Fundación Jubileo, an NGO linked to the Catholic church.

The best reason to be hopeful is that those suspicions are groundless. The tribunal has new members. They have removed dead people and non-voters from electoral rolls and developed software and rules for protecting ballots. The pandemic has kept many foreign observers away, but hundreds of Bolivians have been trained to assume their roles. "The international community won't support anyone who tries to overturn the results." says an ambassador.

Even if a political crisis is avoided, an economic one awaits. Falling revenue from gas exports had reduced growth before covid-19. GDP is expected to shrink by at least 6% this year. The fiscal deficit, 7% of GDP at the end of 2019, is expected to reach 12% this year. Ms Áñez cancelled construction projects that employed thousands. After the pandemic struck, the MAS-controlled legislature refused to spend a \$327m loan from the IMF, which deepened the suffering. Two payments to Bolivians of 500 bolivianos (\$72) each "were hardly enough to buy internet", says an Aymara woman selling colourful sweaters and face masks at the Feria 16 de Julio, a huge market in El Alto, on the plains above La Paz. More pain is in store. The next president will have to reduce spending.

But he will probably inflame Bolivians less than Mr Morales and Ms Áñez did. Some indigenous people regard Mr Mesa, who was driven from office in 2005 by demonstrators demanding nationalisation of gas, as a blander version of the interim president. A graffito in Villa Armonía declares "Mesa = Añez". Mr Mesa responds that he will fight racism and poverty. "A president should be judged by his actions, not by the colour of his skin," he says.

Mr Arce seeks to distance himself from the most contentious aspects of the Morales years. He says he will not interfere in investigations against former officials. His ministers will not be veterans of the former government. Unlike Mr Morales, "Luis Arce is not a *caudillo*," says Juan Carlos Nuñez, the director of Fundación Jubileo.

The next president is unlikely to command congress as Mr Morales did. That

poses a risk. A legislative impasse could further damage the economy and lead to new protests. However, there might be less cronyism and more pragmatism in a government answerable to a legislature in which no party has a majority. It will have to seek consensus, for example, to approve nominees for jobs in such corruption-prone organisations as state-owned firms and the customs agency.

Across the plaza in Villa Armonía, Carla Fernández waits in drizzle for a bus, sporting a Mesa hat. "My mother wears a *pollera* [traditional skirt] and I'm not rich. But that doesn't mean I'm going to vote for the MAS," she says. Her vote will offset that of Joan Fernández, who is no relation. They share a hope that the elections, while they may not bring harmony, will at least forestall another outbreak of violence.

Colombia

VAT half-empty

ROGOTÁ

The government tries to fix a messy and unfair tax

The politics of value-added tax (VAT) are complicated in many countries. They are especially tricky in Colombia. The standard VAT rate is 19%, one of the highest in Latin America, but the list of exemptions, which includes milk, eggs and visits to the doctor, is long. This is supposed to help the poor, but the rich benefit more. Salmon, which is imported and therefore expensive, is not taxed. Coffee and soap, which almost all Colombians use, are.

Luis Alberto Rodríguez, who as director of national planning manages public investment, says it has been "our obsession" to correct this unfairness. Income inequality is the highest in the OECD, a club of mostly rich countries. Colombia's taxes and transfers do less to correct this than in

Bottom of the barrel Reduction in inequality* after taxes and transfers Selected countries, 2018 or latest available, % 10 20 30 40 France Germany OECD Britain **United States** Chile Mexico Colombia Source: OECD *Gini coefficient

any other member country (see chart). VAT exemptions and reductions are also expensive. They cost the government the equivalent of 6% of GDP, more than in any other Latin American country.

In the early 2000s Alberto Carrasquilla, the finance minister, wanted to give rebates to poor people for the VAT they paid. That would have allowed the government to shorten the list of exemptions, boosting its revenue. But politicians objected, because VAT exemptions are popular. The government lacked the information it needed to compensate the poor.

Now it knows more, and, under Mr Carrasquilla, who is again finance minister, it is making another attempt. The government quietly inserted a VAT compensation scheme into a tax bill that Congress rushed to approve in January to stave off a downgrade of Colombia's credit rating. Lawmakers did not realise that the measure was in it, says a former government adviser. It has helped poor people cope with the recession caused by the pandemic. It may become a model for other countries. Argentina and Ecuador have tried such schemes before, without success.

Colombia's government now has two tools that it lacked. The first is a computerised version of Sisbén, a database of mostly low-income families. An upgrade of a registry created in the 1990s, it includes 80% of the population. In Latin America, only Costa Rica has a similar database that covers as high a share. Sisbén informs the universal health-care system and identifies beneficiaries of conditional cash-transfer (CCT) programmes like Families in Action, which helps families that keep children in school. Local authorities provide four-yearly updates to discourage cheaters from registering in more than one place. There are ways to add households between updates. Thanks to Sisbén, Colombia transferred more emergency aid during the pandemic than Peru, which had a bigger aid budget as a share of GDP.

The second tool is digital financial services. In 2012 the government signed a contract with Davivienda, the third-largest bank, to deliver cash transfers through DaviPlata, a free "digital wallet" that allows rural people to open accounts on their smartphones. Other banks and fintech firms followed. Today, 37% of beneficiaries get their money through digital wallets.

Because many Colombians are employed off the books and shop in stores that do not keep accurate records, the government does not know precisely how much poor families spend on VAT. Using surveys, it has estimated that the average outlay is 37,500 pesos (\$10) a month. The compensation programme gives that amount back, in two-monthly instalments.

One beneficiary is Irma Rosa Melenje, a single mother, who lives in a slum 40 min-

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butes south of Popayan in south-western Colombia. She lost her job as a saleswoman in her sister's stationery shop in March, when the government decreed a country-wide lockdown. But she hasn't had to cut down on meals. VAT compensation plus Families in Action, which gives her 160,000 pesos a month, provides enough cash to buy fruit and veg for her two daughters.

The government had planned to launch the VAT scheme as a trial this year for 300,000 of the poorest families. Because of the lockdown, it increased that to 1m families. By next year the scheme will cover 2m households, many of which do not qualify for a CCT programme, at a cost of \$250m, or 0.3% of the budget. A pre-pandemic study found that VAT compensation would reduce the rate of "monetary poverty", ie, the share of households that earn less than the minimum needed to buy basic goods, by two percentage points from around 30%.

The scheme should be more ambitious, says Roberto Angulo, a development economist. He thinks all the poor, some 6m households, need VAT compensation. The government says it does not yet have the money for that. The OECD suggests that the

cash should be delivered more often than every two months.

The government sees the compensation scheme as the first stage of a plan to shore up its finances. Tax revenue amounts to just 14% of GDP; VAT accounts for more than two-fifths of that. The budget deficit is expected to exceed 8% of GDP this year. Now that it can shield the poor, the government hopes to persuade Congress to lengthen the list of VAT-liable products. It will soon propose a tax bill to deal with the effects of the recession. That, supporters say, is a chance to make the country fairer.

Bello The girl who hated soup

Mafalda and the power of political satire in Latin America

THE COMIC strip appeared for just nine years, between 1964 and 1973, in Argentina. Yet Mafalda occupies a unique and lasting place in Latin American popular culture. That showed in the acclaim and affection bestowed on her creator, Joaquín Lavado, who died on September 30th. The strip's heroine was a dumpy, mop-haired, rebellious six-year-old girl. With the implacable logic of children (but rather more sophistication than most), she interrogated domestic life, her country and the world, and usually found them wanting.

Mafalda was more political than Peanuts and more modern than Asterix, but she enjoyed similar popularity. Mr Lavado, who drew under his childhood nickname of Quino, syndicated the strips across Latin America and southern Europe. They were translated into 26 languages and are still republished today. Mafalda has sold more than 20m books as well as T-shirts, mugs and other memorabilia. The original comic strips reflect a particular milieu and time: middleclass Argentina in the turbulent 1960s and 1970s. But much of Mafalda's wit is universal and feels fresh even today. She

plays a prominent role in a long and continuing tradition of political satire in Latin America.

Umberto Eco, an Italian writer, was an early fan. Mafalda, he wrote, is "an irate heroine who rejects the world as it is...defending her right to continue to be a girl who doesn't want to take charge of a world spoiled by adults". She was a born rebel—and she hated soup. In one strip she reads a newspaper recipe for vegetable broth. She wants to put the ingredients on trial for "illicit association".

She was an early feminist. "The bad thing about the human family is that everyone wants to be the father," she says. If her mother hadn't dropped out of university to get married, "you would have a degree in your hands and not a pile of shirts," she tells her. She drives her father, a mild-mannered office worker whose hobby is potted plants, to distraction with her questions. The space race, the Vietnam war, the Beatles, wash-and-wear suits and inflation—already a growing problem in Argentina—all make an appearance.

Mafalda despairs at the state of the world. After a military coup in Argentina in 1966, she contemplates a graffito stat-



ing: "Basta de censu...[ra]", or "Down with censo ...[rship]". Quino promptly introduced a new member to her group of friends in the strip, a girl called Libertad (Freedom) who is a dwarf. But Mafalda is no raging leftist. In perhaps her greatest political put-down she asserts that "soup is to childhood what communism is to democracy". But she is also merciless about the failings of the establishment and the Argentine state. She calls her pet tortoise "Bureaucracy". When she and her friends decide to play at being the government, she tells her mother, "Don't worry, we're going to do absolutely nothing." She is at bottom a progressive liberal, mistrusting power of all kinds.

It is perhaps this suspicious scorn of the state that made Mafalda such a hit in a region that has too often been misgoverned. In Latin America, as elsewhere, satire has long been a weapon against the abuse of power. Mafalda was part of its golden age. The 1960s and 1970s were "a good time" to be a cartoonist, Quino reflected much later, because "there was so much conflict".

That still applies. Humour may be more globalised: stand-up comics have appeared in the region and memes on social media relay satire from the United States. But more traditional forms still provoke official wrath, recently that of autocrats of the left. In 2011 Hugo Chávez's regime in Venezuela shut down a satirical magazine and arrested its staff. The government has repeatedly fined *TalCual*, a newspaper, for its lampoons. Rafael Correa, when Ecuador's president, organised a fine against a newspaper over a cartoon. In Nicaragua threats from the regime of Daniel Ortega forced Pedro X. Molina, a cartoonist, to flee in 2018. Mafalda would have sentenced such despots to a lifetime of soup.



Middle East & Africa



Mali after the coup

We were soldiers once

The new "civilian" government has rather a lot of military men

N THE LATE evening of October 8th a man \blacksquare in a white turban stepped off a military plane into a crowd of well-wishers at Bamako airport in Mali. Soumaila Cissé, an opposition leader kidnapped by jihadists in March, was free at last. Also arriving to cries of "maman" from her waiting son was Sophie Pétronin, a 75-year-old French woman held hostage for almost four years. Two Italians were freed, too. Locals blowing plastic horns celebrated in the streets. Mali's new post-coup government, appointed just days earlier, claimed its first big public-relations success.

But in northern Mali there would soon be another party to welcome back many of the 200 or so jihadists who were freed in exchange for the hostages. Bomb-makers and insurgent commanders were treated to a feast of grilled meat, couscous and fruit by the jihadist leaders who hold sway over much of the north and centre of Mali.

Less than two months after massive street protests precipitated a coup that ousted President Ibrahim Boubacar Keita. Mali's politics are still extremely wobbly. That worries other countries, too: Mali is at the centre of an international effort to contain jihadism. It is also in the heart of a region described this week by Mark Lowcock, the un's emergency-relief co-ordinator, as "close to a tipping point" that might make it the world's worst humanitarian disaster. "Nowhere scares me more than the Sahel," he said. It was not necessary to add that the odds are stacked against Mali's new government restoring stability or rolling back the spreading jihadist insurgency.

Start with the government's composi-

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tion. After the coup in August, Ecowas, a regional bloc, imposed sanctions on Mali and demanded that the junta hand power back to a civilian administration. In early October it did so, sort of. Bah Ndaw, president of the "civilian" transitional government, is a retired colonel and former minister of defence. His vice-president is Assimi Goita (pictured, centre), the colonel who led the coup. Though there are real civilians in the cabinet, members of the junta got four of the top posts, including responsibility for organising elections, which are promised within 18 months. "The real power is with the military," says Bréma Ely Dicko of the University of Letters and Social Sciences in Bamako.

The appointments were enough to satisfy ECOWAS, which has lifted sanctions. But they will do little to mollify M5-RFP, the coalition of opposition groups that led the protests—and has been almost entirely left out of the government. That puts Mali's Western allies in an awkward spot. The EU had a large mission training the army. France has some 5,100 troops in the region fighting jihadists. America has provided military assistance. The UN has 15,000 peacekeepers in Mali. A coup and a government led by hard men were not in anyone's good-governance plans.

France urges a return to civilian rule, but also says "it is imperative that we continue the fight against terrorism." A new >> Middle East & Africa The Economist October 17th 2020

▶ force of Estonian and French commandos has just deployed. France hopes to persuade other countries to send troops, but the coup has surely made that harder. The EU has suspended its training mission (though may be edging towards resuming it) and America has stopped military aid until elections are held. In recent years the jihadists have been gaining ground, attacking neighbouring countries and inflicting heavy losses on Mali's army. Instead of more help, though, Mali may get less.

Backers of the coup say it was needed to restore security and stability and that the uniformed men who now run things will bring grit to the fight. Yet the new government seems to have moved in the opposite direction by freeing prisoners. The released fighters will swell the ranks of Jama'at Nasr al-Islam wal Muslimin (JNIM), a group linked to al-Qaeda, by about 10% and stiffen them with seasoned fighters.

Reportedly among those released were the men behind terrorist attacks on hotels in Mali, Ivory Coast and Burkina Faso that killed scores. One is thought to be Mimi Ould Baba, who faces terrorism charges in America for killing an American in Burkina Faso in 2016. A ransom worth €10m-30m (\$12m-35m) was apparently handed over, a sum that will not only buy bullets but also boost JNIM's prestige, says Héni Nsaibia of Menastream, a research consultancy.

Some Malians hope the prisoner swap will open the door to peace talks. But JNIM is strong, so the government is not in a good position to negotiate. And because there are rival extremist groups, such as Islamic State in the Greater Sahara, JNIM may worry that its fighters will defect if it is seen as going soft.

Beyond security, the new government has promised to curb corruption and enact a raft of reforms. But just before the coup took place a UN report detailed ample graft in the armed forces themselves.

All the same, many Malians remain cautiously optimistic. Mr Cissé's return and promised reforms to the constitution and electoral system should lend more legitimacy to any future election. But if the government makes slow progress on its reform agenda or in pushing back the jihadists, it may use this as an excuse to push back the date of the next election, says Boubacar Haidara of Sciences Po Bordeaux, who is based in Ségou in central Mali. "They will try it," he adds.

After a visit to Mali on October 11th Nana Akufo-Addo, the Ghanaian president who currently heads ECOWAS, said there was "good hope" that the new government would keep its promise to hold elections. He urged it to set a firm date for the poll. The coup was an unwelcome "bunch of lemons", says an American diplomat. Yet he hopes that Mali and its backers can "at least make lemonade" out of it.

Congo's cobalt

The ugly rush

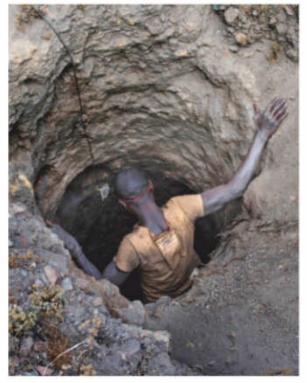
KAWAMA

The little guys are jailed for stealing minerals. Powerful pilferers stay free

When cobalt prices soared from 2016, young men from all over Congo flocked to the south of the country to dig the stuff up. Demand for the metal, used in smartphones and electric cars, was driven by carmakers needing around 10kg of it per vehicle. (Phone batteries, by contrast, require just a few grams each.) Some of these young men set up camp in the village of Kawama, cobbling together their huts with planks and sheets of tarpaulin.

The village feels less hopeful nowadays. Barefoot children in rags chase each other around piles of smouldering wood, which residents burn to make charcoal. Cobalt prices plummeted in 2018 after the market was flooded and companies dawdled over electric-car designs. About 60% of the world's cobalt is found in Congo, scattered across the copperbelt that stretches east into Zambia. The people of Kawama grumble that too much land has been sold to mining firms. "We used to dig freely," says Gerard Kaumba, a miner. "But now the government has sold all the hills." There are still some sites where miners can turn up and dig, but they have to sell to whoever owns the concession. A sweltering day's work might earn you \$7. Many people have found they can make more at night, pilfering cobalt from industrial mines.

Glencore, a commodities giant with two mines in Congo, reckons that some 2,000 people sneak into its pits every day. Other companies have even more robbers to con-



What a way to make a living

tend with. Last year Congolese soldiers chased thieves out of a mine owned by China Molybdenum where, it was reckoned, 10,000-odd people were then illegally digging. Sneaking into Glencore's mines is hardest, says a Kawaman, as its guards do not collude with thieves—and often chase them away with dogs.

Elsewhere it is usually the guards who egg the diggers on, and then demand half their profits. On a recent foray, a team of five diggers managed to bag up enough copper and cobalt to make \$150 each, even after paying the guards. "I spent Sunday to Thursday in a hole," says one of the group, describing how they dug a tunnel and passed the minerals out. They also hid in the hole at moments during the day. The team sold its loot to Chinese buyers, some of whom work out of a tin hangar hidden down a dirt road in nearby bush. When your correspondent turned up, the men at the entrance demanded to know how she had found the place. Then they threatened to call armed guards if she did not leave.

Last year Glencore closed its biggest mine, cutting output in response to low prices. Today neither the thieves nor the mining giants are making as much as they used to. As the pandemic took off, copper prices tumbled to their lowest in three years, while cobalt costs barely a third as much as it did at its peak. Tesla, a big maker of electric cars, is trying to stop using cobalt, partly to avoid the reputational risks of dealing with Congolese minerals.

Children toil on many artisanal sites in Congo, where tunnels sometimes collapse and kill them. Even if carmakers decide to get cobalt only from industrial mines, where machines do the digging, the metal is often mixed up in smelters in China, so it is hard to be sure where it came from.

Congo's industrial miners are not all angels, either. Gécamines, the state-owned company, has enriched crooked politicians for half a century. Global Witness, a watchdog based in London, says Congo's treasury lost \$750m of mining revenues to graft between 2013 and 2015. Eurasian Resources Group, with three mines in Congo, has faced allegations of corruption and an investigation by Britain's Serious Fraud Office (it denies wrongdoing). So has Glencore, which has worked with Dan Gertler, an Israeli billionaire. Mr Gertler, a close friend of a former Congolese president, Joseph Kabila, is under American sanctions.

▶ Glencore has long denied being involved in any improper transactions and has said it is co-operating with investigators.

While big firms rake in millions, many of the little guys languish in jail. The prison in Kolwezi, the largest city in the mining region, is crammed with men caught stealing copper and cobalt. More than a hundred inmates occupy one stinking room, sitting in rows on the ground, each wedged between another's legs. Prisoners are allowed to use the toilet only once a day, so they often urinate in their clothes. "I reasoned it was a stage of life and that all the suffering would pass," recalls Cisco Ngoyi, who spent six months in jail last year after being caught on an industrial site.

In Kolwezi, shiny jeeps slide past beggars on roadsides. Dusty, makeshift settlements, similar to Kawama, abut the city, while Chinese casinos and swanky hotels occupy the centre. A cynic might see here a microcosm of Congo itself, where mineral wealth is hogged by a powerful few, while the many scrabble to get by, and pray to stay out of jail.

Iran's armed forces

After the embargo

Iran will soon be free to restock its armoury, but a buying spree is unlikely

THE F-14 TOMCAT was a cutting-edge I fighter jet when it first flew 50 years ago. It acquired iconic status when it starred in "Top Gun", a Hollywood blockbuster, during the Reagan era. Newer planes have long since taken its place in America's air force. But Tomcats are still a feature of Iran's decrepit armed forces, which acquired the planes (one is pictured) shortly before the Islamic revolution in 1979. Many of the country's other weapons, from infirm British tanks to vintage American helicopters, are also museum pieces. But the expiry of a United Nations arms embargo on October 18th allows the country's generals to dream of shinier weapons.

Iran's armed forces have long had to make do with junk. Though America and Britain sold advanced weapons to the pro-Western shah in the 1960s and 1970s, the theocracy that followed lost somewhere between one-half and two-thirds of that equipment in a brutal eight-year war with Iraq. The departure of Western technicians and an informal arms embargo prevented the Iranians from maintaining or replacing what was left. In 2007 the UN imposed a formal arms embargo, amid rising tensions over Iran's nuclear programme.

In 2015 Iran signed a deal with six world

powers, under which it agreed to curb its nuclear programme in return for the lifting of international sanctions—and the arms embargo in 2020. The Trump administration walked out of the deal in 2018 and demanded that the embargo remain in place. But those efforts ended in humiliation in August, when America was rebuffed at the UN by allies and rivals alike. The embargo will therefore expire as planned on October 18th, though restrictions on Iran's development of nuclear-capable ballistic missiles will remain in place until 2023.

In theory, it will be legal for Iran to buy and sell weapons to and from whomever it chooses. Russia has hinted that it is keen to do business. "We have said since the very first day that there will be no problem with selling weapons to Iran from October 19th," said Russia's ambassador to Iran. Last year an assessment by America's Defence Intelligence Agency said Iran would probably buy advanced Russian fighter jets. China is also eager to sell its arms, which tend to be cheaper. China and Iran are working towards an agreement on economic and military co-operation, including joint weapons development.

Yet a full-blown arms spree is unlikely for several reasons. Russia and China both want to keep good relations with Iran's deeper-pocketed Arab rivals. Iran's annual military spending was \$12.6bn last year; Saudi Arabia spent almost five times that. Nor is Iran about to catch up soon. America's own sanctions—separate from the UN measures (and more draconian)—have strangled Iran's economy and sent its currency to new lows, pushing up the price of arms imports. America's Treasury Department continues to hound anyone doing business with Iran, deterring many countries from taking the risk. Iran is also keen on building up its own defence industry, though (with the exception of missiles and

drones) it produces more hot air than modern weapons. An ostensibly new tank unveiled in 2016, for instance, used a chassis from a 1950s American one, notes Robert Czulda of the University of Lodz.

Most important, Iran's military strategy does not depend on traditional weapons, but on a mix of ballistic missiles to deter attacks and a sprawling network of friendly militia groups-from Hizbullah in Lebanon and Syria to the Houthis in Yemen—to project power. Accordingly, Iran's Islamic Revolutionary Guard Corps, which controls the missiles and works with the militias, is politically and militarily more powerful than the regular armed forces. In June Mike Pompeo, America's secretary of state, was ridiculed when he tweeted that new Iranian warplanes would mean that "Europe and Asia could be in Iran's crosshairs". A map attached to his tweet used ranges that implied one-way suicide missions.

"I don't think this is going to be a moment where they just get a bunch of tanks and march across the Middle East, because they are already present through proxies and drones," says Behnam Ben Taleblu of the Foundation for Defence of Democracies, a think-tank in Washington that has argued in favour of continuing the embargo. Iran does not have a history of huge arms deals, but Hassan Ahmadian of the University of Tehran thinks it will make some purchases "to enhance its defensive capabilities and to showcase the end of the embargo". It may focus on better cruise missiles and modernisation of its diesel submarines, says Mr Ben Taleblu. Western officials say their biggest concern is that Iran will pass on imported weapons or technology to its proxies abroad. But if the country hopes to tune up its ageing Tomcats, it is out of luck. America shredded the last of its fleet a decade ago, precisely to exclude that possibility.



Ready for the "Top Gun" sequel

Dubai

Old is gold

BEIRUT

A struggling emirate hopes rich pensioners will boost its economy

You can find almost anything in Dubai—except old people. The migrants who run its economy are a young bunch; with residency tied to work, retirement usually means a flight home. The tourists dancing in nightclubs and lounging on beaches tend to be young, too. But the emirate may soon sprout some grey hairs.

In September Dubai announced a new residence visa for over-55s. Only the well-off need apply. Applicants must have a comfortable nest-egg or buy a property worth 2m dirhams (\$540,000). The hope is that old folk who might settle in Portugal or Palm Beach will opt for the Persian Gulf instead. The scheme, two years in the making, could boost Dubai's sputtering economy, which may contract by 11% this year.

Unlike most Gulf states, Dubai (part of the United Arab Emirates) does not rely on oil or gas. The black stuff accounts for just 1% of GDP. Instead it has banked on ceaseless building to fuel a service-heavy economy. The city can feel like a frenetic construction site: new hotels to draw more tourists, who create more jobs for migrant workers, all of which means more demand for malls and apartments.

Even before covid-19 arrived, though, Dubai was starting to look overbuilt. The property market is saturated: one website lists nearly 19,000 flats for sale and another 32,000 for rent. Average sale prices have fallen to 896 dirhams per square foot, estimates ValuStrat, a consultancy. That is the lowest level in more than a decade, 35% below the ten-year peak of 1,380 dirhams in 2014. Rental prices are dropping as well. Some tenants in the downtown financial hub have negotiated discounts of 20% to 25% on their contracts—even as they watch new high-rises spring up across the street.

The pandemic has thrown the engine of growth into reverse. Travel and tourism, for example, have collapsed. Dubai's airport has mothballed one of its two main terminals. Passenger traffic was down 20% in the first quarter—before most countries went into lockdown—and further still in the second. Hotel occupancy rates in September, normally more than 80%, were just 45%. Emirates, the official air carrier, has already laid off more than 10% of its workforce. Layoffs will ripple across the economy, cutting demand for everything from private schools to happy hours.

When their economies slump, Gulf states epitomise the proverb that no news

Ethiopian lews

From Gondar to Jerusalem

JERUSALEM

The Jews who confound Israel's law of return

THE AIRLIFTS that brought Ethiopian Jews to Israel during the 1980s and 1990s are the stuff of legend. A secret operation over 36 hours in 1991 involved 40 flights carrying some 14,000 members of the Beta Israel, the largest community of Ethiopian Jews. At the time Israelis celebrated the missions. But today their government's plans for a different group of Ethiopian Jews are making few people happy.

On October 12th Israel decided to admit 2,000 members of the Falash Mura, descendants of Ethiopian Jews who converted to Christianity over a century ago. For nearly 30 years the Falash Mura have been clamouring to be accepted by Israel. Every now and then Israel lets a few thousand in. But roughly 8,000 languish in camps in Addis Ababa and Gondar. Some Jews think Israel should open its doors to all of them.



Shalom to some of you

is good news. They are notorious for publishing indicators months or years late. One analyst recalls using data on power and water consumption to guess at Dubai's economic growth. In September, though, the emirate offered a rare glimpse of its balance-sheet in a prospectus for a \$2bn bond issue. The document listed Dubai's government debt at 124bn dirhams (\$34bn), less than 30% of GDP.

But the figure omits the debt held by government-linked entities. Though they borrow on commercial terms, they have the implicit backing of the state. One of the largest, Dubai World, needed a bail-out in 2009 to avoid defaulting on \$59bn in liabil-

Others question whether the Falash Mura qualify under Israel's law of return, which grants citizenship to all Jews.

Ethiopian Jews claim their ancestors belonged to the lost tribe of Dan, which dispersed when the ancient kingdom of Israel fell, over 2,700 years ago. But, largely isolated, their practices differ from those of mainstream Jews. The Falash Mura have another problem: Israel's high court long ago ruled that Jews who converted to another religion, and their descendants, are not eligible under the law of return. The government does not consider the group fully Jewish. Even some Beta Israel members accuse them of pretending to be Jewish in order to escape hardship at home.

The government occasionally buckles under pressure from liberals, who favour more African immigration, and nationalists, who see the newcomers as helping Jews outnumber Palestinians. There are around 150,000 Ethiopian-Israelis (almost 2% of the population). Half are Falash Mura, who are required to convert to Orthodox Judaism.

Ethiopian-Israelis have faced discrimination and struggled economically. But they have also gained a bit of political influence. Earlier this year Pnina Tamano-Shata became Israel's first Ethiopian-born minister. Binyamin Netanyahu, the prime minister, often talks of bringing over more Ethiopians when he is in political trouble—as he is now, due to his mishandling of covid-19.

But Israel's policy on the Falash Mura is a muddle, says Fentahun Seyoum, an Ethiopian-Israeli activist: "Either they are not eligible and no one should be allowed in, or allow them all. Just 2,000 out of 8,000 doesn't make sense."

ities. This year the government has stepped in only to help Emirates, which has received 7.3bn dirhams in aid. Some of these firms remain highly leveraged, though, with big investments in property, tourism and transport—all vulnerable to the pandemic. s&P, a rating agency, put Dubai's public debt at 148% of GDP if state-backed firms are counted.

Pensioners could soak up some of Dubai's excess capacity. But they will provide only a temporary fix if Dubai continues to rely on new construction to drive growth. For years the economic model has been "If you build it, they will come." That mantra may be due for retirement.

The Economist October 17th 2020



Sexual politics in South Korea

Cradle to desk

SEJONG

The government's new plan to slow the shrinking of the labour force

 $oldsymbol{C}$ HIN JOO-HEE learned to cook at the age Oof 39, while his wife was pregnant with their son. He says it started as a modest challenge to himself: "I wanted to do something nice for her at least once a week." To his surprise, he found that he enjoyed it. These days the couple share child care and housework more or less equally, helped along by his flexible hours as a civil servant and her control over her schedule running a private art school. They hope that their son, now seven, will grow up without oldfashioned preconceptions about men's and women's work. "I truly believe those stereotypes will disappear in the next generation," says Mr Shin.

That may be optimistic, but the family's set-up, although still unusual for South Korea, is less exotic than it would have been just a few years ago, thanks in part to a gradual shift in the authorities' response to the country's demographic decline. For decades South Korean women have had too few children to keep the population steady in the long run. Last year deaths exceeded births for the first time. A series of cam-

paigns and incentives to encourage women to have more children have not worked.

So the authorities have begun to focus on stopping the shrinking of the workforce, as opposed to the population. Making big changes to the retirement age or admitting lots of immigrants would be tricky politically, so officials are instead making it easier for women to join and remain in the labour market, where they are underrepresented. The resulting developments are a far cry from an egalitarian revolution, but both the work culture and relations between the sexes are beginning to change.

Sejong, where Mr Shin lives with his family, is a good place to observe the impact of those changes on families. It is a

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newly built administrative city south of Seoul, the capital, and it will probably struggle to achieve the government's population target of half a million inhabitants by the middle of the decade. But it is popular with young families and couples planning to start one. At 37 the average Sejongite is nearly six years younger than the average Korean. Children make up nearly a quarter of the population, compared with 15% on the national level. The city consistently records the highest fertility rate in the country. Last year the average woman in Sejong could expect to have 1.5 children over her lifetime, fully double the rate in Seoul, though still below the average for rich countries (see chart on next page).

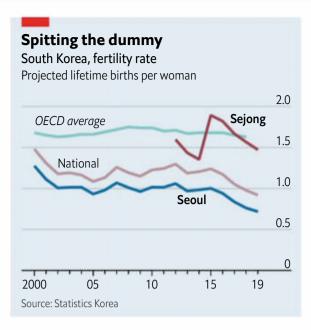
Sejong is indeed child-friendly. The city centre is compact and provides little razzle-dazzle but plenty of green spaces, walking paths and nipper-nurturing infrastructure (half the coffee shop where Mr Shin and his family chose to be interviewed is taken up by an enormous sandbox). The government is pouring money into child care and family support, and regularly asks parents what they want the city to do for them. It helps that many locals work in the civil service, which has to offer flexible working hours like those enjoyed by Mr Shin, encouraging a more equal distribution of labour at home. "It's extremely boring to live here if you don't have kids, but for us it's perfect," says Park Hye-kyung, Mr Shin's wife. Though many of her female friends are stuck at home with children, >> waiting up past midnight for husbands compelled to stay at the office, she says that lots of fathers want to be more involved and more employers are letting them.

Even beyond Sejong, the number of men who choose to be involved in child care is inching upwards. In 2009 a mere 500 men outside the civil service took any paternity leave at all. In 2017 about 12,000 did. By last year the figure had reached 22,000—still barely a quarter of the 80,000 or so women who take maternity leave each year. The increase seems to be the result in part of the government's belated realisation that women do not tend to have children on their own. "Making men participate in child care is important to allow women both to have children and to stay in the labour force," says Kim Seung-tae, who runs the population policy division at the finance ministry. Consequently, the government has made it possible for parents to share what used to be maternity leave.

South Korea remains a tough place for working women, boasting the biggest pay gap between the sexes in the OECD and regularly taking last place in the "glass-ceiling index", which ranks countries by the ease with which women can get ahead in their careers. (It is compiled by the Economist Intelligence Unit, a sister company of The Economist.) Mr Kim takes a somewhat defeatist view of the power of public policy to promote cultural change: "When it comes to people's attitudes, all we can do is just highlight good examples and hope they will follow them."

But one indication that the changes may stick and expand is that they are beginning to take hold among small and medium-size companies, which have tended to lag behind the government and large corporations when it comes to working conditions in general and opportunities for women in particular. Meere Company, a medium-size firm in Hwaseong, just south of Seoul, is typical. The company produces surgical robots and other high-tech equipment. The bulk of its 330 employees are engineers or salespeople; less than 10% are women. The first time any of its workers took paternity leave was three years ago. Since then seven more have done so. Kim Joon-koo, the CEO, expects the number to keep rising: "Of course there was resistance at first, but as we encourage more people to take leave it's becoming more of a normal thing to do." Mr Kim says that everyone taking leave can come back to the same job at the end of it—a legal requirement which companies in South Korea have tended to flout, in practice encouraging women to quit once they get pregnant. He says that the shift at the company has been accelerated by the example set by the government. "We've been moving in a more egalitarian direction ever since they have."

The government's intention in making



businesses more friendly to families is to adapt to a shrinking population by increasing the proportion of women who work. What is more, the improving conditions may also help a little with the goal it had largely abandoned: getting women to have more children. The impact on South Korea's demographic trajectory will be slight, acknowledges Mr Kim from the finance ministry: even in Sejong women have too few babies to stop the population from shrinking. But every current and future taxpayer is a plus.

The Aboriginal flag

Take down or cough up

SYDNEY

A copyright dispute ensnares a national symbol

THE ABORIGINAL flag has been an em-■ blem of pride and protest for half a century. Its colours—black, red and yellow represent Australia's first people, their connection to the land and the life-giving sun. It is hoisted over schools and waved at sporting fixtures. It flies periodically over Sydney's famous Harbour Bridge. Yet Aboriginals fear its very existence is under threat.

The issue is copyright. Australia's government has officially adopted the flag, but its design is still owned by the man who created it, Harold Thomas, an Aboriginal artist. He conceived it in the 1970s as a banner for the campaign to allow Aboriginals to reclaim their traditional lands. The image was reproduced fairly freely until 2018, when he sold exclusive rights to its use on apparel and "digital and physical media products" to WAM Clothing, a private firm.

WAM has since chased down many firms and charities for royalties. The Victorian Aboriginal Health Service was told it would have to pay to use the flag on T-shirts, a recent Senate inquiry heard. These were sold at cost to patients to encourage them to attend check-ups. Diabetes Victoria, another non-profit, had to stop using the flag on its website because wam demanded payment.

'How could one company have a monopoly on an iconic symbol?" wonders Laura Thompson, an indigenous health expert. She started a campaign to "free the flag" after her charitable enterprise was given three days to "cease and desist" from printing it on clothing. To some, it seems doubly insulting that the firm commercialising the banner is owned by white Australians. Worse, critics argue, its co-founder, Ben Wooster, has a record of exploiting indigenous culture. Another of his companies, Birubi Art, was fined A\$2.3m (\$1.65m) last year for selling fake Aboriginal art.

The danger, says Linda Burney, the country's first indigenous MP, is that the emblem could be forced out of use. It is already disappearing from sport. The Australian Football League (AFL), of top Aussierules teams, normally prints the flag on pitches and players' jerseys for an annual "indigenous round", which celebrates its Aboriginal athletes. It stopped doing so this year after wam threatened legal action. Australia's national cricket and rugby union teams and the National Rugby League have all followed, saying they will not pay.

The national government is trying to defuse the row by buying the rights from Mr Thomas, wam Clothing and two other licensees. This should allow the flag to be used freely. But not everyone likes the idea of handing custodianship of the image to bureaucrats. The Senate inquiry recommended that an independent Aboriginal committee should be in charge of it. Labor, the main opposition party, fears that things are moving rather too slowly. "The importance and history of the flag is being lost," two of its senators have warned. If negotiations are not resolved by January, they suggested, the government should forcibly commandeer the design.



A copyright infringement

55



Politics in Kyrgyzstan

From prison to power in a week

The president resigns as a convicted kidnapper takes charge

N THE FENCE of the building housing • Kyrgyzstan's parliament and the office of the president, which protesters stormed last week, hangs a disconsolate handwritten sign: "In autumn, leaves should fall, not the country." Many locals fear that Kyrgyzstan is on the brink of chaos, after Sooronbay Jeyenbekov, the president, tendered his resignation on October 15th. He was on the defensive after protests had erupted over a parliamentary election marred by systematic vote-buying. He had the election annulled and accepted the resignation of the prime minister, but had intended to stay on himself until the country was "back on the path of lawfulness". His change of heart suggests he sees little hope of that now. Instead, he simply said he was hoping to avoid bloodshed by going.

The government has been left in the hands of Sadyr Japarov, the new prime minister, who was sprung from prison by his supporters during the post-election unrest, cutting short an 11-year sentence for kidnapping. Attacks on rivals by his thuggish followers have raised fears of mob rule. By law, the parliamentary speaker acts as president until new elections can be held. But if Kanat Isayev, who is loyal to Mr Jeyenbekov, were also to step aside, as Mr Japarov's supporters have been demanding, the prime minister would become the acting president.

Mr Japarov, an ex-MP, brushes off accusations that he has criminal connections as a bid to "blacken" his name. But Omurbek Suvanaliyev, a security official ousted during the drama, warns that "the underworld has the upper hand over politicians". The American government has issued a statement saying it is important to "fight against the influence of organised crime and corruption in politics".

On October 9th Mr Japarov's supporters attacked a rally in support of liberal politicians. Tilek Toktogaziyev, an entrepreneur who was also vying for the job of prime minister, was knocked unconscious. An unknown gunman took a pot-shot at Almazbek Atambayev, an ex-president also sprung from jail by supporters during the unrest. Mr Japarov asserts that Mr Atambayev—who is back in prison, where he is serving a sentence on corruption charges that he claims were politically motivated staged the attack himself. Getting the hint, MPS from the outgoing parliament chose Mr Japarov as prime minister, although some complained of intimidation. As for his conviction, the Supreme Court has, with lightning speed, ordered a review.

The prime minister's supporters continue to flex their muscles with noisy rallies in Bishkek, the capital. The unenviable fates of Kyrgyzstan's ex-presidents—one in jail; two, toppled by popular protests, in exile-must be on Mr Jevenbekov's mind. Those who protested in favour of cleaner elections, meanwhile, must be wondering how their complaints led to this.

Corruption in Bangladesh

Land of land-grabs

A crackdown on crooked politicians hints at a culture of venality

N FARIDPUR, A small provincial town in lacksquare Bangladesh, it is hard to keep a secret. Everyone knows not just that Sajjad Hossain and Imtiaz Hasan, two brothers who until recently headed the local branch of the ruling Awami League, are very rich, but also how they came to be so. Over the past seven years they acquired more than 300 hectares of land at rock-bottom prices. Sellers apparently felt that the brothers' low offers could not be refused-perhaps because they had connections to Sheikh Hasina Wajed, the prime minister, or because complaints about them to the police seemed to fall on deaf ears. No longer: a recent criminal investigation into the Faridpur division of the Awami League found that some \$340m had passed through the brothers' 49 accounts. Along with other local Awami League leaders involved in the scandal, the brothers now await trial, on charges of money-laundering.

If the scale of the pair's empire surprised many, so did the fact that it ever came to light. Their arrest is the latest in a series of moves to clean up the ruling party. At the start of the covid-19 pandemic, Sheikh Hasina berated her party's members for pocketing rice intended for the poor. In July two hospitals in Dhaka found to be issuing fake negative-test certificates for hefty fees were raided by the Rapid Action Battalion, an elite police unit. Mohammad Shahed, chairman of the Regent group, which owns the hospitals, was iailed on corruption charges. Last year wads of discarded cash were found in Dhaka's rivers after the prime minister ordered raids on the city's underground casinos, mostly run by high-up officials in the Awami League and their cronies.

Sheikh Hasina has complained about corruption since she came to power in 2009, but has shown much more vigour in the past year and a half, says Iftekhar Zaman from Transparency International Bangladesh, a watchdog. The crackdown, he argues, is mainly driven by the prime minister's hankering for legitimacy, which is in doubt because she has squeezed the pips out of the opposition and run the country with a crushing parliamentary majority for the past 12 years. The scourge of covid-19 risks further harm to the government's standing. Making a song and dance about corruption diverts voters' attention, says Mr Zaman, and suggests that the Awami League is, as it claims, "working in >>

▶ the public interest".

The crackdown may also reflect divisions within the ruling party. The raids on casinos chiefly netted members of the Awami Youth League. Omar Faruk, its leader at the time, accused the police of hypocrisy, claiming they had been complicit in the thriving casino business for years. The crackdown, he said, was a politically motivated "plot". He was removed from his position, along with many others in the Youth League. But the main reshuffle, says one observer, was of Dhaka's underworld: the Youth League's ousting allowed gangsters with connections to other bits of the party to muscle in on the casino business.

In the Faridpur case, the accused named a local Awami League politician, Khandaker Mohtesham Hossain, as their "protector", alleging that he took a 2% cut of the spoils (he denies it). His brother, Khandaker Mosharraf Hossain, the local MP and a former minister, is the father-in-law of Saima Wajed Hossain, Sheikh Hasina's daughter. Bangladeshis speculate that allegations that such grandees were involved reflect a power-struggle within the party.

Whatever the explanation for it, the

sudden anti-corruption drive, far from burnishing the Awami League's image, seems to have horrified many Bangladeshis by revealing that the problem was even bigger than they had realised. "I knew there were casinos in Dhaka," says Mr Zaman, but the number—at least 60, according to reports—was "surprising even to me". The suspected abuses in Faridpur, he notes, began long before the current government took office. But their exposure has reinforced the widespread suspicion that many politicians see their jobs as "a licence for self-enrichment". ■

Banyan Suharto with a saw

While cutting red tape, Indonesia's president is also undercutting institutions

NCE UPON a time, a slight, upstand-Oing, mild-mannered person came to inhabit the presidential palace in Jakarta. carried there on the shoulders of millions of Indonesians who recognised in the former furniture-maker a man of the people. Today's incumbent, by contrast, remains remote and aloof, surrounded by courtiers from the capital's intertwined business and political elites. The previous president used to talk of using political capital to help ordinary folk. His informal blusukan walkabouts forged his famous connection with voters and allowed him to learn first-hand about their problems and how to fix them. The current one has just pared back protections for workers and, this week, sent the police out to crack the heads of those who took to the streets in protest.

The two men are, of course, one: President Joko Widodo, or Jokowi, who came to power in 2014 and was re-elected last year. On the face of things, the new "omnibus" law, which takes a saw to regulations around employment, among other things, is a sensible effort to make it easier to do business and thus promote investment. The economy is indeed tied up in red tape. Mandatory benefits for the few workers lucky enough to be in formal employment were definitely so lavish as to discourage firms from creating jobs. Yet to weaken them in the midst of the pandemic, which has prompted the steepest collapse in incomes in a generation, is tone-deaf, as a former senior official puts it. What is the government doing to help the unemployed to retrain, or to keep tiny businesses afloat?

That is not the law's only flaw. It reduces the autonomy enjoyed by provincial, district and city governments across the vast archipelago (which, incidentally, enabled Jokowi's own rise from mayor of a middling city to president). In the name of shredding paperwork, it reduces the say of affected communities in the issuing of environmental permits. It benefits the coal-mining interests close to Jokowi by doing away with royalties in favour of a lower value-added tax. And it makes it much easier for logging firms to plunder virgin forests.

Perhaps the clearest indication of the law's deficiencies is the murky way in which it was drawn up. The government says unions were consulted; they deny it. The final text, passed by parliament on October 5th and now sitting on the president's desk for his signature, has yet to be made public.

The saga caps a dispiriting year in which Jokowi and his people have stripped the anti-corruption commission of its independence, neutered the constitutional court, used the police to hound critics, expanded the army's influence and pandered to Islamists at the expense of women, minorities and civil liberties. Now the central bank's independence is at risk. The former senior official calls the past year



"the biggest assault on independent institutions" since the days of Suharto, the strongman who ruled Indonesia from 1967 to 1998.

The question is what brought this turn in the presidency. One observer argues that Jokowi changed as he sought re-election. Needing money to campaign, he pivoted from the people to the oligarchs. The transformation was complete when, after a nasty presidential race, he co-opted his defeated opponent, Prabowo Subianto, a tycoon, ex-general and former son-in-law of Suharto who is the epitome of the old guard. Mr Prabowo is now defence minister. Jokowi's coalition includes nearly three-quarters of MPS. With the opposition co-opted, the job of government is to spread patronage—or lose the oligarchs' support.

Jokowi was probably never the transformational democrat his early fans imagined. Like Suharto, development was what mattered. Jokowi loves getting stuff built—toll roads, a metro system, power plants—and if a bit of corruption helps the process, fine. Now, as Ben Bland of the Lowy Institute in Sydney argues in an excellent book, "Man of Contradictions", power has revealed his limitations. Building things falls "far short" of a "strategy to remake the economy". Lurching from problem to problem, and with a low tolerance for boredom, power has "revealed a man with surprisingly little to say about the big questions" of Indonesia's modern history, including the tension between democratisation and the elites' concentrated power. As for Indonesia's lurch back into authoritarianism: if it carries shades of Suharto, one man who wouldn't mind the comparison with the old development-obsessed tyrant is the former furniture-maker himself.



Xinjiang

Orphaned by the state

Mass internment in Xinjiang's gulag is tearing apart Uyghur families

Por Zumrat dawut's three children, Fridays were terrifying. That was the day when officials would question students at their schools in Urumqi, the regional capital of Xinjiang in China's far west. The interrogators were looking for clues about their lives at home. They wanted to know whether parents prayed or used Islamic greetings at home, or talked to the children about the prophet Muhammad. The information they gleaned could result in a family member being sent to a "vocational training centre", the government's euphemism for a camp in Xinjiang's new gulag.

As Ms Dawut describes it, ethnic Uyghurs like her were under constant watch. Her children suffered the effects as much as their parents. Every Monday they were not in school she had to take them to the courtyard of her block of flats to watch the raising of China's flag, whether in freezing winter temperatures or in blazing summer heat. Participants were careful to look cheerful. Not only were the officials watching for signs of dissatisfaction; every family had to keep an eye on ten neighbouring

families, and report anything suspicious by putting notes in a box at each ceremony.

Ms Dawut says that before she and her children fled to America last year (they are seeking asylum there), she spent two months in one of the new camps where more than 1m people, mostly Uyghurs, have been sent without trial since 2017. Her offences: receiving calls from Pakistan where her husband is from; visiting Pakistan years earlier; accepting money from a foreigner (a family friend who lived in China); and securing an American visa. She was put in a cell so packed that inmates had to take turns sleeping. Her children feared that if they misspoke during their Friday interrogations, she would be sent back.

It is impossible to verify individual accounts of the horrors that have been unfolding over the past three years in Xinjiang as a result of these incarcerations, or

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what the government calls job training and "deradicalisation". Foreign journalists who visit the region are kept under intense surveillance, which makes interviews potentially perilous for those they try to talk to. Yet government documents and the accounts of witnesses provide damning evidence that the stories of people like Ms Dawut are not only credible, but typical. They show how the attempt to erase Uyghurs' distinctive cultural identity and crush their Islamic faith has not only caused immense suffering for the more than one-inten Uyghurs who have been sent to the camps, but has also blighted the lives of their hundreds of thousands of children.

This report draws on records compiled by officials in rural communities in southern Xinjiang where many of the Uyghurs live (see map, next page). They were given to The Economist by Adrian Zenz, a German scholar whose research, using satellite imagery and government documents, has been instrumental in confirming the proliferation and purpose of the camps. The files were downloaded (without hacking) from online networks used by local-government work groups in their fight against poverty. Uyghur exiles interviewed for this story asked that their names not be used, and that other details which could be used to identify them be withheld. Many of those who have escaped China fear that speaking out will endanger family and friends in China (see box, next page).

The work groups' records use a chilling >>

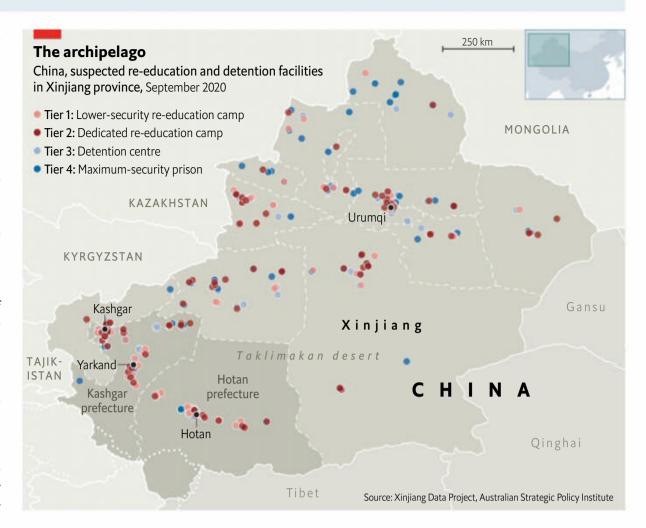
• official terminology to refer to children whose parents are being held by the state. They are called dankun ("single-hardship") or shuangkun ("double-hardship"), depending on whether one or both parents have been sent away to a vocational-training camp in the new gulag, a regular prison or another kind of detention facility.

Yarkand, a county in Kashgar prefecture on the southern rim of the Taklimakan desert, has about 900,000 residents. Of them, roughly 100,000 are children in grades one to six (ie, aged between about seven and 12). In 2018 more than 9,500 of these students were recorded at one point as being singlehardship or double-hardship (822 were of the double kind). All of those children were Uyghurs, apart from 11 who were of Kazakh or Tajik ethnicity-two mostly Muslim groups whose members account for less than 1% of the population of Yarkand. Not a single Han child had a parent in custody. These data, if extrapolated across Xinjiang, imply that around 250,000 of the region's nearly 3m Uyghurs under the age of 15 have had one or both parents interned. As Mr Zenz notes in a paper published as The Economist went to press, 880,500 children had been placed in boarding facilities by the end of 2019, an increase of nearly 383,000 since 2017.

The tearing apart of Uyghur families has been so rapid that local governments have struggled to accommodate the surge in the number of children who have lost parents to internment. Indeed, the documents show that some double-hardship children have been placed in institutions meant for children whose parents have died or left them. Governments are rapidly expanding and transforming primary schools into boarding facilities, many of them with high-security fences. Even pre-kindergartens are being adapted for boarding. Infants only a few months old have been placed in them. In Xinjiang, the floor-space of student dormitories in boarding schools grew by more than 30% in 2019 compared with less than 5% in China as a whole (see chart, next page).

In Kashgar and other mainly Uyghur regions the authorities plan to send all hardship students above third grade to such schools. Schools are under orders to observe such children closely. In 2018 the government of Kashgar city, the capital of the prefecture of that name, said they should receive "psychological counselling". It said teachers must "resolutely put an end to negligence in monitoring students in distress" and told them to "eliminate the negative impact on personality development" caused by separation from parents.

Students are even encouraged to write letters and send short videos to their parents in camps and prisons. Near the end of her time as an inmate, Ms Dawut says those detainees who were deemed well-behaved



were allowed to have live video chats with their families. They would be provided with ordinary clothes and told to speak positively about their experience.

But such tightly controlled communications are no remedy for the pain. The trauma experienced by many children was conveyed in an online article last year by an ethnic-Han teacher at a school in Kashgar. She wrote of an impoverished girl, her father interned and her mother in a far-off city, often hungry and inadequately clothed, being beaten by her stepmother. She said that when sirens blared outside



Uyghurs abroad

Many members of the Uyghur diaspora live in fear of the Chinese state. In our sister publication, 1843, John Phipps tells their stories based on months of research among members of London's nervous community. His account is online: economist.com/1843/uyghurs

the school—a frequent occurrence—students would rush to the window, wondering, the teacher believed, whether one of their parents was about to be taken away.

Assaults on family life continue after children have left school. When Uyghur girls grow old enough to wed (the legal age for which is 20 in China), they can expect to be cajoled by officials into marrying Han men. Nowadays refusal can incur retribution for the woman's family. Even as the government eases its limits on family size elsewhere in China, in Xinjiang it is tightening such controls, imposing fines and other sanctions on Uyghur couples who have more than two children, or three if they live in the countryside. Uyghur women are being fitted with intrauterine devices at a rate far higher than in China as a whole, according a report in June by the Associated Press, citing findings by Mr Zenz.

Women with three children are at greatest risk of being forcibly sterilised. Ms Dawut says she was subjected to such treatment in 2018. After she recounted her ordeal at an American-government panel last year on the sidelines of the UN, media in China released a video of Ms Dawut's brother. In it he said she not been to one of the camps and had not been sterilised. She says she is willing to be examined medically to prove the latter. But the statistics are telling enough: birth rates among Uyghurs in Xinjiang have plummeted, official figures show. In Kashgar and the neighbouring prefecture of Hotan, they fell by more than 60% between 2015 and 2018.

Officials try to deflect criticism of the harm they are inflicting on families. They suggest they are protecting children from >>>

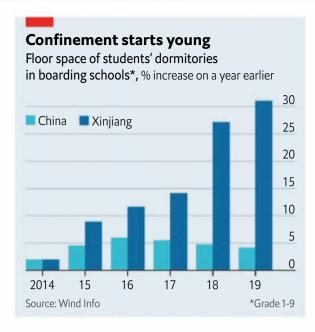
the "three evils" of terrorism, separatism and religious extremism—and taking better care of them. In 2018 Xinjiang Daily, a state newspaper, described a visit by Zhu Hailun, the deputy party chief of Xinjiang and an architect of the gulag scheme, to a "Kindness Pre-school" at a camp in Hotan. He was told that the children, some aged less than a year, all had parents who could not take care of them "for various reasons". The report said the children were being given necessities free of charge. They were gaining weight, growing taller and quickly learning Mandarin, it crowed.

As elsewhere in China, Xinjiang has been stepping up efforts to banish ethnicminority languages from schools—a policy that has recently triggered protests by parents in Inner Mongolia, a northern region. One purported aim is to give non-Han children a better chance of success in their careers, given the importance of Mandarin in many jobs. But it is also about diluting minority identity. The authorities in Xinjiang are very keen to achieve that. The Uyghur language is Turkic and the customs and religion of Uyghurs appear more foreign to most Han Chinese than do those of Tibetans or ethnic Mongols. As the authorities see it (even if they are careful not to declare it so), fighting separatism in Xinjiang also involves a cultural war.

Until early this century, schools in Uyghur-dominated regions mostly employed ethnic Uyghurs who taught in the local language. A former educator in Xinjiang, who fled China in 2017 to escape persecution, says it became obvious before he left that schools were trying to recruit more ethnic-Han teachers. Job ads called for a proficiency in Mandarin attained by few Uyghurs, and no longer required that applicants have a local residency permit. By the time he left China, he says, the only local-language course left in the curriculum was Uyghur literature. Many Uyghur teachers had been pushed out of their jobs. Some had been sent to the camps (one simple method for disqualifying Uyghur teachers was a "political investigation" to determine whether anyone in their home had been in trouble with the authorities).

In 2017 a primary school in the Kashgar township of Tokzake issued a plan for creating a "completely Chinese-speaking school environment". The document, obtained by Mr Zenz, said any use of Uyghur by teachers or students should be treated as a "serious teaching incident". An article on the website of *People's Daily*, the party's main mouthpiece, called the school the "epitome of rural education in Kashgar".

At the boarding schools where hardship children are sent, the plunge into a Mandarin environment is likely to exacerbate the pain of separation from their families. But having to grapple with a strange language is only part of the remoulding they face.



Some Han teachers in Xinjiang have posted videos on social media to show how "interethnic unity" is promoted in schools, with Uyghur students sometimes required to wear traditional Han costumes and sing patriotic songs. Teachers who are Han wield considerable power on account of their ethnicity. The one whose student had been beaten by her stepmother wrote that she had warned the guardian that if she beat the child again, she would report her and possibly get her sent to a camp.

The government's policy of sending hundreds of thousands of Han officials and civilians to stay in Uyghurs' homes is another disturbing example of how Xinjiang's Han-dominated government (under Communist rule, the region's leader has always been Han) is chiselling away at Uyghur family life. Officials call it "becoming kin". Han "relatives" stay as often as every month with Uyghur families for ten days at a time (the stays often impose costly burdens on the Uyghurs, even though the "rel-

atives" are supposed to help with provisions). Hosts have to show enthusiasm, or face repercussions. Ms Dawut's then tenyear-old daughter was assigned a 20-year-old man as kin. She shows a photo of the official drinking tea in her home, smiling, seated next to her child. She weeps as she describes how uncomfortable this relationship between the young man and her daughter made her feel.

The government insists that its measures are working. It points to the absence of any terrorist incident in Xinjiang since 2017, when the camp-building programme began. Last month, in a white paper on Xinjiang, it said residents' "sense of gain, happiness and security" had "significantly increased" thanks to employment-boosting measures such as the provision of vocational training. It said Xinjiang had given such coaching to nearly 1.3m people a year between 2014 and 2019, but did not specify how it was administered. Last year officials claimed everyone had "graduated" from the camps, but the Australian Strategic Policy Institute, a think-tank, has identified dozens of new detention centres being built in the past two years. It says some inmates are being moved from vocationaltraining camps to higher-security facilities such as the one pictured near Kashgar.

Ms Dawut says she is still haunted by her experience in a camp. Every day she would gather in a classroom with women from several other cells, where they would have to study "Xi Jinping Thought". As they left, guards would ask them, "Is there a God?" A "yes" would earn a beating. Then they would ask if there was a Xi Jinping, Ms Dawut recalls, in tears. "They said, 'Your God cannot get you out of here, but Xi Jinping has done so much for you."





Building new accommodation for 10,000 Uyghurs—2018 and now

Chaguan | Claiming covid as a win

China calls its handling of the pandemic a "heroic feat" proving the Communist Party's wisdom



SERIES OF failures made 2020 a rough year for China's relations ${f A}$ with the world. First, Chinese officials—following the logic of their unaccountable, secretive one-party system—failed to report an unknown virus in the central city of Wuhan for several critical weeks, giving covid-19 time to take hold. More failures followed. As one foreign government after another botched its own response, China's rulers refused to take any blame for the pandemic, instead slapping economic sanctions on such countries as Australia that called for inquiries into the outbreak's origins. The costs are plain to see: a recent survey of rich countries by the Pew Research Centre found soaring distrust of China (with negative views in Australia jumping 24 percentage points since last year).

That political gulf between China and the world is set to widen. This time, the cause will be asymmetric success. China has effectively controlled covid-19 and its economy is returning to life. Meanwhile, governments in America, Europe and beyond face second waves of infections and business bankruptcies and exploding public deficits. Several elected incumbents will lose office.

Amid that global misery, China's leaders call their country's recovery proof that Communist Party rule offers a uniquely effective blend of organisational prowess, respect for science, and traditional Chinese morality. They are about to discover how provocative that boasting will sound to many in the rest of the world. Foreign anger will in turn prompt resentment within China. Ordinary Chinese remember the collective sacrifices made by hundreds of millions of citizens who stopped transmission by staying indoors for weeks, often without pay. Glib lines from Western politicians about admiring China's people and opposing the Communist Party will not help. People are complicated. It is possible for Chinese citizens to remember their leaders' early mistakes, to resent officials for thuggishly enforcing lockdowns, and at the same time to agree that the country's pandemic response is a source of national pride. Modern China's story is not one of oppressed masses all vearning to be free. Party bosses stake their claim to rule on making people's lives better. Their China is a majoritarian project that enjoys broad, if unknowable, public support. The headache for foreign governments is how to respond when the party crushes minorities that get in the way, whether ethnic, religious or political.

Covid-19 has given a fresh edge to arguments about which political system is best. It is hard to overstate how bad the West's handling of the virus looks to ordinary Chinese. It is heartbreaking to hear Western-educated liberals wonder whether democracy is being exposed as selfish and disorderly. Longtime admirers of America watch President Donald Trump blaming their country for unleashing a "China virus" on the world, and hear a horrifying incitement to racial hatred. Chinese nationalists feel vindicated.

Diplomats in Beijing compare covid-19 to the global financial crisis of 2008, another event that convinced many Chinese leaders that the West is in long-term decline. Arguably, this pandemic is a more perilous moment. For one thing, in 2008 the credit crunch was a crisis discussed between Chinese and Western elites. Few American or European voters either knew or cared that global growth was being sustained by massive Chinese investments in domestic infrastructure. For another, China was not on the defensive. Elites in Beijing were tut-tutting observers of a crisis created in the West. As one Chinese leader told Americans in 2008: "You were our teacher, and the teacher doesn't look very smart.'

This time, on both sides, elites and regular folk have strong views about covid-19. In Beijing, Western diplomats recall this pandemic year with real bitterness. They remember the dark days of January and February as their home governments cancelled scheduled flights to and from China, and pleaded for permission to evacuate citizens from Wuhan, only to be summoned for hourslong meetings at the Chinese foreign ministry, where officials angrily accused them of sowing panic and insulting China. With unblushing hypocrisy, China then turned round and sealed its borders still more tightly a few weeks later, after foreign infection rates climbed. Early on, foreign countries were asked to send medical aid to China without any publicity, and complied. Later, when they sought to buy Chinese ventilators for their own patients, they were told that the price included public praise for China.

Why China's return to growth will inspire mixed feelings

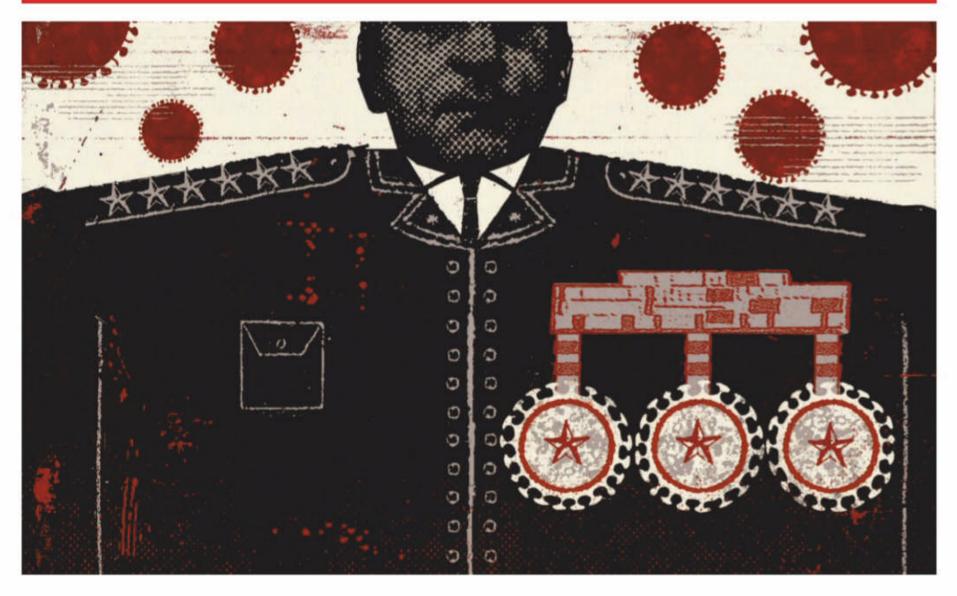
Far from the embassies in Beijing, foreign views of China have soured dramatically, too. In the Pew survey of public opinion in advanced economies, a median of 61% of respondents deplored China's handling of covid-19. Chinese officials blame such criticism on scapegoating by anti-China hawks in America. That is self-serving tosh. Thirteen of the 14 countries polled were even harsher about America's covid blunders. The survey is a record of public displeasure over mistakes made, not a festival of China-bashing.

Foreign scepticism about China's record is not entirely fair. Some in the West speculate that China is hiding mass infections. That is improbable: despite strict censorship, news of another Wuhan-like catastrophe would leak. Instead, after early cover-ups, China's response has been simple but effective. Since late March it has closed its borders to most foreigners, built high-tech systems to monitor domestic travel and attacked even small flare-ups with lockdowns and mass testing. After announcing a dozen cases on October 11th, the coastal city of Qingdao began testing 9m people.

Yet a core claim made by the party is also false—that its crushing of covid-19 proves the unique advantages of autocracy. Off China's coast, the democratic island of Taiwan has handled the virus brilliantly, recording just seven deaths in a population of 23m.

The arguments will not stop even if vaccines are found to beat the virus back. Shared suffering did not bring the world together in 2020. Alas, a lopsided global recovery, especially if accompanied by Chinese bragging, risks creating still sharper divisions.

International



Covid-19 and liberty

No vaccine for cruelty

ALMATY, ISTANBUL, KAMPALA, MEXICO CITY AND SÃO PAULO

The pandemic has eroded democracy and respect for human rights

PEOPLE WERE hungry during lockdown. So Francis Zaake, a Ugandan member of parliament, bought some rice and sugar and had it delivered to his neediest constituents. For this charitable act, he was arrested. Mr Zaake is a member of the opposition, and Uganda's President Yoweri Museveni has ordered that only the government may hand out food aid. Anyone else who does so can be charged with murder, Mr Museveni has threatened, since they might do it in a disorderly way, attract crowds and thereby spread the coronavirus.

Mr Zaake had been careful not to put his constituents at risk. Rather than having crowds converge on one place to pick up the food parcels, he had them delivered to people's doors by motorbike-taxi. Nonetheless, the next day police and soldiers jumped over his fence while he was showering and broke into his house. They dragged him into a van and threw him in a cell. He says they beat, kicked and cut him, crushed his testicles, sprayed a blinding chemical into his eyes, called him a dog

and told him to quit politics. He claims that one sneered: "We can do whatever we want to you or even kill you...No one will demonstrate for you because they are under lockdown." The police say he inflicted the injuries on himself and is fishing for sympathy with foreign donors.

The charges against him were eventually dropped, but the message was clear. "The president doesn't want the opposition to give out food," says Mr Zaake, who walks with crutches and wears sunglasses to protect his eyes. "He knows that people will like us [if we do]."

The pandemic has been terrible not only for the human body but also for the body politic. Freedom House, a think-tank in Washington, counts 80 countries where the quality of democracy and respect for human rights have deteriorated since the pandemic began. The list includes both dictatorships that have grown nastier and democracies where standards have slipped. Only one country, Malawi, has improved (see map overleaf). Covid-19 "has

fuelled a crisis for democracy around the world," argue Sarah Repucci and Amy Slipowitz of Freedom House. Global freedom has been declining since just before the financial crisis of 2007-08, by their reckoning. Covid-19 has accelerated this pre-existing trend in several ways.

The disease poses a grave and fast-moving threat to every nation. Governments have, quite reasonably, assumed emergency powers to counter it. But such powers can be abused. Governments have selectively banned protests on the grounds that they might spread the virus, silenced critics and scapegoated minorities. They have used emergency measures to harass dissidents. And they have taken advantage of a general atmosphere of alarm. With everyone's attention on covid-19, autocrats and would-be autocrats in many countries can do all sorts of bad things, safe in the knowledge that the rest of the world will barely notice, let alone object.

Measuring the pandemic's effect on democracy and human rights is hard. Without covid-19, would China's rulers still have inflicted such horrors on Muslim Uyghurs this year? Would Thailand's king have grabbed nearly absolute powers? Would Egypt have executed 15 political prisoners in a single weekend this month? Perhaps. But these outrages would surely have faced stronger opposition, both at home and abroad. Granted, the current American administration makes less fuss about human

rights than previous ones have and covid-19 has not changed that. But the voice from the White House is not the only one that counts.

Last year was a year of mass protests, which swept six continents, brought down five governments (Algeria, Bolivia, Iraq, Lebanon and Sudan) and forced others to rethink unpopular policies, as in Chile, France and Hong Kong. This year, by contrast, governments have banned mass gatherings to enforce social distancing. For many, this is wonderfully convenient.

For example, in India, the world's largest democracy, the biggest campaign of civil resistance for decades erupted shortly before the pandemic. For 100 days protesters raged against proposed changes to citizenship laws that would discriminate against Muslims and potentially render millions of them stateless. These protests petered out after a curfew was imposed in response to covid-19, since it was no longer possible to occupy the streets.

Later, when Prime Minister Narendra Modi's Hindu-nationalist government began imposing strict local lockdowns, it singled out neighbourhoods which had held protests, many of which were Muslim. Heavy police barricades locked in residents for weeks.

In early September the government declared that in the upcoming parliamentary session there would be no Question Hour for the opposition and no private members' bills—long-standing institutions that allow opposition MPS to query the government directly. The excuse: the health risks of covid-19, along with assertions that in a crisis, legislative time was too precious to waste on noisy debate. The opposition walked out, allowing Mr Modi to ram through 25 bills in three days. He then suspended the session eight days early, having apparently forgotten the earlier excuse that time was short.

At the outset of the crisis Mr Modi, who has a knack for the theatrics of power, called on citizens to bang on pots, and later to light sacred lamps, in a show of solidarity to fight the pandemic. These displays, taken up by his supporters with glee, were not spontaneous expressions of support for doctors and nurses, like similar displays in Italy, Spain or Britain. Rather, they were a demonstration of Mr Modi's power.

H.L. Mencken, an American journalist, once wrote that "the whole aim of practical politics is to keep the populace alarmed (and hence clamorous to be led to safety) by an endless series of hobgoblins, most of them imaginary." He could have added that when people have real cause for alarm, they are even keener to be led to safety. Some put their trust in the sober calculations of evidence-driven experts. Others put their faith in strongmen.

Mr Modi has racked up colossal approv-

al ratings this year, even as he presides over a double catastrophe of mass death and economic slump. So has Rodrigo Duterte in the Philippines, despite the largest reported caseload in South-East Asia. Mr Duterte's poll numbers may be coloured by fear; he has had thousands of people, supposedly criminal suspects, killed without trial, a campaign that appears to have intensified during the pandemic. But many Filipinos admire his grim style—extending a "state of calamity" for another year last month, temporarily banning many nurses from going to work overseas and vowing to try the first covid-19 vaccine himself to show it is safe.

Popular, you're gonna be popular

Admiration for Jair Bolsonaro, Brazil's militaristic president, is as high as ever, despite over 5m covid-19 cases and more than 150,000 deaths. This is partly because he has handed out emergency aid to 67m hard-up Brazilians, but his macho posturing also appeals to many voters. He caught covid-19 and recovered, crediting his background as an athlete. He declared: "We have to face [the virus] like a man, damn it, not like a little boy." He blames state governors for being so scared of the disease that they wreck people's livelihoods unnecessarily.

That strikes a chord with some. When São Paulo's lockdown was at its tightest, a clothing shop was illegally letting customers in through a tiny metal shutter door. "The governors shut things down to hurt the economy and make Bolsonaro look bad," grumbled the owner, who shared his president's dismissive attitude towards covid-19. "The death numbers are a lie," he said: "I'm only wearing this mask out of respect for our clients. I don't need it."

Strongmen find it easier to impress the masses when they control the news. In April Reporters Without Borders, a watchdog, counted 38 countries using the coronavirus as an excuse to harass critical media. That number has now more than

doubled, to 91, says Freedom House.

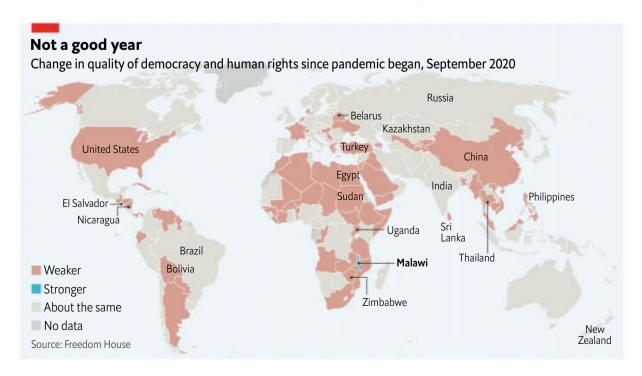
Many governments have criminalised "fake news" about the pandemic. Often, this means commentary that displeases the ruling party. Nicaragua's regime plans to ban news that "causes alarm, fear or anxiety". El Salvador has relaunched a state television outlet, having purged 70 journalists since President Nayib Bukele came to power last year. "I am watching a very balanced newscast," grinned Mr Bukele. "I don't know what the opposition will see."

Anyone in Zimbabwe who publishes or disseminates "false" information about an official, or that impedes the response to the pandemic, faces up to 20 years in prison. Two journalists were arrested when they tried to visit in hospital three opposition activists, including an MP, who had been abducted, tortured and forced to drink urine by ruling-party thugs.

All around the world, ordinary people are being gagged, too. Some 116 citizen journalists are currently imprisoned, says Reporters Without Borders. In Uzbekistan people entering quarantine facilities have had to hand over their phones, supposedly to prevent the devices from spreading the virus but actually so they cannot take photos of the woeful conditions inside.

Medics, who see covid-19 fiascos close up, face extra pressure to shut up. China's rulers silenced the doctors in Wuhan who first sounded the alarm about the new virus. Censorship can be lethal. Had China listened to doctors and acted faster to curb the disease, it would not have spread so fast around the world.

Still, other regimes have copied China's example. In September the Turkish Medical Association accused Turkey's government of downplaying the outbreak. A ruling-party ally called for the group to be shut down and its leaders investigated for stoking "panic". Yet the doctors were right. The health ministry later admitted that its daily figures did not include asymptomatic patients. An opposition lawmaker shared a



document suggesting that the true number of cases in a single day in September was 19 times the official tally.

Egypt's government says it is coping admirably with the pandemic. A dozen doctors have been arrested for suggesting otherwise, as have several journalists. One, Mohamed Monir, died of covid-19 contracted during detention.

Of the 24 countries that had national elections scheduled between January and August, nine were disrupted by the pandemic. Some delays were justified. But as South Korea showed, a ballot can be held safely if suitable precautions are taken. Some other governments were in no hurry. Sri Lanka's President Gotabaya Rajapaksa dissolved the opposition-controlled parliament in March and did not allow fresh elections until August. In the meantime, he ran the country without lawmakers to check him.

In Hong Kong pro-democracy candidates were expected to do well in elections in September. Citing the risk of covid-19, the territory's pro-communist leaders delayed them for a year.

Burundi's election in May was probably never going to be clean, but the virus supplied the perfect excuse to exclude pesky foreign observers. Twelve days before the election they were told that they would have to quarantine on arrival in the country for 14 days, thus missing the vote.

In Russia Vladimir Putin has turned the virus to his advantage. He shifted responsibility for a strict lockdown to regional governors, but then took credit for easing it. In the summer he held a constitutional pseudo-referendum to allow himself to stay in office until 2036. Citing public health, he extended the vote to a week and allowed people to vote at home, in courtyards, in playgrounds and on tree stumps. The vote was impossible to observe or verify. Mr Putin declared a resounding victory. Parliament voted to change the voting procedure permanently.

In countries with too few checks and balances, rules to curb the virus can be used for other ends. On a dark road in Senegal, a policeman recently stopped a taxi and detained the driver for wearing his anti-covid mask on his chin. After 45 minutes, shaking with fury, the driver returned to his vehicle. The cop had threatened him with dire punishments unless he handed over some cash, he explained to his passenger, a reporter for *The Economist*. He drove off as fast as he could, cursing.

While petty officials abuse the rules to pad their wages, strongmen typically abuse them to crush dissent. Police assaulted civilians in 59 countries and detained them in 66 for reasons linked to the pandemic. Violence was most common in countries Freedom House classifies as "partly free", where people are not yet too scared to prot-

est, but their rulers would like them to be.

In Zimbabwe, for example, many of the 34 new regulations passed during a national lockdown are still in place, and have been used as a pretext for myriad abuses. In September the Zimbabwe Human Rights NGO Forum, an umbrella group, released a report listing 920 cases of torture, extrajudicial killings, unlawful arrests and assaults on citizens by the security services in the first 180 days of lockdown. One man was forced to roll around in raw sewage. Many had dogs set on them. Dozens of opposition activists have been arrested or beaten, including a former finance minister. There were too many everyday cases of intimidation and harassment to count.

Many strongmen are also chipping away at pre-pandemic checks on their power. Nicaragua has borrowed an idea from Mr Putin: a law will require NGOs that receive foreign funding to register as "foreign agents". India used similar rules to



shut down the local arm of Amnesty International, which closed in September after its bank accounts were frozen.

In Kazakhstan trials are taking place on Zoom, leading some defendants in politically charged cases to complain that this makes it easy for judges to have selective hearing. Alnur Ilyashev, a pro-democracy campaigner who was sentenced to three years of restricted movement for "disseminating false information", said he could not always hear his own trial.

Nothing spreads like fear

Panic about a contagious disease makes people irrational and xenophobic. A study in 2015 by Huggy Rao of Stanford University and Sunasir Dutta of the University of Minnesota found that people were less likely to favour legalising irregular immigrants if told about a new strain of flu. Many autocrats, even if they have not read the academic literature, grasp that blaming outgroups is a good way to win support.

Mr Modi's government tars Muslims as superspreaders. Bulgaria imposed harsher lockdowns on Romany neighbourhoods than on others. Turkey's religious authorities blame gay people. Malaysian officials blame migrant workers, some of whom have been caned and deported.

Minorities have had an especially grim time in Myanmar. Aung San Suu Kyi, the country's de facto president, threatened severe penalties for residents who re-enter the country illegally. People understood this to refer to the Rohingyas, a persecuted Muslim group, roughly 1m of whom have fled into neighbouring countries. The rumour that Rohingyas were infecting the nation spread rapidly. A cartoon circulating online showed a Rohingya man, labelled as an "illegal interloper", crossing the border, carrying covid-19.

Meanwhile, a UN rapporteur warns that the pandemic has "emboldened" Myanmar's army, which has stepped up its war on secessionists. The Arakan Army, a rebel group, offered ceasefires in April, June and September; all were rebuffed. In May and June the army bombed civilians, razed villages and tortured non-combatants, says Amnesty International. Some 200,000 have fled to camps for displaced people, according to a local NGO, the Rakhine Ethnics Congress. Since covid-19 struck, donations have declined and supplies of food to the camps have dwindled.

Abusers and autocrats have not had it all their own way this year. The pandemic has drained their treasuries. Their finances will still be wobbly even when a vaccine is found and the public-health excuse for curbs on freedom is no longer plausible.

And people are pushing back. Although 158 countries have imposed restrictions on demonstrations, big protests have erupted in at least 90 since the pandemic began. Furious crowds in Kyrgyzstan this month forced the government to order a re-run of a tainted election. Protests in Nigeria prompted the government to disband a notoriously torture-and-murder-prone police unit on October 11th. Mass rallies in Belarus have so far failed to reverse a rigged election there, but have made it clear that the dictator, Alexander Lukashenko, has lost the consent of his people.

Institutions are pushing back, too. A court in Lesotho barred the prime minister from using the virus as an excuse to close parliament. Russia's opposition parties refuse to be cowed even by the poisoning of their main leader, Alexei Navalny.

With luck, when covid-19 eventually recedes, the global atmosphere of fear will recede with it. People may find the capacity to care a bit more about abuses that occur far away, or to people unlike themselves. They may even elect leaders who speak up for universal values. But for the time being, the outlook is grim.

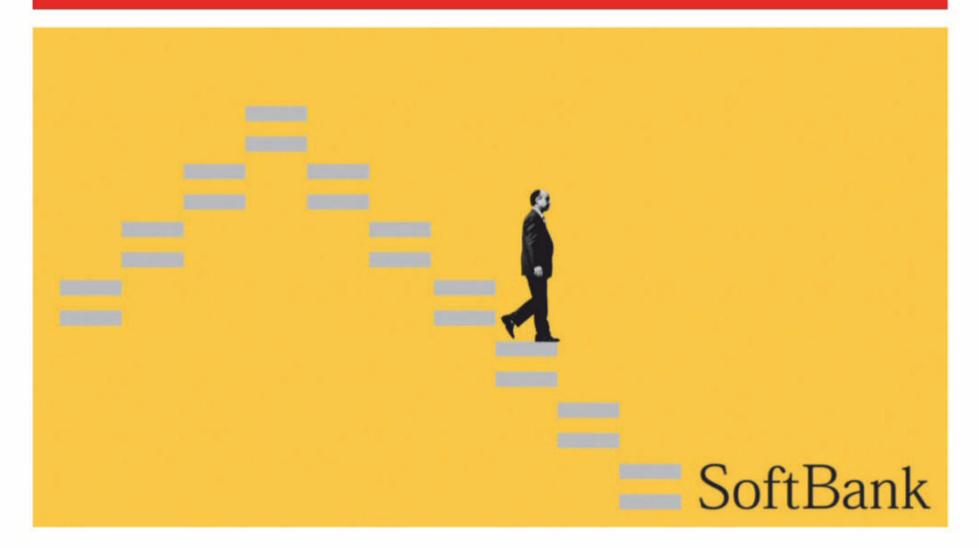


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Business



SoftBank

What Masa does next

Can the coronavirus-induced digital revolution restore Son Masayoshi's reputation for investing brilliance?

E ARLIER THIS year the covid-19 pandemic brought SoftBank Group to its knees. As bondholders fled heavily indebted firms, the junk-rated Japanese tech conglomerate looked shaky. In March its flamboyant boss, Son Masayoshi, announced a \$41bn sale of assets to return to stability.

Mr Son has since regained his footing—or at least his chutzpah—enumerating the upsides of coronavirus lockdowns for his firm. The "new normal", in which meetings, food delivery, education, medical care, shopping and entertainment are mediated online, he said in September, is a boon to SoftBank. He has long invested around a grand vision of a digital transformation and ubiquitous artificial intelligence (AI). Covid-19 means it is coming to pass much more rapidly than expected. Having mostly dumped its telecoms activities outside Japan, SoftBank is wholly devoted to Mr Son's technophilic passions.

The digital surge is helping the group's underperforming Vision Fund, a \$99bn tech-investing vehicle. The fund started deploying capital in 2017 in a cloud of hype and optimism but lost its way as a result of a few spectacular failures, most notably the

implosion of WeWork, an office-subleasing firm masquerading as a tech platform.

Even though SoftBank contributed only \$28bn of the Vision Fund's capital (equal to around 12% of the Japanese firm's assets at the time), the mishaps hurt its share price and Mr Son's reputation as a brilliant investor. That reputation was acquired after his purchase, starting in 2000, of a 34% stake in a Chinese e-commerce startup called Alibaba, now China's most valuable listed company. The pandemic has hurt valuations of some Vision Fund firms in industries such as hospitality and transport. Mr

→ Also in this section

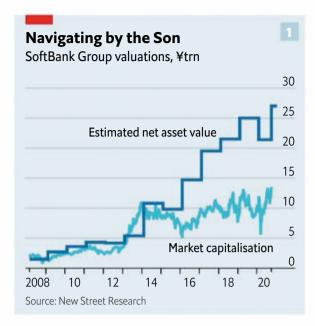
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Son has struggled to raise outside money for a sequel, Vision Fund 2, which was aiming for \$108bn in capital but now makes do with small sums from SoftBank.

Unsurprisingly, then, these days the Japanese firm steers attention away from the Vision Fund. This leaves a mystery over where Mr Son will direct his energy and cash next. His selling spree did not end with the asset sales announced in March. This year SoftBank has completed an unprecedented number of disposals.

The firm has offloaded most of its mobile-telecoms assets, including another slice of its Japanese mobile business, Soft-Bank Corp, and the whole of Sprint, America's fourth-largest mobile operator, and of Brightstar, a distributor of wireless gear. In September Mr Son announced the sale of Arm, a Britain-based chip-designer, for \$40bn to Nvidia, a big American chipmaker. Arm was the lynchpin of Mr Son's envisioned ecosystem of huge web- and Alpowered startups. Even some of his top executives were confounded to see it go.

Excluding the sale of Arm, which will take months to complete, SoftBank has amassed \$52bn from the divestments. Investors do not expect the hyperactive Mr Son to sit on it for long. Three different paths appear open to him. One scenario is to activate long-discussed plans to take SoftBank private. Second, he may be preparing to take a large stake in one or more publicly listed technology giants. In September SoftBank pulled off another surprise when it emerged as the mystery "Nasdaq whale" that had snapped up billions of

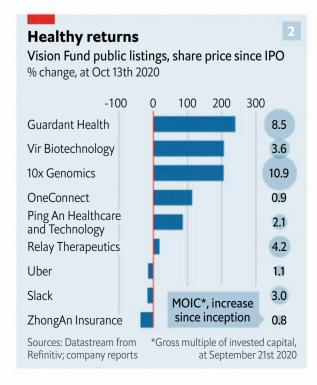


• dollars' worth of options in publicly listed stocks such as Amazon, Microsoft and other technology stars. A new asset-management arm had already bought nearly \$4bn of shares in various tech giants. Third, he could double down on the Vision Fund model by putting more cash into the second vehicle and subsequent funds.

The rationale for a management buyout, which would be one of the largest in history, is the steep discount between Soft-Bank's market value and the value of its underlying listed assets (see chart 1). That has narrowed thanks to a big run-up in Soft-Bank's share price this year (owing in part to a large share buyback).

A buy-out would be feasible, says a big SoftBank investor, if it were structured as a bridge loan financed by selling more of the firm's stake in Alibaba and other assets. But it would shrink SoftBank, enriching its billionaire boss but reducing his ability to invest in new growth areas, notes Oliver Matthew of CLSA, a broker. As such, says Mr Matthew, it looks fairly unlikely.

Investing in publicly listed tech giants could be more attractive. These firms are raking in big profits from the digital surge. Unlisted tech darlings, by contrast, are of-



ten still honing their business models or fighting for market share. Mr Son's view, according to a person close to him, is that "size begets size, and the big companies are the ones to succeed in this environment". New opportunities in private markets are less plentiful—partly because the Vision Fund has already bankrolled most of them.

The third way is less crazy than the first fund's blow-ups suggest. Its results are looking better than a few months ago. So far it has deployed \$82.6bn of capital in 92 firms. By the end of June it had risen in value by \$3.5bn. By the end of September, say people close to it, it had gained another \$4.5bn. This adds up to a 10% return, hardly stratospheric: the NASDAQ tech index has returned ten times as much in the past three years. But it continues a turnaround from early 2020, when the fund pulled its parent into a record \$8.8bn annual loss. The fund has nine more years to run. In the spring it slashed valuations to conservative levels and now expects markups.

A hot market for technology initial public offerings (IPOS) will help. Since the fund's inception nine of its firms have gone public. Prominent bets like Uber have disappointed. But all told, returns from the listings have been decent (see chart 2). And more IPOS are in the offing. DoorDash, a food-delivery firm, expects to list in November at a valuation of around \$25bn. That would quintuple the value of Vision Fund's \$600m investment.

Its 37% stake in Coupang, South Korea's Amazon, could prove similarly juicy if it went public at the level at which some have been trying to invest. According to investors in Asia, Coupang has received offers at a valuation as high as \$30bn. And Soft-Bank's portfolio contains holdings in some of China's choicest private tech stars, including ByteDance, the biggest (which owns TikTok, a short-video app beloved of teenagers the world over), and Beike, a residential-property platform which has recently quadrupled in value.

Another reason for optimism is that the lessons from the Vision Fund's error-filled first three years appear to have sunk in. The second fund is not trying to stuff too much money into young companies. Whereas Mr Son's monster first fund refused to get out of bed for any investing opportunity under \$100m, eight of its successor's 13 investments are less than that. One is a piddling \$20m. It looks far less risky.

What has not changed is Mr Son's clout and unpredictability. Under pressure from Elliott, an activist hedge fund, he has made governance tweaks, adding a woman to the board. But Glass Lewis, a proxy firm, opposed another appointment. Allies with the stature to challenge him, such as Jack Ma, Alibaba's co-founder, have stepped down. Whatever Mr Son's next act, he will serve chiefly his own impulses.

Aerospace

Not boxing clever

A ceaseless subsidies scrap between Boeing and Airbus ends. Maybe

Anisation (WTO) between Boeing, an American planemaker, and Airbus, a European one, over illegal subsidies resembles a heavyweight boxing bout in which both sides raise their gloves to claim the round. And so it was on October 13th, when the WTO ruled that the EU can impose tariffs on \$4bn-worth of American goods annually. The award is lower than last year's decision that America is allowed to slap duties on \$7.5bn in European goods. But it was much higher than the Americans once braced for. More important, both aerospace titans look knocked about.

The counterpunching at the wto began in 2004. After Airbus first overtook it in aircraft deliveries, Boeing complained that its rival was boosted by government support eventually amounting to \$22bn in repayable "launch aid". Airbus soon parried with its own claim that Boeing had benefited from \$24bn in favourable tax breaks, as well as research-and-development support from NASA and the Pentagon.

The wto eventually determined that both firms had received illegal subsidies. America used last year's win to slap tariffs on everything from French cheese to Scotch. Airbus now faces levies of 15%. The EU will be permitted to impose its new duties after October 27th.

The latest ruling will not put paid to the bickering. Boeing says that the contentious tax break from Washington state has been repealed, so the looming EU tariffs are un-



The fight is over. Not the race

• justified. Airbus says it is now in full compliance with the rules, and grumbles that the wto appellate body that decides such matters is in limbo. America's long-standing claims of unfair treatment at the hands of the body have led it to veto new appointments, leaving the arbiter inquorate.

With no knockout blow on either side, the spat may end in a negotiated settlement. America has been more reluctant to talk. But it may reconsider, given the size of the Eu's permitted retaliation—and Boeing's precarious position. The aerospace giant has more to fear from the devastating effect of the pandemic on the world's air travel. The continued grounding of the 737 MAX, its cash cow, after two fatal crashes means that battered carriers are cancelling orders without penalty.

Airbus has not escaped unscathed. Last month it said it would cut more jobs on top of the 15,000, out of a global workforce of 130,000, announced in June. It has shaved output to 40% of capacity. Like Boeing, it has lost around half its market value since the start of the year.

The European firm nevertheless looks in a bouncier mood. It is said to be plan-

ning to ramp up production of its A320 single-aisle aircraft as early as next year, perhaps hoping to win 737 MAX customers. Airbus also has a broader range of planes and a factory in Alabama, which lets it escape tariffs on jets sold to American customers (though not on imported parts), whereas Boeing assembles all its planes at home. Airbus has just unveiled plans to bring a hydrogen-powered net-zero-emissions aircraft to the skies by 2035. Boeing, already weighed down by the MAX debacle, may do best to put yesterday's fight behind it and prepare for the next bout. \blacksquare

Bartleby Stop all the clocks

Flexible working is countering the tyranny of time

Two hundred years ago, a device L began to dominate the world of work. No, not the steam engine—the gadget was the clock. With the arrival of the factory, people were paid on the basis of how many hours they worked, rather than their material output.

In the "putting out" system that prevailed before the factory era, merchants would deliver cloth to be woven, spun, stitched or cut to a worker's home. Each worker would then be paid for the items they produced. That gave the weavers and spinners freedom to work when it was convenient. At the factory, in contrast, workers were required by the owner to turn up for a set shift.

The tyranny of time was marked by a number of innovations. As few workers owned watches or clocks in the 19th century, people known as "knockeruppers" would roam the streets rapping on doors and windows to wake workers at the right time. Later, factories would use hooters and whistles to signal the start and end of shifts, and employees would punch in and out using a time clock. Eventually, as workers moved farther away from their place of employment, the power of the clock led to daily rush hours, as millions headed to and from work. Often they paid a penalty in terms of time wasted in traffic jams or awaiting delayed trains.

The clock's authoritarian rule may at last be weakening. Flexible working existed well before the pandemic. But it only offered employees the ability to choose when in the day they worked their allotted hours. Remote working has brought a greater degree of freedom. A survey of 4,700 home-workers across six countries commissioned by Slack, a corporate-messaging firm, found that flexible working was viewed very posi-



tively, improving both people's work-life balance and productivity. Flexible workers even scored more highly on a sense of "belonging" to their organisation than those on a nine-to-five schedule.

It is hardly surprising that workers prefer flexibility. Working a rigid eighthour schedule is incredibly restricting. Those are also the hours when most shops are open, when doctors and dentists will take appointments, and when repairmen are willing to visit. Parents on a conventional routine may be able to take their children to school in the morning but are unlikely to be able to pick them up in the afternoon. Many families find themselves constantly juggling schedules and giving up precious holiday time to deal with domestic emergencies.

On reflection, it is also not too shocking that home-workers feel they are more productive. After all, few people have the ability to concentrate solidly for eight hours at a stretch. There are points in the day where people are tempted to stare out of the window or go for a walk; these may be moments when they find inspiration or

recharge themselves for the next task. When they do this in an office, they risk the boss's disapproval; at home, they can work when they are most motivated.

Remote working is not possible for everyone, of course. There is a long list of industries, from emergency services to hospitality and retail, where people need to turn up to their place of work. But for many office workers, remote working is perfectly sensible. They may maintain some fixed points in the week (staff meetings, for example) but perform many of their tasks at any time of the day—or night. Office workers can now be paid for the tasks they complete rather than the time they spend (which firms would have to monitor by spying on people at home).

What is striking about Slack's study is the widespread nature of support for home-working. Overall, just 12% of the workers surveyed wanted to return to a normal office schedule. In America black, Asian and Hispanic employees were even more enthusiastic than their white colleagues. Women with children were generally keen, reporting an improvement in their work-life balancethough a gap exists between discontented American women and those in other countries, who are much happier (the availability of state-subsidised child care helps explain the difference).

Of course, the new schedule carries dangers: people may lose all separation between work and home life, and succumb to stress. To inject some human contact, companies may embrace a hybrid model in which workers go into the office for part of the week. But overall office-workers' freedom from time's voke is to be welcomed. The clock was a cruel master and many people will be happy to escape its dominion.

Chinese IPOs in America

Red capitalism

NEW YORK

Why companies from China still flock to Wall Street

THINESE FIRMS get a frosty reception in CAmerica these days. President Donald Trump is a relentless China-basher. His administration has tried to crush Huawei, a telecoms giant, ban TikTok and WeChat, two popular Chinese-owned apps, and expel Chinese companies listed on American stock exchanges. No wonder that some have steered clear of late. Ant Group, a fintech star that may once have followed Alibaba, the tech titan with which it is affiliated, onto the New York Stock Exchange (NYSE), is about to float in Hong Kong and Shanghai instead. Last month Sina, the Nasdaq-listed owner of Weibo, China's answer to Twitter, said it would go private in a \$2.6bn deal. A day later Tencent, another Chinese online colossus, said it would buy out Sogou, a NYSE-traded search company, for \$3.5bn.

Many Chinese firms that might once have flocked to New York are eyeing their home stockmarkets. According to consultants at Deloitte, from January to September new listings in Hong Kong raised some \$28bn, two-thirds more than in the same period last year. The money raised by new-comers to the biggest mainland exchanges, in Shanghai and Shenzhen, has reached 355bn yuan (\$53bn), 2.5 times the comparable figure in 2019.

Look closer, though, and plenty of Chinese startups continue to covet American listings. In August KE Holdings, an online property firm backed by Japan's SoftBank Group, raised \$2.1bn; xPeng, an electric-car maker, picked up \$1.5bn. Lufax, a fintech firm which this month filed to go public on the NYSE, may raise \$3bn. All told, Chinese firms have raised nearly \$9bn in American

initial public offerings (IPOS) since January, and another \$8bn in secondary share sales. Goldman Sachs, an investment bank, reckons that the money raised from Chinese IPOS on the NYSE and Nasdaq has held up during Mr Trump's presidency (see chart). The market value of Chinese listings in America now exceeds \$1.6trn, of which American investors hold nearly a third. Goldman Sachs forecasts a record number of Chinese listings in New York this year.

Why would Chinese companies flock to America given the apparently toxic environment? For one thing, as Adam Lysenko of Rhodium Group, a research firm, points out, it is often easier to list on American exchanges than in China, with its more restrictive regulatory regime. Ant's block-buster stockmarket debut hit a last-minute snag this week when China's top securities regulator unexpectedly delayed approval for the Hong Kong leg of its dual listing.

An overseas listing also allows mainland companies to get round China's strict currency controls. Gary Rieschel of Qiming Ventures, a venture-capital firm, says that going public in New York, the world's preeminent financial centre, makes sense for Chinese firms like Lufax keen on global expansion. For rising technology startups in particular Wall Street also represents an imprimatur from the world's most sophisticated investors, and access to its deepest and most liquid capital markets.

Shareholders, for their part, get a slice of its perkiest stocks. Total returns for an index of Chinese firms listed in America tracked by BNY Mellon, a bank, have risen by nearly half in the past 12 months, twice the rate for the s&P 500 index of big American firms. Mr Lysenko calculates that from 2017 to 2019 Chinese firms listed on American exchanges traded at higher valuations relative to earnings than companies in the s&P 500, on the Nasdaq, or indeed those whose shares changed hands on the Shenzhen and Hong Kong stockmarkets. These "red" stocks are simply too tasty for American investors, red as they already are in tooth and claw, to forgo. ■





Farm equipment

Fertile ground

The pull of India's biggest tractor-maker

Were any more evidence needed to reflect how surprising 2020 has been, consider tractor sales. In April Hemant Sikka, president of Mahindra & Mahindra's farm-equipment business—which makes around 300,000 of the things a year, more than any other company anywhere—sat in his Mumbai flat near his shuttered main factory wondering if he still had a business. India's nationwide lockdown that began a couple of weeks earlier led analysts to fore-tell doom for all manner of vehicle sales. Instead, Mr Sikka's main challenge has turned out to be meeting unprecedented demand, both at home and abroad.

The Indian conglomerate's tractor sales have broken records since May; production is operating at 100% of capacity. At its American factories the company has added a second shift. Regional managers around the globe are clamouring for tractors to replenish sparse dealer lots.

After collapsing in March, the share price of Mahindra & Mahindra has doubled, pulled along by the booming tractor division. So have the share prices of Deere and AGCO, two American manufacturers of farm equipment, suggesting that investors are eyeing bountiful profits from the industry as a whole.

Mahindra's particular niche—durable, low-horsepower machines—has been especially sought-after. In America that is the fastest growing segment, with sales up by 18% in the first nine months of the year, compared with 2019, according to the Association of Equipment Manufacturers. By contrast, sales of the largest tractors have

69

declined by 2%. The smaller tractors are used on properties of less than 100 acres (40 hectares). That makes them ideal for organic farms, which, because they eschew pesticides, cannot be large. They are also handy for tasks such as mowing lawns or hauling things around the rural properties where many city-slickers have fled from covid-infested urban areas.

In India other factors are at play. Stories about Indian farmers have long focused on suicides and misery. This year there is good news. The summer harvest was 6% bigger than last year. Prices for farm produce were up by an average of 12%. This has boosted farm incomes (even though it has concerning implications for inflation). The winter crop looks equally promising, thanks to favourable monsoon rains, which have been 9% heavier than usual and, critically, welldistributed over India's northern agricultural belt. Reservoirs are at their highest level in a decade, which bodes well for harvests to come.

The extra cash, combined with lower interest rates and cheaper credit, has enabled farmers to modernise. Some are upgrading to slightly larger machines, capable not just of pulling a plough but also of hauling heftier kit like harvesters. The draconian national lockdown, which for weeks prevented migrant workers from returning to their villages from cities, added another incentive to accelerate mechanisation. Farmers in India often regard buying a Mahindra tractor as akin to having a child: both become part of their lives and livelihoods for decades to come. With brighter prospects than in years past, many may wish to add more little Mahindras to the fold.

Retail

Turning a corner

BRISTOL AND TOKYO

Convenience stores could benefit from the pandemic—if they adapt

ORNER SHOPS are within walking dis-Ctance of many homes, open long hours and small enough not to require customers to linger too long inside. They no longer sell just basic necessities, such as milk, beer and sweets. And they offer other services, from charging e-bikes in South Korea to paying for online shopping in Mexico. On paper, this makes them perfectly suited to the pandemic. And in practice?

Going into covid-19, convenience stores were a mixed bag. Some benefited as busier lifestyles, smaller households and ageing populations led more people to shop little, often and locally. They were the only brickand-mortar shops in South Korea whose sales grew in 2019. Oxxo, a Mexican chain with some 20,000 outlets across Latin America, reported sales of \$8.7bn in 2019, up by 10% on the year before. Minimarts, which mostly operate as franchises, have been opening in China, India and Thailand.

Elsewhere they have struggled. In Japan, home to the world's three biggest chains, they have been in outright decline. The share price of Seven & i Holdings, the giant which owns 7-Eleven and accounts for a third of the industry's \$360bn in global revenues, has dropped by around 30% over the past two years, as investors cooled

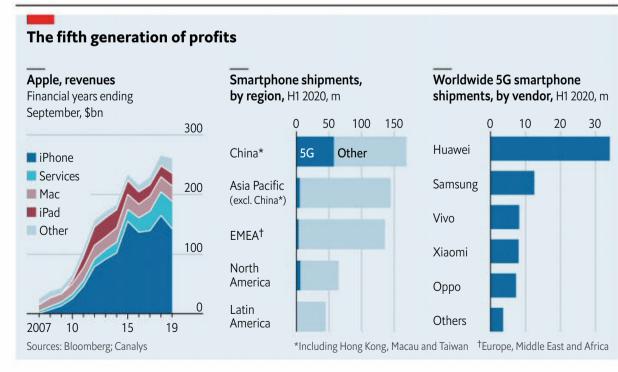


on its saturated domestic market. Its two Japanese rivals, FamilyMart and Lawson, have been laggards, too (see chart). In many countries supermarkets have been muscling in on their traditional high-street turf. In September Asda, a British supermarket, launched Asda on the Move, joining Tesco Express and Sainsbury's Local.

Despite the potential pandemic boost, performance this year has been similarly patchy. The average value per conveniencestore transaction in China increased by 120% at the height of the pandemic, and stayed high. In Britain the Co-operative Group declared that sales rose by 8% in the first half, year on year, to £5.8bn (\$7.6bn), thanks to its Co-op and Nisa minimarts. At the same time Seven & i reported a 12% drop in operating profits in the three months to August. FamilyMart lost money in the third quarter. oxxo's parent company, FEMSA, is also in the red this year.

Although some pandemic shopping habits favour convenience stores, others do not. Rivals are offering the same goods for less and brought to your doorstep, often in an hour or two. Deliveroo, a British fooddelivery app (part-owned by Amazon), ferries booze from supermarkets. In August DoorDash, an American one that teamed up with 7-Eleven in the pandemic's early days, launched its own virtual DashMart.

To fend off rivals, stores must evolve with shoppers' changing ideas of convenience, says Amanda Bourlier of Euromonitor International, a research firm. One American chain, Wawa, has opened drivethrough stores. Another, Casey's, has reported a surge in digital sales. Stores in South Korea and Japan, which face labour shortages, are toying with automated payments. In America 7-Eleven now delivers online orders to homes, as well as public places like parks. But its parent has also bought Speedway, a chain of American petrol stations, for \$21bn. That adds 3,900 outlets to the 9,000-odd 7-Elevens in America (and 70,000 or so globally). It is a big bet that petrol cars aren't soon disappearing and nor are convenience stores.



The iPhone gets up to snuff

Having more or less invented the smartphone in 2007, Apple has lately lagged behind other gadget-makers. On October 13th it caught up, unveiling its first 5G-enabled iPhones. Expect sales to pick up as users who have put off purchases finally upgrade. Whether they can find a zippy 5G network is another matter. Opensignal, a research firm, finds that most 5G handsets are connected to one less than a quarter of the time.

Schumpeter | Bad news

Big tech cannot—and should not—rescue the newspaper industry



In the Early 17th century the best place to gather news in London was the old cathedral of St Paul's, a place that buzzed with gossip on politics and was described—unusually for a house of worship—as "the ear's brothel". Some of the informants were entrepreneurs; they had recently started writing "letters of news" which they sold to subscribers at a hefty price. Some 400 years later, the original newspaper business model is finally making a comeback.

The reason it has taken so long to resurface is that, for almost two centuries, newspapers have been on a journey into the mass market which gave them scale, prestige and profit but which has now reached its end. They mostly abandoned dependence on subscriptions and instead sold below what they cost to produce as a way to attract legions of readers to sell to advertisers. The aphorism today applied to users of technology platforms—"If you are not paying, you are the product"—rang almost as true of newspaper readers in the heyday of print advertising.

No longer. Since the internet took off, the print media's advertising-supported business model has floundered. In the past 20 years newspapers' ad revenues in America have fallen by about 80% (to Depression-era levels), while circulation has roughly fallen by half. Though online traffic has surged, revenue from digital advertising has failed to offset the profit draining out of print. Platforms such as Google and Facebook have become the new moguls of the media landscape. In Britain, for instance, Google accounts for more than 90% of search-advertising revenues and Facebook for half the value of all display ads, says the Competition and Markets Authority (CMA), a regulator. In the past two years they have between them disgorged 40% of online traffic going to national papers. The CMA warned in July that ad-fuelled online platforms could hasten the decline of reliable news media.

This power shift has led newspapers in many countries to plead with politicians that they need help in the face of big tech. Partly because they have, by their very nature, a loud voice, they have generated sympathy. How much they deserve it is another matter.

The world is strewn with businesses, from books and music to travel and taxis, that have been torn apart by the digital revolution without anyone rushing to the rescue. Why are newspapers different? One argument is that a thriving press supports grass-roots

journalism which, though often loss-making, supports democracy. That is reasonable. Yet it is muddled up with other motivations, such as the desire to throttle the tech giants. The result is an array of government interventions in recent months aimed at putting the squeeze on Google and Facebook. In Australia and France trust-busters are striving to force the duo to pay for news they link to on their platforms. In America a congressional subcommittee this month recommended a "safe harbour" for newspapers to negotiate collectively with online platforms.

Mindful of the hue and cry, Google is offering a handout. This month it pledged \$1bn over three years to newspapers to curate news content for its site. Some publishers saw it as a precedent—and a tacit admission that Google should pay for news. Even News Corp, a media behemoth controlled by Rupert Murdoch, which has led the crusade against the tech giants, welcomed the move. Last year Facebook agreed to pay News Corp a licensing fee for displaying some articles in its news tab.

If anything, the gratitude for big tech's largesse shows how desperate newspapers are for payment of any kind. Yet set against revenues of \$162bn last year at Google's parent, Alphabet, \$1bn is a pittance. More to the point, it will not change the underlying economics of the global newspaper industry, which had about \$140bn of revenues last year. That is because the ad-funded business model was living on fumes even before the internet ate the world this century. Data from Benedict Evans, who writes a technology newsletter, show that newspapers in America have been losing share of ad dollars to TV since the 1950s—long before the web. Circulation has also fallen relative to population, suggesting that profits were bolstered by economic and demographic growth, not because the industry was producing a more popular product.

Claims that the tech giants are plundering newspapers for profit sound far-fetched, too. The real failure is that papers have lost control of distribution to Google and Facebook, making it harder to monetise the traffic. This is a mistake some content industries, such as video-streaming and music, have avoided. Moreover, some of the advertising dollars made by big tech came from bringing new firms, particularly microbusinesses, into the market, rather than poaching online advertisers from newspapers.

The (slightly) better news

So ignore the moaning of old-media moguls in distress and look instead at how some newspapers have already adapted to the digital onslaught. Revenues at the *New York Times*, for instance, are still far short of their ad-funded halcyon days. Yet the number of subscriptions exceeded 6.5m this year, a number that should give the paper enough clout to bypass the tech giants. Tabloids find it harder to turn readers into subscribers, especially with so much clickbait around. But some digital publications with a newsworthy focus such as Axios, which produces sponsored newsletters, are thriving. Axios even plans to enter local markets, where newspapers are in particular trouble.

The question of who pays for public-interest journalism remains unanswered. But few think it ought to be Google and Facebook. That would "undermine the principles of an independent press", says Alice Pickthall of Enders Analysis, a consultancy. Curbing the power of big tech is a matter for the world's trustbusters, which must not be conflated with bailing out press barons. The survival of newspapers should depend on business, not regulation. Like the gossip merchants of St Paul's, they need to produce a product that readers are happy to pay a fair price for.



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China's economy

The real deal

SHANGHAI

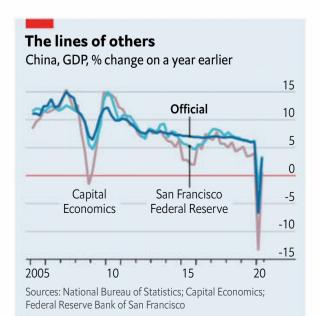
China's reported growth has long been far too smooth. Can figures showing a strong rebound be trusted?

No sophisticated analysis is needed to show that China is in better economic shape than most other countries these days. Just look at its bustling shopping malls, its jammed roads in rush hour and its mobbed tourist sites during holidays. But if the crowd scenes suffice to affirm that China is doing well, a little more work is needed to address the question: exactly how well? As is often the case with Chinese data, the answer is controversial.

The national statistics bureau will report third-quarter GDP on October 19th. Analysts expect growth of about 5% compared with a year earlier, a strong recovery from the depths of the coronavirus slowdown, and all the more stunning when much of the world is mired in recession. Yet some believe the official growth data have been too rosy this year, not least because China's pandemic lockdown in the first quarter was among the world's most restrictive.

Thankfully, the mysteries are not unfathomable. Research published in recent weeks sheds some light on what is really going on. Doubts about China's data are not new: it is probably fair to say that few seri-

ous economists trust its exact growth figures. Instead, there are two broad camps. One thinks that official data are overly smooth, but that the general picture is not all that misleading, because the government sometimes exaggerates GDP and at other times lowballs it. The second camp sees one-sided manipulation, with China's boffins consistently inflating the size of



the economy. The new research comes from both camps.

Start with the more sceptical of the two, best demonstrated in a note in September by Capital Economics, a consultancy. Julian Evans-Pritchard and Mark Williams, its analysts, argued that Chinese data have looked particularly fishy since 2012. Before that, growth regularly exceeded targets by a wide margin. Since then, reported GDP has been smack in line with targets set early in the year. And statisticians have stopped making big revisions to their initial estimates. It all seems a little too perfect.

Other data look more credible. Whereas real growth (ie, adjusted for inflation) has been improbably smooth, nominal growth has been volatile. Moreover, certain elements of the real-growth calculations appear to have been lifted upwards. For years the construction component of GDP moved in tandem with cement production. But from 2014 until 2018 a big gap opened up as construction raced ahead. In the first quarter of this year, when China was in partial lockdown, the transportation component of GDP was resilient—despite a collapse in freight and passenger traffic.

So Capital Economics has developed a "China activity proxy" to gauge growth. There is a long tradition of analysts using alternative sources to measure the Chinese economy. No less an authority than Li Keqiang, now prime minister, famously did so when he ran a north-eastern province. In their latest proxy Messrs Evans-Pritchard and Williams include eight indicators,

The Economist October 17th 2020

• from property sales to seaport cargo. The results are stark. Whereas official GDP grew by 48% in cumulative terms from 2014 to 2019, they put the true expansion at 33%.

China's boffins can to turn to an unlikely corner for a partial defence: America's Federal Reserve. John Fernald, Eric Hsu and Mark Spiegel, economists at the Fed's San Francisco arm, have also constructed a proxy for Chinese growth, laid out in a forthcoming paper, using indicators such as consumer expectations and fixed-asset investment. They, too, conclude that official growth has been implausibly smooth since 2013. But they find that true growth was faster about half the time and slower the other half (see chart on previous page).

The crucial test for these proxies is whether they offer insights about China's trajectory that are missing in the official GDP data. Both pass the test. The ups and downs of their measures better explain China's periodic shifts in fiscal and monetary policies than the uncannily steady path of official real GDP does. The Fed economists subject their proxy to another test, constructing it to be in line with Chinese imports, as measured by the reported exports of trading partners—in other words, a

data source entirely free from potential Chinese fiddling. In countries with reliable statistics, import growth typically moves closely with that of GDP. That is the case for their proxy—but not for official GDP.

Does this mean that Chinese data are, put bluntly, garbage? No. The Fed economists find that Chinese statistics, with the notable exception of real GDP, have become more reliable over time. The analysts with Capital Economics conclude that the main problem occurs in the transformation of nominal figures into real ones; statisticians appear to use excessively low inflation rates when calculating real growth so that the government can hit its targets. Nominal measurements are more trustworthy, and that matters when trying to assess, say, China's debt burden or the size of its economy relative to America's.

The proxies, alas, offer slightly different narratives about China's economy this year. Capital believes that the slowdown in the first quarter was much sharper than reported, whereas the Fed's calculations suggest that it was milder. Both, however, agree on the most salient point: the rebound since then has been big. The crowded streets and buzzing shops do not lie.

provisions for bad loans. But those in the third quarter were skinnier, at just \$6.5bn, not far off those in the third quarter of 2019 (see chart). The stock of allowances for bad loans adds up to \$106bn, about 2.8% of banks' loan books. Non-performing assets are creeping up, but are still far from the levels that would wipe out provisions. Jennifer Piepszak, the chief financial officer of JPMorgan, said that customers were "holding up well".

As the perils of higher provisions and

As the perils of higher provisions and the spoils from market volatility became less dramatic, investors' attention turned towards a more prosaic influence on earnings: banks' net interest incomes, or the difference between the interest collected on loans and other assets and the interest paid on deposits and other funding. These have been squeezed by interest-rate cuts by the Federal Reserve and low long-term bond yields. America's five large banks earned \$44bn in net interest income in the third quarter, 13% less than in the same period last year. All together, reduced interest income, calmer trading revenues and subsiding credit costs meant that profits were lower than they were a year ago, but less starkly so than in the second quarter. Profits fell by 11% across Bank of America, Citigroup and JPMorgan in the third quarter, compared with a drop of 56% in the second.

The question now is what banks will do with their earnings. Regulators, still scarred by the global financial crisis of 2007-09, want well-padded shock absorbers. On September 30th the Fed said that the 33 banks with more than \$100bn in assets would remain barred from buying back shares in the fourth quarter. Dividend payments are allowed, in contrast to Europe, but capped. As a result many banks are accruing capital. JPMorgan's commonequity capital ratio rose to 13.0%, from 12.3% in the third quarter last year. At Bank of America the ratio climbed to 11.9%, from 11.4%. That is about \$35bn above regulatory requirements, Paul Donofrio, its chief financial officer, told analysts.

With buy-backs off the table, bosses can either spend or save the cash. Some are splashing out. Bank of America said it had invested in adding branches in the third quarter, pandemic notwithstanding. Others are acquiring new businesses. On October 8th Morgan Stanley announced that it was buying Eaton Vance, an asset manager, for \$7bn. That came just days after it completed its purchase of E*Trade, an online trading platform.

The extra capital could also come in handy if the economy fares worse than even the dismal scenarios baked into loanloss provisions. Banks' bosses sounded cautiously optimistic that this would not be the case. But investors have their doubts. Banks' share prices are still a third below their levels at the start of the year.

Wall Street

The calm after the storm

NEW YORK

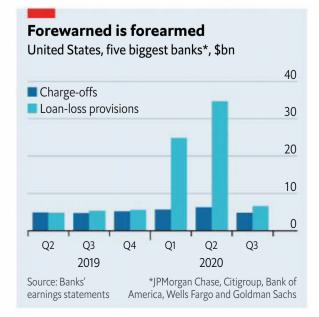
Banks say they are prepared for losses. Now what?

OST BANKERS have been working fran $extbf{N1}$ tically for the past six months. Traders handled record-high volumes in choppy markets. Their colleagues issued mountains of equity and debt as companies sought to withstand the economic downturn by amassing capital. Commercial bankers offered forbearance to struggling borrowers, and were forced to write down the value of loans as the likelihood of being repaid fell. As a result, investmentbanking revenues soared in the first half of the year, and most commercial banks suffered losses as they set aside provisions for bad loans. That made for slender profits at Bank of America, Citigroup and JPMorgan Chase, the big hybrid banks. Goldman Sachs and Morgan Stanley, which are more skewed towards investment banking, posted stellar profits. Wells Fargo, a mostly commercial lender, lost money.

The third-quarter earnings reported by five of these banks on October 13th and 14th tell a different story (the sixth, Morgan Stanley, was due to report on the 15th, as *The Economist* went to press). Investment bankers were still busy—trading revenues

were up by around 20% compared with the third quarter of 2019, and Goldman's profits doubled on the year. But the pace of activity was leisurely compared with the second quarter, when trading revenues were up by 60% over the same period in 2019.

Banks also think they are now largely prepared for losses. In the first half of the year the big five booked \$60bn-worth of



Government debt

Relief efforts

WASHINGTON, DC

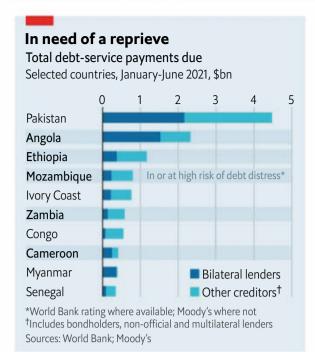
Why securing debt forgiveness for poor countries is so hard

OVERNMENTS IN MANY poor countries Thave faced a sickening choice this year, between spending to support their populations through the covid-19 crisis and paying creditors. On October 14th finance ministers of the G20 group of countries offered a temporary salve for 73 of the world's neediest countries, by saying they would extend their Debt Service Suspension Initiative (DSSI) to halt debt-service payments until July 2021. That should free up funds to fight the pandemic (see chart). But a lasting solution will take more dramatic action.

Public debt in poor countries rose from 29% of GDP in 2012 to 43% in 2019, according to the IMF, and is expected to jump to 49% this year. Collapsing tax revenues and swollen deficits make it harder to pay the bills and give foreign investors the jitters. According to data from the World Bank and the three largest credit-rating agencies, at least 33 of the DSSI-eligible countries were either close to or in debt distress—ie, struggling to meet their repayment obligations. The 73 countries eligible for the DSSI were due to spend over \$31bn servicing debt between May and December. About half of this was owed by the 33 countries under most fiscal strain, which include Ethiopia, Mozambique and Zambia.

If a wave of sovereign defaults has been avoided, it is because central banks have lowered interest rates and international financial institutions have doled out emergency funds. But neither these nor the DSSI, which only suspends debt-service payments, can fix longer-term solvency problems. Where these exist the best solution is probably a quick debt restructuring in order to avoid disorderly defaults. The underwhelming experience of the DSSI helps illustrate why speedy restructuring could be devilishly difficult to achieve. So far only around \$5bn of debt-service payments between May and December this year have been suspended.

One difficulty was that struggling borrowers were wary of signing up, in case they worsened their financial position. The G20 encouraged private creditors, which were owed another \$5bn between May and December, to participate, but found that poor countries worried that rating downgrades might ensue. Some fretted that approaching even official creditors would be taken badly by rating agencies. "We would certainly ask why they needed to avail themselves of that option," says



Tony Stringer of Fitch, a rating agency.

Then there was the matter of getting other lenders on board. The "Paris Club" of mostly rich-country governments was once important enough to call the shots in any restructuring. But by the end of 2019, the strained 33 owed around a quarter of their public debt to China, which is not in the club. And although China signed up to the DSSI on paper, and has been one of the biggest providers of relief, in practice it has wriggled out of offering the same terms as other countries. Quibbles have included whether the payments should be halted from the date at which the request for suspension was made or when its terms were finalised, and whether countries already in arrears should get relief. China also insisted that the China Development Bank, which makes development loans, was not an official lender, and should therefore be excluded from the scheme.

Definitions of private and official creditors are "manipulable, manipulated, and totally beside the point", says Anna Gelpern of Georgetown University. What matters is that creditors are treated equally, so that they can agree on restructuring quickly without suspecting that their own sacrifice may be lining other creditors' pockets. If the process is slowed down by Chinese lending agencies squeezing the most from their debtors, then the indebted country could end up with too little relief, and default later anyway.

The extension to the DSSI might suggest that lenders are trying to put off difficult questions around restructuring. Encouragingly, though, the G20 also said that it had agreed in principle on a "common framework" for debt restructuring, which could ensure that G20 creditors and the private sector are treated alike. The details are yet to be hammered out before a summit in November. But if it prods the Chinese authorities to co-ordinate across their various lending agencies, it could lead to some real relief.

Personal finance

The saver's dilemma

In a world of low interest rates, savers have few good options

'N THE 1980S comedy, "Trading Places", Ja-In the 1980's comedy, Indiana Indiana Market State of the 1980's Comedy, Indiana Market State of the 1980's Com been saving for her future; she has \$42,000 "in T-bills, earning interest". If she followed the same strategy today, she would be disappointed with the return. The oneyear Treasury bill yields 0.13%, so her annual interest income would be just \$55. If she reinvested the income, it would take more than 530 years for her money to double.

Savers around the world face the same problem. Bank accounts, money-market mutual funds and other short-term instruments used to offer a decent return. Not any more (see chart on next page). Rates are lower in nominal terms than they were 30 years ago because of a long-term decline in inflation, but they are also lower in real terms. The pandemic has made the dilemma acute. This year American, British and German nominal ten-year bond yields have all touched their lowest levels in history.

Savers are likely to respond to this situation in one of three ways. They can save less, and spend more of their incomes. Another approach is to set aside more money, to make up for lower returns. A third option would be to put more savings into risky assets, such as equities, which should deliver a higher return over the long run.

So what will savers actually do? Unfor-▶

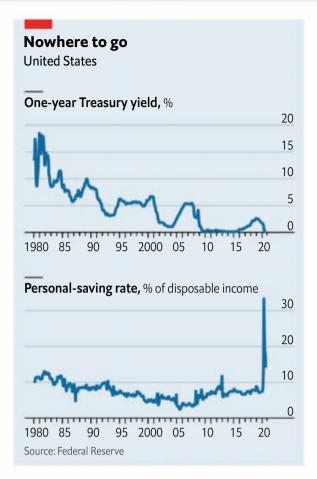


Short-changed

▶ tunately, history is not a particularly helpful guide. You might think that central banks had looked into the question, given their low policy rates are intended to boost consumption (and thus the economy) and reduce how much people stash under their mattresses. But the Federal Reserve and the Bank of England have done surprisingly little research into the subject.

More work has been done in Germany, where low interest rates are a hotter political issue. But this suggests that the impact of rates on savers' behaviour is murky, at best. The Bundesbank has found that the level of returns has become less important over time as a determinant of savers' behaviour. A study by Allianz, an insurer, also finds that other factors play a bigger role. The more money governments devote to social spending, for instance, the less people save, because they expect the state to help them in tough times. Demography also affects the saving rate: people tend to save more as they near retirement. But once retired, most live off their savings, so an increase in the number of retirees could cause the aggregate saving rate to fall. Research by Charles Yuji Horioka of Kobe University suggests that this has been the main cause of the long-term decline in Japan's household-saving rate.

To the extent one can tell, the historical relationship between rates and the level of savings seems to be weak. The Allianz study finds that, across Europe as a whole, for every one-percentage-point drop in interest rates, saving rates increased by 0.2 percentage points. Even then cause and effect is hard to disentangle. Central banks cut rates in response to bad economic news, and such news, rather than lower



rates, may be the main reason that savers become more cautious. America's saving rate fell from more than 10% before 1985 to less than 5% in the mid-2000s. That could have been related to the downward trend in rates. But shorter-term fluctuations seem to have been driven by recessions.

If history is an unreliable guide to what savers will do now, what signals can be gleaned from their behaviour so far this year? Anxiety about the pandemic helped push the saving rate in America to a record high earlier in the year; in August it was still relatively elevated, at 14.1%. The Investment Company Institute (ICI), a lobby

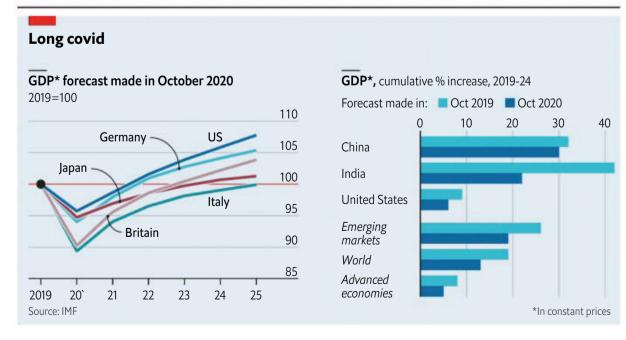
group for American fund managers, reports that \$115bn flowed into money-market (ie, short-term deposit) funds in March this year. "Fear came into discussions with clients," says Andy Sieg, president of Merrill Lynch Wealth Management. "Their concern was safety of principal." If you are worried about losing your job, then the return on your savings is a minor concern. The main thing is to have some.

Yet as the panic subsided some savers turned to another strategy, of piling on risk. The American stockmarket rallied, due in part to central-bank action. Many retail investors rushed in, buying shares through platforms such as Robinhood. With returns on bonds and cash so low, stocks seemed attractive, particularly as some offer a dividend yield that exceeds the return savers get in the bank. For investors who turned to shares in March, this wealth effect easily compensated them for the lower returns on other savings. This greater risk-taking is part of a longer-term trend. Mr Sieg says that, ten to 15 years ago, rich American retirees may have parked a lot of their savings in municipal bonds. Now they have a more diverse portfolio including equities and corporate debt.

The approach of taking more risk to compensate for lower interest rates has not always paid off, though. America's frothy stockmarket has been an outlier. Savers elsewhere have been less well compensated for risk. Britain's FTSE 100 index is below its level in 1999. In Germany a boom in the 1990s did cause equities to rise from 20% to 30% of household assets. But when the bubble burst, retail investors' enthusiasm waned. By 2015 shares were 19% of household assets. Japan's stockmarket is still below its high in 1989. Around half of total household financial assets is still in cash and bank deposits, says Sayuri Shirai of Keio University.

Moreover, not all savers are the same. Even in America, stockmarket gains have mainly accrued to the rich. The wealthiest 1% owns 56% of the stockmarket, up from 46% in 1990; the top 10% own 88% of the market. One way of thinking about this is that most people set aside cash for emergencies. Poorer people may be unable to save any more than that; rich ones can afford to venture into equities.

Even if they don't punt on stocks, ordinary workers in rich countries still have exposure to riskier assets through their pension schemes. But these tend to be quite small. The median balance in an American 401(k) plan for those aged 55 to 64 was only \$61,738 in 2019. A pension of 4-5% of that pot amounts to just \$2,500-3,100 a year. In Britain, where auto-enrolment has brought many low-income employees into the pension system, the median defined-contribution pot in 2019 was just £9,600 (\$12,200). And the solvency of final-salary



From acute to chronic

The IMF's latest forecasts, released on October 13th, spell out just how long the economic harm from covid-19 will last. America's GDP will return to its 2019 level only in 2022; Italy's, in 2025. The fund reckons that in many places output will stay well below its pre-pandemic trend, as labour and capital are only slowly reallocated from shrinking industries towards thriving ones. Last October the fund expected India's economy to grow by more than 40% by 2024; now it expects half that.

pension schemes has deteriorated as a result of the shifts in markets. When they calculate the cost of meeting their pension promises, funds have to discount the cost of their liabilities using bond yields; as yields have fallen sharply, these costs have risen. The average public-sector pension plan in America was 72.2% funded in 2019, down from 78.4% in 2009, according to the Centre for Retirement Research (CRR), despite the long bull market in shares.

The danger is that individual savers faced with bewildering movements in markets and rickety pension schemes may choose to keep their savings in deposits. Many may lack access to financial advice, and are unaware of the scope for higher returns or indeed of the scale of savings they need to set aside to prepare for their old age. A worrying signal can be gleaned from Britain, where rules were changed in 2015 to allow people to withdraw money from their pension pots without using the proceeds to buy an annuity (which offers a guaranteed income). Annuity returns on bond yields were stingy, making them an unpopular choice.

With their savings stuck in cash elderly

people around the world risk running out of money before they die. This is already happening in Japan. "The decline in interest rates to virtually zero has sharply reduced the interest income that the retired were counting on, requiring them to draw down their savings more than they had been planning to," says Mr Horioka. Governments have long urged people to make provision for retirement, but low rates have made that harder to achieve. With society yet to square the circle, and rates going nowhere anytime soon, savers' lives are set to get even more difficult. ■

Buttonwood Persian version

The tale of Iran's stockmarket bubble is familiar—yet also strange

ROUND FIVE years ago emerging-A market investors were greatly excited by the prospects for Iran's stockmarket. The lifting of sanctions in exchange for limits on its nuclear programme was in sight. Exports of oil, Iran's main source of foreign currency, would increase, boosting the economy. And there was the hope that Iran might soon be included in equity indices tracked by global investors. A surge of buying by foreigners would surely follow.

Things turned out rather differently. Sanctions were lifted in 2016, only to be reimposed by America in 2018. Oil exports have dwindled. Iran did have a stockmarket boom, but it came much later than anyone had expected and foreigners played almost no part in it. And it was more bubble than boom. In a few short months this year, share prices rocketed (see chart).

The bubble has since popped. Share prices have fallen by around a quarter since early August and by a lot more in hard-currency terms. One rationale for the frantic stock-buying was Iranians' desire to hedge against the lost purchasing power of the rial; sanctions make holding dollars offshore rather tricky. It is tempting to conclude that bad things happen when savings have nowhere else to go but the stockmarket. But Iran's story is more complicated than that.

Start with the economy. The collapse of oil production that followed the reimposition of sanctions caused GDP to shrink by around 6% last year. A lack of oil revenue has hurt government finances and undermined the rial. But there is more to Iran's economy than oil, says Maciej Wojtal of Amtelon Capital, a Europe-based fund that invests in Iran. It has a domestic market of 83m, mostly young people, roughly the same as Turkey. A range of industries, from white goods and cars to personal care and processed food, serve that market. Sanctions have not entirely suffocated trade. Iran's neighbours—notably Iraq and Afghanistan-lack its industrial base, and so import a lot from it. Its neighbourhood includes Pakistan, Turkey and the UAE. A steadily weaker rial has over time boosted non-oil export industries, such as petrochemicals, metals, engineering services and even chocolate and pastries, says Ramin Rabii of Turquoise Partners, a financial-services group.

The stockmarket reflects this industrial diversity. There are hundreds of stocks in a variety of sectors. And because crude is a state-owned business, it better reflects the non-oil economy. The market had a good run last year thanks in large part to improving export earnings. People took notice. Here was an asset class that acted as a hedge against the rial's diminishing value. The scene was set for this year's melt-up in share prices.

The trigger was the coronavirus pandemic, which hit Iran particularly hard.

Gulf stream

Iran, Tehran stock exchange, overall index January 1st 2020=100





Industry stopped. Hard currency became even scarcer. Since January the rial has lost more than half its value against the dollar, according to Bonbast, which tracks the unofficial currency market. Iran's central bank flooded the banking system with liquidity to try and limit the economic damage. Inflation picked up to almost 35%. Money soon found its way into asset prices, including shares. Iran's government even raised a chunk of revenue through a big IPO in April. As in America, retail investors flooded in. The number of people active in the stockmarket went from 700,000 to 5m in a matter of months, says Mr Rabii.

There are shades of China in 2015 here: a fear of devaluation; a weak economy; and trapped capital feeding a stockmarket frenzy, cheered on by the government. That ended badly. But stocks were far from the only hedge in town in Iran. Property prices in Tehran have surged since American sanctions were reimposed, says Mr Rabii. Just about any hedge against a weaker rial has multiplied in value, from gold coins to second-hand cars. Others have noted a hint of bubble dynamics in hard currencies in Iran. The more they go up, the greater the temptation to keep hoarding them. Scarcity begets scarcity.

For Iran's government, a stockmarket boom was the least worst way to absorb excess liquidity, says Esfandyar Batmanghelidj, of Bourse & Bazaar, a Londonbased think-tank that focuses on Iran's economy. True, people who piled in at its peak are now nursing hefty losses. But a stockmarket bubble beats one in hard currencies, second-hand cars or property, all of which add to the cost of living. Optimists will point out that China survived its frenzy; the value of its stockmarkets has just hit a new high.

Free exchange | Winning bids

The Nobel prize for economics rewards advances in auction theory



In the long term, he wrote, "the real test of our success will be not merely how well we understand the general principles which govern economic interactions, but how well we can bring this knowledge to bear on practical questions of microeconomic engineering." Sweden's Royal Academy of Science seems to agree. On October 12th it gave this year's Nobel prize to Paul Milgrom and Robert Wilson, both of Stanford University, for their work on auction theory and design. Their work epitomises economics as engineering.

Auctions are an ancient mechanism for selling valuable commodities, from fine art to a fisherman's catch. A few, simple forms of auction have been dominant over time. In an English auction, ascending bids are made until a winner remains; in the Dutch variety, a high opening price is set and is reduced until a bidder is found. Yet as their use has expanded, auctions have become more complex, and economists have taken a keener interest. In the 1960s William Vickrey, who shared the Nobel in 1996, developed what became known as auction theory. He assessed bidders' optimal strategies and studied the revenue and efficiency properties of different auction formats. But Vickrey concentrated on a relatively narrow set of cases, in which each bidder's valuation of the good being sold is unrelated to those of the other bidders. In practice, however, what one person believes an auctioned item to be worth often depends on the valuations of other bidders or the seller. Each may have private information about its value, clues to which are revealed in the course of the auction.

Mr Wilson began analysing such cases in the 1960s. He first tackled scenarios where the item for sale has a "common value"—a value that is uncertain beforehand but, in the end, is the same for everyone. An example might be a plot of land with oil beneath it, where participants may have different estimations of its value, perhaps because each has varying estimates of the quantity of oil. In such cases, the winner often discovers that the information others had about the common value led them to make lower bids. This may mean that the winner overestimated the worth of the item and paid too much, a phenomenon known as the winner's curse.

Mr Wilson's work in this vein laid the groundwork for the analysis of yet more complex scenarios, which take both bidders' unique private valuations and estimates of an item's common value into consideration. The value of an oilfield, for instance, might depend on both the quantity of oil in the ground and how cheaply each bidder can extract it. Mr Milgrom (whose doctoral thesis was supervised by Mr Wilson) derived a number of important lessons from his analyses. Auction structures that elicit more private information from bidders—such as English auctions, where every participant observes who bids what and who drops out—reduce the winner's curse problem compared with formats where very little private information is divulged. In some cases, it may be in the seller's interest to provide bidders with more information about the item under the hammer.

Much like Mr Roth, who helped design market mechanisms to match sick patients with kidney donors, Messrs Milgrom and Wilson put the knowledge gained from their theoretical work to practical use. Before the early 1990s, America's government used unwieldy methods to allocate portions of the radio spectrum to interested telecoms companies. Bidders either explained why they deserved a slice of spectrum more than others (and spent vast sums of money on lobbying), or were allocated slices through lotteries. Neither led to an efficient allocation. In 1993 Congress allowed the Federal Communications Commission to use auctions instead. Yet it was not clear how these might work. Bidders had wildly varying assessments of how slices of spectrum might be used, and the value of one piece of spectrum often depended critically on what other parts an owner also controlled. The laureates worked with another economist, Preston McAfee, now at Google, to invent a new format, known as the "simultaneous multipleround auction" (SMRA). Participants may bid on all items in a number of rounds, after each of which some information about bids and prices is revealed to the bidders. When first used in 1994, SMRA raised \$617m for an American government that had previously earned almost nothing from its distributions of spectrum rights.

smra-style auctions are now used routinely in many countries and in contexts other than spectrum sales—in selling electricity, for instance. Questions of distribution have continued to motivate the prizewinners' research and led to the development of other specialised auction formats. Messrs Milgrom and Wilson became the embodiment of the economist as engineer, using theory to devise a solution to a practical problem. It is an approach Sweden's Royal Academy of Science seems to admire. This year's award is the third since 2007 to honour "mechanism design", or the use of economic principles to design markets to solve real-world problems.

The economist's lot

The pursuit of economics as a form of engineering means that Messrs Milgrom and Wilson are more enmeshed in the real world than the typical academic. Both have consulted for regulators and firms. Mr Milgrom advised Time Warner and Comcast on their participation in radio-spectrum auctions in 2006; his efforts helped save his clients more than \$1bn. In 2009 he co-founded a firm, Auctionomics, that provides consulting services to those looking to operate and to bid in auctions (many of the sort designed by the prizewinners).

It is a different sort of work from that which many aspiring scholars imagine themselves to be pursuing. But the rewards the laureates have reaped in academia and beyond certainly advertise the power wielded by economic engineers.

Science & technology



Transgender athletes

Scrum down

A ban by World Rugby could have wider implications

T IS THE latest development in a bitter arlack Lgument. On October 9th World Rugby, the global governing body for rugby union, decided to bar trans women—people who are biologically male, but identify as women—from playing in the international women's game, on the grounds that it is unsafe. That ban will probably affect the top levels of the game in individual countries, too, since international players are drawn from the top clubs. Decisions on what to do in the game's lower levels have been left to the governing bodies in individual countries.

World Rugby's decision puts it at odds with much of the rest of the sporting world. The International Olympic Committee (IOC) has allowed trans women to compete in women's events since 2004. It loosened its rules in 2015, removing the requirement for genital surgery in favour of a declaration of good faith, and requiring, in the interest of fair competition, that trans women reduce the amount of testosterone in

their blood for at least a year before competing. The idea behind this was that suppressing testosterone would reduce or eliminate the athletic advantages conferred by male physiology.

How much is too much?

The 10c's influence means that similar rules have been adopted by many other sports. That, in turn, has led to some famous victories for trans women. In 2018 Rachel McKinnon, a Canadian trans woman, won a women's cycling championship in the 35-44 age bracket. (Ms McKinnon has since changed her name to Veronica Ivy.)

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Laurel Hubbard, a transgender weightlifter from New Zealand, has won a string of medals in women's contests. Rugby's bestknown transgender player is probably Kelly Morgan, who plays at club level in Wales.

It has also caused rows. Some female athletes have complained that it is unfair to make them compete against people who, despite their gender identities and medical procedures, remain biologically male. Others worry that the system is open to abuse by unscrupulous athletes desperate for success. Several prominent female athletes, including Martina Navratilova, a tennis player, and three British Olympians, have urged the 10c to think again. The arguments are particularly acute in America, where, in at least two cases, they have ended up in court.

World Rugby's decision is significant not just for the precedent it might set in a notoriously bad-tempered debate, but also because of how it was arrived at. After receiving worried letters from referees and female players, the sport organised a workshop earlier in the year to which it invited scientists, players, lawyers and ethicists. Presentations were posted online, in the interests of transparency. One crucial question was whether the testosteronesuppressing drugs advocated by the 10C were enough to counter the sporting advantages enjoyed by males.

Start with the size of that advantage. >>

Sports science confirms what common experience suggests: most males are bigger, stronger and faster than most females. They have bigger muscles, bigger hearts and bigger lungs, as well as a greater capacity to transport and use oxygen, stronger bones and tougher ligaments. The advantage that all this grants varies from sport to sport, from around 10% in running to more than 30% in weightlifting (see chart). But even at the lower end of the scale, it is enough of a difference that some talented male teenagers—despite having yet to finish puberty—can outperform the best female athletes in the world.

It is a similar story on the rugby field. Emma Hilton, a biologist at the University of Manchester, presented data to World Rugby on strength and speed in top-flight rugby players of both sexes. These showed only a small overlap in the speed with which male and female players could manage a ten-metre dash. Even the bulkiest male players were only a fraction slower than the nimblest female ones. The paciest males left both in the dust. Data on the bench press, a weightlifting exercise that emphasises the arms, shoulders and chest. revealed no overlap at all. The weakest, smallest males could shift 10% more weight than the biggest, strongest females. The strongest male players could lift over 60% more.

A great deal of this sex-based advantage arises from the actions of testosterone. Besides being the primary male sex hormone, it is the original anabolic steroid. Doping with it and its chemical cousins remains a popular way of getting an illicit advantage.

Citius, altius, fortius

Male athletic advantage
% of female level

0 25 50 75 100 125 150

Swimming
Track running
Track cycling
Football kick
Tennis serve
Cricket bowl
Weightlifting
Baseball pitch

Athletic world records

Event	Schoolboys	Elite women			
100 metres	10.20 (age 15)	10.49			
800 metres	1:51.23 (14)	1:53.28			
1500 metres	3:48.37 (14)	3:50.07			
Long jump	7.85 metres (15)	7.52 metres			
Discus*	77.68 metres (15)	76.80 metres			
Source: E Hilton and *Boys throw a heavier discus in					

Source: E. Hilton and *Boys throw a heavier discus in T. Lundberg competition than women do

Suppressing its production might, therefore, be expected to undo some of the advantages it bestows.

But what evidence there is suggests otherwise. A review written after the workshop by Dr Hilton and Tommy Lundberg, a physiologist at the Karolinska Institute in Stockholm, summarises existing research on the effects of testosterone suppression in trans women. Drs Hilton and Lundberg analysed 11 scientific papers. Three measured strength directly. The rest measured either muscle size or "lean body mass", defined as total body weight minus fat. Most reported changes of the order of a 5% loss after one to three years of suppression—far too little to remove the physical advantages possessed by males. Participants in the studies had testosterone levels below even the 10c's guideline levels, says Dr Hilton. That suggests no amount of testosterone suppression in adulthood can bring male athletes into line with female ones

On the other hand, Joanna Harper, a researcher at Loughborough University, points out that few of the studies summarised in Drs Hilton and Lundberg's paper measured sporting performance directly. Most came at the question from a medical point of view rather than a sporting one. All focused on strength, she says. None measured speed. And not all the evidence points in the same direction. In 2015 Ms Harper published a study into transgender runners, which suggested that testosterone suppression cut performance sharply.

Ross Tucker, a sports scientist who consults for World Rugby, points out in turn that Ms Harper's paper covered only eight runners, lumped together recent transitioners with those who had made the jump years earlier, and did not attempt to control for other variables, such as levels of training. He says that studies of men taking treatment for prostate cancer—which also suppresses testosterone—show that exercise can avoid loss of muscle altogether.

Health and safety

Faced with this imperfect, but suggestive, evidence, World Rugby has come down on the side of a ban. The sport's authorities weighed questions of fairness, inclusion and safety, says Dr Tucker, but it was safety that clinched the decision. He points out that, besides the evidence on strength, the size of a player's skeleton does not change after transition. The sport is already worried about concussion, a common rugby injury now known to cause more long-term damage than previously thought. "When we say safety is our number one priority, that's not just lip-service," he says.

World Rugby plans to review the science every three years, and to update its decision if necessary. Better data may yet emerge. Ms Harper is trying to recruit participants for a controlled, longitudinal trial

of trans women and sporting performance that would follow participants for several years. Dr Lundberg is keen on doing something similar. But Ms Harper cautions that it is likely to be a lengthy process. Finding volunteers is not easy, she says.

In the meantime, the governing bodies of other sports, particularly contact and combat sports, have been watching World Rugby's deliberations, says Dr Hilton. She thinks some may adopt similar guidelines of their own.

A more immediate question will be whether the rest of rugby does the same. Although World Rugby can rule on what happens in international matches, it can offer only guidance to national unions. Authorities in England have already said they will ignore this guidance and carry on allowing trans women to play the women's game within England. Rumblings suggest other unions in both the northern and southern hemispheres may follow suit. Excluding trans women from women's sport may conflict with laws—or proposed laws—in some countries, including America and Canada. If anything, the arguments are likely to get louder.

Submarine communications

Good vibrations

An aquatic device that extracts energy from ambient noise

Radio waves do not travel well underwater. That is why ships employ sonar rather than radar to plumb the briny depths. Messages broadcast through the ocean need to be sonic, too. For that purpose people often use acoustic modems, which can turn electronic signals into sound, and vice versa, like an old-fashioned acoustic coupler for a telephone.

Such instruments need power, though. And if they are sitting on the seabed, replacing their batteries is a serious chore. But Fadel Adib of the Massachusetts Institute of Technology (MIT) may have the answer. A device he has created and tested not only broadcasts and receives sound—it is powered by sound as well.

The core of Dr Adib's invention is called a broadband resonator. Typically, an object resonates strongly at only one or a few frequencies. This is why a singer can shiver a wineglass into fragments by holding a particular note—but only that note, and no other. A broadband resonator, by contrast, can receive or transmit sound across a range of frequencies.

Dr Adib's resonator consists of two nested hollow ceramic cylinders with a layer of >> ▶ polymer sandwiched between them. This structure has many interacting resonance modes. It is this that gives it its frequency range. The trick that turns it into a power source is that the ceramics are piezoelectric—meaning they can convert the vibrations of acoustic energy into electrical energy and vice versa. And, the ocean being a noisy place, there is a lot of acoustic energy around to convert. A device powered by a piezoelectric broadband resonator can thus constantly replenish its batteries without them having to be changed.

The resonator also, though, has a second use. It acts as an acoustic modem that receives instructions to and broadcasts data from the instrument it is part of. To prove this works, Dr Adib and his colleagues used a resonator-based acoustic modem to communicate 60 metres across the Charles river, which separates MIT's home town of Cambridge from Bostonand, indeed, flows directly past the front of the institute. The Charles is nowhere near as noisy as the open ocean, so they had to supply the sound to power the resonator artificially, using an underwater loudspeaker. Thus supplied, however, the device was able to transmit data at a rate of 20 kilobits a second. This is about the same as a conventional acoustic modem.

Dr Adib has also, by attaching the resonator to an appropriate sensor, used it to transmit information about water temperature, acidity and salinity. Indeed, he sees sensors as an important market for the new devices. One application would be monitoring conditions in fish farms. Another would be in tracking tags for sea creatures—though the current minimum size of a resonator means this would, for the moment, be practical only for large animals such as whales.

Ring my chimes

Resonators could be employed, as well, as nodes in underwater communications networks—extending the range over which a message can be sent. And they might be used in underwater navigation beacons that would provide precise location data to submersibles unable (because signals from satellites are radio waves) to employ the global positioning system or one of its equivalents for the purpose.

More specifically, America's navy, which is sponsoring the project, has plans to use resonator-powered devices as sentries. An array of such devices could calculate the range and direction of a source of sound such as a ship or submarine and send it back to base.

Dr Adib and his team are now working on extending the devices' capabilities. Their immediate goals include communicating between pairs of them over a distance of a kilometre, and building networks that have hundreds of nodes.

Gut microbes

Germ lines

How to arm Caesarean babies with the bacteria they need

CHILDBIRTH IS MESSY. When a baby comes out, a lot else comes out with it. Some of this material is inevitable, such as the amniotic fluid that presages birth and the placenta which follows it. But a fair bit of faeces is discharged, too.

From an evolutionary perspective, that seems surprising. Exposing newborns to such bacteria-laden excrement looks risky. Yet no mechanism has arisen to stop it happening. Evidence is mounting, moreover, that far from being harmful, this exposure is actually important for the development of the child's immune system. Interaction with the multitude of microscopic organisms a baby picks up when it is born helps that system to learn friend from foe. Without it, immune disorders like allergies and type-1 diabetes may follow. Components of the gut flora are also involved in digesting certain foodstuffs containing complex carbohydrates, and an unbalance in the relevant microbial mix is implicated in obesity.

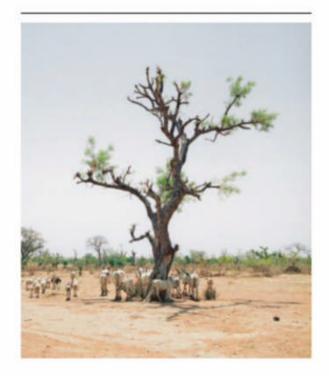
Babies born via Caesarean section (ie, surgical removal directly from the womb) do not get such a biological baptism, and their guts are left bacterially bereft as a consequence. That has left doctors wondering how best to give them what they are missing. In the past, researchers have skirted around the central point by swabbing the faces of newborns with bacteria collected from their mothers' vaginas. To no avail. Willem de Vos and Sture Andersson of the University of Helsinki, have therefore taken the bull by the horns. In a paper just published in Cell they demonstrate that feeding newborns a dose of their mothers' gut bacteria, in the form of faeces inoculated into breast milk, seems more fruitful.

Dr de Vos and Dr Andersson selected seven mothers-to-be who had elected, for medical reasons, to have their children delivered by Caesarean. They were screened to make sure they had no pathogenic bacteria in their faeces. And none had recently taken antibiotics.

Collectively, these seven women gave birth to five girls and two boys, all healthy. Each of the newborns was syringe-fed a dose of breast milk immediately after birth—a dose that had been inoculated with a few grams of faeces collected three weeks earlier from its mother. None of the babies showed any adverse reactions to this procedure. All then had their faeces analysed regularly during the following weeks. For comparison, the researchers

collected faecal samples from 47 other infants, 29 of which had been born normally and 18 by Caesarean section.

Dr de Vos and Dr Andersson found that, though the bacterial populations in the faeces of the seven treated infants initially resembled those found in the faeces of the untreated Caesarean-born infants, this quickly changed. Within three weeks their gut floras had come to resemble the bacterial mix seen in the vaginally born infants. Whether this shift to normality will reduce the chances of children treated in this way developing immune-related maladies later in life remains to be determined by longer and larger studies—which Dr de Vos and Dr Andersson are now planning.



Ecology

Not so deserted

Arid areas have more trees than previously thought

TREES LOOM large in both environmental science and the wider social and political movement of environmentalism. Not for nothing are greens sometimes called "tree-huggers". Generally, the arboreal news is gloomy, as large areas of forest are cleared and either burned or taken on a one-way trip to the saw mill. But a paper published in this week's *Nature*, by Martin Brandt of the University of Copenhagen and Compton Tucker of NASA, America's space agency, brings some welcome good news. A part of the world previously seen as lacking in trees has actually been shown to harbour almost 2bn of them.

The area in question embraces the western end of the Sahara desert and the semi-desert Sahel region to its south. Few trees have shown up here in past surveys be->>

▶ cause such surveys have used satellite photographs that have insufficient resolution to spot individual trees' canopies. Instead, they have looked for contiguous patches of green that represent woods and forests.

Dr Brandt and Dr Tucker thought this approach old-fashioned. Many high-resolution satellite photographs of Earth's surface now exist. Some—in the hands of armed forces and intelligence agencies—are secret. But others, owned by private Earth-observation firms, can be inspected at a price. As it happened, that price had already been paid by the American government for a set of appropriate images. This gave the researchers access to shots with a resolution as small as 50cm, rather than the 10-30 metres of those used in the past.

It is one thing, though, to have adequate resolving power. It is quite another to be able to use it. For that, Dr Brandt and Dr Tucker had to apply some artificial intelligence to the problem. This involved handlabelling 89,899 individual trees in a set of training images, in order for the search algorithm to be able to learn what a tree looks like at different times of day, when covered by cloud, when shrouded by dust and when viewed from different angles. And, of course, individual trees themselves look different from one another.

Once it had digested these images, the algorithm was let loose on high-resolution photographs covering 1.3m square kilometres of the Sahara and the Sahel. In contrast to the previous negative results, it reported that there are 1.8bn trees in the area.

In the global scheme of things, 1.8bn is still a tiny number. People debate how many trees Earth supports, but it is probably in the low trillions. Locally, however, even sparse tree cover is important. Trees provide shade for people and animals, and their roots hold the soil together. On top of this, being able to monitor these loners will help to monitor a region's ecological health. Crucially, the price of high-resolution images is expected to fall as more firms enter the market, and satellites get smaller and cheaper to launch. Dr Brandt and Dr Tucker therefore suggest using their approach to analyse other parts of the world currently listed as having few trees.

Something similar, but more sophisticated, might have still wider applications, like permitting different species to be recognised or allowing individual trees to be distinguished within forests. At the limit of the imagination lies the possibility of mapping every sizeable tree in the world. Ecologists would love this level of detail—provided that they did not have to hug them all as a result.

Award Oliver Morton, *The Economist*'s Briefings editor, has been named British Science Journalist of the Year by the Association of British Science Writers for pieces he has written on climate change and synthetic biology

Physics

Max machs

Just how fast can sound travel?

When IT comes to cosmic speed limits, light gets all the attention. Its velocity in a vacuum, a tad below 300m metres per second, is an absolute upper bound on how fast anything in the universe can travel. This value, called "c" by physicists, is somehow baked into the fabric of reality as what is known as a fundamental constant.

The speed of sound, by contrast, has no obvious upper limit of its own. Find the right material, it has always been assumed, and you could make sound travel arbitrarily fast—so long as you did not break the speed of light.

Kostya Trachenko of Queen Mary University of London, however, disputes this—at least when the sound in question is travelling through a solid or a liquid. He proposes that in these circumstances sound, too, has a maximum possible velocity. Intriguingly, he also proposes that this is likewise baked into reality's fabric by being composed solely of fundamental constants. In a paper just published in *Science Advances*, he lays out the reasons why.

Sound travels by making things vibrate. In solids and liquids—known collectively to physicists as the condensed phases of matter—molecules are bound to one another tightly. When one moves, its neighbours follow suit, and a wave of sound is thus transmitted. Allowing for differences in properties such as density and interatomic bond strength, Dr Trachenko and his colleagues calculated that the speed of sound in condensed matter obeys a simple trend. The lighter the particle doing the vibrating, the faster it transmits sound.

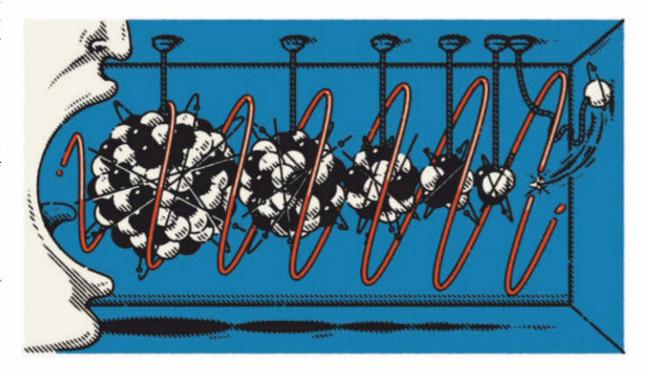
Sound's highest speed in such matter, they therefore predict, will be through a solid made of the lightest atoms: hydrogen.

Unfortunately hydrogen, which generally exists as a gas, is notoriously difficult to squeeze into a solid form, so measuring the speed of sound within its solid phase is tricky. But Dr Trachenko's analysis predicts that if and when this is done, the result will be about 36,000 metres per second. That testable prediction of his theory is twice the current measured record for condensed-matter sound waves, which is held by diamond—ie, crystallised carbon.

Part of what makes Dr Trachenko's work so surprising is the way he arrived at this figure. His formula depends only on four fundamental constants of nature. One is *c*. The others are the mass of an electron, the mass of a proton and something called the fine-structure constant. This last is a parameter from quantum theory, the branch of physics which describes the universe on its smallest scales.

Dr Trachenko's insights do not apply to uncondensed matter—namely gases and the state of matter called plasma, in which electrons break free from their parent atoms. In gases, the speed of sound increases with temperature, so the newly described speed limit might be exceeded were a gas hot enough. It would, though, need to be at well over 1m degrees for this to happen, and at that temperature it would have turned to plasma. The acoustic physics of plasma are not well understood, so what the speed of sound would be then is anyone's guess.

The other place to look for sound travelling at supersonic speeds, as it were, would be a form of matter where the word "condensed" barely begins to describe what is happening. Neutron stars, composed, as their name suggests, almost entirely of those particular subatomic particles, are the densest objects known of outside a black hole. That density might overcome Dr Trachenko's new limit. But finding out would be the stuff of Nobel prizes.



Books & arts



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American history

The road to Camelot

A masterful biography of a fabled president is a reminder of imperilled ideals

JFK: Coming of Age in the American Century, 1917-1956. By Fredrik Logevall. Random House; 816 pages; \$40. Viking; £30

John fitzgerald kennedy was just 43 when he became president—a whipper-snapper compared with Donald Trump, who was 70 when he was first elected, or with Joe Biden, who is 77. His administration exuded an air of youthful energy and glamour, but also a sense of high public purpose. JFK believed that lucky people like him had a duty to serve the public and lucky countries like the United States had a duty to serve the world.

Fredrik Logevall's blockbuster of a book follows JFK's life from his birth in 1917 to 1956, when he decided once and for all to run for the presidency (a second volume will tell the rest of the story). It is as good as anything that has been published about its subject, based on years toiling in the archives but written with a delightfully light touch. At times it reads more like a novel than a biography, so vivid is the prose and so extraordinary the material. It is also per-

fectly timed, with America in the doldrums, its politics polarised, its global reputation shot to pieces and its political class, particularly on the Republican side, discredited. "JFK" reminds readers of what America once was—and could be again.

Perhaps the greatest difficulty in writing a biography of Jack (as he was always known by friends, family and journalists) is that he is surrounded by legends. The Kennedys and their courtiers bear primary responsibility for this: Jack's father, Joe, managed his image as a man of destiny from an early age and later his professional acolytes, particularly Arthur Schlesinger junior, turned instant history into hagiography. Nature lent a hand: Jack and Jackie Bouvier, whom he married in 1953, were a ridiculously good-looking couple and the Kennedy clan were a picturesque bunch.

Myths inevitably provoked countermyths. Joe Kennedy, the founder of the family's fortune and America's ambassador to Britain in the late 1930s, is often presented as a right-wing monster who had his mentally ill daughter, Rosemary, lobotomised when she showed an interest in

sex. Jack himself is often portrayed as a spoilt rich kid who went into politics only at his father's bidding and treated women like trash.

Mr Logevall, a professor at Harvard University, deals with the legends deftly, defusing them as he goes along but never allowing them to dominate his narrative. He doesn't sugar-coat "the Ambassador", as the family patriarch was called: he was an isolationist reactionary who tried to keep America out of the second world war, had a soft spot for Joseph McCarthy and behaved appallingly to women. But he had his good points: "say what one will about Joseph P. Kennedy", the author writes, "it's not every multi-millionaire father who takes such broad interest in his children, who believes in them so fervently and who, together with his wife, instils in them, from a young age, a firm commitment to public service.' His nuanced picture of the young JFK presents him as a fully rounded human being rather than a hero or villain—a figure cursed by a sense of entitlement (particularly when it came to women), yet blessed with a profound desire to understand the world and improve it.

Jack was far from a passive vehicle of his family's political ambitions. He struggled to free himself from his father's prejudices: his first book, "Why England Slept" (1940), was a critique of appeasement of Hitler, and he matured into a leading supporter of liberal internationalism. He also broke from the populist political style that his family had adopted, presenting himself as

▶ a shy, cerebral figure rather than a backslapping pol in the Irish-American mould that was his inheritance. "There was a basic dignity in Jack Kennedy," a friend said, "a pride in his bearing that appealed to every Irishman who was beginning to feel a little embarrassed by the sentimental, corny style of the typical Irish politician."

What did it matter to him?

He was more than just a rich kid with a silver spoon in his mouth. Mr Logevall doesn't hide the fact that his father's money and connections helped: the Ambassador played a vital part in getting "Why England Slept"—an expanded undergraduate thesis—into print. But Jack was also his own man. He displayed genuine bravery commanding a boat in the Pacific during the war (though it was his family name that ensured his exploits were celebrated in the pages of the New Yorker). He also endured more than his share of tragedies. Two of his siblings—his elder brother, Joe junior, and his beloved sister. Kathleen, known as Kick—died before he was 40. He was the victim of a mysterious illness, later diagnosed as Addison's disease, that put him in hospital for months and left him with almost permanent back pain.

In recounting Jack's childhood, Mr Logevall also tells a story of ethnic ambition and cultural assimilation. The Kennedys had every reason to hate America's WASP elite. Their ancestors fled from Britishruled Ireland during the famine and, on arriving in Boston, encountered a Brahmin class that hogged power and privilege. But the clan's response was not to luxuriate in resentment but to get ahead. First they beat the wasps at everything they held dear, from politics to money-making. JFK's grandfather, P.J. Kennedy, transformed himself from saloon-owner to state senator: the Ambassador made a fortune in the traditionally WASP world of Wall Street before consolidating it in Hollywood.

Then they joined them. Jack attended a WASPY boarding school, Choate, and the Brahmins' favourite university, Harvard, developing into a thorough Anglophile when his father became ambassador. That he admired Winston Churchill is hardly a surprise; but he also made a cult of Lord Melbourne, Queen Victoria's first prime minister, on account of his charm, nonchalance, poise and female conquests. His sister Kick married a British aristocrat. The Kennedys' set-up at Hyannis Port was very similar to the Bush family's compound up the coast at Kennebunkport, down to the sports-packed daily schedule and roughand-ready domestic arrangements. They were rightly called the first Irish Brahmins.

The most important thing they shared with the old WASP elite was a sense of public duty. At first this may have contained a soupçon of revenge: Joe undoubtedly liked

the fact that he, a child of the Irish diaspora, was representing the world's most powerful country at the Court of St James's. But for Jack that matured into something broader and deeper. One of his favourite political aphorisms was a line from Rousseau: "As soon as any man says of the affairs of state, 'What does it matter to me?', the state may be given up as lost."

His belief that America needed to take responsibility for policing the global system, first awakened by reading Churchill, was powerfully reinforced by his extensive travels, including visits to Hitler's Germany, and his wartime experiences. His second book, "Profiles in Courage" (1956), reflected on the role of leadership in a democracy, particularly how statesmen should respond if their constituents and parties were bent on doing something dan-

gerously foolish. The oft-quoted lines from his inaugural address, "Ask not what your country can do for you. Ask what you can do for your country", may seem a bit overwrought today, but they expressed the essence of his political philosophy.

One of America's great tests in the coming years will be whether the elite can recover the sense of public duty that animated JFK. Mr Logevall shows that political careers could take a heavy toll even when politics was less polarised and the press tamer. Jackie in particular blanched at the "crazy pace of politics" and her husband's relentless work schedule. But recent American history is a testimony to what happens if the talented ignore politics for the quiet life and rich rewards of the private sector, and leave the public sphere to carnival barkers and clowns.

Egyptology

Pyramid schemes

Foreign enthusiasts uncovered, pillaged and helped save ancient Egypt's glories

A THE BEGINNING of the 19th century, Egypt's wondrous heritage was neglected. Ancient mud bricks were turned into fertiliser and temple stones repurposed in factories as the country's industries developed. Within 100 years, all that had changed. Children learned about the pharaohs; politicians visited their tombs. "Our nation today does not exist independently from the nation of our past," an Egyptian journalist wrote. "The nation is a single unbroken, unbreakable whole."

As Toby Wilkinson makes clear in his



In the Valley of the Kings

A World Beneath the Sands. By Toby Wilkinson. *W.W. Norton; 528 pages; \$30. Picador; £25*

fascinating new history, this transformation was riddled with ironies. For if Egyptians ultimately came to love their pharaonic past, they had often been coaxed to do so by outsiders. Finally abandoning occult myths and medieval stereotypes about Egypt, Western academics and adventurers had scrabbled for the truth. In 1822 Jean-François Champollion, a French scholar, deciphered hieroglyphics, at last letting the pharaohs speak in their own tongue. By the 1920s his successors were reading letters by Heqanakht, a farmer who lived 4,000 years ago.

An exquisite bust of Nefertiti showed that the ancient Egyptians could produce stunning sculpture. Vivid tomb paintings suggested a dynamic people. No wonder that the Westerners who came to Egypt often fell in love with it. "It is so difficult to tear myself away from this place," exclaimed John Gardner Wilkinson, a British Egyptologist, in 1832—and he was not alone. Born into a comfortable family, Amelia Edwards was captivated by Egyptian landscapes; she wrote two books about the country and exhorted other Egyptologists to visit. Champollion adopted local dress and proudly drank Nile water, despite the risk of plague.

At the same time, some of the foreigners saw in Egypt and its treasures an occasion >>

▶ for imperialist chauvinism and an opportunity for pillage. As a popular Cairo saying put it: "The riches of Egypt are for the foreigners therein." European explorers battled for access to the best sites, nursing nasty personal rivalries, ingratiating themselves with Egyptian rulers and smuggling booty away to museums at home (one enterprising Englishman extracted his treasure from a guarded storeroom by tunnel). Unable to carry the Great Pyramid of Giza back to Berlin, a group of Prussians did the next best thing, singing their royal hymn in the burial chamber and scrawling a hiero-

glyphic ode to their king. Archaeology was not a science, commented a later writer—it was a vendetta.

But "A World Beneath the Sands" is more than a saga of foreigners in the desert—it also follows Egypt on its rocky path to the 20th century. Mr Wilkinson vividly evokes the slave markets and Bedouin attacks of the early 1800s and, later, tourist hotels and the Suez Canal (opened in 1869). New nationalist ideas were sometimes advanced by the same outsiders who hoarded Egyptian artefacts. So desperate was a French Egyptologist to keep German and

British influence out of the Egyptian Museum, for example, that he hired locals for senior jobs instead, incidentally championing their advancement.

By the 1920s Egyptian officials were cancelling foreign excavation permits. Especially after the nationalist revolution three decades later, archaeology in the country was controlled by the locals. That was just and probably inevitable—yet for all their flaws, the foreigners achieved a lot. They liberated ancient Egypt from legend, proving it "every bit as innovative and sophisticated" as Greece and Rome.

Johnson Wine and bottles

The fruity lexicon of wine suggests the links between language and understanding

"AK" AND "fruit forward" are for wine amateurs. "Cedar" and "barnyard" are for real connoisseurs, and only a professional would have the confidence to deploy "gravel" or "tennis balls". One tasting note says a wine has hints of "mélisse, lemon-balm". If you are wondering what "mélisse" is, don't bother: it is actually just French for "lemon-balm".

The language of wine is easy to mock. It can be recondite, even downright obscure. Oenophiles make a convenient subject for ridicule: if their cellars require such a wide-ranging lexicon, they are probably rich enough to cope with it. But wine vocabulary has its uses. Among the vast array of tastes, perhaps even flowery labels help experts pinpoint odours and flavours that they are interested in and want to remember. If you have a name for something, it may be easier to keep it in your head.

Perhaps. You might have heard the stereotyping joke about women having hundreds of words for colour in their vocabularies because they love to shop, but men having just the eight that come in a child's crayon box. This is a caricatured and simplified version of Ludwig Wittgenstein's view that "the limits of my language mean the limits of my world." The underlying argument is that having a name for something lets you understand it. But researchers have found that the links between perception, cognition and language turn out to be more complicated than that.

The debate over the relationship between thought and language is one of the most heated in psychology and linguistics. In one corner is the "Sapir-Whorf hypothesis", named after two early-20th-century American linguists, who posited that the world is made up of continuous realities (colour is a classic

example) that are chopped into discrete categories by language. People perceive what their vocabulary prompts them to. An extreme version of this theory holds that it would be difficult, even impossible to distinguish colours—or wine odours or flavours—without names for them.

On the other side of the debate are those who say that although language is indeed linked with cognition, it derives from thought, rather than preceding it. You can certainly think about things that you have no labels for, they point out, or you would be unable to learn new words. Supposedly "untranslatable" words from other tongues—which seem to suggest that without the right language, comprehension is impossible—are not really inscrutable; they can usually be explained in longer expressions. One-word labels are not the sole way to grasp things.

Into this dispute comes a new study of wine experts and their mental labels. Ilja Croijmans, Asifa Majid and their colleagues gave a host of wine experts and amateurs a number of wines and winerelated flavours (such as vanilla) to sniff.





those who articulated their thoughts did

no better than those who had not.

Some who did not label the odours out loud may have done so in their heads. So the researchers conducted a second experiment. Some subjects were distracted while sniffing by a requirement to memorise a series of numbers, making it harder for them to verbalise what they smelled, even mentally. They did no better or worse than a second group who were given a visual distraction (memorising a spatial pattern), or a control group with no distractions.

The team conclude that olfactory memory in wine experts, at least, is not directly mediated by language. This is not to say such language is useless. Vinologists describe wines more consistently than amateurs do, meaning that—contrary to sceptical gibes about their pretentiousness—they are not just making up what they taste.

Ms Majid says that rather than ask whether language affects cognition—since it clearly seems to, at least some of the time—the real question is what functions it affects. Perception, discrimination and memory are not the same thing, and some might be swayed by language more than others. Mr Croijmans compares words to a spotlight, which may not give you the ability to perceive things you could not otherwise, but rather help separate them from the background. That is a rather more positive version of Wittgenstein's aphorism: language not as a limit, but as a light.

British fiction

Secrets and lies

Trio. By William Boyd. *Viking;* 320 pages; £18.99. Published in America by Knopf in January 2021; \$27.95

Over a career spanning almost four decades William Boyd has written many kinds of bestselling novels, from black comedies to literary thrillers. His finest books, such as "Any Human Heart" (2002), trace a protagonist's life against a backdrop of 20th-century upheavals. "I always think a life without complications isn't really a life," remarks a character in "Love is Blind" (2018), which swashbuckled across fin-de-siècle Europe. Those wrinkles and nuances render the people he sketches convincing and compelling.

"Trio", his 16th novel, is no cradle-to-grave epic. It unfolds over a single summer, shadowing (as the title suggests) not one character but three—a film producer, an actor and a writer. If it lacks the breadth of Mr Boyd's immersive life stories, there are ample complications to engage readers in the threesome's struggles.

It is 1968 and filming is under way in Brighton of a Swinging Sixties movie, "Emily Bracegirdle's Extremely Useful Ladder to the Moon". For Talbot Kydd, the producer, every day brings a new fiasco. His problems come to a head when he discovers that someone is stealing film stock and his business partner is defrauding him. Anny Viklund, an American starlet, is enjoying an illicit affair with the leading man until her ex-husband, now an escaped convict, shows up out of the blue. Elsewhere Elfrida Wing, the long-suffering wife of the film's director, tries to overcome ten years of writer's block, only to be thwarted and steadily broken by alcoholism and her philandering husband's latest betrayal.

In time, each is forced to delve deep into their "private self" and decide who they really are and what they really want. Talbot is living a lie and yearns to open up his "undeveloped heart" and obey his true desires. Anny becomes a fugitive who must weigh up her means of escape. And in the book's darkest sections, Elfrida moves from drowning her sorrows to thinking about drowning herself.

This is an absorbing novel about lives spiralling out of control and the drastic measures required to right them. Rotating between perspectives, the story is made up of a series of dramas that can be read as separate if intertwined tales or as components in a satisfying whole. In "Trio", in other words, three is never a crowd.



Art and punishment

Body and soul

MOSCOW

Russia is persecuting a feminist artist

YULIA TSVETKOVA, an artist and activist in the far east of Russia, wanted to dispel the taboos that surround women's bodies and sexuality. At 27, she had founded a community centre in her home city of Komsomolsk-on-Amur, where she hosted feminist and LGBT events. She produced plays for children that questioned gender stereotypes, ran a sex-education blog and celebrated same-sex relationships on social media (incurring a fine for disseminating gay "propaganda"). She also shared stylised drawings of female nudes in an online group named after the play "The Vagina Monologues".

Among her sketches was a series called "A Woman is Not a Doll". In one image, a woman sits with her legs apart, accompanied by the slogan, "Living women have body hair". In another (see picture), a shapely figure in bikini bottoms and a sun hat perches among the words, "Living women have fat—and that's normal!"

Supposedly on account of these and other pictures, police raided Ms Tsvet-kova's home last year and arrested her on charges of "distributing pornography". When her case comes to trial (no date has yet been set), she faces up to six years in prison. In the meantime, the ludicrous accusations have galvanised protests against the country's increasingly conservative authorities. Ms Tsvetkova's queer, feminist art has become an emblem of embattled

women's and LGBT rights; artists and campaigners have taken to Russia's streets, put on exhibitions and posted nude images of themselves in her support.

'These subjects have never been discussed by the whole country, among such a large number of people," Ms Tsvetkova remarks from her home town some 3,700 miles east of Moscow, where she was under house arrest for several months this year (she is still unable to travel). Russian schools offer no sex education themselves, and public discussion of gay rights has in effect been illegal since 2013, because of a law that bans the "promotion of non-traditional sexual relations" to minors. The case against Ms Tsvetkova was launched after a prominent anti-gay campaigner reported her; she says she has received death threats from far-right groups. "How good it is that so many people care about this idea of women's freedom," she reflects. Those behind the supportive rallies "are very brave".

Indeed they are: people speaking out on her behalf are being punished, too. Last month activists in Moscow organised a screening of "Vulva 3.0", a German documentary that explores the history of female anatomy; the National Guard shut down the event and demanded a copy of the film. Courts have fined single-person pickets, who have held banners bearing slogans such as "My vagina is not pornography" and "We are all Tsvetkova".

Artists have been persecuted before for challenging the regime's conservative stance. The jailing of members of the punk collective Pussy Riot in 2012 heralded a harder line on dissent; this summer Kirill Serebrennikov, a controversial director, received a suspended three-year sentence for fraud. Rappers, film-makers and performance artists have been targeted. But Ms Tsvetkova's plight has drawn an especially broad response. Galina Rymbu, who has written poetry in solidarity, says the protests are part of a pushback against regressive laws, in particular the decriminalisation of most domestic violence in 2017.

"If the state wants to kill us, it has the opposite effect. We will save ourselves and come together," insists Ms Rymbu, some of whose work is published in Britain this month as part of a translated anthology by the feminist collective F-Letter. Feminist ideas have spread in Russia even though the cause has sometimes seemed "hopeless", Ms Rymbu says, amid government efforts to portray the feminist and LGBT movements as insidious Western imports.

Ms Tsvetkova is under no illusions about her chances in a legal system in which more than 99% of trials result in convictions. "I'm researching the law and violations of rights in Russia," she says. But she is also "looking into the prison system and rehabilitation of prisoners. And I'm still doing some drawing." ■



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88 Economic & financial indicators

Economic data

	% chan		on year ag		% char		r prices year ago 2020†	Unen rate %	nployment	baland	nt-account ce P, 2020†	Budge		10-yr go	st rates ov't bonds	change on	Currence per \$	% change
11.7. 16.	latest		quarter*		latest				-	_	7, 2020	_	JP, 2020 ·	latest,%)	year ago, bp	OCT 14til	on year ago
United States	-9.0			-5.3	1.4		0.7		Sep	-1.8		-15.3		0.7	§§	-103		4.0
China	3.2			1.7		Sep	3.5		Q2§	1.8		-5.6		3.1	33	10.0	6.74	4.9
Japan	-9.9			-6.4		Aug	nil		Aug	2.5		-10.6		nil		-8.0	105	3.1
Britain		Q2		-9.5		Aug	0.8		Jul ^{††}	-1.7		-18.2		0.3		-39.0	0.77	2.6
Canada		Q2		-5.8		Aug	0.7		Sep	-2.1		-13.0		0.6		-94.0	1.31	0.8
Euro area	-14.7			-8.4		Sep	0.3		Aug	2.2		-9.2		-0.6		-11.0	0.85	7.1
Austria		Q2		-6.4		Aug	1.1		Aug	1.0		-7.4		-0.4		-21.0	0.85	7.1
Belgium	-14.4			-8.1	0.9	Sep	0.4		Aug	-1.6		-9.6		-0.3		-18.0	0.85	7.1
France		Q2		-10.2	0.1	Sep	0.7		Aug	-1.0		-11.3		-0.3		-12.0	0.85	7.1
Germany	-11.3	Q2		-5.8	-0.2	Sep	0.5		Aug	5.4		-7.2		-0.6		-11.0	0.85	7.1
Greece	-15.3	Q2		-8.5	-2.0	Sep	-1.0	16.8		-2.9		-7.5		0.8		-69.0	0.85	7.1
Italy	-18.0	Q2		-10.4	-0.5	Sep	nil		Aug	2.6		-11.6		0.7		-35.0	0.85	7.1
Netherlands	-9.4			-6.0	1.1	Sep	0.9		Mar	5.3		-5.4		-0.5		-21.0	0.85	7.1
Spain	-21.5	Q2	-54.3	-12.6	-0.4		-0.1	16.2		0.5		-12.3		0.1		-4.0	0.85	7.1
Czech Republic	-10.8	Q2	-30.4	-6.6	3.2	Sep	2.8		Aug [‡]	-1.3		-6.6		1.0		-28.0	23.2	1.0
Denmark	-7.6	Q2	-24.6	-4.0	0.6	Sep	0.4	4.9	Aug	9.1		-6.3		-0.5		-2.0	6.33	7.0
Norway	-4.7	Q2	-19.0	-3.5	1.6	Sep	1.2	5.2	Jul ^{‡‡}	1.8		-0.9		0.7		-51.0	9.19	-0.9
Poland	-8.0	Q2	-31.1	-4.1	3.2	Sep	3.1	6.1	Sep§	0.5		-9.3		1.3		-72.0	3.84	1.3
Russia	-8.0	Q2	na	-5.7	3.7	Sep	3.4	6.4	Aug§	1.8		-4.3		6.2		-59.0	77.5	-17.0
Sweden	-7.7	Q2	-29.3	-3.8	0.4	Sep	0.4	8.8	Aug§	4.7		-4.1		nil		15.0	8.82	11.3
Switzerland	-8.3	Q2	-26.1	-4.6	-0.8	Sep	-1.1	3.3	Sep	9.8		-4.9		-0.5		15.0	0.91	9.9
Turkey	-9.9	Q2	na	-3.9	11.7	Sep	11.7	13.4	Jul§	-4.1		-5.6		13.2		-194	7.90	-24.8
Australia	-6.3	Q2	-25.2	-4.5	-0.3	Q2	0.5	6.9	Sep	1.3		-7.6		0.8		-21.0	1.39	6.5
Hong Kong	-9.0	Q2	-0.5	-4.2	-0.5	Aug	0.9	6.1	Aug ^{‡‡}	4.4		-5.8		0.5		-89.0	7.75	1.2
India	-23.9	Q2	-69.4	-8.5		Sep	5.2		Sep	0.9		-7.9		5.9		-77.0	73.3	-2.9
Indonesia	-5.3	Q2	na	-2.2	1.4	Sep	1.9	5.0	Q1§	-1.1		-7.1		6.8		-41.0	14,710	-3.9
Malaysia	-17.1		na	-8.0	-1.4	Aug	-1.1		Aug§	0.5		-8.0		2.7		-72.0	4.15	1.0
Pakistan	0.5			-2.8	9.0	Sep	9.0		2018	-1.3		-8.0		9.8	†††	-153	164	-4.7
Philippines		Q2		-6.1	2.3	Sep	2.4	10.0		0.9		-7.9		2.9		-179	48.6	6.0
Singapore	-7.0			-6.0		Aug	-0.4	2.8		18.5		-13.6		0.9		-81.0	1.36	0.7
South Korea	-2.8			-1.5	1.0		0.5		Aug§	3.0		-5.8		1.5		2.0	1,147	3.3
Taiwan	-0.6			-0.2		Sep	-0.3		Aug	12.3		-1.5		0.3		-38.0	28.7	6.6
Thailand		Q2		-5.9	-0.7	Sep	-0.7		Aug§	3.1		-6.3		1.1		-24.0	31.2	-2.5
Argentina	-19.1	Q2		-11.0		Sep [‡]	41.7	13.1	Q2§	2.2		-10.0		na		-464	77.4	-25.0
Brazil	-11.4			-5.2		Sep	2.8		Jul§‡‡	-0.7		-15.7		2.1		-250	5.56	-25.7
Chile	-14.1			-5.6	3.1		2.6		Aug ^{§‡‡}	0.2		-10.0		2.6		-17.0	798	-10.8
Colombia			-47.6	-7.7		Sep	2.6		Aug§	-4.6		-8.8		5.0		-78.0	3,845	-10.8
Mexico			-52.7	-9.1		Sep	3.4		Mar	0.4		-4.5		5.7		-101	21.3	-9.4
Peru			-72.1	-13.0		Sep	1.8		Aug§	-0.8		-9.0		3.3		-72.0	3.59	-6.4
Egypt	-1.7			3.8		Sep	4.9		Q2§	-3.4		-9.4				nil	15.7	3.5
Israel			-29.0	-5.0	-0.8		-1.1		Aug	4.5		-10.2		na 0.7		-13.0	3.37	4.2
Saudi Arabia			9 na	-5.0 -5.2		Aug	3.4		Q2	-4.7		-10.2				-13.0 nil	3.75	nil
														na o 4				
South Africa	-17.1	Q2	-51.0	-8.0	3.0	Aug	3.3	23.3	QZs	-2.3		-16.0		9.4		120	16.5	-10.3

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. #3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

Markets			
		% c	change on:
In local currency	Index Oct 14th	one week	Dec 31st 2019
United States S&P 500	3,488.7	2.0	8.0
United States NAScomp	11,768.7	3.6	31.2
China Shanghai Comp	3,340.8	3.8	9.5
China Shenzhen Comp	2,290.4	6.6	32.9
Japan Nikkei 225	23,626.7	0.9	-0.1
Japan Topix	1,643.9	-0.2	-4.5
Britain FTSE 100	5,935.1	-0.2	-21.3
Canada S&P TSX	16,455.4	0.2	-3.6
Euro area EURO STOXX 50	3,273.3	1.2	-12.6
France CAC 40	4,941.7	1.2	-17.3
Germany DAX*	13,028.1	0.8	-1.7
Italy FTSE/MIB	19,607.7	0.9	-16.6
Netherlands AEX	572.0	3.1	-5.4
Spain IBEX 35	6,916.6	0.1	-27.6
Poland WIG	48,596.5	-3.2	-16.0
Russia RTS, \$ terms	1,160.3	1.4	-25.1
Switzerland SMI	10,292.7	1.0	-3.1
Turkey BIST	1,189.3	3.2	3.9
Australia All Ord.	6,387.4	2.4	-6.1
Hong Kong Hang Seng	24,667.1	1.7	-12.5
India BSE	40,794.7	2.3	-1.1
Indonesia IDX	5,176.1	3.4	-17.8
Malaysia KLSE	1,523.3	2.3	-4.1

		% (change on:
	index Oct 14th	one week	Dec 31st 2019
Pakistan KSE	40,144.3	0.7	-1.5
Singapore STI	2,555.6	0.7	-20.7
South Korea KOSPI	2,380.5	-0.3	8.3
Taiwan TWI	12,919.3	1.4	7.7
Thailand SET	1,264.0	nil	-20.0
Argentina MERV	47,295.3	5.7	13.5
Brazil BVSP	99,334.4	4.0	-14.1
Mexico IPC	38,025.7	1.6	-12.7
Egypt EGX 30	11,333.9	0.1	-18.8
Israel TA-125	1,413.8	2.0	-12.5
Saudi Arabia Tadawul	8,592.1	2.8	2.4
South Africa JSE AS	55,394.2	1.2	-3.0
World, dev'd MSCI	2,453.6	1.8	4.0
Emerging markets MSCI	1,135.6	2.5	1.9

US corporate bonds, spread over Treasuries	5	
		Dec 31st
Basis points	latest	2019
Investment grade	171	141
High-yield	547	449

Sources: Datastream from Refinitiv; Standard & Poor's Global Fixed Income Research. *Total return index.

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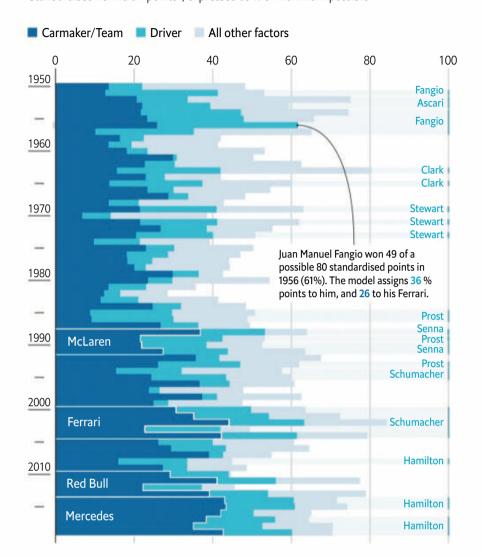
The Economist commodity-price index % change on								
2015=100	Oct 6th	Oct 13th*	month	year				
Dollar Index								
All Items	127.5	128.1	-1.7	15.7				
Food	103.9	104.7	3.7	9.9				
Industrials								
All	149.5	150.0	-4.9	19.8				
Non-food agriculturals	102.9	103.6	-8.5	10.7				
Metals	163.3	163.7	-4.2	21.7				
Sterling Index								
All items	150.0	150.6	-2.7	13.8				
Euro Index			-					
All items	119.9	121.0	-0.8	8.7				
Gold								
\$ per oz	1,913.0	1,891.6	-3.2	27.7				
Brent								
\$ per barrel	42.8	42.5	4.7	-28.3				

Sources: Bloomberg; CME Group; Cotlook; Datastream from Refinitiv; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit **Economist.com/indicators**

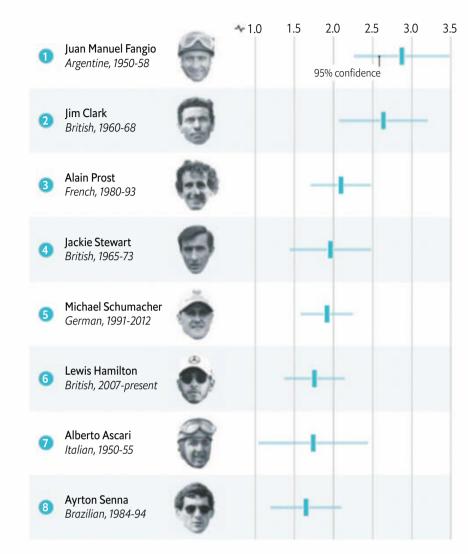
→ Cutting-edge carmaking has replaced daredevil driving as the main source of success in Formula 1

Relative importance of car quality to driver skill for champion driver Standardised Formula 1 points*, expressed as % of maximum possible



Formula 1's best drivers

Ranked by standardised points* per race added above an average driver



Sources: Ergast.com; F1-Facts.com; "Formula for success: multilevel modelling of Formula 1 driver and constructor performance, 1950-2014", by Andrew Bell et al., *Journal of Quantitative Analysis in Sports*, 2016; *The Economist* *Ten points for first place, six for second, four for third etc.

Man v machine

Engineers, not racers, are now the true drivers of success in motor sports

Talways Thought records were there to be broken," Michael Schumacher, a star Formula 1 (F1) driver, said in 2013. At the time, his record of 91 career F1 victories looked safe: the closest active racer had just 32. Yet on October 11th Lewis Hamilton of Britain equalled the mark. Mr Hamilton is also on pace to tie Mr Schumacher's record of seven F1 championships later this year.

Mr Hamilton's ascent has ignited debate over whether he is F1's best driver ever. Comparing athletes across eras is always hard—especially in motor sports, where a racer depends on his car. Moreover, F1 has regularly changed its scoring system and its number of races, drivers and teams.

However, statistical analysis can address many of these nuances. We have built a mathematical model, based on a study by Andrew Bell of the University of Sheffield, to measure the impact of all 745 drivers in

F1 history. It finds that Mr Hamilton's best years fall just short of those of the all-time greats—but so do Mr Schumacher's.

The model first converts orders of finish into points, using the 1991-2002 system of ten points for a win and six for second place. It adjusts these scores for structural effects, such as the number and past performances of other drivers in the race. Then, it splits credit between drivers and their vehicles. (Today, F1 has ten teams, each using two drivers and one type of car.)

Disentangling these factors is tricky. Mr Schumacher spent most of his peak at Ferrari, as Mr Hamilton has at Mercedes, leaving scant data on their work in other cars.

However, their teammates varied. And drivers who raced alongside Mr Hamilton or Mr Schumacher tended to fare far better in those stints than they did elsewhere. If Ferrari's and Mercedes' engineers boosted lesser racers this much, they probably aided their stars to a similar degree. Because most drivers switch teams a few times, this method can be applied throughout history.

Between the two racers with 91 wins, the model prefers Mr Schumacher. He won 1.9 more points per race than an average driver would have done in the same events and cars, edging out Mr Hamilton's mark of 1.8.

Limited to their five best consecutive years, the gap widens, to 2.7 points per race for Mr Schumacher and 2.0 for Mr Hamilton.

This difference stems mostly from the impact of their cars. Both stars raced in the finest vehicles of their day. But 20 years ago, cars from Williams and McLaren were nearly as strong as Ferrari's. In contrast, Mercedes now towers over its rivals, enabling Mr Hamilton and Valtteri Bottas, his teammate, to coast past lesser cars. Before joining Mercedes, Mr Bottas had never won a F1 race. He now has nine victories.

Yet on a per-race basis, the greats of yesteryear beat both modern stars. Three of the model's top four drivers stopped racing by 1973; the leader, the Argentine Juan Manuel Fangio, won five titles in the 1950s.

These pioneers had short careers. Fangio started just 51 races, to Mr Schumacher's 306. However, the model is impressed by them, because the impact of cars relative to drivers has grown over time. On average, it assigns drivers in the 1950s 58% of their teams' points; today, that share is 19%. Fangio, who was a mechanic by training and won titles using cars from four different firms, was known as "the master". The masters of modern F1 are engineers who sit behind laptops, not steering wheels. ■



The bird of freedom

Mohammad Reza Shajarian, Iran's favourite singer, died on October 8th, aged 80

THEN HE BECAME famous—when, as he sang the opening words of his best-loved song, Morgh-e Sahar, "Dawn Bird", the crowds would start clapping and leaping to their feet-Mohammad Reza Shajarian credited his musical achievements to his father. That seemed unexpected. His father had been a gari, a reciter of the Quran, in their local mosque in Mashhad, in Iran's northeast. He had taught him from early childhood which letters had to be leaned on, which treated lightly, which melodiously prolonged. But singing itself, in the classical Persian style, was something his father declared haram, forbidden. So it was in secret that, from the age of 12, he began to study the music that became his life.

Other singers might have perfect pitch, but soon they would begin to waver. In his prime he could sing for 40 minutes, clearly and without stumbling on any of the quarter-tones and the 12 modes (the equivalent of the West's major and minor keys) which are the hallmark of Persian classical music. Each mode might have as many as 40 melodies associated with it; he had to memorise all of them, so that at any request or movement of the heart he could sing as required. It was he, not the players who might accompany him on the long-necked tar and the shake-drum, who chose both the mode and the lyrics—usually the mystical works of the medieval Sufi tradition, Hafiz, Rumi and Attar, as well as modern pieces. The sound he aimed for was the ringing clarity of the tar: one of his chief teachers, Jalil Shahnaz, was a tar-player rather than a singer. And the core of his music, as he sat cross-legged onstage, was intense concentration not just of mind, but of his whole human awareness. He thought, he said, of people's longings.

Over the years he captured the country's soul. He sang on national radio both against the shah's torture machine and that of the mullahs who, in 1979, overthrew the Pahlavi dynasty. Gradually he became a bridge between those who stayed in the country, struggling through, and the huge Iranian diaspora. "Dawn Bird" had

first roused the crowds campaigning for a constitution in the early 20th century; but under the shah and under a pseudonym, so as not to embarrass his father, he made it his own.

Flightless nightingale, rise out of your cage, sing for the freedom of the human being... Oh God, oh universe, oh nature, turn our dark evening into dawn... Oh fiery sigh! start a flame in this cage...

He was also the haunting radio voice of the Rabbana prayer that called Iranians at dusk to break their Ramadan fast: "Oh Lord, accept this service from us, Thou the All-Hearing, the All-Knowing...

The mullahs were divided about him. After Ayatollah Ruhollah Khomeini banned Persian instruments and songs, he sang publicly only in the gardens of Western embassies in Tehran. But when war with Iraq broke out in the early 1980s and Persian nationalism needed boosting, the regime gave him space on the airwaves. He often claimed to be non-political, but the songs he chose were rich with allegory: the themes of "night" and "winter", meaning oppression, or the simple longing for truth that burned in Rumi and Hafiz. More blatant messages came through, too. His first album after the revolution was "Bidad", "Injustice", based on a poem by Saadi; it spoke of a wonderful land reduced to a shambles. "Dawn Bird" was a plea for freedom from start to finish. Iran's history for four decades, he said, was all there in his songs.

It seemed to him that the Islamic Republic's severity and Persian identity could not fit together. The rules of his intricate musical system, for example, also made room for free-flowing interpretation, improvisation and searching. In 2000 he released "Night, Silence, Desert" with a Kurdish musician, Kayhan Kalhor; it was full of melodies he had found in villages on his travels round Iran. He devised new instruments, mostly variations on the tar and dulcimer, in an attempt to broaden a traditional orchestra's range. If musicians let themselves be trapped in ancient formats, he told a newspaper, they would no longer speak for their times.

His political dissent took longer to become explicit; until the Green revolution of 2009, after President Mahmoud Ahmadinejad engineered a second term. When the protesters were shot and beaten up by security forces, he sang "Language of Fire":

Put your gun down... come, sit, talk, listen. Perhaps the light of humanity will get through to your heart too.

The protesters were denounced by the regime as "dust and trash". He considered himself, therefore, the voice of dust and trash. At his concerts he insisted that the house lights staved up so that he could see the audience's faces: the women openly weeping, the men pretending to clean their glasses, all as raptly still as he was, but with energy flowing as a wave between them. Every concert ended with "Dawn Bird", as rose petals showered down on him.

Since he could no longer bear to be a voice on state media, exploited to back up the republic's propaganda, he asked to be taken off-air. In return, he was banned from all public performances and recording in Iran. He was not arrested—that would have caused too much uproar—but nor did he slip into oblivion. Though he stayed in Iran, quietly doing calligraphy and Japanese gardening, he took his concerts abroad, singing in packed venues in Europe and America. Meanwhile, at home, his music was still everywhere: on cassettes in cars, on CDs and the internet. And when they could no longer hear him on live radio singing the Rabbana prayer, Iranians played his recordings of it defiantly from their windows.

His voice never lost that mystical lilt he had learned from his father. His last public appearance was at the grave of Rumi in the Turkish city of Konya. Its commercialism repelled him. How much closer he was to the great poet when he sang of flying up to God, the Beloved, like a bird; or like the dust beneath the people's feet.



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