The Economist

The carbon-capture conundrum

NATO: the good, the bad, the ugly

A special report on the Asian tigers

Our books of the year

DECEMBER 7TH–13TH 2019

Britain's nightmare before Christmas

Contents

Business

Finance and economics

Science and technology

Books and arts

Economic and financial indicators

Graphic detail

Obituary

Politics this week

Print | The world this week Dec 5th 2019

The political leaders of *NATO* countries gathered in London for a meeting. Donald Trump sparred with both Emmanuel Macron, the president of France, who recently described the military alliance as being in a state of “brain-death”, and with Justin Trudeau, Canada’s prime minister, who was caught on camera mocking the American president. Despite these minirows, NATO, at 70 years old, is in better shape than it sometimes looks. See article .

Germany expelled two **Russian** diplomats in retaliation for the killing of a Chechen separatist in Berlin in August. The government has been slow to act over the case.

Finland’s prime minister, Antti Rinne, resigned after a key political ally withdrew support. He had been in office for just six months.

The prime minister of **Malta**, Joseph Muscat, said he would stand down, though not until January, as allegations over the murder of an investigative journalist who had been looking into official corruption threatened some of his closest associates. See article .

With a week to go before an election, **Britain’s** political parties tried to limit last-minute blunders. Boris Johnson, the Conservative leader, continued to dodge scrutiny from the BBC’s fiercest interviewer, who has already mauled other candidates. The Tories enjoy a ten percentage-point lead, but are worried they may again fail to get a majority. See article .

Two people were murdered in **London** by a convicted terrorist at a conference on prison education. He had been released on temporary licence. Questions were raised about the effectiveness of a rehabilitation programme for jihadists, which the killer, who was tackled by the public and shot dead by police, had completed. See article .

In the dock

A military court in **Suriname** convicted the country’s president, Desi Bouterse, of murder and sentenced him to 20 years in prison. In 1982 soldiers killed 15 opponents of the military regime then led by Mr Bouterse. He will not begin his sentence until a decision is made on his appeal. He may be re-elected president next year. See article .

A court in **Honduras** sentenced the killers of Berta Cáceres, an environmental activist, to 50 years in prison. She was murdered in 2016 after campaigning to prevent the building of a dam that would have flooded land inhabited by the Lenca people, an indigenous group to which she belonged.

Regime change

Adel Abdul-Mahdi, the prime minister of **Iraq**, said he would step down amid large protests over corruption, poor governance and unemployment. His resignation is unlikely to satisfy the demonstrators, who want other changes too. The authorities have killed over 400 people since October, when the unrest began. See article .

Human-rights groups said up to 450 **Iranians** were killed during protests over a rise in the state-controlled price of fuel last month. The regime was accused of trying to hide the scale of its crackdown by shutting down the internet. See article .

Hage Geingob won a second term as president of **Namibia** in an election overshadowed by claims of corruption against senior members of SWAPO, which has ruled since the country's independence in 1990. Two former ministers have been arrested on allegations of bribery in connection with the allocation of fishing rights to Iceland's biggest fishing firm.

The UN'S World Food Programme said it will double the number of people it is feeding in **Zimbabwe** to 4.1m, as rising inflation and a collapsing economy push nearly 8m people into hunger.

Watching the news

The government of **Singapore** used its new "fake-news" law for the first time, ordering Facebook, among others, to publish a notice next to a post explaining that the authorities deemed it to contain falsehoods. See article .

Australia's government repealed a law allowing asylum-seekers held in offshore detention centres to be brought to Australia for medical treatment under exceptional circumstances. It argues that the measure encouraged unauthorised immigrants to try to reach the country by boat.

During a surprise visit to **Afghanistan**, Donald Trump said that America would resume peace talks with the Taliban. He also implied that a ceasefire would be part of any deal—an idea the Taliban have long resisted. See article .

China said it had suspended port calls in **Hong Kong** by American navy vessels in response to America's new law in support of democracy in the territory. China also reacted angrily to the passage by America's House of Representatives of a draft law that would require sanctions to be imposed on Chinese officials for violations of human rights in the far-western region of Xinjiang.

Riot police clashed with hundreds of people protesting in Wenlou, a town in southern **China** about 100km from Hong Kong, over the building of a crematorium. The police fired tear-gas and reportedly beat and detained dozens of protesters.

Russia activated a 3,000km **natural-gas pipeline** to supply the Chinese market. The pipeline cost $55bn and will provide 38bn cubic metres of gas a year to China by 2024.

Just in time for Christmas

The **impeachment proceedings** against Donald Trump moved to the House Judiciary Committee, after the Intelligence Committee released its report, finding that the president "subverted US foreign policy towards Ukraine...in favour of two politically motivated investigations". The Judiciary Committee will now consider whether to bring formal charges. See article .

The Senate confirmed Dan Brouillette as America's **energy secretary**. He replaces Rick Perry, one of the "three amigos" who managed Mr Trump's contacts with Ukraine.

Kamala Harris withdrew from the Democratic race for president. A year ago Ms Harris was seen as a possible front-runner for the nomination, but she never hit her stride, squeezed between her party's progressive and moderate wings. Joe Biden said he would consider her as a possible running-mate, should he win. See article .

Lori Lightfoot, the mayor of **Chicago**, sacked Eddie Johnson as chief of police. Mr Johnson led America's second-biggest police force through a tumultuous three years. But Ms Lightfoot said she fired him for lying to her about an incident where he was found asleep at the wheel of his car. Mr Johnson said he didn't "intentionally mislead or deceive" anyone.

Business this week

Print | The world this week Dec 7th 2019

In an unexpected move, Sergey Brin and Larry Page stepped down from their respective roles as president and chief executive of Alphabet, **Google's** parent company. The pair founded the internet giant in a garage while at Stanford in 1998. They will retain their combined voting majority in the company and continue to sit on the board. Sundar Pichai becomes Alphabet's chief executive in addition to his job running Google, expanding his brief to oversee "moonshot" projects, such as driverless cars and electricity-generating kites. Messrs Brin and Page assured Mr Pichai they would still be around to offer "advice and love, but not daily nagging." See article .

Playing a game

Stockmarkets had an unsettled week amid uncertainty about America and China reaching a **trade deal** before December 15th, when tariffs are due to rise on a raft of Chinese goods. Donald Trump's ruminations about being prepared to wait until after November's presidential election to reach an agreement spooked investors at first, but was then dismissed as a negotiating tactic. See article .

Mr Trump said he wanted to raise tariffs on metal imports from **Brazil** and **Argentina**, accusing both countries of manipulating their currencies. Finding himself on a roll, the president also threatened to impose 100% tariffs on $2.4bn-worth of **French goods**, including champagne, after the United States Trade Representative found that France's digital tax discriminates against American companies such as Amazon, Facebook and Google, and is "inconsistent with prevailing tax principles". See article .

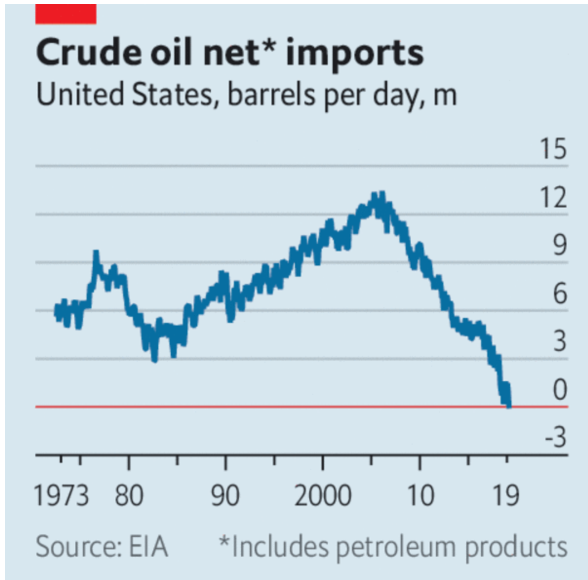
The World Trade Organisation rejected the European Union's claim that it no longer provides illegal state aid to **Airbus**, a second victory in recent months for **Boeing** in the pair's 15-year dispute. In response the USTR said it would look to increase the retaliatory tariffs it imposed in October on a range of European goods following the WTO's first ruling.

In contrast with souring trade relations elsewhere, **Japan's** Diet approved a trade deal with America that slashes tariffs on American beef and pork imports in return for lower levies on Japanese industrial goods. The limited agreement is a substitute for a Pacific-wide trade pact that Mr Trump withdrew America from. Separately, Japan's government unveiled a larger-than-expected ¥13trn ($120bn) **spending plan** to stimulate the economy.

Brazil's GDP was 1.2% higher in the third quarter than in the same three months last year. The pace of its economic expansion is quickening following a severe recession in 2015-16. Consumer spending and business investment rose in the quarter, helped by falling interest rates.

Also pulling out of the doldrums, **Turkey's economy** expanded by 0.9% in the third quarter, following nine months of contraction. Growth was spurred by agriculture and industry. Construction, which has been championed by the government, continued to struggle, shrinking by 7.8%.

UniCredit, Italy's biggest bank, said it would cut 10% of its workforce, close 500 branches and take other measures to cut costs, as it seeks approval for a €2bn ($2.2bn) share buy-back programme. After years of paltry profits, it is rare for a European bank to return cash to investors; UniCredit must convince the European Central Bank that it can do so without weakening its capital buffers. See article .



The Economist

America exported more crude oil and refined petroleum products in September than it imported, the first time it has been a **net exporter of oil** for a whole month since records began in the 1940s. Boosted by production from lighter shale oil, America's net exports averaged 89,000 barrels a day in September, the difference between the 8.7m it imported and the 8.8m it exported. American refineries still rely on heavier foreign crude oil.

In the wake of LVMH's offer to take over Tiffany, more consolidation beckoned in the luxury-goods industry as **Kering**, a French group that includes the Gucci and Saint Laurent brands in its stable, was said to be interested in buying **Moncler**, an Italian skiwear-maker.

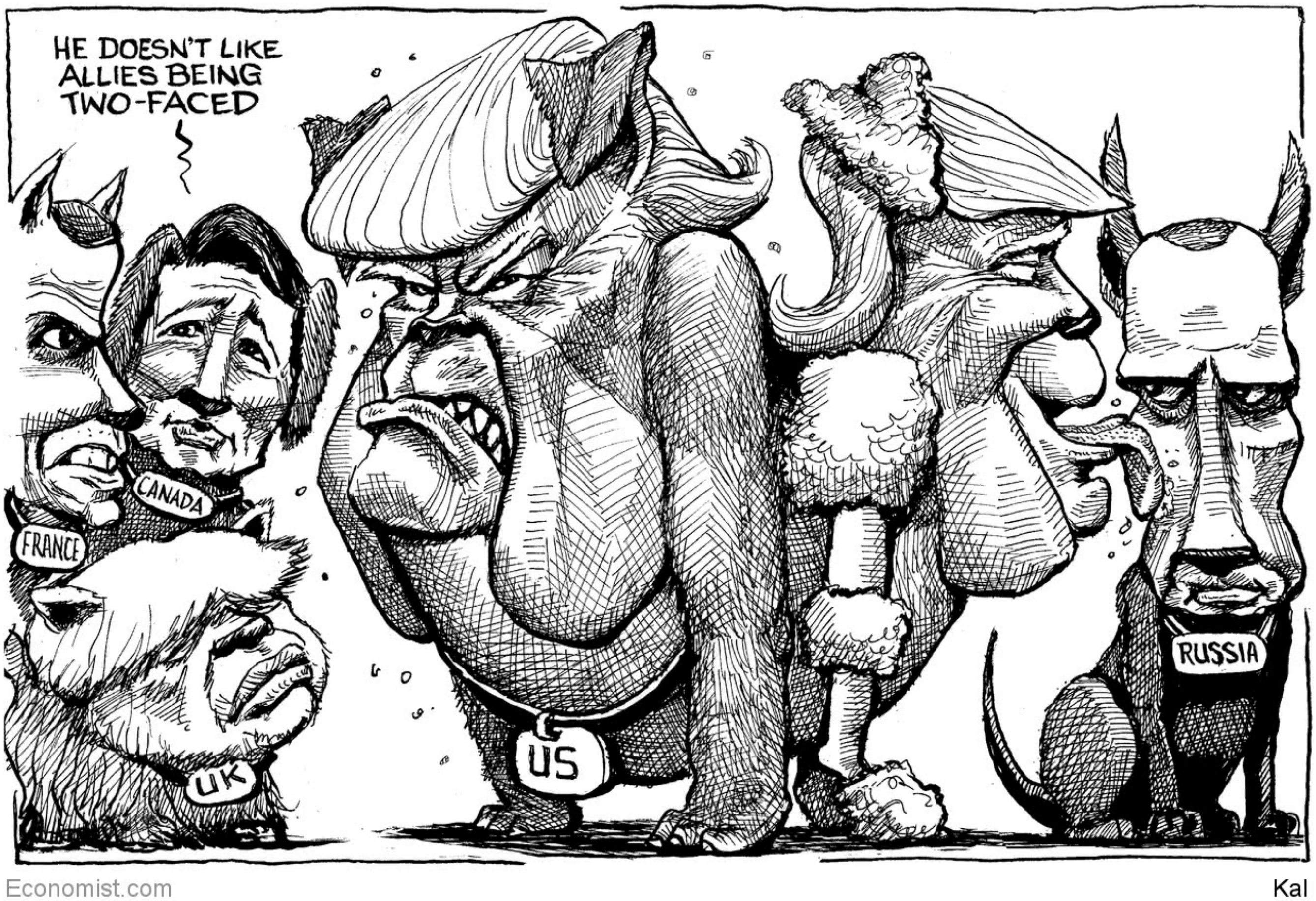
Mike Pompeo, America's secretary of state, strongly urged European countries to shut out **Huawei** from building 5G networks, because of fears over data security. The EU is to discuss the matter at a forthcoming meeting. Huawei responded angrily, describing Mr Pompeo's allegations as "defamatory and false".

In the hot seat

The UN announced that Mark Carney will become its envoy on financing **climate action** when he steps down as governor of the Bank of England next year. The job may present more headaches for Mr Carney than Brexit ever did. This week's climate-change summit in Madrid declared the past decade to be the hottest on record. New research suggested that emissions may have declined in America and the EU this year, but risen in China, India and the rest of the world.

KAL’s cartoon

Print | The world this week Dec 7th 2019



Britain's election
Britain's nightmare before Christmas

Our election endorsement

Britain's nightmare before Christmas

A divided country faces an election that will tear it still further apart

Print | Leaders Dec 5th 2019

BRITISH VOTERS keep being called to the polls—and each time the options before them are worse. Labour and the Conservatives, once parties of the centre-left and -right, have steadily grown further apart in the three elections of the past four years. Next week voters face their starkest choice yet, between Boris Johnson, whose Tories promise a hard Brexit, and Jeremy Corbyn, whose Labour Party plans to "rewrite the rules of the economy" along radical socialist lines. Mr Johnson runs the most unpopular new government on record; Mr Corbyn is the most unpopular leader of the opposition. On Friday the 13th, unlucky Britons will wake to find one of these horrors in charge.

At the last election, two years and a political era ago, we regretted the drift to the extremes. Today's manifestos go a lot further. In 2017 Labour was on the left of the European mainstream. Today it would seize 10% of large firms' equity, to be held in funds paying out mostly to the exchequer rather than to the workers who are meant to be the beneficiaries. It would phase in a four-day week, supposedly with no loss of pay. The list of industries to be nationalised seems only to grow. Drug patents could be forcibly licensed. The bill for a rapid increase in spending would fall on the rich and companies, whose tax burden would go from the lowest in the G7 to the highest. It is an attempt to deal with 21st-century problems using policies that failed in the 20th.

Nor has Mr Corbyn done anything to dampen concerns about his broader worldview. A critic of Western foreign policy and sympathiser with dictators in Iran and Venezuela who oppose it, he blamed NATO for Russia's invasion of Ukraine in 2014. Last year he suggested samples of a nerve agent used to poison a Russian former spy in Salisbury should be sent to Moscow, so Vladimir Putin could see if it was his. Under such a prime minister, Britain could not rely on receiving American intelligence. Nor has Mr Corbyn dealt with the anti-Semitism that has taken root in Labour on his watch. Some Remainers might swallow this as the price of a second Brexit referendum, which Mr Corbyn has at last promised. We have long argued for such a vote. Yet Mr Corbyn's ruinous plans at home and bankrupt views abroad mean that this newspaper cannot support Labour.

The Conservatives, too, have grown scarier since 2017. Mr Johnson has ditched the Brexit deal negotiated by Theresa May and struck a worse one, in effect lopping off Northern Ireland so that Britain can leave the European Union's customs union. The public are so sick of the whole fiasco that his promise to "get Brexit done" wins votes. But he would do no such thing (see article). After Britain had left the EU early next year, the hard work of negotiating a trade agreement would begin. Mr Johnson says he would do this by the end of 2020 or leave without one. No-deal is thus still on the table—and a real prospect, since getting a deal in less than a year looks hard. The best estimates suggest that leaving without a deal would make average incomes 8% lower than they would otherwise have been after ten years.

Brexit is not the only problem with Mr Johnson's new-look Tories. He has purged moderates and accelerated the shift from an economically and socially liberal party into an economically interventionist and culturally conservative one. Angling for working-class, Leave-voting seats in the north, he has proposed extra state aid, buy-British government procurement and a sketchy tax-and-spending plan that does not add up. Also, he has absorbed the fatal lesson of the Brexit campaign: that there is no penalty for lying or breaking the rules. He promised not to suspend Parliament, then did; he promised not to extend the Brexit talks, then did. This chicanery corrodes trust in democracy. Like Mr Corbyn he has normalised prejudice, by displaying his own and failing to investigate it in his party (both men are thought racist by 30% of voters). For all these reasons this newspaper cannot support the Conservatives.

That leaves a low bar for the Liberal Democrats, and they clear it. They, too, have become more extreme since we backed them in 2017. Under a new leader, Jo Swinson, they have gone beyond the idea of a second referendum for an irresponsible promise to reverse Brexit unilaterally. This has deservedly backfired. Yet their economic approach—a moderate increase in spending, paid for by broad-based tax increases—is the most sensible of the main parties, and is the only one to be honest about the cost of an ageing society. On climate change and social policy they strike the best balance between ambition and realism. As last time, they are the only choice for anyone who rejects both the hard Brexit of the Conservatives and the hard-left plans of Labour.

Yet they will not win. So why back them? The practical reason is to restrain whoever ends up in Downing Street. Voters worry that backing the Lib Dems plays into Mr Corbyn's hands, but our modelling suggests that votes and seats would come fairly evenly from both parties (see Graphic detail). Mr Corbyn is preparing to govern with the Scottish National Party, which would back most of his programme in return for another independence referendum. Having more Lib Dems would check his plans. Likewise, they would rein in Mr Johnson. Some Tories cling to the hope that if he wins a big majority he will drop the populist act and rediscover his liberal instincts. They are deluded. If he wins the Brexit-backing seats he is targeting with his promises of more state aid, do they expect him to switch back to the fantasy of building Singapore-on-Thames? The opposite is true: the bigger the Tory majority, the more drastic the party's transformation.

The principled reason is that the Lib Dems are closest to the liberalism on which this newspaper was founded. A strong Lib Dem showing would signal to voters who favour open markets and a liberal society that the centre is alive. The past few years have shown why Parliament needs good people such as Sam Gyimah, who left the Tories because of their extremism, and Chuka Umunna, who left Labour because of theirs. The course of Brexit has been repeatedly changed for the better by independent-minded MPs making the running. If Britain withdraws from the EU in January, the Lib Dem MPs will be among the best advocates of a deep trade deal and the strongest opponents of no-deal. There is no good outcome to this nightmare of an election. But for the centre to hold is the best hope for Britain. ■

NATO's summit

New troublemakers emerge

As America draws back, members of history's most successful alliance are squabbling

Print | Leaders Dec 7th 2019

SO MUCH TALK of "crisis" has surrounded NATO's 70th-birthday year that it has been easy to forget there are reasons to celebrate. Not only has the alliance proved remarkably durable by historical standards, but since 2014 it has responded aptly to Russia's aggression in Ukraine, refocusing on its core mission of collective defence. It has deployed multinational battlegroups into the three Baltic states and Poland and committed to improved readiness. Goaded by criticism from President Donald Trump, its members have raised their spending on defence. Though many countries, notably Germany, still fall short of their promises, NATO now estimates that between 2016 and 2020 its European members and Canada will shell out an extra $130bn.

This new money helps explain one welcome development at the meeting of NATO leaders in Britain this week. Mr Trump, previously the disrupter-in-chief, who used to call the organisation "obsolete" and caused consternation at a summit in Brussels in 2018 by threatening to withdraw if Europeans failed to take on a fairer share of the burden, has—however briefly—become a defender. In London this week he blasted President Emmanuel Macron's criticism of the alliance as "nasty" and "disrespectful". He made no sign of blocking stern words on Russia or the reiteration of Article Five of NATO's treaty, the cornerstone of the alliance. America's commitment will be on display next year, when some 20,000 of its troops are to practise reinforcing Europe in an exercise called Defender 2020.

The bad news is that other disrupters have emerged. The viscerally anti-NATO Jeremy Corbyn could conceivably become prime minister of one of its leading members after next week's British general election. Turkey's president, Recep Tayyip Erdogan, has caused consternation by buying a Russian anti-aircraft system, obstructing NATO's decisions on eastern Europe and invading northern Syria without regard for his allies' interests. He responded with personal insults to a suggestion by Mr Macron that, given Turkey's actions in Syria, it might not be able to count on the mutual defence enshrined in Article Five.

The most surprising troublemaker, and the reason relations have turned ugly, is Mr Macron himself. In a recent interview with *The Economist* he said that NATO was experiencing "brain-death". He champions a stronger European defence, which Europe needs, and on December 4th insisted that this would "not be an alternative to NATO but one of its pillars". But there is lingering suspicion of his intentions among other allies. That is partly because of his enthusiasm for a "strategic dialogue" with Russia. He has emphasised the threat of terrorism over the task of defending against Vladimir Putin's aggression. Mr Macron is taking a long view and is seeking to stimulate fresh thinking, but most of his allies understandably hear his words as a threat to the progress of the past five years (see article). Russia's actions, not just in Ukraine but also on NATO territory (including by sending assassins to Salisbury in Britain and, possibly, Berlin's Tiergarten), call for a strong response. Any desire for concessions will be seen in Moscow as weakness.

In Britain NATO papered over the cracks. The summit's declaration affirmed its members' commitment to Article Five and proclaimed that "Russia's aggressive actions constitute a threat to Euro-Atlantic security". That is welcome, but the alliance needs to find a new strategic coherence. Even if Mr Trump remains in favour, America's focus is shifting ineluctably to its rivalry with China in Asia and beyond. Exercises and increasing readiness will cement the alliance at a military level—and this will endure while the politicians come and go. Work on newish areas such as space and cyberwarfare will help, too. Eventually, a strategic dialogue with Russia might make sense. But to thrive NATO also needs a greater common purpose. Once the impetus came from America. Mr Macron was right to point out that in future Europe will have to play a larger part. ■

System failure

Time for Iraq and Lebanon to ditch state-sponsored sectarianism

Protesters rightly blame the system for producing disastrous results

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As many Arab leaders have fallen in the past year as did during the Arab spring. And still the wave of protests over corruption, unemployment and threadbare public services continues to sweep across the Middle East and north Africa. Turnover at the top has not mollified the masses, because rather than producing real change it has reshuffled entrenched elites. Particularly in Iraq and Lebanon, many of the protesters now want to tear down entire political systems. It is a dangerous moment. Yet the protesters are right to call for change.

Both Iraq and Lebanon divvy up power among their religions and sects as a way of keeping the peace between them. Lebanon constructed a sectarian political system long before the civil war of 1975-90, and buttressed it afterwards. Iraq's system was set up in 2003, after America's invasion. It did not prevent Sunnis from fighting Shias. But the civil war is over in Iraq, as in Lebanon. It would seem risky to upset these fragile arrangements.

Leaving them be would be even riskier. Start with Iraq, where America aimed to satisfy all groups but instead created a system that encourages patronage and empowers political parties (and militias) which entrench the country's ethnic and sectarian divisions. It is difficult to get ahead in Iraqi politics—or indeed in life—without associating with one of these parties. They treat ministries like cash machines and hand out government jobs based on loyalty, not merit. Many people depend on them for access to health care, education or a salary. Hence politicians long ago exposed as corrupt and incompetent can remain in power.

The situation is similar in Lebanon, where the warlords who razed the country became politicians who loot it. The government has racked up huge debts to fund Sunni, Shia and Christian patronage schemes. The World Bank estimates that the waste associated with the power-sharing system costs Lebanon 9% of GDP each year. The government cannot even keep the lights on. Or perhaps it does not want to, since the businessmen who sell generators are often connected to sectarian leaders. With a financial crisis looming, Lebanon must restructure its debt and introduce reforms. Its leaders seem incapable of doing so.

Sectarian government is not only ineffective—it is also unrepresentative. Lebanon has not held a census since 1932, but *The Economist* obtained voter-registration lists from 2016. They show that the allotment of parliamentary seats to each religion does not match the share of voters from each faith. Polls show that Iraqis have lost trust in religious parties and leaders. Many people in both countries, especially the young, appear to be losing their personal faith, too (see article).

The people of Iraq and Lebanon deserve political systems that do more to reflect their views and represent their interests. That means unpicking state-backed sectarianism. Increased transparency would help expose the worst patronage schemes;

stronger institutions might curb them. Militias should be brought under the official chain of command. If Lebanon stopped forcing candidates to compete for seats that are allocated by religion, more might run on secular platforms, not sectarian ones. In Iraq the electoral law helps entrench big parties, while the electoral commission caters to elites. Both need reform.

Such steps may not satisfy the protesters. And they will be resisted by vested interests and their foreign supporters. Hizbullah, a Shia militia-cum-political party in Lebanon, and the Shia militias of Iraq thrive under today's system and fear being constrained. They are backed by Iran, which uses them to extend its influence. But Iran has also been rocked by big protests. The lesson for it is the same. Reform a political system that has failed the people, or risk seeing it come crashing down. ■

Departure of the founders

Who will control Alphabet once Sergey Brin and Larry Page are gone?

The company's strategy, role in society and governance are open questions

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"YEAH, OK, WHY not? I'll just give it a try." With those words Sergey Brin abandoned academia and poured his energy into Google, a new firm he had dreamed up with a friend, Larry Page. Incorporated in 1998, it developed PageRank, a way of cataloguing the burgeoning world wide web. Some 21 years on, Messrs Brin and Page are retiring from a giant that dominates the search business. Alphabet, as their firm is now known, is the world's fourth-most-valuable listed company (see article), worth $910bn. In spite of its conspicuous success, they leave it facing three uncomfortable questions—about its strategy, its role in society and who is really in control.

Silicon Valley has always featured entrepreneurs making giant leaps. Even by those standards Google jumped far, fast. From the start its search engine enjoyed a virtuous circle—the more people use it and the more data it collects, the more useful it becomes. The business model, in which advertisers pay to get the attention of users around the world, has printed money. It took Google just eight years to reach $10bn in annual sales. Its peak cumulative losses were $21m. By comparison, Uber has incinerated $15bn and still loses money.

Today Alphabet is in rude health in many respects. Its search engine has billions of users, who find it one of the most useful tools in their lives. One recent study found that the typical user would need to be paid $17,530 to agree to forfeit access to a search engine for a year, compared with $322 for social-media sites, such as Facebook. Alphabet cranks out colossal profits. Many pretenders have tried to mimic the Google approach of having a vast customer base and exploring network effects. Only a few, including Facebook, have succeeded at such a scale.

There are uncertainties, however. Take strategy first. Other tech giants have diversified away from their core business—Amazon began in e-commerce, for example, but is now big in cloud-computing. In China Tencent has shifted from video games to a huge array of services. Alphabet has not stood still: it bought YouTube in 2006 and shifted to mobile by launching Android, an operating system, in 2007. But it still makes 85% of its sales from search-advertising. A big bet on driverless cars has yet to pay off. As the firm matures, it should start paying a dividend.

The second question is how closely the company might end up being regulated. Alphabet's monopoly in the search business has led to worries that it may squeeze other firms unfairly. Its huge store of data raises privacy concerns. And because it is a conduit for information and news, its influence over politics has come under ever more scrutiny. All this augurs much tighter regulation. Alphabet has already paid or been subject to $9bn in fines in the EU, and in America politicians on both sides of the aisle support tighter rules or, in some cases, a break-up. If it were to be regulated like a utility, profits could fall sharply.

The last question is who will be in control. Messrs Page and Brin famously sought "parental supervision" in 2001 and hired an external chief executive. Both founders will now relinquish any executive role, handing the reins to Sundar Pichai, a company stalwart. Yet dual-class shares mean they will still control over 50% of the firm's voting rights. This structure is popular in Silicon Valley. But there is little evidence that it ages well. Of today's digital giants, two have so far faced succession—Microsoft and Apple. They have prospered partly because their founders or their families did not retain voting control after they left the scene. Alphabet's founders should forfeit their special voting rights and gradually sell their shares. Their firm faces deep questions—best to give someone else the freedom to answer them. ■

Climate change

The necessity of pulling carbon dioxide out of the air

But it is difficult to do at the scale you need

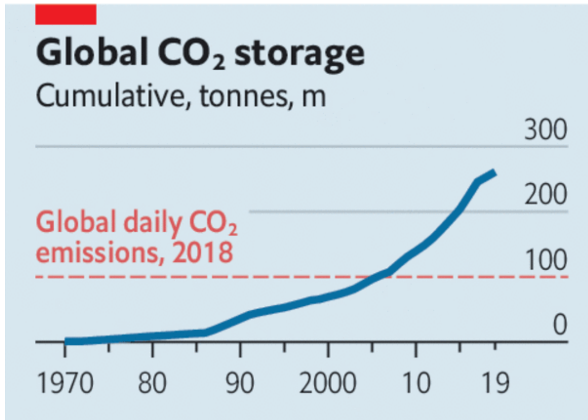
Print | Leaders Dec 7th 2019


Alamy

OF THE WISDOM taught in kindergartens, few commandments combine moral balance and practical propriety better than the instruction to clear up your own mess. As with messy toddlers, so with planet-spanning civilisations. The industrial nations which are adding alarming amounts of carbon dioxide to the atmosphere—43.1bn tonnes this year, according to a report released this week—will at some point need to go beyond today's insufficient efforts to stop. They will need to put the world machine into reverse, and start taking carbon dioxide out. They are nowhere near ready to meet this challenge.

Once such efforts might have been unnecessary. In 1992, at the Rio Earth summit, countries committed themselves to avoiding harmful climate change by reducing greenhouse-gas emissions, with rich countries helping poorer ones develop without exacerbating the problem. Yet almost every year since Rio has seen higher carbon-dioxide emissions than the year before. A staggering 50% of all the carbon dioxide humankind has put into the atmosphere since the Industrial Revolution was added after 1990. And it is this total stock of carbon that matters. The more there is in the atmosphere, the more the climate will shift—though climate lags behind the carbon-dioxide level, just as water in a pan takes time to warm up when you put it on a fire.

The Paris agreement of 2015 commits its signatories to limiting the rise to 2°C. But as António Guterres, the UN secretary-general, told the nearly 200 countries that attended a meeting in Madrid to hammer out further details of the Paris agreement this week, "our efforts to reach these targets have been utterly inadequate."



The Economist

The world is now 1°C (1.8°F) hotter than it was before the Industrial Revolution. Heatwaves once considered freakish are becoming commonplace. Arctic weather has gone haywire. Sea levels are rising as glaciers melt and ice-sheets thin. Coastlines are subjected to more violent storms and to higher storm surges. The chemistry of the oceans is changing. Barring radical attempts to reduce the amount of incoming sunshine through solar geoengineering, a very vexed subject, the world will not begin to cool off until carbon-dioxide levels start to fall.

Considering that the world has yet to get a handle on cutting emissions, focusing on moving to negative emissions—the removal of carbon dioxide from the atmosphere—might seem premature. But it is already included in many national plans. Some countries, including Britain, have made commitments to move to "net zero" emissions by 2050; this does not mean stopping all emissions for all activities, such as flying and making cement, but taking out as much greenhouse gas as you let loose.

The Intergovernmental Panel on Climate Change estimates that meeting the 1.5°C goal will mean capturing and storing hundreds of billions of tonnes of carbon dioxide by 2100, with a median estimate of 730bn tonnes—roughly 17 times this year's carbon-dioxide emissions. In terms of designing, planning and building really large amounts of infrastructure, 2050 is not that far away. That is why methods of providing negative emissions need to be developed right now.

That raises two problems, one technological, the other psychological. The technological one is that sucking tens of billions of tonnes of carbon dioxide out of the atmosphere every year is an enormous undertaking for which the world is not prepared. In principle it is simple to remove carbon dioxide by incorporating it in trees and plants or by capturing it from the flue gas of industrial plants and sequestering it underground. Ingenious new techniques may also be waiting to be discovered. But planting trees on a scale even remotely adequate to the task requires something close to a small continent. And developing the engineering systems to capture large amounts of carbon has been a hard slog, not so much because of scientific difficulties as the lack of incentives (see Briefing).

The psychological problem is that, even while the capacity to ensure negative emissions languishes underdeveloped, the mere idea that they will one day be possible eats away at the perceived urgency of cutting emissions today. When the 2°C limit was first proposed in the 1990s, it was plausible to imagine that it might be met by emissions cuts alone. The fact that it can still be talked about today is almost entirely thanks to how the models with which climate prognosticators work have been revised to add in the gains from negative emissions. It is a trick that comes perilously close to magical thinking.

This puts policymakers in a bind. It would be reckless not to try to develop the technology for negative emissions. But strict limits need to be kept on the tendency to demand more and more of that technology in future scenarios. As at kindergarten, some discipline is necessary.

The first discipline is to keep in mind whose mess this is. One of the easiest routes to negative emissions is to grow plants. And the world's cheap land tends to be in poor places. Some of these places would welcome investment in reforestation and afforestation, but they would also need to be able to integrate such endeavours into development plans which reflect their people's needs.

The second discipline is for those who talk blithely of "net zero". When they do so, they should be bound to say what level of emissions they envisage, and thus how much negative emitting their pledge commits them to. The stricter they are about its use, the less they are in reality accommodating today's polluters.

Government capture

The third discipline is that governments need to take steps to make negative emissions practicable at scale. In particular, research and incentives are needed to develop and deploy carbon-capture systems for industries, such as cement, that cannot help but produce carbon dioxide. A price on carbon is an essential step if such systems are to be efficient. The trouble is that a price high enough to make capture profitable at this stage in its development would be unfeasibly high. For the time being, therefore, other sticks and carrots will be needed. Governments tend to plead that radical action today is just too hard. And yet those very same governments enthusiastically turn to negative emissions as an easy way to make their climate pledges add up. ■

Letters to the editor
On billionaires, groceries, The National Health Service, wind power, Kurt Vonnegut

On billionaires, groceries, The National Health Service, wind power, Kurt Vonnegut

Letters to the editor

A selection of correspondence

Print | Letters Dec 7th 2019

Taxing the super rich

The political left gets many things wrong, but by identifying billionaires as a "policy failure" they are exactly right. As you say, on average billionaires inherit one-fifth of their wealth (" In defence of billionaires ", November 9th). These transfer payments are unrelated to any effort or talent. Therefore, high inheritance taxes would not just be "welcome" but are necessary for a well-functioning capitalist system. Furthermore, the inequality of income and, more importantly, wealth, is a disincentive for the vast majority of individuals who can't expect to be millionaires when they are toddlers (hello, Donald Trump). Research has shown that inequality can suppress economic growth.

William Nordhaus conflates billionaires and innovators when he says that the latter collect only 2% of the value they create. To the extent that billionaires have made their fortunes in property, where corruption abounds, or in finance, where "innovations" can remove vast amounts of value in crises, this argument falls flat.

KENNETH REINERT
Professor of public policy
George Mason University
Arlington, Virginia

You condemned George Lucas for the money he made by selling Lucasfilm to Disney, reasoning that it rewards him for "Star Wars", a film he made over 40 years ago. However, the price Disney paid was for the commercial behemoth (I purposely avoid the word empire here) created through the life of the franchise. The fact that the Star Wars brand has flourished and is still evident in everyday life (the Pentagon's JEDI contract being a good example) is testament to the creativity and ingenuity of the firm that Mr Lucas created. Indeed, in your next issue you glorified Disney's new streaming service offering "Star Wars" and described the sale of Lucasfilm as benefiting the consumer through more choice and lower prices ("Power to the people", November 16th).

I'm perplexed by your zig-zag approach. In one edition Disney's takeover of Lucasfilm is rent-seeking profiteering, in the next it is good for the consumer. I agree with the second argument. Mr Lucas generated a great amount of entertainment for millions and deserves his reward.

TIM KILPATRICK

Brussels

Taxes on the rich do not demotivate them from trying to become richer. Nor do taxes demotivate the not-yet-rich from trying to become rich. When Bill Gates launched Microsoft in 1975 the top rate of tax was 70%.

BEN AVELING

Sydney

Nate Kitch

The sell by date

The time a consumer saves by shopping for groceries online is indeed important (Schumpeter , November 16th). But unlike shopping in a physical store, the customer does not get to select the quality of the food, or more important, get to check the expiry date. Supermarkets have identified the online-delivery channel as one where they can distribute their close-to-out-of-date goods, cleaning out their inventory.

M.J. FAHERTY

London

The pulse of a nation

Regarding the politics of Britain's National Health Service (" Spin doctors ", November 16th), senior medics are accused of being traditionalists because a lifetime of ethical practice tells us what will work. The ministers in charge have had zero training in the complex interaction between medical science and the management of hospitals and doctors, relying instead on civil servants, who provide them with top-down plans to reform clinical practice.

The acute problem facing the NHS is a lack of adequate applicants for nursing and paramedical professions. It is no good promising larger hospitals if standards cannot be maintained. School leavers prefer to do a social-science degree rather than join a practical nurse-training scheme, which involves unsocial hours, discipline and the stress of dealing with patients who are often poor, old and sick.

Other problems include the European Working Time Directive, which abolished the requirement for newly trained doctors to be resident in hospitals in order to gain full registration. The supervisory system that was akin to a firm, where consultants and senior nurses maintain standards and teach doctors and nurses on a designated ward, has been demolished. Doctors leave university with huge debts. Small wonder therefore that, particularly in general practice, trainees opt for limited hours and no home visits. Hence the deluge of patients attending accident and emergency.

Three measures are needed. First, the reinstitution of pay and accommodation for nurses in training. Second, pilot projects in hospitals where the ward/firm/residents' mess system can be reintroduced. Third, upping the pre-registration status of qualifying doctors from one to two years, with the second year including six months in A&E and in general practice.

F.D. SKIDMORE
Consultant surgeon
London

Increased demand in the NHS is usually put down to ageing, and it does play a role. More important is "supply-led demand". Constant innovation means that there is more that doctors can do. But many of those innovations lead to what has been described by Alain Enthoven, an economist, as "flat of the curve medicine": no or minimal improvement at high cost. This is particularly true when we move towards death, with around 20% of health-care budgets being spent on the last year of life.

Another common mistake is to confuse health care and health. Health care accounts for perhaps 10% of health. Income is the main determinant of health. Spending more on health care crowds out spending on things like housing, education, the environment and benefits, which are more important for health. The NHS doesn't need more money, it needs a radical rethink.

RICHARD SMITH
Former editor of the British Medical Journal
London

More on wind power

Kit Beazley (Letters , November 23rd) missed the point about wind power. The worry I raised (Letters, November 9th) is that, as wind-turbine towers, foundations and infrastructure get seriously bigger, particularly offshore, are the carbon footprint figures silently getting worse, not better? The projected financial cost per megawatt hour is central to every wind-farm project and is public knowledge. If the projected carbon footprint was published as an equally important figure for every wind-farm globally, all calculated on an agreed basis, we would know, project by project, if we are actually making technical progress or not. It is these detailed numbers that I want the public to have. Then we can have a meaningful conversation on sustainability.

JIM PLATTS

Cambridge, Cambridgeshire

A green lament

Your article on the Kurt Vonnegut museum (" So it goes ", November 16th) reminded me of his epitaph for the 20th century: "The good Earth—we could have saved it, but we were too damn cheap and lazy."

PATRICK LEACH

Adjunct faculty

Colorado School of Mines

Denver

Briefing

Negative emissions
The chronic complexity of carbon capture

Clearing the air

Climate policy needs negative carbon-dioxide emissions

The world is not remotely ready to provide them

Print | Briefing Dec 5th 2019

ON ONE SIDE of a utility road at the edge of Drax power station in Yorkshire sits a vast pile of deep black coal. On the other side, trains loaded to the brim with compressed wood pellets. "The old and the new," says a worker.

Opened just under half a century ago, Drax (pictured) was not only the biggest coal-fired power station ever built in Britain: it was the last. Now only two of its six mighty boilers are still fired by coal, and at the end of November they had sat idle since March. In the first half of 2019, coal accounted for just 6% of Drax's electricity output. The rest came from those wood pellets. Biomass burned at Drax provides 11% of Britain's renewable electricity—roughly the same amount as all the country's solar panels combined.

And soon Drax—the power plant is owned by a company of the same name—hopes to be more than an electricity supplier. It hopes to be a carbon remover. By pumping the CO it produces from its pellets into subterranean geological storage, rather than returning it to the atmosphere, it hopes to pioneer a process which climate policymakers see as vital: so-called "negative emissions".

The Paris climate agreement of 2015 calls for the Earth's temperature to increase by no more than 2°C over pre-industrial levels, and ideally by as little as 1.5°C. Already, temperatures are 1°C above the pre-industrial, and they continue to climb, driven for the most part by CO emissions of 43bn tonnes a year. To stand a good chance of scraping under the 2°C target, let alone the 1.5°C target, just by curtailing greenhouse-gas emissions would require cuts far more stringent than the large emitting nations are currently offering.

Recognising this, the agreement envisages a future in which, as well as hugely reducing the amount of COput into the atmosphere, nations also take a fair bit out. Scenarios looked at by the Intergovernmental Panel on Climate Change (IPCC) last year required between 100bn and 1trn tonnes of CO to be removed from the atmosphere by the end of the century if the Paris goals were to be reached; the median value was 730bn tonnes–that is, more than ten years of global emissions.

This is where what is going on at Drax comes in. Plants and algae have been sucking carbon out of the atmosphere and turning it into biomass for over a billion years. It is because the carbon in biomass was, until recently, in the atmosphere that burning it in a power station like Drax counts as renewable energy; it just puts back into the atmosphere what the plants took out. The emissions from procuring and transporting the biomass matter too, but if the supply chain is well managed they should be quite small in comparison. The pellets at Drax are mostly made from sawmill refuse and other by-products in America; they are then transported by rail, ship and rail to the site where they will be pulverised and burned.

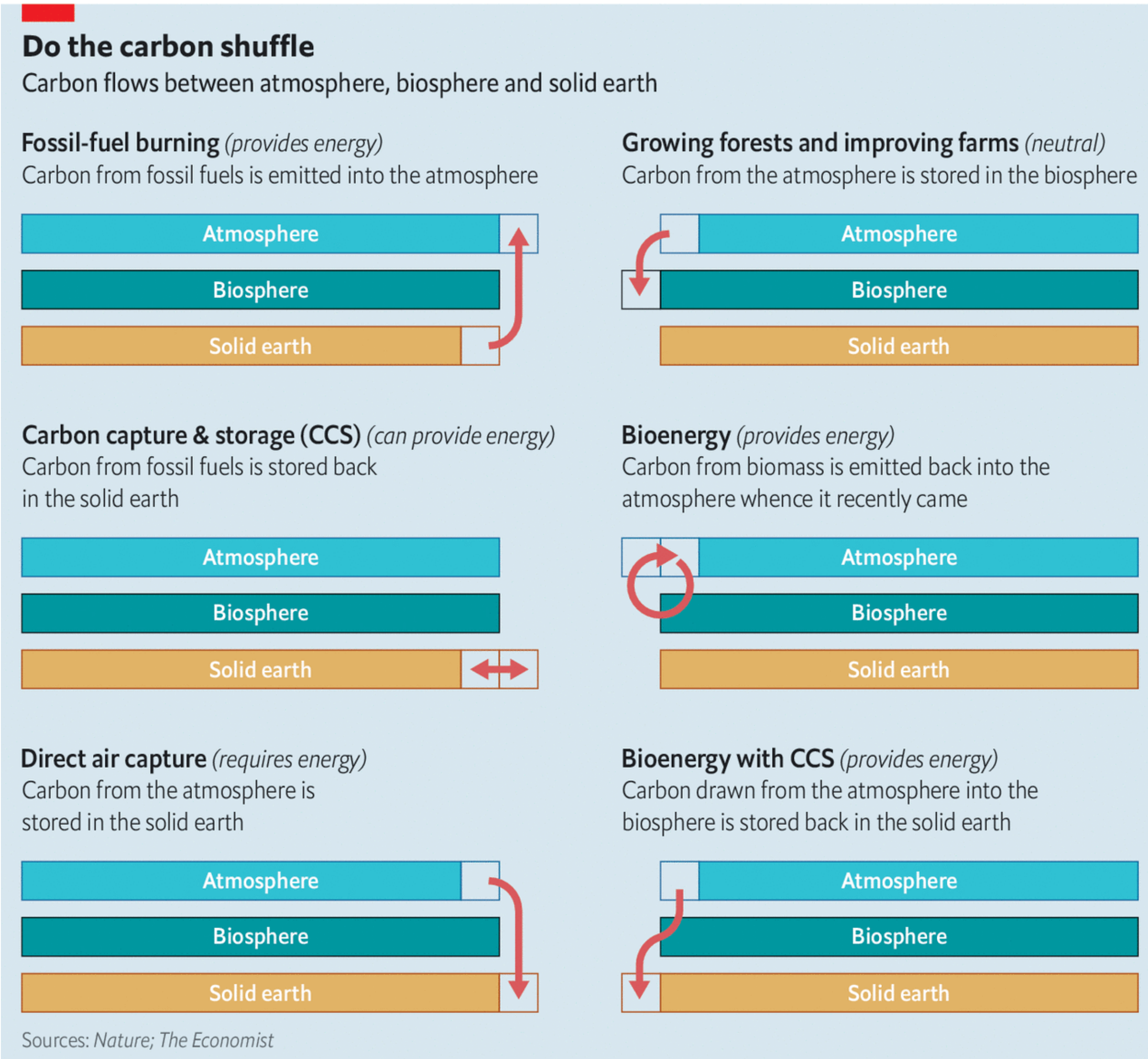
If, instead of burning the biomass, you just let it stand, the carbon stays put. So if you increase the amount of vegetation on the planet, you can suck down a certain amount of the excess CO from the atmosphere. Growing forests, or improving farmland, is often a good idea for other reasons, and can certainly store some carbon. But it is not a particularly reliable way of doing so. Forests can be cut back down, or burned—and they might also die off if, overall, mitigation efforts fail to keep the climate cool enough for their liking.

But the biggest problem with using new or restored forests as carbon stores is how big they have to be to make a serious difference. The area covered by new or restored forests in some of the IPCC scenarios was the size of Russia. And even such a heroic Johnny Appleseeding would only absorb on the order of 200bn tonnes of CO ; less than many consider necessary.

The sort of bioenergy with carbon capture and storage (BECCS) power station that Drax wants to turn itself into would allow more carbon to be captured on the same amount of land. The trick is to use the biomass not as a simple standing store of carbon, but as a renewable fuel.

A question of combustion

The original use envisaged for carbon capture and storage (CCS) technology was to take CO out of the chimneys of coal-fired power plants and pump it deep underground; do it right and the power station will be close to carbon-neutral. Apply the same technology to a biomass-burning plant and the CO you pump into the depths is not from ancient fossils, but from recently living plants—and, before them, the atmosphere. Hey presto: negative emissions. And BECCS does not just get rid of CO: it produces power, too. The solar energy that photosynthesis stored away in the plants' leaves and wood gets turned into electricity when that biomass is burned. It is almost as if nature were paying to get rid of the stuff.



The Economist

There are, as you might expect, some difficulties. Even if you regularly take some away for burning, growing biomass on the requisite scale still takes a lot of land. Also, the bog-standard CCS of which BECCS is meant to be a clever variant has never really made its mark. It has been talked about for decades; the IPCC produced a report about it in 2005. Some hoped that it might become a mainstay of carbon-free energy production. But for various reasons, technical, economic and ideological, it has not.

The world has about 2,500 coal-fired power stations, and thousands more gas-fired stations, steel plants, cement works and other installations that produce industrial amounts of CO. Just 19 of them offer some level of CCS, according to the Global Carbon Capture and Storage Institute (GCCSI), a CCS advocacy group. All told, roughly 40m tonnes of CO are being captured from industrial sources every year—around 0.1% of emissions.

Why so little? There are no fundamental technological hurdles; but the heavy industrial kit needed to do CCS at scale costs a lot. If CO emitters had to pay for the privilege of emitting to the tune, say, of $100 a tonne, there would be a lot more interest in the technology, which would bring down its cost. In the absence of such a price, there are very few incentives or penalties to encourage such investment. The greens who lobby for action on the climate do not, for the most part, want to support CCS. They see it as a way for fossil-fuel companies to seem to be part of the solution while staying in business, a prospect they hate. Electricity generators have seen the remarkable drop in the price of wind and solar and invested accordingly.

Thus Drax's CCS facility remains, at the moment, a pair of grey shipping containers sitting in a fenced-off area outside the main boiler hall, dwarfed by the vast buildings and pipes that surround them. Inside the first container, the flue gases—which are about 10% CO by volume—are run through a solvent which binds avidly to CO molecules. The carbon-laden solvent is then pumped into the second container, where it is heated—which causes it to give up its burden, now a pure gas.

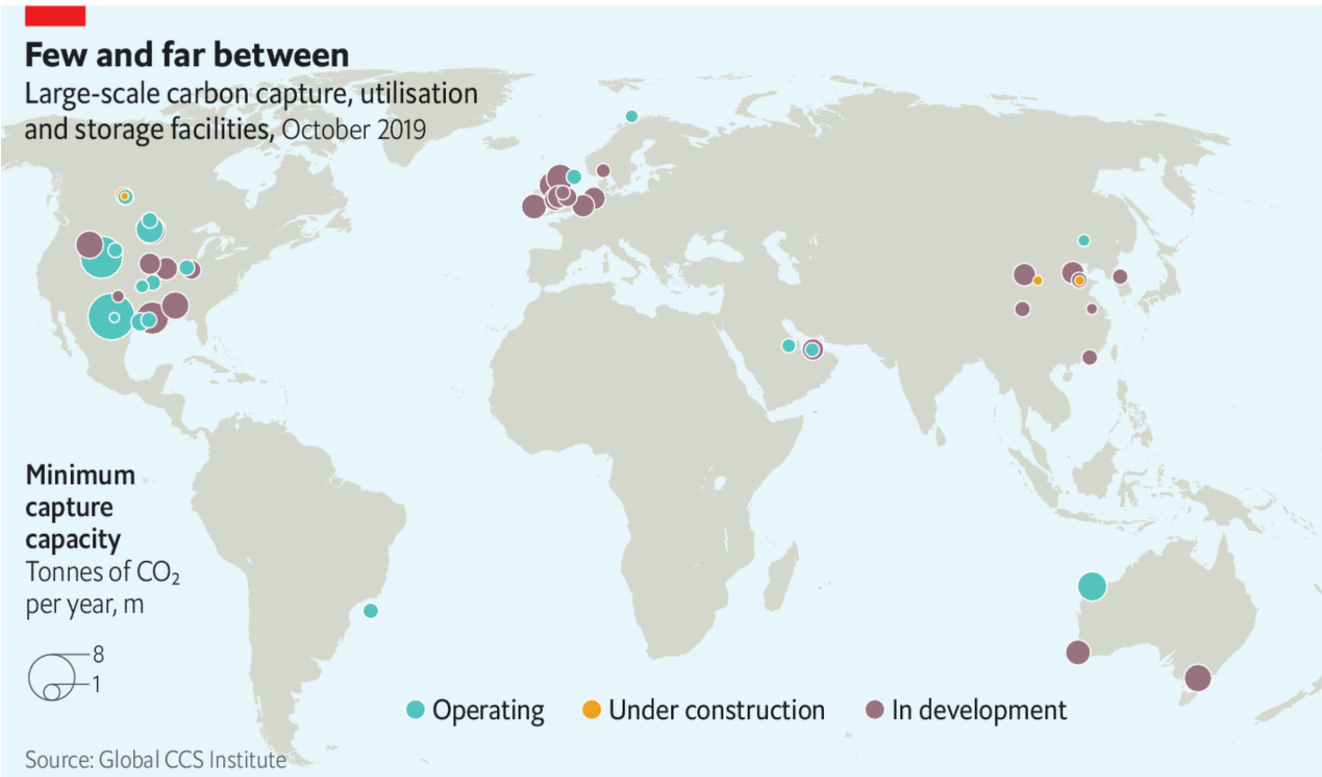
This test rig produces just one tonne of CO a day. The pipe through which the flue gases enter it is perhaps 30cm across. High above it is another pipe, now unused, which in coal-burning days took all the flue gases to a system that would strip sulphur from them. It is big enough that you could drive down it in a double-decker bus with another double-decker on top. That is the pipe that Drax would like to be able to invest in using.

In some circumstances, you do not need a subsidy, a carbon price or any other intervention to make capturing CO pay. Selling it will suffice. The commercial use of CO is nothing new. Not long after the great British chemist Joseph Priestley first made what he called "fixed air" in the 1760s, an ingenious businessman called Johann Jacob Schweppe was selling soda water in Geneva. CO, mostly from natural sources, is still used to make drinks fizzy and for other things. Many greenhouses make use of it to stimulate the growth of plants.

The use case

The problem with most of these markets from a negative-emissions point of view is that the CO gets back into the atmosphere in not much more time than it takes a drinker to belch. But there is one notable exception. For half a century oil companies have been squirting CO down some of their wells in order to chase recalcitrant oil out of the nooks and crannies in the rock—a process known as enhanced oil recovery, or EOR. And though the oil comes out, a lot of the CO stays underground.

The oil industry goes to some inconvenience to capture the 28m tonnes of CO a year it uses for EOR from natural sources (some gas wells have a lot of CO mixed in with the good stuff). That effort is rewarded, according to the International Energy Agency, with some 500,000 barrels of oil a day, or 0.6% of global production. That seems like a market that CCS could grow into—though the irony of using CO produced by burning fossil fuels to chase yet more fossil fuels out of the ground is not lost on anyone.



The Economist

The fact that oilfields in Texas regularly use EOR has made the state a popular site for companies trying out new approaches to carbon capture. A startup called NET Power has built a new sort of gas-fired power plant on the outskirts of Houston. Most such plants burn natural gas in air to heat water to make steam to drive a turbine. The NET Power plant burns natural gas in pure oxygen to create a stream of hot CO which drives the turbine directly—and which, being pure, needs no further filtering in order to be used for EOR.

Also in Texas, Occidental Petroleum is developing a plant with Carbon Engineering, a Canadian firm which seeks to pull CO straight out of the air, a process called direct air capture. Because CO is present in air only at a very low concentration (0.04%) DAC is a very demanding business. But oil recovered through EOR that uses atmospheric CO can earn handsome credits under California's Low-Carbon Fuel Standards cap and trade programme. The scheme aims to be pumping 500,000 tonnes of CO captured from the air into Occidental's nearly depleted wells by 2022.

Not all the CO pumped into the ground by oil companies is used for EOR. Equinor, formerly Statoil, a Norwegian oil company, has long pumped CO into a spent field in the North Sea, both to prove the technology and to avoid the stiff carbon tax which Norway levies on emissions from the hydrocarbon industry. As a condition on its lease to develop the Gorgon natural-gas field off the coast of Australia, Chevron was required to strip the CO out of the gas and store it. The resultant project is, at 4m tonnes a year, bigger than any other not used for EOR, and the world's only CCS facility that could handle emissions on the scale of those from Drax.

In Europe, the idea has caught on that the costs of operating big CO reservoirs like Gorgon's will need to be shared between many carbon sources. This is prompting a trend towards clusters that could share the storage infrastructure. Equinor, Shell and Total, two more oil companies, are proposing to turn CCS into a service industry in Norway. For a fee they will collect CO from its producers and ship it to Bergen before pushing it out through a pipeline to offshore injection points. In September Equinor announced that it had seven potential customers, including Air Liquide, an industrial-gas provider, and ArcelorMittal, a steelmaker.

Return to sender

Similar projects for filling up the emptied gasfields of the North Sea are seeking government support in the Netherlands, where Rotterdam's port authority is championing the idea, and in Britain, where the main movers are heavy industries in the north, including Drax.

This is part of what the GCCSI says is a steady increase in projects to capture and store, or use, CO. But the trend needs to be treated with caution. First and foremost, global carbon capture is still measured in the tens of millions of tonnes, not the billions of tonnes that matter to the climate. What the Gorgon project stores in a year, the world emits in an hour.

Second, the public support the sector has received in the past has often proved fickle or poorly designed. In 2012, the British government promised £1bn in funding for CCS, only to pull the plug in 2015. Two projects which had been competing for the money, a Scottish one that would have trapped CO at an existing gas plant and one in Yorkshire which planned to build a new coal-fired power station with CCS, were both scrapped. This history makes the £800m for CCS that Boris Johnson, the prime minister, has promised as part of the current election campaign even less convincing than most such pledges.

But there are some reasons for optimism. In 2008 America enacted a tax credit, 45Q, that was to reward the first 75m tonnes of CO sequestered through CCS. Unfortunately, not knowing from the outset whether a given project would end up emitting the lucrative 74th-millionth tonne or the otiose 76th-millionth tonne tempered investor enthusiasm. Last year 45Q was amended. Instead of a 75m tonne cap, there is now a time limit: all projects that are up and running before January 1st 2024 will be eligible. This has created a flurry of activity.

The European Union has also recently announced financial support for CCS, in the form of a roughly €10bn innovation fund aimed at CCS, renewables and energy storage. The first call for projects goes out in 2020. Christian Holzleitner, head of the EU's Directorate-General for Climate Action, emphasises that the fund's purpose is not to decarbonise fossil-fuel energy, but rather to focus on CCS development for the difficult-to-decarbonise industries such as steel and cement. With renewables on a roll, that makes a lot of sense.

Tax breaks, experimental capture plants, new fangled ways of producing electricity and talk of infrastructure hubs amount to an encouraging buzz, but not yet much more. A CCS industry capable of producing lots of BECCS plants remains a long way off, as does the infrastructure for gathering sustainably sourced biomass for use in them. Carbon Engineering and its rival DAC companies, such as Climeworks and Skytree, remain very expensive ways of getting pure CO. If they can find new markets and push their costs down both by learning better tricks and through economies of scale, they may yet be part of the solution. But for now, it looks like most of the CO being pumped into the atmosphere will stay there for a very long time. ■

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Refugee policy
Denying opportunities costs

Denying opportunities costs

What America could lose by curtailing refugee resettlement

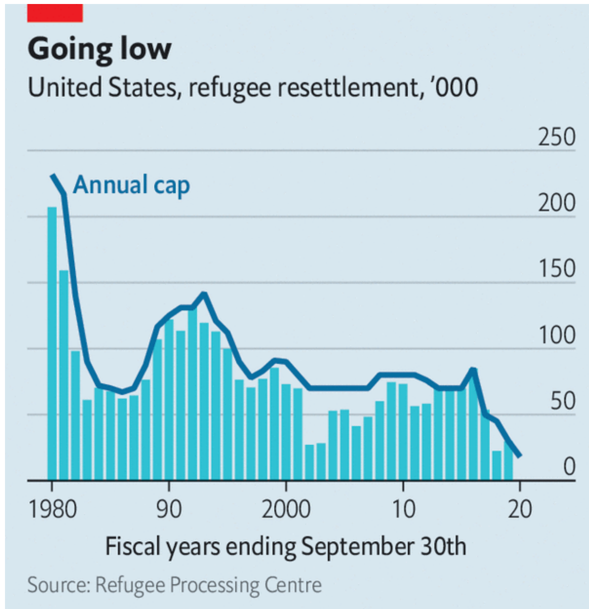
A former Liberian refugee running for the Senate shows the promise of asylum

Print | United States Dec 5th 2019

Thom Bridge/Independent Record

AMERICA DID not settle a single refugee in October. In November it admitted under 1,500, the lowest total for that month since the aftermath of the 9/11 attacks. A new federal cap imposes a limit of 18,000 to be resettled next year, down from 85,000 in 2016. Canada now welcomes more refugees than its more populous neighbour.

The decades-long period in which America resettled more refugees than the rest of the rich world combined has come to an end. The country long abided by an international convention that individuals who feared persecution because of their political opinions or their membership of particular social groups should get asylum. During the cold war, refugees were overwhelmingly perceived as democrats fleeing communist repression.



The Economist

Definitions have since expanded. That is partly due to changes in attitudes and domestic laws. In 1994 the first asylum-seeker won sanctuary on the basis of fearing persecution over sexual orientation. The Board of Immigration Appeals ruled in 2014 that Guatemalan women with repressive male companions could count as a group deserving refugee status. In 2016 it added a similar ruling to cover Salvadorean women who are abused. But the Trump administration is trying to curtail the broadening of who can count as a "persecuted group". The recent dip in resettlement numbers mostly reflects the shrinking federal cap on them (see chart). A narrower definition of who may claim asylum would also keep numbers low.

Stricter resettlement policies come with a cost. They run the risk of shutting out people like Wilmot Collins. As a young man ensnared in Liberia's civil war in 1990, Mr Collins cheated death. Trapped in gun battles in Monrovia, the capital, he was twice almost killed by government soldiers. Seized by a rebel while he foraged for food, he narrowly avoided execution. Elsewhere, rebels beheaded his brother. Half-starved and sick with malaria, he fled with his wife aboard a cargo ship.

Four years later—and only after lengthy vetting by UN and American officials while in Ghana—he reached Helena, Montana's sleepy capital. He and his wife left, he recalls, with "nothing but the clothes on our backs", arriving in an alien, snow-flecked place. They stand out. Barely 0.6% of Montanans are African-American. Explore Helena's dainty streets, cafés or offices and almost only white faces appear.

Montanans mostly offered the Collinses a generous welcome, but not all. Someone daubed "KKK" on a wall by their house; Mr Collins's car was vandalised; a fake plane ticket came in the post, with a message saying "Go back to Africa". He shrugged that off as the ranting of "crazy people". Now when he hears politicians, including the president, saying similar things he says he feels "rotten". He wants to show that people who are granted sanctuary in fact help to make America stronger.

Public attitudes to refugees are sharply divided. Three-quarters of Democrats see a duty to take them in, according to a Pew poll last year; only one-quarter of Republicans agree (a drop from the previous year). Some Republicans worry about security, though rigorous vetting helps to ensure refugees are overwhelmingly law-abiding. In May the Cato Institute, a libertarian think-tank, estimated that an American has but a one in 3.86bn chance per year of being murdered by a refugee in a terrorist attack. The chance of being murdered by a native-born terrorist is about 1 in 28m.

Others claim refugees are an economic drain. Yet where workers are scarce, they are likely to be a boon. Most refugees are employed within 180 days of arrival, points out David Miliband of the International Rescue Committee (IRC), which he says has resettled 350,000 in America. Mr Miliband is a former British foreign secretary.

A few years back, after the mayor of Missoula, a city in western Montana, asked for more refugees, the IRC opened a re-settlement office. Many refugees now work in supermarkets, hotels and other businesses in the city. Theo Smith, who owns Masala, a restaurant, says his workers from Congo, Iraq and Syria are loyal and capable. The (Republican) governor of nearby Utah, Gary Herbert, appears to agree. He wrote to Mr Trump in October asking for more refugees, whom he called valuable "contributors" to his state.

Within days of Mr Collins's arrival, a chance meeting with Montana's governor led to his first job, at a children's home. He has since been a caretaker and teacher. Six months after getting to Helena he also enrolled in the National Guard. Long spells in the navy and army reserves followed.

Two years ago he turned to politics. In his speeches he has confronted misconceptions that refugees pay no tax, take others' jobs or even get free cars. He jokes indignantly that somehow he missed out on such mythical goodies. (In fact, those given sanctuary must accept any job offered by a resettlement agency, such as the IRC, and repay some of the cost of getting to America, such as their plane tickets.)

In 2017 Mr Collins made history when Helena's voters picked him to run their city. He became the first black mayor ever elected in Montana. After moderate early success as mayor—a funding boost for local services, a plan for affordable homes—he is running for the Senate with a promise to make Washington more civil. Montanans, even rural folk in remote areas, have been nothing but supportive, he says.

His chances of becoming the junior senator from Big Sky Country are slender. Three others are vying in the Democratic primary, which takes place in June. All would be overshadowed if Steve Bullock, Montana's Democratic governor, were to run for the Senate. Whoever ends up taking on the Republican incumbent, Steve Daines, could struggle. Mr Daines raised a mountainous $1.2m in the latest quarter; Mr Collins lacks big donors. In the same period he gathered only $84,000.

That, though, is not really the point. In few countries would Mr Collins's story be possible. The candidate himself, a congenital optimist, expects America's readiness to take in refugees to return. "On the whole, Americans have an open door," he says, describing how he was met at the airport in Helena, in 1994, by a crowd of strangers who held a banner that read "Welcome home Wilmot". But the America of 2019 is less welcoming than before. The refugee squeeze is just one sign of that. ■

Uncommon grounds

The impeachment inquiry enters its next phase

It began with duelling reports and a chaotic hearing

Print | United States Dec 5th 2019

DOUG COLLINS, the highest-ranking Republican on the House Judiciary Committee, and Bernie Sanders, the socialist senator from Vermont seeking the Democratic nomination for president, differ in almost every way but one. They both have just two volume settings: full and off. On December 4th Mr Collins's committee invited four law professors to testify about the constitutional basis for impeachment and the nature of impeachable offences. In his opening statement, Mr Collins, a law-school graduate himself, peered at the four witnesses present and shouted, "Hey, we got law professors here! What a start of a party!...America will see why most people don't go to law school!"

Of course, any congressman-law professor colloquy risks breaking the logorrheic scale. And Wednesday's hearing uncovered no new facts. But it was not intended to: the professors were there to define terms before the committee decides, perhaps by next week, whether to draw up articles of impeachment. Yet the two parties' strategies, in both the hearing and their reports about the House Intelligence Committee's findings, remained relatively constant, with Democrats focused on Mr Trump's actions, and Republicans on process. They are playing to different crowds. Democrats are trying to shift public opinion, which is probably a fool's errand. Republicans are trying to prevent significant congressional defections, at which they will probably succeed.

The Democrats' report is precise, forensic and thorough. Like the Mueller report, it has two sections: the first focusing on Mr Trump's actions regarding Ukraine, and the second on conduct that Democrats believe has obstructed their investigation.

According to their report, Mr Trump's efforts to pressure Ukraine's president, Volodymyr Zelensky, into investigating Joe Biden did not consist of just one phone call. It was a sprawling, months-long campaign spearheaded by Rudy Giuliani, Mr Trump's personal lawyer. Call records show extensive contact between Mr Giuliani and the Office of Management and Budget, which implemented the hold on Ukraine's assistance funds; as well as Mike Pompeo, the secretary of state, and Devin Nunes, the highest-ranking Republican on the House Intelligence Committee. Mr Giuliani also received calls from someone listed just as "-1", who tended to ring soon after he called or texted White House numbers.

The report concludes that Mr Pompeo, Vice-President Mike Pence, Mick Mulvaney, the chief of staff, and others were "knowledgeable of or active participants in" Mr Trump's efforts to make military assistance conditional on Ukraine announcing investigations that would be of personal political benefit to him.

It also lays out which officials declined to take part in the impeachment inquiry and what information Congress wants. The report argues that Mr Trump's blanket refusal is unprecedented—Andrew Johnson, Richard Nixon and Bill Clinton all complied with House requests for information—and that such defiance represents "an existential threat to the nation's constitutional system of checks and balances…and rule of law".

The Republican report rejects virtually all those claims. It paints the impeachment inquiry as an effort "to undo the will of the American people". It argues that no evidence establishes that Mr Trump pressured Ukraine, orchestrated a "shadow foreign policy" or "covered up the substance" of his conversation with Mr Zelensky. It notes, correctly, that Ukraine has a history of corruption, and that during the 2016 election some Ukrainian officials were publicly sceptical of Mr Trump, which, given his avowed fondness for Russia and their oppression by it, makes sense. Some of Mr Trump's defenders have tried to equate these isolated, individual statements of preference with Russia's extensive, covert meddling in the 2016 election, but the two things are not remotely similar.

The two sides continued speaking past each other at the hearings. The three professors whom Democrats invited all testified that Mr Trump had committed impeachable offences; the lone invited by the Republicans disagreed. It sounded as though Democrats were laying the groundwork to draw impeachment articles on abuse of power and obstruction.

That will not change public opinion. Support for impeachment rose steeply, to around 50%, after the inquiry began, but there it has stayed, just as Mr Trump's approval rating has remained in the low 40s. Without an unlikely shift, congressional Republicans will still fear a primary challenge from the right, if they support impeachment, more than a general-election loss. Which means that Mr Trump still looks likely to be impeached, but then tried and acquitted. ■

Fostering enmity

Why Donald Trump wants to keep religious adoption agencies open

The clash between religious liberty and anti-discrimination legislation has jolted child-welfare services

Print | United States Dec 5th 2019

Rod Sanford

THE FIRST lesson Melissa Buck taught her eldest child was that she was not going to hit him. The 37-year-old stay-at-home mother from Holt, Michigan and her husband had fostered the then four-year-old and his two younger siblings after a parishioner at their church told them that the children, having been removed from their mother, were at risk of being separated. All three were traumatised by physical abuse and neglect. The little boy was plainly terrified, Mrs Buck recalled, that he would be beaten if his younger brother and sister made too much noise.

Over the next five years the Bucks fostered two more children: a girl with a rare genetic condition who needed frequent hospital stays, and the autistic younger half-brother of two of their older foster-children. “I was so nervous at the beginning,” says Mrs Buck. “What if they started a fire or ran away; what if I loved them too much? But the Bible makes clear that taking care of the orphaned, the parentless, is our job.” She could not, she says, have coped without the agency that arranged the placements, St Vincent Catholic Charities in Lansing, Michigan. Though Mrs Buck and her husband have now formally adopted all five children, they still depend on the organisation to help them find the myriad medical and educational services needed by their children.

St Vincent may soon stop doing this work—along with innumerable other Christian organisations that have long organised fostering and adoption placements in America. The reason is their refusal to consider placing children with LGBT parents, a requirement of the anti-discrimination laws that followed the legalisation of gay marriage in 2015. In 2017, after St Vincent told two lesbian would-be foster parents that it did not work with same-sex couples, the American Civil Liberties Union sued the state of Michigan, with which St Vincent has a contract. Settling the case this year, Michigan said it would cut funding to agencies that discriminate on religious grounds. In September, after St Vincent, along with the Buck family, sued the state, a federal judge ruled that religious agencies could continue to refuse to work with same-sex couples. The decision is likely to be appealed against.

A similar battle is playing out in Philadelphia, where the city stopped funding a Christian foster agency because it would not work with same-sex couples. In other states which have passed laws protecting religious agencies from requirements that conflict with their beliefs, more cases are being fought. As long as Christian agencies go on insisting that marriage is only between a man and a woman, their continued existence is under threat.

The issue, inevitably, has been politicised. President Donald Trump, who presented himself as a warrior for religious freedom to the evangelicals who helped elect him in 2016 and on whom he still depends, has entered the fray. This month his administration issued a proposed rule allowing religious providers to follow their beliefs. It would replace an Obama-era rule from 2016 that forbids recipients of federal funding to discriminate on the ground of sexual orientation. Though rules do not have the power of laws, the change is likely to lead to further legislation and more legal battles on the issue. Right-wing Evangelical leaders have greeted the planned rule-change with jubilation.

Some conservative Christians argue that if religious adoption and fostering agencies are forced to close, fewer children will find proper homes. Assessing this claim is less straightforward than it might seem, because no data exist on the proportion of placements organised by religious agencies. But Christian organisations have undoubtedly played a huge role in finding homes for children who cannot live with their own families. Around a quarter of the more than 400,000 children now in foster care in America will never return to their families. Many religious agencies recruit in churches with great success. Research by the Barna Group, an evangelical research outfit, found that practising Christians were twice as likely to have adopted children as other Americans. Although some Christians would doubtless adopt and foster children from secular agencies if no religious ones existed, others would not.

Yet it is unlikely that fewer children will be fostered or adopted if anti-discrimination laws prevail. Not all Christian agencies will be forced to close. A number of them have long placed children with LGBT parents, though they have tended to do so quietly. More important, the number of LGBT Americans who want to foster and adopt seems likely to make up for any shortfall that arises when Christian organisations lose their funding. Research by the Williams Institute, part of the University of California, Los Angeles, found that of the 114,000 same-sex couples raising children in America, 25% of them are bringing up adopted or fostered ones, compared with 3% of heterosexual couples with children.

But in some places, especially in the South, where religious agencies dominate adoption and fostering services, their absence will be keenly felt. And Christian foster parents and adopters will mourn lost connections. Mrs Buck says she would like to offer a home to any future offspring of her children's biological parents. But if St Vincent's is no longer arranging placements, she may not get the chance. ■

Theocracy in America

Short Creek starts to move beyond its past as a fundamentalist fief

A small community straddling the Utah-Arizona border charts a new course

Print | United States Dec 5th 2019

JUDGING BY its shops, Short Creek seems more like a trendy suburb of somewhere like Portland than a small town on the Utah-Arizona border with just shy of 8,000 people. There are two health-food stores, a bakery and a vape shop. The occasional sight of women in prairie dresses and the huge houses with thick walls are the only conspicuous evidence Short Creek was once home to an American theocracy.

When the Church of Jesus Christ of Latter-Day Saints (LDS), better known as the Mormon church, abandoned several controversial doctrines in 1890, there were dissenters. Some, seeking to preserve abandoned institutions such as "plural marriage" (polygamy) and communal ownership, formed communities practising "Old-Fashioned Mormonism". By the early 1930s Short Creek was such a place.

The settlement was largely ignored by the outside world, apart from the occasional court case over polygamy and an ill-advised raid by the state of Arizona in 1953, when 263 children were taken from their parents and held for up to three years, inciting widespread sympathy for the town. Short Creek ultimately incorporated as two places: Hildale City, Utah in 1962 and Colorado City, Arizona in 1985. It was not until the turn of the century that outsiders started paying attention again.

Short Creek's church, by then called the Fundamentalist Church of Jesus Christ of Latter-Day Saints (FLDS), had long been headed by a "prophet". The church's most famous, Warren Jeffs, assumed the title in 2002. By excommunicating dissenters—which meant ostracisation by believers, even spouses and children—Mr Jeffs took control of the priesthood and therefore of the town's resources and government, as most residents and city office-holders were church members. He began to exercise total authority over relationships, starting by marrying many of his stepmothers. He removed all FLDS children from public school and banned television, books other than approved scripture, toys and red clothing. Mr Jeffs was arrested in 2006 after a stint on the FBI's most-wanted list for charges related to sexual abuse of a minor. He is serving a life sentence in Texas.

Mr Jeffs's arrest did not end Short Creek's legal troubles. The United States began court proceedings against Colorado City and Hildale City in 2012, alleging that city officials and local utility providers had acted in concert to "deny non-FLDS individuals housing, police protection, and access to public space and services". The FLDS filled the local marshal's office with loyal members who turned a blind eye to under-age marriages and food-stamp fraud. The marshal's office trained and equipped a formal security force, called "Church Security", with the primary purpose of helping church leaders evade the law. They held mock FBI raids to be ready for the real thing, and even helped burgle the business of an ex-FLDS member who had evidence that Mr Jeffs had raped a 12-year-old in the presence of other girls.

The two cities lost their case in 2016. Both then appealed, though Hildale City withdrew in 2018. The ruling was upheld by the Ninth Circuit Court of Appeals in August of this year.

Over the course of the proceedings, Short Creek has changed dramatically. Many true believers have moved away, while the town has seen both the return of ex-FLDS members and an influx of newcomers. Though the government of Colorado City is still controlled by FLDS members, Hildale City elected non-FLDS councillors and an ex-FLDS mayor in 2017, causing a number of FLDS city employees to resign.

Most of the towns' businesses opened recently. The Edge of the World Brewery served its first beer in March 2018. The Black Cloud vape shop opened three months later. Few FLDS-run businesses remain. And the children have returned to class. An old FLDS storehouse has since become Water Canyon High School.

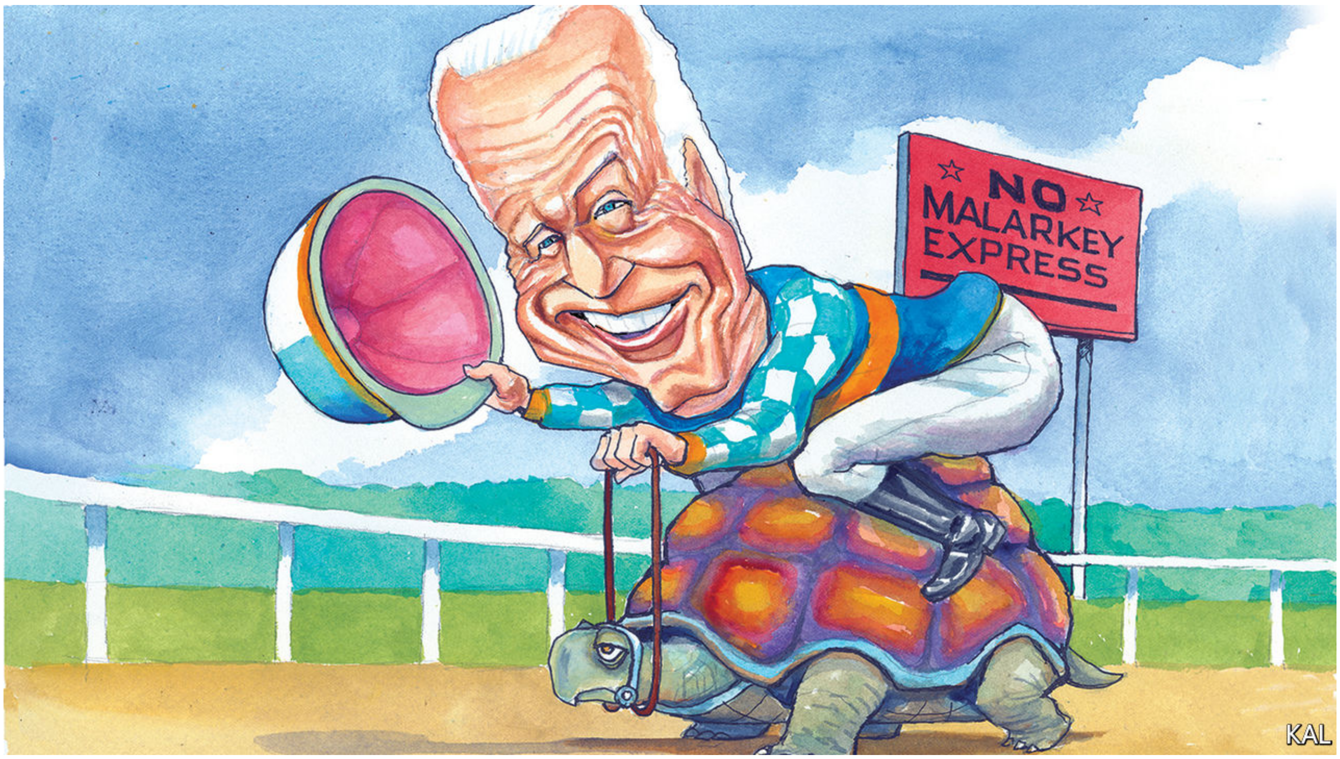
With these changes has come a newfound democratic zeal. At a town-hall meeting on October 21st the citizens of Hildale City debated paving the town's many dirt roads. Mr Jeffs's name came up only one time, invoked by a man who had moved in relatively recently. There is a long road still to travel to escape Mr Jeffs's legacy, but the community of Short Creek has set off in the right direction. ■

Lexington

The stickiness of Joe Biden

The former vice-president is dated, gaffe-prone, and well placed to take on Donald Trump

Print | United States Dec 7th 2019



IT WOULD BE too much to describe Joe Biden's "No Malarkey" bus tour through Iowa this week as a desperate measure. Despite much negative commentary on his candidacy, the former vice- president continues to lead the Democratic primary field in national polls. With strong support from African-Americans, who like his loyalty to Barack Obama and don't love his rivals, he is also ahead in second-phase primary states such as Nevada and South Carolina. Yet in Iowa and New Hampshire he is now trailing Pete Buttigieg, Bernie Sanders and Elizabeth Warren. And as few candidates have lost those early states and still won the nomination, his eight-day, 650-mile tour through icy Iowa had a lot riding on it.

One long day on the trail started in Emmetsburg, northwestern Iowa, across the road from a Lutheran retirement home. The white-haired crowd might have been made up of its residents. Biden supporters skew old, as pollsters say. Perhaps that makes them more forgiving of the 77-year-old's regular befuddlements; he recently confused last year's Parkland school shooting, which left 17 dead and the youthful Democratic base aroused in anger, with the massacre at Sandy Hook six years earlier.

Biden supporters are certainly more receptive than younger Democrats to his folksy language and 1990s view of America. Notwithstanding a bold climate-change plan—which he mentions at odd moments and often—he appears to have little interest in most of the problems, such as slow wage growth, student debt and overconcentration of corporate power, that exercise his rivals. In his telling, America is broadly as it ever was, a country of strivers putting "one foot in front of another", wanting government out of the way almost as much as they want its help. "You don't want government to fix all your problems but you want it to understand them," he says. "You're hardworking, decent people, the soul of America."

It can sound complacent, especially from a man first elected to the Senate almost 50 years ago. That underlines what an odd front-runner Mr Biden is turning out to be. Unlike their opponents, Democrats overall are forward-looking. It is a posture reflecting the party's commitment to social justice, which unites its disparate parts. Yet the 77-year-old former vice-president's age, record and nostalgic politics all point to the past. Even the cosmetic measures he appears to have taken do. His taut and polished features, like those of an ageing game-show host, recall a time when Americans were happier to take their leaders at glossy face value.

The many commentators who doubt that Mr Biden is the man to beat Donald Trump have other jarring things to cite. Though a cornerstone of the Democratic establishment, he is struggling for money and top-level endorsements—above all from Mr Obama. (Recent reports suggest the revered former president is not merely agnostic, as he claims to be, but critical of Mr

Biden's candidacy.) That reflects Mr Biden's struggle in the early-voting states—which is even more of an indictment than it may seem. Small and sparsely populated, Iowa and New Hampshire are famously won by pressing the flesh, which is his speciality.

Working his way around the post-event mêlée in Emmetsburg (where he appeared to know many in attendance), he offered inexhaustible bonhomie, including selfies, joshing greetings and naughty kisses for delighted ladies. ("God love you!" he muttered, between planting peckers on one aged cheek: "Thank you! [peck] Thank you! [peck] Thank you!") Famously bereaved, he also offered consolation. A burly farmer was reduced to tears, and warmly embraced by Mr Biden, as he described his late wife's esteem for him. And yet the Iowan and New Hampshire voters who have seen most of Mr Biden, the polls suggest, have the biggest doubts about him. "He's a quality person. His age is a concern," said a retired nurse—and newly registered Democrat—looking on.

Yet he keeps clinging on. And none of Mr Biden's rivals looks clearly able to depose him. Ms Warren is in decline, Mr Sanders appears to have hit his ceiling, Mr Buttigieg, though rising, still has little support from non-whites. This is starting to make Mr Biden's resilience look as significant as his weaknesses. It may be the most important story of the election to date. And a day spent observing his campaign also offered a couple of possible explanations for it.

One is that, having a choice to make, voters tend to weigh a politician's flaws against his competitors'. And the underappreciated moderation of most Democratic voters made them relatively tolerant of Mr Biden's platitudes when the main alternative was the excessive miserabilism of Mr Sanders and Ms Warren. If he is incurious about the economy's weaknesses, the left-wingers seem unable to account for its current strength—illustrated by rows of gleaming trucks outside Mr Biden's events. Mr Buttigieg, the first formidable moderate challenger Mr Biden has faced, may be eroding that advantage. Hence Mr Biden's big push this week.

Kindness to strangers

His apparent economic incuriousness, though disappointing in itself, also allows him to focus on his strongest suit: attacking Donald Trump. At his intermittent best, Mr Biden offers a powerful critique of the president's behaviour. He marvels, as if briefly horror-stricken, at "the language the president uses, the way he refers to people...It's so degrading." The fact that Mr Biden and Mr Trump are close in age lends an air of authority to such denunciations. So does the fact that the president plainly fears him—or else why did he try to nobble him in Ukraine?

So, too, does the contrast with Mr Trump that such criticisms raise. Though rather sanctimonious, Mr Biden is rightly known for civility and patience. He has never been called a scoundrel. And if those qualities seem less decisive when Mr Biden is seen up close, only Iowans and New Hampshirites will get the chance to do so. The gaffe-obsessed media should not discount how far Mr Trump has lowered the presidential bar. That Mr Biden is decent and presumably has some idea how to do the job could yet be enough. ■

Canada
"Wexit" doesn't mean Wexit

The Wexit wave

Alberta's secession movement spells trouble for Justin Trudeau

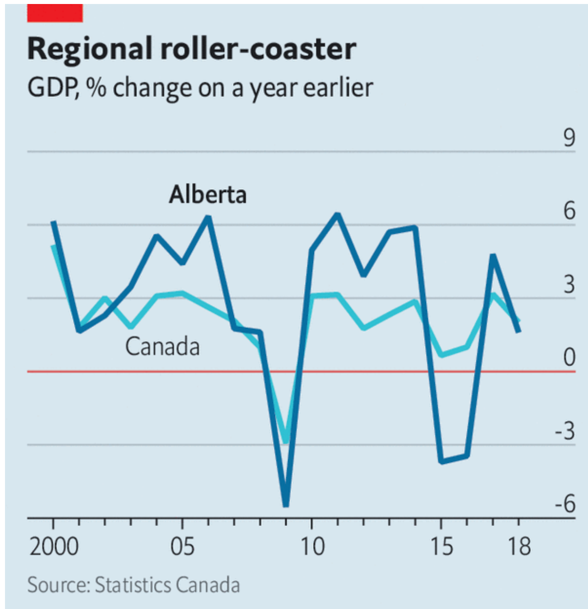
The province probably won't leave Canada. But it can get more autonomy

Print | The Americas Dec 5th 2019

THE 700 PEOPLE who gathered on a recent Saturday night at the Boot Scootin' Boogie Dancehall in Edmonton, the capital of the western Canadian province of Alberta, came not to boogie but to vent. Baseball caps for sale bore such slogans as "Make Alberta Great Again", "The West Wants Out" and "Wexit". On stage, before a Canadian flag held between hockey sticks and pointed upside down, Peter Downing recited the grievances that drew the crowd: cancelled plans to build oil pipelines, subsidies paid to the rest of Canada and snobbery towards Alberta from the central Canadian provinces. The country's prime minister, Justin Trudeau, would get what's coming to him, Mr Downing pledged. Someone near the back muttered, "Hopefully, a bullet."

The anger at the Boot Scootin' would be easy to ignore, except that it will be one of the dominant themes of Mr Trudeau's second term in office, which began when he narrowly won re-election in October. His Liberal Party was wiped out in Alberta and in its equally resentful neighbour, Saskatchewan. Mr Trudeau appointed Alberta-born Chrystia Freeland, the foreign minister in the last government, to be deputy prime minister and minister of intergovernmental affairs. One of her main jobs will be to soothe western feelings. Canada's governor-general was expected to outline the government's ideas for bridging regional divisions, among other priorities, in a "speech from the throne" as *The Economist* went to press on December 5th. They are unlikely to include a big reduction in Alberta's net transfers to the rest of the country. But its drive for greater autonomy could be a model for reshaping how the federation works.

Alberta's 4m people are Canada's richest. The province is a motor for the national economy when oil prices are high. It is a big net contributor to the federal budget and to other provinces. Alberta was also the fulcrum of Mr Trudeau's climate and energy policies. He had hoped to win its support for a national price on carbon by approving the expansion of the Trans Mountain oil pipeline to the country's west coast. The province rejected this grand bargain by scrapping the carbon tax on consumers.



The Economist

Though rich, Alberta has had a run of bad luck. It began when global oil prices fell in 2014, causing a recession and a jump in unemployment to a high of 9% in 2016 (see chart). The economy has since recovered, but Alberta still struggles to sell its oil. In part that is because existing pipelines are full. This forces producers to ship oil expensively by train to the United States, where it competes against cheaper American shale oil, or to store it. Extracting oil from Alberta's oil sands consumes a lot of energy, and it is harder to refine than lighter crudes. Each barrel contributes more to climate change than does one from most other sources.

These problems have led to an exodus of oil companies. Shortly after the election Encana said it would move its head office from Calgary, Alberta's business centre, to Denver. It is changing its name to Ovintiv. In November this year Sweden's central bank said it would sell its holdings of bonds issued by Alberta because its carbon footprint is too large. Royal Dutch Shell has sold almost all its oil-sands assets.

Albertans blame many of these setbacks on Mr Trudeau. He is the son of a prime minister, Pierre Trudeau, who during the 1970s and 1980s forced Alberta to sell its oil domestically at a discount to world prices. Although Mr Trudeau's government bought the Trans Mountain pipeline and the project to expand it, which is to begin laying pipe this month, it has vetoed other pipeline projects. Canada needs to phase out the oil sands, he has said. The national carbon price, which will be imposed on Alberta after it scrapped its own scheme, is another insult to the oil patch. Albertans are just as angry about an overhaul of the law for giving regulatory approval for infrastructure projects, including pipelines. This gives the public more say and obliges builders to consider such issues as climate change and gender equity.

A third of Albertans now think they would be better off outside Canada, the highest level on record, according to a poll by Ipsos. In November advocates of Wexit—western exit—applied to be recognised (by the federation they want to leave) as a political party. Wexit Canada imagines that if Alberta secedes, neighbouring British Columbia—which resembles California the way Alberta does Texas and has a coast—will have no choice but to join it.

Alberta's leaders, and most Albertans, are more realistic. Among the hurdles on the road to separation are old treaties signed by indigenous First Nations with Canada's rulers. These would be difficult to change. Moreover, separatist sentiment caused one firm to cancel plans to put its headquarters in Calgary. That cost the city 1,000 jobs, says its development agency.

Last month the province's canny Conservative premier, Jason Kenney, argued that separation would landlock Alberta's oil. He said he would host town halls and convene a panel with a more modest aim: to devise a "fair deal" for Alberta within Canada. This is likely to be a package of measures that the province can take unilaterally. They may give Alberta a status within the confederation closer to that of Quebec, the French-speaking province.

Mr Kenney's fair deal is likely to include a new force to take over provincial policing. Quebec and Ontario already have forces that operate alongside the Royal Canadian Mounted Police. Alberta, rather than the central government, might collect revenues destined to be spent within the province, as Quebec now does. The province may also try to opt out of some federal programmes, such as the Trudeau government's plan to pay for patients' prescriptions. Alberta could withdraw from the Canadian Pension Fund as long as, like Quebec, it sets up one with comparable benefits. That might lower Albertans' contributions (because its population is relatively young) and raise those of other Canadians. Many of these measures would increase administrative costs, which is one reason the province has rejected such ideas in the past. Quebeckers, for example, complete two tax returns.

On most money matters Alberta can do little on its own. Since 2000 the difference between what it has sent to the federal government and what it receives in transfers and services has amounted to 8% of the province's GDP. Much of the anger focuses on "equalisation", a transfer from rich provinces to poorer ones, mainly Quebec, that is supposed to even out social spending. During the provincial election campaign in May, Mr Kenney promised to hold a referendum on equalisation if the federal government did not expand the Trans Mountain pipeline.

It would have no legal force. Mr Trudeau is unlikely to cut Alberta's subsidy to the rest of Canada, even though it largely derives from oil dollars. Nor is he likely to scrap his environmental policies. He and Ms Freeland will no doubt seek other ways to placate the west. But these will probably not overcome its sense of alienation. Wexiteers may be gathering at the Boot Scootin' dance hall for years to come. ■

Unjust desserts

Desi Bouterse's murder conviction will not trouble him much

Suriname's president can probably win re-election, if he wants to

Print | The Americas Dec 7th 2019

TWO DAYS after a military court found Desi Bouterse, Suriname's president, guilty of murdering 15 political foes, he returned home from a visit to China. A throng of supporters, many wearing the purple of his National Democratic Party, turned up to greet him at Paramaribo's international airport on December 1st. Mr Bouterse brought back a promise of $300m to upgrade airports and roads and install solar power and 5G internet services. But the welcome was a defiant show of loyalty to a leader who has dominated his tiny country's politics for four decades.

Mr Bouterse's conviction for murders that took place in 1982, and the 20-year sentence that goes with it, are unlikely to dislodge him. He helped lead a "sergeants' coup" against an elected government in 1980, five years after independence from the Netherlands. He was elected democratically as president in 2010 and re-elected five years later. He may well repeat that feat next year. Few Surinamese expect Mr Bouterse to serve a day of his sentence. The appeal process could drag on for ten years, says the vice-president, Ashwin Adhin.

The murder victims were foes of Mr Bouterse's regime—journalists, lawyers, scholars, soldiers and businessmen. Fearing a counter-coup backed by the Netherlands, the regime rounded them up at night and held them in Fort Zeelandia, built in the 17th century. They were summarily tried, then tortured and shot. Mr Bouterse claimed at the time that they had been trying to escape.

He went on to fight a civil war. This pitted the army against disgruntled ethnic groups, especially Maroons, descendants of escaped slaves. In 1986 the army massacred 39 people in the home village of the Maroons' leader. Democracy was restored in 1991, under a coalition of parties that had not taken part in the war.

In 2000 a newly elected government set in motion a magistrate's inquiry into the murders of 1982, just ahead of the deadline set by the statute of limitations. Mr Bouterse and 25 others, mostly army officers, were indicted in 2004. He accepted political responsibility for the murders but has never admitted guilt. Since a Dutch court convicted him of trafficking cocaine in 1999 he has avoided visiting or even passing through the Netherlands, where he could be arrested.

Surinamese overlook his chequered reputation. A charismatic strongman with a jokey man-of-the-people style, Mr Bouterse outshines rival politicians. The ethnic tensions that sparked the civil war no longer define politics.

Mr Bouterse says he will be a candidate in the legislative election, due to be held in May. The president is elected indirectly, either by a two-thirds majority of the legislature or, if that fails, by a simple majority of a "united people's assembly", composed of all elected national and local representatives. Mr Bouterse can probably extend his hold on power, if he wants to.

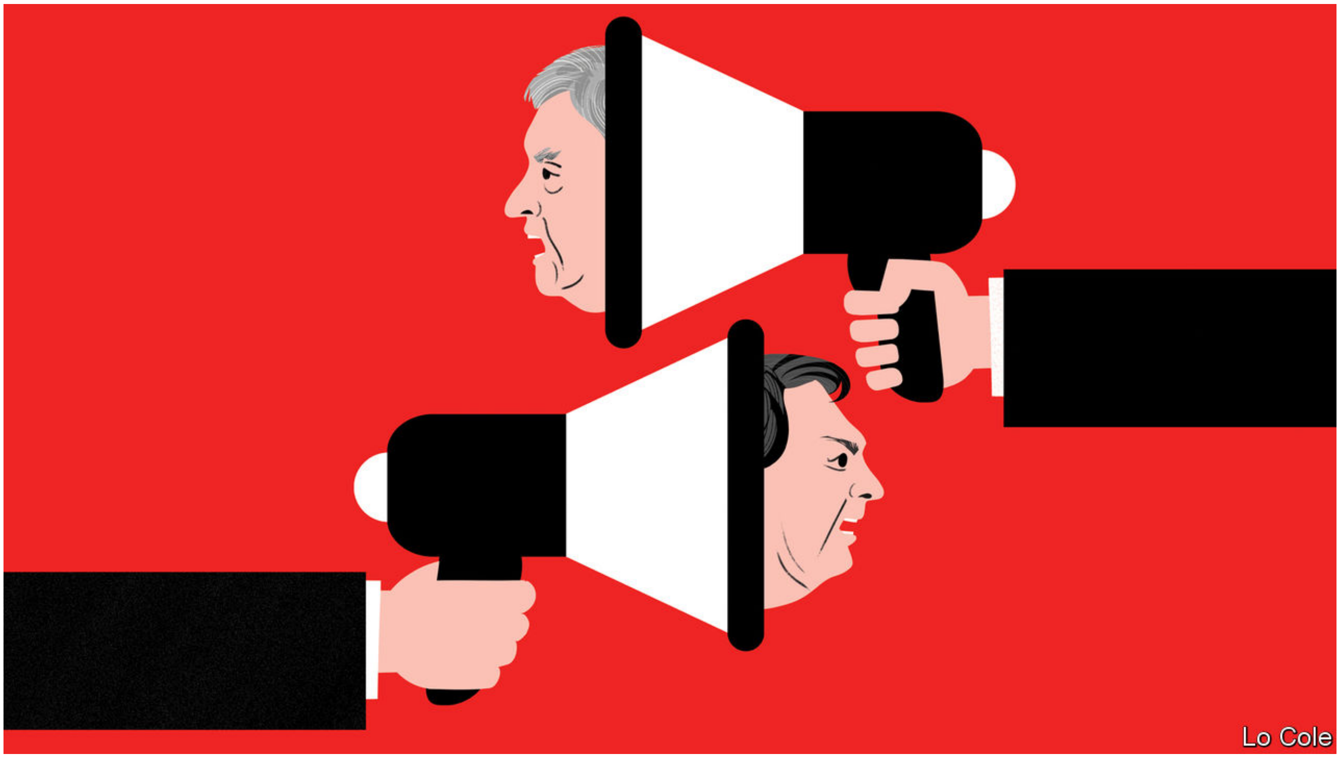
That would alarm democrats. They worry that part of the money from China will pay for a “safe city” project, which includes technology to track licence plates, and a facial-recognition surveillance system. But at 74 Mr Bouterse is showing his age. He may step aside for Mr Adhin or someone younger. If he decides to run, he is more likely to serve a third five-year term as president than a 20-year murder sentence. ■

Bello

The surprising similarities between AMLO and Jair Bolsonaro

Their ideologies clash, but their ways of exercising power have much in common

Print | The Americas Dec 5th 2019



TO ALL APPEARANCES they are opposites and foes. Brazil's Jair Bolsonaro is a foul-mouthed former army captain of the hard right. Mexico's Andrés Manuel López Obrador is a would-be revolutionary of the left. Mr Bolsonaro appeals to the worst in Brazilians, with his diatribes against women and gays, casual racism and fondness for guns and chopping down the Amazon's trees. Mr López Obrador (known as AMLO) invokes the noble purpose of making Mexico fairer and less unequal. Yet for all their differences, the two most important presidents in Latin America are strikingly similar in many ways. After roughly a year in office, each faces difficulties.

Both are reactionaries in the purest sense, conjuring up an imagined golden past. Mr Bolsonaro lionises Brazil's military dictatorship of 1964-85. AMLO, who stresses that he is a democrat, believes that everything was better in Mexico before a turn to "neoliberalism" in the 1980s. Both are nationalists with little interest in the outside world and would rather the outside world reciprocated. They are believers, and have inserted religion into the political discourse of hitherto secular states. Mr Bolsonaro, a Pentecostal protestant, campaigned on the slogan "Brazil above all, God above everyone". AMLO implicitly compares himself to Christ, who was "sacrificed ...for defending the poor". Both defend traditional family values, though they see different threats to them: left-wing political correctness in Mr Bolsonaro's case, neoliberalism for AMLO. Although Mr Bolsonaro, whose cabinet is stuffed with officers, more obviously relies on military help, AMLO has also bolstered the army's role. He called it "the people, in uniform" and put a retired general in charge of a new National Guard.

Neither has much respect for the separation of powers. During Mr Bolsonaro's election campaign one of his sons, Eduardo, said it would take only "a soldier and a corporal" to close the supreme court. Both Eduardo and Paulo Guedes, the economy minister, have mused about reviving A1-5, a decree under which the dictatorship suspended freedoms and purged congress. In Mexico AMLO's government strong-armed a supreme-court justice into resigning. His critics fear that he will take control of the electoral authority when new members are chosen next year. Both men dislike NGOs, which they see as meddlers. Mr Bolsonaro has made preposterous claims that NGOs (and Leonardo DiCaprio, an American film star) were behind fires in the Amazon. AMLO cancelled government funding to outfits providing child care and fighting people-trafficking.

Both presidents were elected on similar promises: to revive their economies and, by force of will, eliminate corruption and crime. They are going about these tasks differently, and with varying success. The efforts of Mr Bolsonaro's economic team to shrink unsustainable fiscal commitments have found support in congress, despite the president rather than because of him. The economy grew by 0.6% in the third quarter compared with the second. Mexico had a solid fiscal position. But AMLO introduced his own version of austerity, cutting government salaries and what he sees as waste. He and private business are suspicious of each other. Mexico's economy has sunk into a mild recession.

On crime, Mr Bolsonaro can be blamed for a rise in killings by police, which he has encouraged. He can take little credit for a sharp fall in overall murders this year, which began before he took office and owes much to the end of a vendetta between drug syndicates. AMLO has even less to crow about: Mexico's murder rate continues to rise, with massacres by drug gangs almost every month. His policy of "hugs, not bullets", of helping unemployed young people, shows no sign of working. He has failed to strengthen corruption-fighting institutions. Mr Bolsonaro's government has tried to block an investigation that has revealed links between his sons and paramilitary militias in Rio de Janeiro.

What really unites these seemingly contrasting presidents is that both are populists. They see themselves as saviours, and claim a special bond with "the people". Measured by popularity, AMLO is the winner. His approval rating is 68% compared with 42% for Mr Bolsonaro. How long will that last? Mr Bolsonaro, who has outsourced economic policy to Mr Guedes, knows what he doesn't know, while AMLO thinks he knows better than anyone else. Brazil has more checks on presidential power than does Mexico. That means AMLO has nobody else to blame as things start going wrong.

India’s economy
Searching for a landing site

Searching for a landing site

India’s economy is growing at its slowest pace since 2013

But the worst may be over

Print | Asia Dec 5th 2019


Getty Images

GLOBAL INVESTORS once fell in love with India’s growth “story” because of people like Shanmuga Subramanian. Educated in mechanical engineering, he became a computer programmer, working with Cognizant, an outsourcing firm, and Lennox, which makes heaters and air-conditioners. But that was not enough to exhaust his technological enthusiasms. He recently devoted four days of his spare time to scrutinising images of the Moon’s surface, provided by NASA, searching for any sign of an Indian moon lander that disappeared in September. He eventually spotted an incongruously bright pixel, which NASA this week confirmed was debris from the craft’s crash-landing.

Unfortunately, India’s growth story is in danger of repeating the lander’s ill-fated trajectory. The explanation offered by India’s space agency for the crash (“the reduction in velocity was more than the designed value”) might apply equally well to the economy. GDP grew by just 4.5% in the 12 months ending in September. That is the slowest pace since 2013 (see chart).

The Economist

Back then, India suffered from chronic inflation, high oil prices and an unsustainable current-account deficit, fragilities that were all cruelly exposed by a sudden deterioration in global investor sentiment known as the "taper tantrum". The present slowdown, though similar in its gravity, is quite different in its origins. Inflation is low, external imbalances are modest and oil prices are bearable. The decline began with a loss of confidence not among foreign investors, but among the country's own consumers.

Their spending began slowing in early 2018, according to some measures. Matters then took a sharp turn for the worse in September 2018 with the default of Infrastructure Leasing and Financial Services (IL&FS), one of many lenders outside the traditional banking system that had become a growing source of credit. Its failure cast doubt on many similar institutions, interrupting the flow of financing for purchases of big-ticket items like homes and cars. Sales of passenger vehicles slumped by 32% in September compared with a year earlier, their 11th monthly decline in a row.

Other consumer-facing industries have also suffered. Mobile-phone operators have faced predatory pricing from deep-pocketed conglomerates and "tax terrorism" from overzealous revenue collectors. Vodafone Idea reported a record loss of $7bn in the third quarter, prompting Nick Read, Vodafone's boss, to complain about unsupportive regulation, excessive taxes and a Supreme Court decision that forced operators to share additional revenues with the government.

The government dawdled in its response to the economic slowdown, perhaps because it was too convinced by its own economic boasts. Rahul Bajaj, an industrialist, has said that business people are afraid of criticising the government openly. (A day after making his complaints, Vodafone's Mr Read felt the need to apologise.) But for several months now, the economic debris has been too conspicuous to ignore. The government has responded, haphazardly at first, but with increasing force. It has slashed corporate taxes from 30% to 22% for existing firms (and to 15% for manufacturing startups), quickened the recapitalisation of government-owned banks, reversed an unpopular tax increase for foreign investors and offered some relief to telecoms firms, among other things.

The government has also broached a judicious reform of labour laws. Last month it introduced a bill that would consolidate three existing laws, making it easier for firms to hire workers on fixed-term contracts (rather than employing them on open-ended contracts that can be almost impossible to terminate). The new bill would still require firms with more than 100 employees to obtain government permission before laying anyone off. But it would give the government discretion to raise that threshold in future without further legislation.

Combined with five interest-rate cuts from the Reserve Bank of India, the central bank, these efforts should help stabilise the economy. Consumption is already growing faster than it was earlier in the year. Although it will take years to unclog the financial system properly, some of the panic over India's new breed of lenders has also dissipated. Financial institutions with good credit ratings can now borrow almost as cheaply as they did in early 2018 before the default of IL&FS.

One side-effect, however, is that the government's own borrowing is raising eyebrows. Last month Moody's said the outlook for India's credit rating was "negative" (although a downgrade would merely move Moody's assessment of India into line with rival rating agencies). The government is almost certain to miss its deficit target of 3.3% of GDP for this fiscal year, which ends on March 31st. And if the states and government-owned enterprises are included in the total, the combined fiscal deficit could reach 8.2% of GDP, according to Goldman Sachs.

The government's reputation for economic management is also now in deep deficit. In response to the latest growth figures, one member of parliament for the ruling party said it was wrong to treat GDP as the truth like the "Bible, Ramayana or Mahabharat". Unfortunately, many economists now agree with him—doubt in the veracity of the official figure has grown since a new methodology was introduced in 2015. Arvind Subramanian, who previously served as the government's chief economic adviser, has argued that India's growth may have been overstated by 2.5 percentage points a year over the five-year period from 2011-12 to 2016-17. If any consolation can be drawn from the latest miserable GDP number, it is only that the official data are not so flawed that they cannot register the bad news.

India's space agency was slow to acknowledge that its lander had been destroyed (insisting at first that it was still trying to communicate with it). After NASA confirmed Mr Subramanian's discovery of the crash site, the Indian agency said that it had found it weeks ago. But for some reason it neglected to reveal the location to the outside world. India's dogged and passionate professionals are one reason global investors fell in love with the country's growth story. Its unhelpful government institutions are one reason their ardour has since dimmed. ■

The bilk road

A vast smuggling ring is exposed in Kyrgyzstan, to popular outrage

Officials admit $1bn was siphoned out of the poor, landlocked country

Print | Asia Dec 5th 2019

THE VICTIM was a Chinese citizen. He was shot in a gangland-style killing in Istanbul, the biggest city in Turkey. But the smuggling racket on which he had just blown the whistle was centred on Kyrgyzstan, a poor Central Asian country of 6m which has been a transit point between China and Europe for centuries.

Aierken Saimaiti said his part in the racket had been to launder the proceeds, overseeing the removal from Kyrgyzstan of at least $700m in dirty money between 2011 and 2016. Kyrgyz officials have since admitted that Saimaiti and his associates funnelled nearly $1bn to banks in a dozen countries. (Kyrgyzstan's GDP last year was $8bn.) Before his assassination last month he told journalists from Kloop, a Kyrgyz website, Radio Free Europe, an American-funded news outlet, and the Organised Crime and Corruption Reporting Project, a charity, that he had done so with the connivance of Kyrgyz officials. Ordinary Kyrgyz are asking how such a huge scam could have occurred under two presidents who styled themselves as corruption-busters.

The money Saimaiti laundered seems to have been made by dodging import tariffs. The gang either failed to declare goods brought to Kyrgyzstan from China or disguised them as items of little value, while bribing customs officials to look the other way. Some of the smuggled merchandise was sold in Kyrgyzstan. Much of the rest was sent on to Russia or to other countries inside the customs union of which Kyrgyzstan is a member, labelled as goods on which duty had been paid and which were therefore entitled to enter duty-free.

The revelations have caused a furore in Kyrgyzstan. Police have belatedly begun an investigation, questioning (as a witness, rather than a suspect) Raimbek Matraimov, a former deputy head of the customs service whom Saimaiti had accused of playing a part in the scheme. He denies any wrongdoing, as does his brother, the governor of a district bordering Uzbekistan where much of the smuggling is alleged to have occurred. The customs service, meanwhile, has denied that Kyrgyz taxpayers have lost any money at all as a result of any laxity or corruption on its part.

Nonetheless, another of Mr Matraimov's brothers, an MP, has reluctantly stepped down from the parliamentary committee formed to investigate Saimaiti's murder. Police have arrested on suspicion of corruption Erkin Sopokov, the consul in Istanbul when Saimaiti died, after his car was found near the scene of the shooting.

Politicians have started blaming one another for the scandal. Sooronbay Jeyenbekov, the president, is trying to shrug off Mr Matraimov's enthusiastic support for his election campaign in 2017. His predecessor, Almazbek Atambayev, is trying to explain how the smuggling ring became established on his watch. (Mr Matraimov once boasted of having enjoyed the ex-president's "personal backing", although he was dismissed from the customs service the day before Mr Atambayev left office, in 2017.) As it was, Kyrgyz politics was in uproar due to the arrest of Mr Atambayev, who is alleged to have helped a mafia boss secure early release from prison—a claim he dismisses as an effort by Mr Jeyenbekov to smear him.

Street protests have toppled governments twice recently in Kyrgyzstan, in 2005 and 2010. Inevitably, protesters have taken to the streets again, although only in the hundreds so far. Whatever the truth of the various allegations, the feud between the two presidents and the steady flow of scandals do not make anyone in government look good. ■

Red alert

The anti-vax movement causes an epidemic in Samoa

The government has ordered mandatory measles vaccinations for the whole country

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SAMOA'S STREETS are silent. The only busy spots are the country's hospitals, where fearful families queue for vaccinations. An epidemic of the measles has so far produced 4,000 infections and 60 deaths, in a country of 200,000 people. The government has announced a state of emergency, closed all schools and banned private vehicles from the roads. People have been told to stay in their homes, and hang red cloths in front of them to indicate the presence of unvaccinated residents. Mobile vaccination units are touring the country in a mandatory mass inoculation campaign.

Measles has spread so rapidly in Samoa because only a small proportion of children has been vaccinated. The World Health Organisation estimates that just 31% of infants received the vaccine in 2018, down from 90% in 2013. Distrust of the health system was fuelled by the death last year of two babies who had mistakenly been administered a muscle relaxant along with the vaccine. In response, the government put measles vaccinations on hold. Anti-vax activists spread false rumours that hospitals were using faulty or expired vaccines and, as in other countries, repeated the debunked claim that immunisation is linked to autism.

Although the nurses responsible for the botched vaccinations were tried and imprisoned, many Samoans remained suspicious. Some responded to the outbreak by praying instead of seeking vaccination or treatment, or by administering traditional remedies, such as oiling the red blotchy skin that is a symptom of the disease.

Such responses prompted the government to make vaccination mandatory. The prime minister, Tuilaepa Sailele Malielegaoi, has called on village councils, faith-based organisations and church leaders, among others, to persuade the hold-outs. The authorities say 65,000 people been vaccinated in recent days, and the government aims to bring the rate to 90% within 48 hours.

The crisis offers clear proof of the dangers of anti-vax propaganda. Although the outbreak probably originated in New Zealand, where many Samoans live, and has spread to neighbouring Fiji, neither of those countries has suffered nearly so serious an epidemic because vaccination rates are much higher. Fiji also provides a lesson in how deadly measles can be. In 1875 an outbreak there killed a quarter of the population.

False alarm

Singapore strikes its first official blows against fake news

A tough new law adds to the government's criticism-suppressing arsenal

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"FACEBOOK IS LEGALLY required to tell you that the Singapore government says this post has false information," reads the message, which links to a government website. It appeared on November 30th on a post published by the States Times Review, a blog which delights in hectoring the Singaporean authorities. The post alleged that the country's elections are rigged and that the next one could "possibly turn Singapore into a Christian state".

The idea that the ruling People's Action Party is trying to turn Singapore into a theocracy is absurd—even "scurrilous", as the government put it. (The contention that it rigs elections is more defensible, although it does so not by stuffing ballot boxes, but by making life difficult for its critics and threatening adverse consequences for areas that vote for the opposition. It has won every general election in the past 60 years.)

The government, deeming the post false, asked its founder, who lives in Australia, to publish a correction notice under the Prevention from Online Falsehoods and Manipulation Act (POFMA), which came into effect in October. He refused, noting that the Australian authorities had not asked him to remove anything, but thanked the Singaporean government for boosting traffic to his site. Officials had more luck with Facebook, which made the notice visible to users in Singapore. States Times Review's website is blocked in Singapore, so Facebook is its chief means of reaching people there.

The episode was not POFMA's only outing in recent weeks. The finance minister, Heng Swee Keat, who is widely expected to become the next prime minister, decided to invoke it against an obscure opposition politician, Brad Bowyer, who had questioned the independence and investment nous of Singapore's sovereign-wealth funds. Mr Bowyer's post had indeed contained errors, on which the authorities seized. But its main contention—that the government's investments were not as well managed as they could be—is clearly a subjective matter.

The hubbub over the two orders relates more to the display of POFMA's powers than to the details of the posts themselves. The law aims "to prevent the electronic communication in Singapore of false statements of fact" and "to suppress support for and counteract the effects of such communication", among other things. It allows any minister, upon declaring a particular statement to be false, to order its removal or correction. A special POFMA office advises ministers on how best to act. It also offers codes of practice to digital platforms.

The accused can only seek recourse at the High Court after the minister in question has rejected an appeal (which costs about $150). The court can then rule on whether the original statement was indeed misleading. Individuals found guilty of ignoring correction orders or of deliberately spreading lies face criminal penalties, including prison terms of up to ten years, fines of S$100,000 ($73,000) or both. Social-media firms face fines of up to S$1m.

Human rights groups, a UN Special Rapporteur and a cluster of tech firms have all opposed POFMA. Its vast scope—from private group messages to online videos and beyond—is a particular concern. And it joins a host of other legislation which already keeps critics in check. The country's constitution limits free speech with "such restrictions as it considers necessary or expedient". Contempt-of-court law has been used to target the odd journalist, cartoonist or blogger. Defamation cases trouble other outspoken figures. Singapore sits below Russia, Afghanistan and many of its own neighbours in the latest ranking of press freedom compiled by Reporters Without Borders, a watchdog.

Sending fabricated messages was already a crime under the Telecommunications Act. But POFMA offers the government ways to respond to criticism it deems unreasonable faster and in a (slightly) less heavy-handed manner. Facebook has said that it hopes the law will not impinge on free expression. To say it already has would presumably attract a POFMA order. ■

Banyan

Food is a fulcrum in Indian politics

Onion prices are high enough to make South Asian politicians cry

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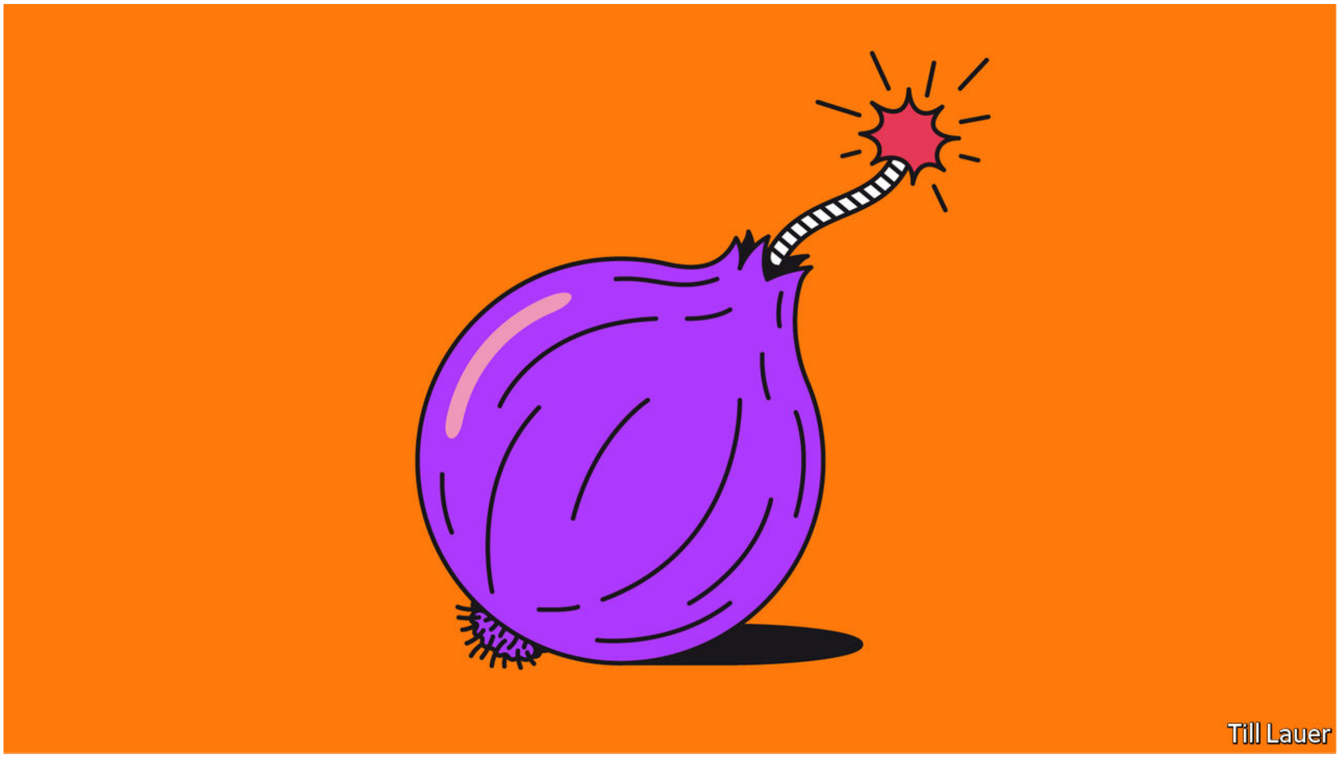

Till Lauer

IN SOUTH ASIA the ruling classes ignore the quotidian at their peril. Just ask them about onions. This autumn the humble bulb has challenged titans.

The trouble began when unseasonably heavy rains followed drought across the onion-growing belt of north and central India. That not only all but destroyed the crop; the wet caused more than a third of onions in storage to rot. The result is a severe shortage of onions across India, as a result of which prices more than tripled.

This hardly threatens famine—something the green revolution abolished decades ago by boosting wheat and rice yields. Yet remove the onion and you struggle to imagine Indian cuisine. It forms the base for curries and biryanis. When a poor Indian has nothing else to eat, at least she has an onion with a *chapati* or two.

The onion crisis has hit both the farmers and urban consumers of north India, the political heartland of the prime minister, Narendra Modi, and his Bharatiya Janata Party (BJP). In the past, state and even national governments have fallen over onions: Indira Gandhi's return to power in 1980 was assisted by an election campaign that equated high onion prices with economic mismanagement. Mr Modi, who faces growing economic problems, is surely aware of the perils. In late September his government slapped a ban on exports of onions. That briefly brought down prices, helping consumers. But it has angered farmers and exporters in Gujarat, Maharashtra and Karnataka, for whom onions are an essential cash crop. For the BJP these are key battleground states. And when onion prices are high another problem emerges—organised gangs of allium thieves. The government risks getting blamed for those too.

In South Asia, a region riven by geopolitical faultlines, there are international implications. Upon hearing of Mr Modi's export ban, Bangladesh's strongwoman, Sheikh Hasina Wajed, admonished his government for giving no warning. Her country counts on Indian onions, whose price at one point had risen fivefold in the markets of Dhaka, Bangladesh's capital. She had, she claimed, been forced to tell her own chef to cook without onions, no small or easy thing.

Bangladesh immediately tendered for imports to be airlifted from Egypt, Turkey and, notably, from Pakistan. Trade between the two countries has been negligible since Bangladesh split from Pakistan in a terrible war in 1971. Relations have been especially strained over the recent convictions and executions for war crimes of pro-Pakistan Bangladeshis. So the approach to Pakistan hinted at the government's desperation.

Despite a long, shared land border, trade between Pakistan and India is also lamentably small. The two countries too often relish their political enmity over the huge potential benefits from trade. However, such is India's onion crisis, it, too, is turning to Pakistan.

Though such decisions are taken at the highest level, it is too much to think that this welcome outbreak of onion diplomacy can lay South Asia's old antagonisms to rest. Even at home, Indian politicians are blind to some obvious conclusions from the crisis, however much their fate is tied to the markets for farm produce. Though the BJP reacts quickly to market stress, politicians have done far too little to encourage decent agricultural warehousing. A consequence is that staggering proportions of vegetables and fruit (and even pulses and grain) end up spoiled. The impediments to trade and poor storage mean that even modest changes in supply and demand lead to wild swings in prices. An onion glut last year, for instance, prompted calls for aid for farmers.

There is perhaps karmic justice in the prospect of Mr Modi suffering politically over onions. For reasons of cynical electoral advantage, he and his closest advisers have chosen heavily to politicise one specific food choice above all: the consumption of beef, a practice shunned by most Hindus, who consider cows to be sacred. The Hindu-chauvinist BJP has turned the cow into a marker of good Indians (Hindus) and bad (Muslims, Christians and the godless). That has helped the BJP consolidate power across India—and led to lynchings of those accused of killing cows or trafficking in their meat. Vegetarianism was once, as Shikha Mukerjee, a writer based in Kolkata, puts it, a matter of culture and choice. Mr Modi and his gang have made it a centrepiece of politics. Shed only onion tears at his current discomfort.

China and the United Nations
A new battleground

A new battleground

In the UN, China uses threats and cajolery to promote its worldview

Some countries are pushing back

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DESPITE ITS veto-wielding power in the United Nations, China has long been reluctant to stick its neck out. It has been 20 years since it last stood alone in exercising that right. But in the UN's backrooms, the country's diplomats are showing greater willingness to flex muscle, and their Western counterparts to fight back. Not since the cold war has the organisation become such a battleground for competing visions of the international order.

A struggle in October over China's mass internment of Uighurs, a Muslim ethnic minority, suggests how intense the fight has become. It involved Britain taking an unusual leading role in condemning China's human-rights record. The British representative at the UN, Karen Pierce, issued a statement, signed by 22 other countries including America, calling for unfettered UN access to the prison camps in China's far-western region of Xinjiang. A diplomatic brawl ensued. Chinese diplomats persuaded dozens of authoritarian countries, including mostly Muslim ones in the Middle East, to sign a counter-statement praising China's actions in Xinjiang as an enlightened effort to fight terrorism and eradicate religious extremism.

There were threats and reprisals, too. Chinese diplomats are said to have told Austrian counterparts that if their country were to sign Britain's statement, the Austrian government would not get land it wanted for a new embassy in Beijing. The Austrians signed anyway. Chinese officials cancelled a bilateral event in Beijing with Albania, another of the signatories. "A lot of countries came under a lot of pressure today," tweeted Jonathan Allen, Britain's deputy ambassador to the UN, on the day of his country's statement. "But we must stand up for our values and for human rights."

China's efforts span a broad range of UN activity, from human rights to matters relating to economic development. They appear to have two main aims. One is to create a safe space for the Chinese Communist Party by ensuring that other countries do not criticise its rule. The country has long bristled at any such "interference". Its officials are now becoming tougher in their response. China's other objective is to inject wording into UN documents that echoes the language of the country's leader, Xi Jinping. China is trying to "make Chinese policies UN policies," says a diplomat on the UN Security Council.

China senses that President Donald Trump's aversion to multilateral institutions such as the UN has given it more room to manoeuvre in them. Since Mr Xi took office in 2012 the country has dramatically increased its spending at the UN. It is now the second-largest contributor, after America, to both the general budget and the peacekeeping one. It has also secured leading roles for its diplomats in several UN bodies, including the Rome-based Food and Agriculture Organisation (beating a candidate backed by America, to many people's surprise). Next year the country will join the three-member Board of Auditors, which keeps an eye on the UN's accounts.

The senior jobs being taken by China's diplomats are mostly boring ones in institutions that few countries care much about. But each post gives China control of tiny levers of bureaucratic power as well as the ability to dispense favours. "Each one of these slots has influence with somebody somewhere," says a European diplomat. When votes are taken on matters China regards as important, its diplomats often use a blunt transactional approach—offering financing for projects, or threatening to turn off the tap. This buys China clout, if not affection, other diplomats say.

Mr Xi's influence is evident. Much of the language that Chinese officials try to insert into UN documents uses his catch-phrases, such as "win-win co-operation" and "a community with a shared future for mankind" (keep your hands off China, is the underlying sentiment). For three years in a row, Chinese diplomats managed to inject favourable references to Mr Xi's Belt and Road Initiative (BRI), a "win-win" global infrastructure-building scheme, into resolutions on Afghanistan. They have persuaded senior UN officials, including the secretary-general, António Guterres, to praise the BRI in speeches as a model for global development. In 2018 China convinced the UN Human Rights Council in Geneva (from which America withdrew later that year) to endorse its preferred approach of "promoting mutually beneficial co-operation" in this field, ie, refraining from criticism.

More than merely language is involved. In 2017 China sought successfully to cut funding for a job intended to ensure that all of the UN'S agencies and programmes promote human rights. That same year Wu Hongbo, a Chinese diplomat who was then in charge of the UN Department of Economic and Social Affairs, expelled Dolkun Isa, a Uighur activist, from a UN forum to which Mr Isa was an invited delegate, representing a German NGO (Mr Isa was eventually let back in after protests from American and German diplomats). Mr Wu, whose post required him to be non-partisan, later boasted about his actions on Chinese state television. "We have to strongly defend the motherland's interests," he said.

Opposition to China's more assertive approach may grow. "I think they are overdoing it and I think at some stage people will start to resist," says the Security Council diplomat. But some others at the UN do not share that view. Smaller states in Africa and the Middle East, many of them dictatorships, resent America's post-cold-war dominance of the UN. Why should China not push back, asks a diplomat from one country in that part of the world. The envoy says that countries may be subjected to pressure from China when it wants something, but that America, albeit not as blunt, can also be transactional. Some smaller countries may welcome having two great powers competing for their favour again.

"There's a degree of hypocrisy about it," says Richard Gowan of the International Crisis Group, a conflict-prevention NGO. "It would be weird to imagine that China as a rising power wouldn't want a bigger stake in the multilateral system." Few would imagine that now. ■

Tense times recalled

On the China-Russia border, visitors reminisce about the bad old days

For China, a dividend of peace is tourists' cash

Print | China Dec 7th 2019

EVERY YEAR an elderly retiree brings dozens of his friends to a wind-swept customs post at Mishan on China's side of the country's border with Russia. "There is nothing to see or do here," says the man, who goes by the name "Old Jiang". He is not entirely right. Not far away, the border runs through a large, picturesque lake. A disused bridge is described as the world's smallest connecting two countries. And busloads of visitors arrive every day, many drawn by memories of a not-so-distant history and curiosity about "the very existence" of the post, as Mr Jiang puts it.

Such a symbol of normal interaction once could not have existed. In 1969 Jixi prefecture, to which Mishan belongs, was the scene of border skirmishes between China and the Soviet Union that many observers feared could escalate into war. The little bridge was built three years later to facilitate talks, but it was not until the late 1980s that the two countries made peace. In 1991 the Soviet Union agreed to let China keep the river island known in Russian as Damansky and in Chinese as Zhenbao, over which the clashes began. Today China and Russia describe each other as best friends.

In recent years sites that recall those nail-biting days of Sino-Soviet hostility have become tourist attractions. Zhenbao is under military administration, so tourists are sometimes barred from the island itself (foreigners all the more so). But Chinese visitors can pay to be whizzed around it on motorboats. "Fifty years ago, Zhenbao island was a global centre of attention," says an elderly tourist from the southern city of Guangzhou. He says he wanted to visit because the fighting in 1969 was "China's first victory over the Soviet Union".

China's leader, Xi Jinping, and his Russian counterpart, Vladimir Putin, say growing tourism between the two countries is helping to strengthen their ties. In 2018 China received 2.2m Russian tourists while 1.7m Chinese went the other way. But these numbers are small compared with China's total inbound and outbound flows, and contribute little to visitor statistics at China's official tourist sites along the border. Chinese firms and local governments have been pouring money into developing such tourist spots, but the main targets are domestic travellers. There are plenty of Russian visitors to China's border towns. But they do not head to the main sightseeing attractions. They usually come carrying large bags, to shop for cheap goods.

Farther north along the Ussuri river, at its confluence with the Amur, lies Heixiazi, or Bolshoy Ussuriysky in Russian, a 350-square-kilometre island which the two countries agreed to divide between them in 2004 (marker posts are pictured). On its side, China built a nature reserve that attracts around 600,000 tourists a year, almost all Chinese. Also on the Chinese half is an abandoned tin-roofed Russian military post, preserved to demonstrate that China managed to prise back some of its territory. Plans by Russian and Chinese firms to develop the Russian side for tourism have failed to come together. In 2012

China completed a 1.6km road bridge linking its part of the island with the Chinese shore. The Russians caught up a year later by opening a bridge of their own. But in reaping the dividends of peace, China faces little competition from its one-time adversary. ■

Correction (December 14th 2019): *An earlier version of this piece incorrectly stated that the island of Heixiazi, or Bolshoy Ussuriysky, was only accessible from the Russian side by ferry. This has been updated.*

Mark it with "B"

China needs people to have more children. So why punish those who do?

The bullying mindset of officials is deeply entrenched and dangerous for the country

Print | China Dec 5th 2019

Hanna Barczyk

TO MARK THE 70th anniversary in October of the People's Republic of China, a giant parade trundled through Tiananmen Square filled with symbols of what President Xi Jinping, the country's leader, calls the "great rejuvenation of the Chinese nation". The two most important ones, Chaguan would argue, were a squadron of nuclear-missile launchers and a float showing a model family in their apartment, comprising two parents and two daughters winsomely playing pat-a-cake.

Nearly four years after China scrapped its one-child policy, the harshly enforced system that between 1980 and 2016 limited most urban families to a single child, and many rural folk to two, Communist Party bosses are assiduously promoting two-child families as an ideal. From Liaoning to Hubei, provinces are discussing subsidies and services to support babymaking. It is not working. China's fertility rate is among the world's lowest, and far below what is needed to maintain a stable population. The country is greying fast: the number of working-age people began shrinking in 2012, years earlier than expected. It is a complex problem. But one cause is that officials are too stubborn and controlling to accept that tinkering with quotas is not enough. They should stop setting them at all. Enforcement is now uneven and arbitrary, but some Chinese parents are still being punished for having a third child.

Public opinion is increasingly divided by such coercive methods. The case of Xie Zhengling, a schoolteacher from the southern city of Yunfu, made national headlines last month. According to government documents posted online by supporters, Ms Xie was urged three times by local education officials to "take measures to correct"—ie, terminate—her third pregnancy. Their last attempt came in the month before she gave birth, despite her pleas that her unborn child was "too big" to abort. Ms Xie gave birth in January. Both she and her husband, a policeman, were fired, as is the rule for civil servants who exceed birth quotas. On Weibo, a micro-blogging platform, articles tagged "A policeman was sacked because his wife had a third kid" have been read over 9m times. Some netizens express sympathy, noting that the couple were heeding government calls to have children. Others argue that public servants enjoy privileged access to many services so should expect no pity.

This heated debate is revealing, because it is rare to hear ordinary Chinese challenge the party line that decades of harsh population controls were necessary. Cai Zhiqi, a scientist who runs a chemicals company in the coastal city of Yantai, is a striking case in point. His own life is neatly bookended by the one-child policy. Born in 1979, the year before the policy began, he recalls a cheerful rural upbringing as one of three children. "Though we were poor, the house was full of joy," he says. When his wife, another scientist, fell pregnant with a second daughter in 2010, they resolved to keep her, applying for birth papers without mentioning a first girl born while Mr Cai was studying in America. Alas, in 2012 someone reported him to his employers, the South China University of Technology. In vain his lawyer cited official guidance suggesting that Chinese who studied overseas were allowed two children. Mr Cai was fired as an associate professor for having a second child. Just three weeks later China relaxed the one-child limit as a prelude to eventually scrapping it.

An amiable host, Mr Cai shows Chaguan his laboratories, and points out the schools attended by his young children, amid the skyscrapers and building sites of Yantai's Economic Development Zone. "Like in Harry Potter," he beams, gesturing at a castle-like bilingual academy. He has three children now. In Yantai the fine for a third is about 300,000 yuan ($42,000) per rule-breaking couple, but officials have not sent Mr Cai a bill. "Among my peers now, especially private entrepreneurs, quite a few have three children," he says. "If you want to have more children you pay some fines." Still, he does not question why China's founders imposed birth limits on a poor, agricultural country. Despite losing his own case, he says he understands China's family-planning policy.

A cruel and unnecessary experiment in social control

Many scholars are less forgiving. Wang Feng of the University of California, Irvine, accuses defenders of the one-child policy of confecting a common official claim, namely that the policy "averted" 400m births. In fact, says the professor, that projection is based on sky-high fertility rates from 1970—just before a decade of precipitous fall that preceded the one-child policy. In fact, he says, most of China's decline in fertility rates happened in the 1970s and was caused by such forces as urbanisation and women's education, which led to very similar changes in other Asian nations like Thailand and South Korea that eschewed mandatory limits on births. What can be said is that China's policy produced a lot of one-child families—today the country has about 150m of them—and perhaps tens of millions of abortions and sterilisations, many of them involuntary. Corrupt and brutal family-planning officials demolished the homes of some who resisted. Women had their menstrual cycles recorded on blackboards, for all to see. As birth quotas bit, gender ratios became more skewed by infanticide and sex-selective abortions of girls. China now has 30m fewer women than men. The country has ended up with roughly the population it would have had in any case, but via an exceptionally cruel route.

Still the machine grinds on. While in Yantai, Chaguan dropped in on a population bureau unannounced. A visibly bored official, a Mr Zhao, recalled how once upon a time, an extra birth would prompt a team to race out and "knock on the door immediately to collect fines". His office has not imposed such a penalty in "a few years". Still, he was firm when asked about the case involving the schoolteacher in Yunfu. "According to the regulations, that is how it should be." That bullying mindset is both deeply entrenched and disastrous for China. It is hard to have a national rejuvenation without more babies. ■

Arab unrest
The fight for Iraq's future

The fight for Iraq's future

Elites backed by Iran are clinging to power in Iraq

But the protesters are not giving in

Print | Middle East and Africa Dec 5th 2019

THE TOMB of a dead Shia cleric might seem an odd target for Iraqi protesters angry about corruption, poor governance and a lack of jobs. Muhammad Baqr al-Hakim resisted Saddam Hussein, Iraq's old dictator, and helped to create the modern state. But he also had close ties to Iran, which has assisted the Iraqi government in trying to subdue the protesters. Such meddling enrages Iraqis, who threw petrol bombs at Hakim's shrine—and the Iranian-backed militiamen guarding it—earlier this month in Najaf. They also torched the nearby Iranian consulate.

Iraq has been rocked by protests since October. Hundreds of thousands of people have taken to the streets in Baghdad and the Shia south. Officials have promised reforms. The security forces have fired on the demonstrators, killing more than 400. Neither concessions nor repression have worked. Things came to a head on November 29th, when the senior Shia cleric, Grand Ayatollah Ali al-Sistani, called for a change of government. In response, Adel Abdul-Mahdi, Iraq's prime minister, said he would step down.

But the protesters and the ruling elite know that Mr Abdul-Mahdi's departure is not the endgame. Rather, it is likely to mark the start of a new, potentially more violent struggle over what comes next for the government. It will probably lead to even greater involvement by Iran.

Street sweepers

For now Mr Abdul-Mahdi remains in his job. The Shia warlords-cum-politicians who are Iraq's real power-brokers will choose his successor, with input from Iran. Many of them want the next prime minister to be more ruthless. Hadi al-Amari and Qais Khazali claim to head the largest bloc in parliament and control powerful militias. They work with Qassem Suleimani, the commander of the Quds Force, the foreign legion of Iran's Islamic Revolutionary Guard Corps. All want to spread Shia influence across the region, and view the protests as a threat. Some of their allies favour clearing the streets by force.

Sunni and Kurdish parties, like their Shia counterparts, plunder the state and are thus loth to speak up for the protesters and upset the status quo. The constitution suggests that President Barham Salih, a Sunni Kurd, should have assumed the prime minister's responsibilities following Mr Abdul-Mahdi's resignation. But he has said little since calling for the prosecution of those who killed protesters, and is facing threats himself. Muqtada al-Sadr, a rabble-rousing Shia cleric who heads a large bloc in parliament, also seems muzzled. He has spent long stints in Iran—under a form of house arrest, say some.

Iraq's other institutions have fallen into line. Judges sentence protesters under anti-terror laws. The communications ministry shuts down the internet to make it harder for them to organise. The security forces have so far limited their use of violence—but only, it seems, to avoid a more forceful response from the West (or the clerics). That does not appear to be coming. A resolution condemning the government's brutality would be unlikely to pass in the UN Security Council. America has told the Iraqi government to listen to the protesters and make reforms. But it too is reluctant to get more involved.

The protesters are calling for an entirely new government, a fairer electoral law and early elections. They want to put politicians on trial for corruption and the recent violence. They want Iran and the militias it backs to go away, too. Most of the public is behind them. But they need the support of influential people like Mr Sistani, who is 89. "It is for the people", not the clerics, "to decide what they perceive is most fitting," read his sermon on November 29th. That was seen as a boost to the protesters, a shot at Iran and its clerical rule, and perhaps a signal that he wishes to withdraw from the political fray. Some of Iraq's clerics fear provoking Iran, or losing credibility if the government ignores their advice.

In spite of the killings, the protesters' morale remains high. The demonstrations have a carnival atmosphere in some cities. But in others, such as Hilla, officials have been chased out. The subtle messages in Mr Sistani's sermons do not satisfy everyone. The ranks of the protesters are dominated by young jobless men, some of whom prefer throwing petrol bombs to peaceful marching. "They run towards bullets," says an observer. Lately, armed tribesmen have pursued vendettas against the security forces. Things could get much worse. ■

The numbers behind the rage

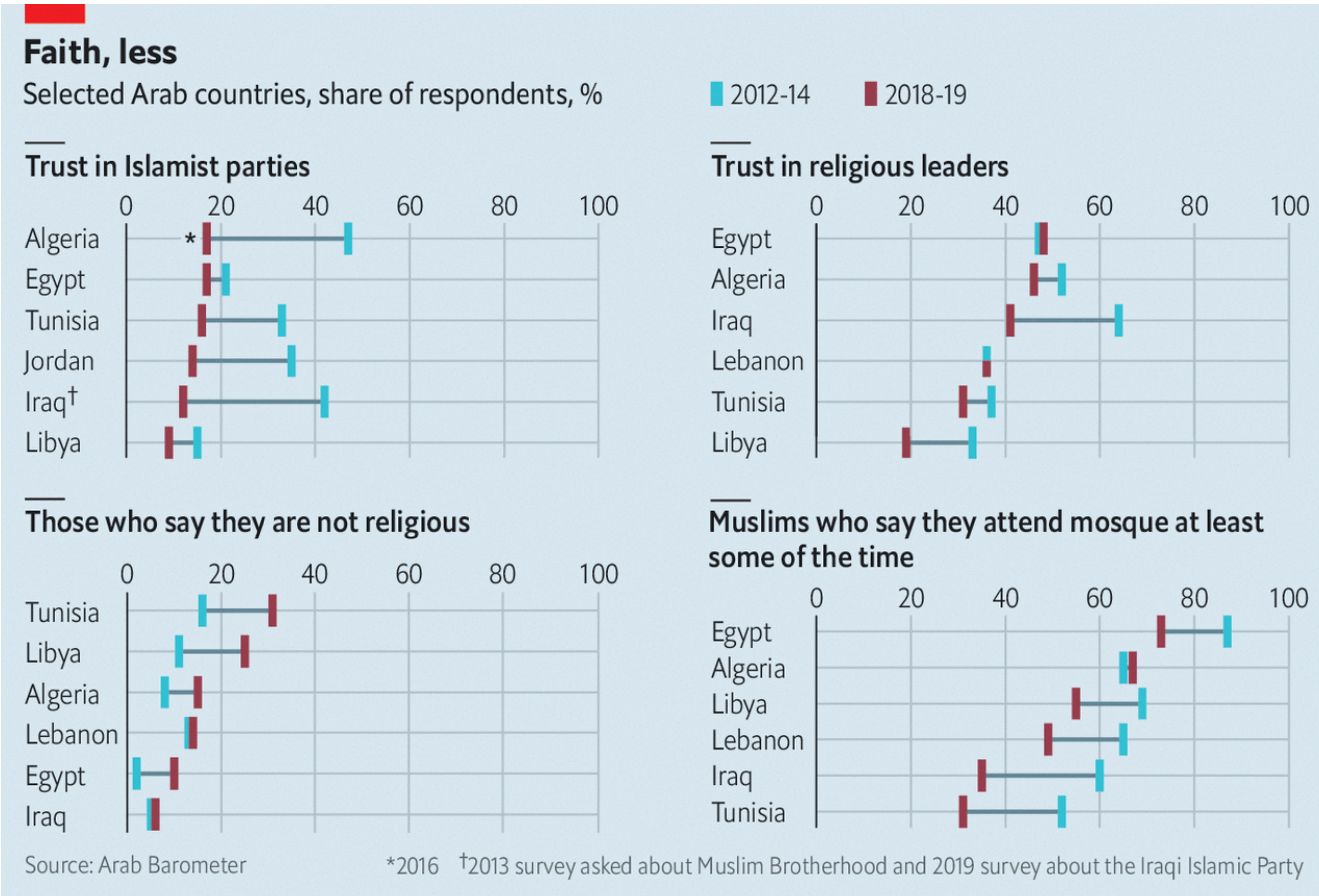
Arabs are losing faith in religious parties and leaders

Polls show fewer are going to mosque, too

Print | Middle East and Africa Dec 7th 2019

"NO TO RELIGION or sect," cry the protesters in Iraq. "No to Islam, no to Christianity, revolt for the nation," echo those in Lebanon. Across the Arab world people are turning against religious political parties and the clerics who helped bring them to power. Many appear to be giving up on Islam, too.

These trends are reflected in new data from Arab Barometer, a pollster that surveys Arab countries. Across the region the share of people expressing much trust in political parties, most of which have a religious tint, has fallen by well over a third since 2011, to 15%. (The share of Iraqis who say they do not trust parties at all rose from 51% to 78%.) The decline in trust for Islamist parties is similarly dramatic, falling from 35% in 2013, when the question was first widely asked, to 20% in 2018.



The Economist

The doubts extend to religious leaders. In 2013 around 51% of respondents said they trusted their religious leaders to a "great" or "medium" extent. When a comparable question was asked last year the number was down to 40%. The share of Arabs who think religious leaders should have influence over government decision-making is also steadily declining. "State religious actors are often perceived as co-opted by the regime, making citizens unlikely to trust them," says Michael Robbins of Arab Barometer.

The share of Arabs describing themselves as "not religious" is up to 13%, from 8% in 2013. That includes nearly half of young Tunisians, a third of young Libyans, a quarter of young Algerians and a fifth of young Egyptians. But the numbers are fuzzy. Nearly half of Iraqis described themselves as "religious", up from 39% in 2013. Yet the share who say they attend Friday prayers has fallen by nearly half, to 33%. Perhaps faith is increasingly personal, says Mr Robbins.

Unprecedented violence

How the Iranian regime put down economic protests

The security forces are thought to have killed hundreds of people

Print | Middle East and Africa Dec 7th 2019


PA

ALMOST IMMEDIATELY after the government of Iran switched the internet back on, the stories started coming out. Near the city of Mahshahr alone, the Islamic Revolutionary Guards Corps surrounded, shot and killed 40 to 100 protesters in a marsh, witnesses told the *New York Times*. Altogether, between 180 and 450 people are thought to have been killed by the government during protests over a rise in the state-controlled price of fuel last month. About 7,000 people were detained out of the hundreds of thousands who took to the streets in all but two of Iran's 31 provinces. Not since the Islamic revolution in 1979 has the country experienced such deadly unrest.

The regime responded to previous protests with more patience, letting people vent for a few days before rounding up the ringleaders. "This time they shot to kill, not to intimidate," says an academic from Shahriar, a town where the protests flared. Such was the perceived threat that the regime's hardliners and pragmatists put aside their rivalries and worked together, unleashing their respective security forces.

Their panic owes much to the make-up of the protesters. Many came from the urban poor, whom the regime calls *mostazafin* (downtrodden) and considers its base. In 1979 they poured onto the streets to bring down the shah; now their grandchildren are turning on the clerics. Some middle-class folk joined them on the streets for the first time since 2009, when they protested a suspicious election outcome.

Economic hardship, exacerbated by American sanctions, is a big cause of the anger. But many are also fed up with official corruption. The public is turning social-justice arguments back on the clerics, who are accused of milking the state. "The ideological challenge is much more dangerous than the economic challenge," says Pejman Abdolmohammadi of the University of Trento in Italy.

Official repression will deter many from challenging the regime, but those who do may become more violent. Some of the recent protests turned into riots. Instructions on how to make petrol bombs circulate on social media. In some areas people have begun taking up arms. The uprising in neighbouring Iraq provides inspiration. "For Iraqis and Iranians it's one enemy," says an exiled Iranian dissident. "They're fighting the same regime." ■

Once more, without enthusiasm

Algerians fear their election will be a blow to democracy

Members of the old regime are still calling the shots

Print | Middle East and Africa Dec 7th 2019

Reuters

THE MOST popular candidate in Algeria's presidential election might be a rubbish bag. On December 12th Algerians will choose a successor to Abdelaziz Bouteflika, who stepped down in April after 20 years of dictatorial rule. Or, rather, a small minority of Algeria's 41m people will choose one. Much of the country seems unenthused by the vote. In the capital, Algiers, protesters hang rubbish bags over campaign posters or replace them with pictures of jailed activists. One candidate's headquarters was pelted with eggs and tomatoes. Another was forced to cancel his first campaign rally because almost no one turned up.

To hear the government tell it, the election is an important step towards democracy. It will probably be the most tightly contested presidential vote since 1995. Yet for the millions of Algerians who demanded the ousting of Mr Bouteflika—and who continue to protest—it is nothing to celebrate. Instead the election demonstrates the difficulty of removing the structures that sustained the strongman.

First scheduled for July, the election was postponed amid calls for a boycott. Only two people, a veterinarian and a mechanic, registered to run. This time 23 candidates tried to make the ballot. Most failed to meet the requirements, such as collecting signatures from supporters in at least 25 provinces. The five who made it all served under Mr Bouteflika—two as prime minister, two as cabinet members and the fifth as an MP who led a small loyalist party.

It may seem paradoxical to shun an election to support democracy. But activists say they have learned from the failed uprisings in countries like Egypt, where protesters toppled a ruler but not his regime. By the end of his long reign, the ailing Mr Bouteflika was no longer up to the task of running the country. Though he remained the figurehead, a group of men known as *le pouvoir* wielded power behind the scenes. They are loth to surrender it.

For the armed forces, which saw their own *pouvoir* curtailed in favour of businessmen close to Mr Bouteflika, the current vacuum is a chance to regain control. One of the candidates, Abdelmadjid Tebboune, a former prime minister, is thought to be close to the army chief, Gaid Salah.

The regime had hoped to simply outlast the protesters, who call themselves *Hirak* ("movement" in Arabic). That strategy has not yet worked: Algerians have demonstrated every week since February. As the election approaches the regime has turned to coercion, detaining scores of activists and journalists. Having been embarrassed in July, the authorities are determined to hold the vote. General Salah warns of foreign plots against Algeria, while the interior minister labels critics of the election as "traitors, mercenaries, homosexuals".

The bigger question is what happens after December 12th. Algeria will have a new president widely seen as illegitimate. But he will still be president, with all the power that entails. Compared with other Arab countries, the repression in Algeria has been mild. The incoming president, keen to cement his grip on power, may not show such forbearance.

He will also inherit a stagnant economy. Despite its vast oil and gas wealth, Algeria's per-capita income is below that of some resource-poor Arab states, such as Lebanon. Unemployment is 12% overall and much higher for young people. The finance minister recently warned that foreign reserves, which amounted to $200bn in 2014, may drop to $50bn by the end of next year. The value of oil and gas exports, which supply 60% of government revenue, fell by 13% in the first nine months of 2019. A new hydrocarbons law, meant to draw foreign investment, has been criticised by protesters and energy experts alike.

Algerians are not alone. In Sudan, Lebanon and Iraq this year angry citizens toppled their rulers but have struggled to force deeper changes. The protests cannot continue for ever. Algeria's election might be a stunt to keep the *ancien régime* in power—but that does not mean it will fail. ■

Change hits a speed bump

Jammed streets highlight the challenges of Sudan's transition

Oppressive laws are being lifted, but daily life is still tough

Print | Middle East and Africa Dec 5th 2019


Panos Pictures

SOUAD AL-SAWY squints in the glare of the mid-afternoon sun, searching for a bus home. The 18-year-old student's commute used to take 20 minutes, but these days it can take up to 90. "It's getting worse every day," she sighs. Although life after the revolution has improved in many ways—for instance, a hated law that banned women from wearing revealing clothing was repealed last month—freedom was not supposed to involve so many traffic jams.

Seven months after the fall of Omar al-Bashir and his 30-year-long kleptocracy, Sudan is struggling to escape the legacy of corruption and mismanagement he bequeathed it. Nowhere is this more evident than in the traffic-clogged streets of Khartoum, the capital, where public transport has all but disappeared. So bad is the shortage of buses that the interim government has decreed that vehicles belonging to the police and army be used to ferry ordinary people about the city.

Traffic jams are the work of the "deep state", conjectures Ms Sawy. A group of minibus owners in north Khartoum claim that saboteurs are causing gridlock by abandoning vehicles in the roadways. Some blame members of the former ruling party, the National Congress Party (NCP), which owned nearly 40,000 vehicles.

As for the vanishing public transport, Yasir Alkordi, a journalist, reported in September that bus drivers had been paid by NCP members to shirk work. The aim of these "dirty tricks" is to undermine the new government, says Mohammed Ali Fazan, another journalist. "By hook or by crook, [the NCP] wants to come back to power again." On November 28th the government passed a law to dissolve the party and seize its assets. But government institutions, including the Khartoum State Transportation Company, are still stuffed with former loyalists, who cannot all be removed at once.

The real causes of the transport crisis are, however, probably mundane economics rather than a conspiracy. The state-regulated fares are too low to pay for the maintenance of buses shaken to bits on Khartoum's shoddy roads. Mohammed Ali, a driver, says that a year or so ago there were 130 minibuses working his route; now there are only seven. The government plans to extend roads and import buses, and has started running trains that, thanks to corruption, had been idle for years. But cleaning up the mess will take time and money. It might be short of both. ■

Papers, please

African countries are struggling to build robust identity systems

But that may soon change, thanks to help from an unlikely quarter

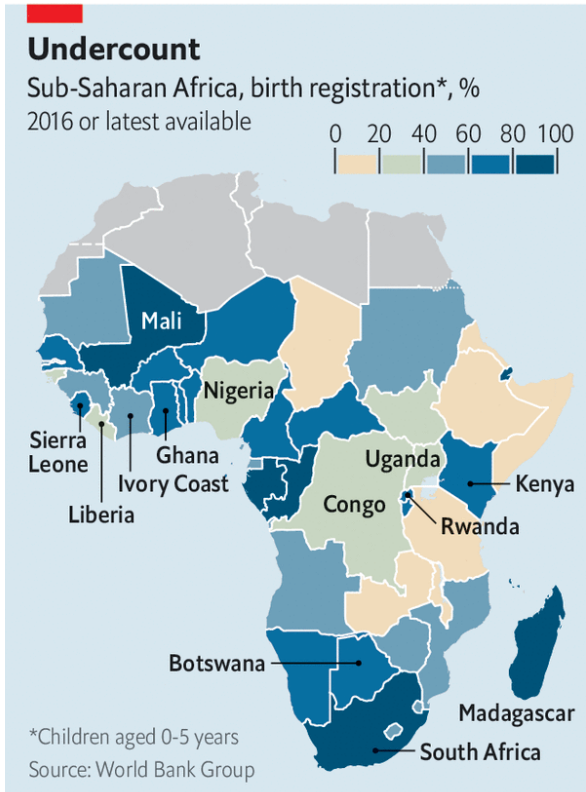
Print | Middle East and Africa Dec 5th 2019

Alamy

THE FIRST thing that visitors to the Apartheid Museum in Johannesburg see is a wall of identity cards—the pieces of paper that determined where people could live and work and whom they could love. From the outset, the apartheid regime's ability to discriminate against "nie-blankes" (non-whites) depended on having a robust system of identifying people.

The opposite problem confronts most other countries in Africa today. Governments have little idea who their citizens are. Around the world, about one billion people lack official proof of their identities, reckons the World Bank. Such citizens cannot, in many cases, get services such as health care, welfare and education. They also struggle to exercise their rights to vote or live in their home countries. States need this information, too. Without it, governments have no idea whom to tax, conscript and protect, or where to allocate resources.

This is not just a poor-world problem. Britain was recently rocked by the "Windrush" debacle, in which dozens of citizens were wrongly deported. But it is a particularly acute problem in sub-Saharan Africa, where one in two people cannot prove his or her identity. It is not for want of effort. Every country in the region has either established or plans to create a universal identity programme.



The Economist

Some countries, such as South Africa and Botswana, have relatively good programmes that register most births and issue papers to almost all of their people. At the other end of the spectrum are countries like Congo and Liberia, which are only just getting started in registering births, never mind issuing identity documents (see map). In the middle are countries that are upgrading from old, paper-based systems to digital ones.

This is more complicated than it sounds. Take Nigeria, which has 13 federal and three state ID schemes. The country's National Identity Management Commission (NIMC), a body set up in 2007 with the purpose of issuing identity numbers and cards to Nigeria's 180m people, has so far reached less than a fifth of the population.

African countries struggle for several reasons. One is racial discrimination. Uganda, Liberia and Sierra Leone explicitly withhold nationality from children of certain races and ethnicities. Other countries do so informally by refusing to issue papers. Another reason is a failure by governments to explain to their citizens how they might benefit. Consider birth registration, the most basic form of official identity. South Asia more than doubled its rate of birth registration to 71% between 2000 and 2014. In sub-Saharan Africa the rate dropped by one point, to 41%, over the same period. For poor villagers, going to a government office to register a birth is time-consuming and expensive, especially when officials demand bribes. Some countries charge a fee, which is a disincentive. Others penalise late registrations.

One way to encourage people is to link birth registration to benefits such as child-support grants—something South Africa did with great success. But that approach may also have the perverse consequence of denying payments to the very poorest.

Money is another reason many African countries have fallen behind their peers. Extending the state's reach to remote areas can be expensive. So, too, is paying for skilled labour of the sort required to fill in forms accurately and to operate biometric machines. The technology itself is costly, especially for small countries that do not have much buying power.

Many governments have unwisely bought proprietary systems, meaning that they are forced to go back to the seller for maintenance, upgrades and new components. That can be expensive. When Nigeria's NIMC wanted to use its own card-printing machines, the firm that had sold it software tried to insist that Nigeria buy its machines as well, says Tunji Durodola, an adviser to the commission. (They eventually got help from Pakistan, which had software that worked on any machine.)

But there are signs of change coming from within the industry itself, spurred by developments in an entirely different part of the world: India. Like Africa, it is vast, poor and home to more than a billion people. Yet as a single country India has tremendous negotiating power.

When India developed its "Aadhaar" identity programme it invited leading firms to bid—but with the caveat that they provide open-source software, or code that can be examined and changed by others. This allowed engineers to knit together different bits of a system such as databases, enrolment software, fingerprint scanners and so on. The suppliers agreed because they did not want to miss out on the biggest identity bonanza the world had ever seen. Moreover, India's spending led to a big increase in production, which caused prices to fall across the industry.

The ripples of India's big splash are now lapping on Africa's shores. Companies including Idemia, Gemalto and De La Rue have agreed to establish "open standards". This is one step short of open-source standards, but it is enough to allow different bits of a system to talk to each other. That would allow countries to buy the parts they need from competing companies, giving them greater flexibility at lower costs.

Eleven countries, including Uganda, Congo, Ivory Coast, Ghana, Mali and Madagascar, have signed up to an industry advisory committee to develop these open standards. "The industry has been almost like a craft industry and now it's moving towards a commodity industry and standardisation," says Alan Gelb of the Centre for Global Development, a think-tank.

Even as governments think about the technical problems of recording identity, they also need to grapple with the far more consequential ones around rights, governance and privacy. The starkest warning of the misuse of identity was in the Rwandan genocide, where ID papers listed ethnicity, making it easy to target Tutsis. Since data on religion and ethnicity are not needed to provide services, governments should not be hoovering it up, yet many still do.

States should also be wary of denying people their rights by creating a class of citizens without papers. In Kenya, for example, the government wants everyone to register for ID cards, but it discriminates against members of the Nubian minority by forcing them to appear before a security panel to prove their nationality. Modern identity systems promise to bring many benefits to Africa. But as they proliferate, so too will the temptation for politicians to misuse them. ■

German politics
Under new management

Under new management

Germany's Social Democrats pick new leaders

They threaten the stability of the government

Print | Europe Dec 5th 2019

"WALTER WHO? Saskia what?" *Bild*, a tabloid, posed the question many Germans will have asked on November 30th when members of the Social Democratic Party (SPD) elected Norbert Walter-Borjans and Saskia Esken as co-leaders. The obscure left-leaning duo triumphed by 53% to 45% over a rival pair led by Olaf Scholz, Germany's finance minister and the SPD's best-known politician. Their win instantly raised the prospect of an early end to Germany's coalition, which has almost two years to run.

The pair's victory resulted from a deep mood of gloom that has settled on the SPD base. The party has spent ten of the last 14 years as junior partner to Angela Merkel's Christian Democratic Union (CDU) and its Bavarian sister party, the Christian Social Union (CSU), and has shed piles of votes along the way. After a dismal result in the 2017 election, the SPD reluctantly signed up to another CDU/CSU-led coalition, securing a rich haul of cabinet jobs and several concessions in the coalition agreement. Yet the slump continued. Today the SPD battles for third spot in polls with the hard-right Alternative for Germany (AfD), well behind the Green Party.

In June the malaise claimed Andrea Nahles, the SPD's previous leader, after a string of poor election results. Mr Scholz reluctantly threw his hat in the ring, but many party members recoiled at the continuity option he represented. Neither Mr Walter-Borjans, an undistinguished former finance minister in the state of North Rhine-Westphalia, nor Ms Esken, a little-known MP specialising in digital policy, looked like charismatic agents of change. But their flirtation with the idea of bringing down the government turned them into a repository for discontent. Irritation with the high-handed manner of the party leadership also contributed to Mr Scholz's defeat, says Wiebke Esdar, one of the few SPD MPs who backed the winning duo.

Now frustration must be translated into results. On the campaign trail Mr Walter-Borjans and Ms Esken laid out a number of demands, including reopening a recently agreed climate-change package, raising the minimum wage to €12 ($13.30) an hour and approving a ten-year €500bn programme of public investment funded by debt. They railed against the government's no-deficit "black zero" policy, a CDU contrivance written into the coalition agreement and faithfully executed by Mr Scholz. They said the SPD had to be ready to leave government if the CDU kept its "blockade mentality".

Yet the new leaders have their work cut out, for two reasons. The first is that the CDU's own difficulties make compromise hard. Several of its politicians are jostling for the right to succeed Mrs Merkel, who is in her last term as chancellor, and kowtowing to Social Democrats does not win votes inside the CDU. Ruling out a rewrite of the coalition agreement, Annegret Kramp-Karrenbauer, the party leader, said it was not the CDU's job to act as a therapist for the SPD. Salvation may come via a clause in the coalition agreement that allows for policy changes if "current developments" permit. Mr Walter-Borjans and Ms Esken claim this condition is met by Germany's economic slowdown (which justifies a spending splurge) and two hot summers (which press the case to do more on climate). A possible compromise could involve a CDU concession in return for a prize of its own, such as a corporate-tax cut. Mrs Merkel, who wants to serve out her term, is open to talks. But a piecemeal deal will hardly satisfy SPD members who thought they were voting for rupture. Kevin Kühnert, the ambitious leader of Jusos, the party's youth wing, has been notably demanding. "If the [CDU] won't negotiate, I hope the new leadership will take us out of coalition," says Ben Schneider, a Jusos deputy in Berlin.

Therefore the second challenge for the SPD's new leaders is to hold their own party together. Party brahmins, such as state premiers and MPs, overwhelmingly backed Mr Scholz for leader and do not want to rock the coalition boat. Leaving it could precipitate an early election or a CDU/CSU minority government, neither of which looks attractive to the SPD. With the whip firmly in her hand, Ms Kramp-Karrenbauer has threatened to suspend the implementation of a recent coalition compromise on state pensions, widely seen as an SPD win, while the party muses on its future.

All this helps explain why Mr Walter-Borjans and Ms Esken quickly lowered the expectations of rupture after their surprise win. The next steps will be determined at an SPD congress in Berlin on December 6th-8th. Details were still being ironed out as *The Economist* went to press, but rather than seek an immediate end to the coalition it appeared the new leadership would seek a vague set of policy concessions from the CDU/CSU on climate, pay, investment and labour regulations, with no deadline attached. Meanwhile, party unity is the watchword. Mr Scholz will remain in government and Klara Geywitz, his running mate, will run for the SPD's vice-chairmanship along with Mr Kühnert. Surprises remain possible, but for now Germany's government looks safe.

Optimists argue that by setting the course for an ambitious election programme in 2021, Mr Walter-Borjans and Ms Esken could rejuvenate a despondent party without blowing up the government. Yet idealistic visions are hard to pursue alongside the compromises of coalition—Mr Scholz remains committed to the black zero, for example—and the new duo does not look ready for prime-time. As Thorsten Benner of the Global Public Policy Institute argues, it would be odd for the SPD to vacate the centre ground just as Mrs Merkel, the archetypal moderate, prepares to give way, possibly to a successor who will steer the CDU rightward. But sometimes despair has its own momentum. ■

Stormy weather

NATO marks its 70th anniversary in typically chaotic fashion

But the fundamentals are surprisingly sound

Print | Europe Dec 5th 2019

WOULD DONALD TRUMP defend a NATO ally that was, as he put it, "delinquent" in meeting its military spending targets? "I'll be discussing that today," replied the president menacingly, in an interview on December 3rd. "It's a very interesting question, isn't it?" And so began a tumultuous two days in suburban London, where NATO leaders had gathered to mark the alliance's 70th anniversary.

Things only got worse. In a press conference with Jens Stoltenberg, NATO's secretary-general, Mr Trump remarked that he could envisage France "breaking off" from the alliance and observed, with something of the air of a mafia boss, that France "needs protection more than anybody". At a reception at Buckingham Palace later that evening, Justin Trudeau, Canada's prime minister, was overheard mocking Mr Trump to his British, French and Dutch counterparts. When he heard about that, Mr Trump cancelled a closing press conference and left early. But although the American president was, predictably, the butt of much merriment among commentators, his words did not cause as much disquiet as those of France's president, Emmanuel Macron.

In an interview with *The Economist* published on November 7th, the French president said that he was not sure whether America would uphold NATO's mutual-defence clause, Article 5, and that the alliance was experiencing "brain death" for want of co-ordinated decision-making in places like Syria. He also urged NATO to reassess its very purpose: "The unarticulated assumption is that the enemy is still Russia." In subsequent weeks Mr Macron has doubled down on his comments. On November 28th, two days after 13 French soldiers were killed in a helicopter crash in Mali, he insisted that terrorism, not Russia, was NATO's "common enemy". On December 4th Mr Macron tweeted that Russia was a "threat" but "no longer an enemy", and "also a partner on certain topics".

Such talk alarms eastern European leaders, who believe that Mr Macron is undermining a consensus that was painstakingly forged in the years since Russia's annexation of Crimea and invasion of Ukraine in 2014. Many European officials are also unnerved by Mr Macron's openness to a Russian proposal for a moratorium on medium-range missiles; Russia's deployment of such missiles in violation of a cold-war treaty prompted America to walk out of the pact on August 2nd.

Although some southern European members are privately sympathetic to the idea of detente with Russia, they were not willing to fall in behind Mr Macron in public. The official declaration from the leaders' meeting included prominent mentions of terrorism and, in an apparent sop to Mr Macron, promise of a "reflection process" on NATO's "political dimension". But it also excoriated Russia's "aggressive actions" and insisted that improved relations would only occur "when Russia's actions make that possible."

Mr Macron was also at the centre of a separate quarrel. Recep Tayyip Erdogan, Turkey's president, urged Mr Macron to "have your own brain death checked out first" after the French president rebuked Turkey's incursion into northern Syria. That offensive targeted Kurdish militants who, backed by America, France and Britain, were serving as foot-soldiers against the Islamic State group.

On December 3rd Mr Macron further accused Turkey of working with IS "proxies" in Syria and castigated Mr Erdogan for his purchase of Russia's advanced S-400 air-defence system. The animus is mutual: in the weeks before the meeting, Turkey said it was blocking NATO plans for the defence of Poland and the Baltic states until the alliance recognised the YPG, a Syrian Kurdish militia, as a terrorist group.

Yet for all the awful political optics, the alliance is in rude military health. This year nine countries will hit the alliance's target of spending 2% of GDP on defence, up from just three a few years ago. By the end of 2020 Canada and European allies will have collectively invested $130bn over what they spent in 2016.

In June the alliance agreed its first-ever space policy, building on the creation of new space units in America, France and Britain over the past year. And to the Pentagon's further delight, the declaration from the leaders acknowledged that "China's growing influence and international policies present both opportunities and challenges" for the alliance.

On December 3rd one European leader could be heard joking with another that Mr Macron had inadvertently employed the sort of reverse psychology used by parents against toddlers. Mr Macron's sharp criticism of NATO seemed to have persuaded Mr Trump that the alliance was a good idea after all. "What I'm liking about NATO is that a lot of countries have stepped up, I think at my behest." ■

Dig deeper:

How NATO is shaping up at 70
Assessing Emmanuel Macron's apocalyptic vision
The French president on Europe's fragile place in a hostile world
Read the transcript: Emmanuel Macron in his own words

La République en grève

Pension anxiety drives France on strike and onto the streets

For now, the strikers and protesters enjoy popular support

Print | Europe Dec 7th 2019

Reuters

***Editor's note**: This piece has been updated.*

FRANCE FACED acute disruption on roads, railways and schools again today after massive participation on the first day of a rolling general strike against upcoming pension reform on December 5th. On day two, the SNCF, the national railway company, cancelled nine in ten trains. Fully ten of the 16 Paris Metro lines were shut down completely. Teachers, hospital staff, oil-refinery workers and even lawyers promised to join in. A third of schools in Paris were closed.

According to the official count, 800,000 people joined demonstrations across the country on Thursday. This is fewer than the number who took to the streets in the paralysing strikes of 1995, which forced the government of Alain Juppé to shelve a planned pension reform. But the figure nonetheless represented the greatest show of force yet on the streets by unions since President Emmanuel Macron was elected in 2017. Recently eclipsed as the face of protest by the *gilets jaunes* (yellow jackets), they are now flexing their own muscles and hoping to force Mr Macron to back down, just as the *gilets jaunes* managed last year.

The strike was called against Mr Macron's pension plan, an election-manifesto pledge in 2017. This is designed not to curb overall spending on pensions, which amounts to 14% of GDP in France, compared with an OECD average of 8%. Nor does it raise the legal minimum retirement age of 62 years, on the low side for the OECD. It aims, rather, to merge France's tangle of 42 different mandatory pension regimes into a single, points-based system. The idea is to make the rules more transparent, simpler and fairer. Those who have broken careers, or have worked a lot part-time, will gain from the system, since even short stretches of work will earn points.

The reason for the collective fury is threefold. First, unlike his predecessors, Mr Macron has decided to use this reform to end pensions with special privileges, the so-called *régimes spéciaux*, which he argues "belong to another era". Indeed some such regimes, such as that covering the Paris Opera, date back to the 17th century under Louis XIV. Naturally, the beneficiaries of such schemes, such as train drivers who can retire at the age of 50 (rising thanks to earlier reforms, but only to 52 by 2024), will not give them up without a fight.

Second, France's overall system will face a deficit of €8bn-17bn ($8.8bn-18.8bn) by 2025, according to the official pensions advisory body. But some of the regimes are well managed and balance their books. Lawyers, for instance, fear that their virtue in maintaining a solvent, sustainable pension scheme will be punished under the merged system. They worry that they will be made to contribute more for the same rights that they enjoy today.

Third, the government has spent so long consulting over its long-promised pension reform that it has ended up generating more anxiety about the outcome than goodwill about the discussions. Nobody knows quite what their future entitlements will be. The government, stuffed with brainy technocrats (Mr Macron himself being one of them), talks in incomprehensible jargon about "systemic" versus "parametric" reform. Mr Macron has ruled out raising the legal minimum retirement age. But many people suspect that, whatever he says now, everyone will have to retire later anyway. A poll this week showed that 57% of French people believe this. Distrust and confusion makes it easy for opponents to whip up anger and suspicion. Supporters of the strikes include not just most of the big unions but such odd bedfellows as the Socialist Party and Marine Le Pen's National Rally.

The government is expected to announce the new pension rules before the end of the year, and possibly as early as next week. What it decides will depend partly on how disruptive the strikes are, and on how far the French are willing to put up with them. In a nation founded on revolt, the French tend to be sympathetic to strikes when they begin, and become less so as the weeks drag on, or things turn violent. Today 64% say that they back the pension strikes. With this sort of protest, and in contrast to the *gilets jaunes*, the government at least has organisations to talk to. But the president is deeply unpopular, the unions are keen to teach him a lesson and the government is on perilous ground. ■

Revenged

Malta's prime minister is ousted by a murdered journalist's work

But he is trying to cling on for a few more weeks

Print | Europe Dec 5th 2019

IT COST HER her life. But, in the end, Daphne Caruana Galizia, a dogged Maltese journalist, brought down from her grave the man she believed had allowed corruption to flourish as he made his island state progressively richer.

On December 1st Joseph Muscat, the prime minister of Malta, announced he was resigning. He has long denied any wrongdoing and tried to depict his departure as natural. "I always said a prime minister should not serve for more than two legislatures," he said in a televised address. But it came as Malta plunged deeper into a crisis with its origins in Caruana Galizia's murder in 2017.

Mr Muscat announced his resignation the day after a local tycoon, Yorgen Fenech, was charged with complicity in the killing. Mr Fenech pleaded not guilty. According to Caruana Galizia's son, Paul, before her death his mother was investigating links between Mr Fenech, a gas deal with Azerbaijan and two senior figures in Mr Muscat's government: his chief of staff, Keith Schembri, and the former energy minister, Konrad Mizzi. A report by the Council of Europe found that a Dubai-registered company owned by Mr Fenech was due to make large payments to Panamanian-registered companies belonging to the two politicians. Both deny any wrongdoing.

Mr Muscat delayed his departure. He said his party would start choosing a new leader on January 12th. He would step down as prime minister "in the days after". That announcement sparked heated clashes in Parliament, a demonstration on the streets of the capital, Valletta, and claims that Mr Muscat intended to hobble the investigation before he left office. Mr Muscat rejected this. "Justice is being done. And I will see that justice is for everyone," he said.

Caruana Galizia died when a bomb planted in her car exploded as she left her home. Three men charged with her murder are yet to be tried. Last month a fourth man offered information on the killing in return for immunity from prosecution. He testified in court on December 4th that he had paid the alleged killers on behalf of Mr Fenech, who was the sole organiser of the murder. But he added that, after the men were arrested, he was asked by a member of the prime minister's entourage to tell them they would get bail and €1m ($1.1m) each. Bail was not granted and the money apparently was not paid.

Ministers (including Mr Muscat) have been pelted with eggs, MPs from rival parties have almost come to blows, and on December 2nd the opposition boycotted Parliament as Mr Muscat gave a farewell speech. He leaves a country that is far richer (growth has averaged 7.2% on his watch), but one that is as troubled as it is troubling.

Fumbling the capture

China tries, and fails, to influence the Czechs

But it still has a lot to learn

Print | Europe Dec 5th 2019

ON THE NIGHT before Christmas Eve last year Zhang Jianmin, China's ambassador to the Czech Republic, paid a visit to Andrej Babis, the prime minister, on the outskirts of the capital. The two men posed for a photograph by a Christmas tree, but it was not a social call. Mr Zhang objected to a security warning about Huawei and ZTE that had been issued by the country's cyber-security agency, and complained that Mr Babis had banned his staff from using products made by the two Chinese telecoms giants. Mr Zhang emerged claiming, in a statement posted on Facebook, that Mr Babis had assured him that the security warning had been "misleading" and the ban hastily decided. It seemed briefly like a Chinese diplomatic victory in Europe.

It was, instead, another in a series of bumbling missteps by China that have left it foundering diplomatically in the Czech Republic. Humiliated by the statement, Mr Babis publicly contradicted Mr Zhang, saying flatly, "I do not know what the ambassador is talking about." The limited Huawei ban, imposed by Mr Babis and some government ministries, stayed in place. A years-long effort to influence the political and business elite of the Czech Republic, and to turn the foreign policy of an EU member country, was unravelling.

Officials in Western democracies have grown anxious in recent years at China's increasing dexterity at exerting influence far from its shores. But China's experience in the heart of Europe suggests its diplomatic playbook is much trickier to execute in a democracy with a free press and fairly strong institutions—and perhaps especially one, like the Czech Republic, that has a historical sensitivity to being pushed around by an authoritarian great power. "It is a story of backlash," says Martin Hala of Sinopsis, which has monitored the rise and fall of Chinese influence in the country.

In its courtship of the Czech Republic, China has employed many of the same tactics it has honed elsewhere. It has courted public figures (including by putting some on the payroll), promised substantial investment, sponsored cultural programmes and events, and applied diplomatic pressure when necessary. Analysts call the process "elite capture".

For a few years it appeared to be working. In 2013 Milos Zeman, a former prime minister, was elected president. Though the president does not set official Czech foreign policy, he pursued a friendly relationship with Xi Jinping. That same year Petr Kellner, a Czech billionaire oligarch and supporter of Mr Zeman's, won a coveted Chinese national licence for one of his companies, Home Credit, to make consumer loans. In 2014 Huawei entered into a five-year sponsorship contract with Prague Castle, the presidential residence, agreeing to supply Mr Zeman and his office with servers, phones and other equipment worth about $20,000 annually.

In 2015 CEFC China Energy, an oil conglomerate, announced that it would invest billions of dollars in the Czech Republic. It snapped up stakes in a football club, a brewery and a hotel, and a few other businesses, including a little-watched TV station. In 2016 China's influence seemed to be reaching an apex, with a state visit by Mr Xi himself.

But then cracks started to appear. In 2018 Ye Jianming, the CEFC chairman, was detained in China on suspicion of corruption. Beyond the initial flurry of deals, CEFC's largesse never materialised.

A nastier side also began to show. In 2016, after the Czech culture minister met the Dalai Lama, a diplomatic no-no for China, Mr Zeman abruptly cancelled plans to award a medal to the minister's 88-year-old uncle, a Holocaust survivor. This year Chinese authorities tried to press the mayor of Prague, an outspoken critic of China's human-rights record, into adhering to the "one-China" principle that forbids diplomatic relations with both China and Taiwan. When he refused, Chinese authorities cancelled a long-planned tour of China by Prague's Philharmonic Orchestra.

Investigative journalists have caused more problems. In July Czech public radio reported that Huawei employees in Prague were supplying information about their clients to the Chinese embassy. In November Charles University closed its Czech-Chinese Centre, which had been hosting China-friendly conferences since its opening in 2016, after a news website reported that its executive secretary, and others, had taken payments from the Chinese embassy via a private company.

For now China's efforts at "elite capture" seem to have alienated the public. In a global survey conducted this year by the Pew Research Centre, 57% of Czechs viewed China unfavourably, compared with just 27% who viewed it favourably—the widest negative margin of any country surveyed in Europe apart from Sweden.

Huawei is still in business in Prague despite the warnings, and Mr Kellner has just bought a popular TV station, which critics fear may now tone down scrutiny of China (a spokesman for his company calls this "completely paranoid"). Observers in Prague reckon a battle over Chinese influence will continue for years. "I don't think it can be won, really," says Janek Kroupa, the journalist who reported the story on Huawei employees sharing information with the embassy. "It can only be fought." ■

Charlemagne

The decline of the Five Star empire

Italy's quirkiest party goes from hero towards zero

Print | Europe Dec 5th 2019

THE QUINCENTENARY of the death of Leonardo da Vinci, which is being marked this year, is a fine moment to savour the Italian talent for walking a step or two ahead of everybody else. The inventory of Italian brainwaves, from double-entry book-keeping to radio, is impressive. In politics, too, Italians have repeatedly anticipated trends and innovated—though not always happily, as with the invention of fascism. In 1968 students in Rome were rioting two months before ever a cobblestone was thrown in Paris. And if today's right-wing populists have a spiritual father, he is surely Silvio Berlusconi. Like Donald Trump, that priapic property developer used TV to launch himself into politics and successfully marketed an idiosyncratic brand of personalised conservatism.

So it was tempting to believe that Beppe Grillo, a politicised comedian in the mould of America's Michael Moore or Britain's Russell Brand, was ahead of the curve when he founded the Five Star Movement (M5S) ten years ago. The late Gianroberto Casaleggio, the internet executive who inspired him, certainly had some original ideas. One was that the internet would do away with representative democracy and replace it with a form of direct democracy in which the electorate could decide on legislation at the click of a mouse. In his view, the Five Stars' main mission was to facilitate the transition.

For a while, the Movement's headquarters was a website. Its parliamentary candidates, who were chosen online by their fellow members, usually had no experience of politics. One of the many temporary jobs held by the young man who now leads it, Luigi Di Maio, was as a webmaster. And these digital natives have created a programme that has something of the internet's wildness. Another of Casaleggio's contentions was that the fall of the Berlin Wall had made meaningless the old division between right and left. The Movement would be neither. It espouses a mixture of progressive and conservative policies. It is pacifist and environmentalist, yet protectionist; socially liberal, yet wary of immigration; keen on Putin's Russia, but only intermittently Eurosceptic. It favours draconian anti-corruption laws, boosting internet connectivity and slashing the cost of politics by, among other things, reducing the size of parliament.

This heterogeneous, even eccentric programme helped the Five Stars win a third of the seats in the legislature at the last general election in March 2018, more than any other party. That enabled it to govern first with the hard-right Northern League and, since September, with the centre-left Democratic Party. But although some of M5S's ideas have been taken up by other new parties such as Vox in Spain and the Brexit Party in Britain, the idea that it offers a glimpse of the political future looks ever less convincing. In the first real test of public opinion since the fall of the last government, a regional election in Umbria on October 27th, the Movement's share of the vote slumped to a mere 7.4%. That result pitched the party into its worst crisis since its foundation. Such has been its loss of self-belief that the leadership proposed it should not contest the next two regional ballots, lest it be further humiliated. Members decisively rejected that proposal in an online vote that has further discredited Mr Di Maio.

So are the Five Stars in fact a cluster of meteors, doomed to burn out in the political atmosphere? The party has never fared well in regional elections. In these, the focus is on the rival merits of the candidates for regional governor. The M5s's contenders are usually unknowns. Polls suggest that in a general election, M5S could still pick up around 17% of the vote. But that is barely half what it won last year.

Although the M5S defies easy classification, that is not always true of its voters. "When the Five Stars allied with the right, they lost those on the left; then when they allied with the left, they lost those on the right," says Antonio Noto of Noto Sondaggi, a polling firm. That leaves the party's hard-core devotees, many of whom abstained in previous elections. Even they may now be deserting.

The M5S won support by being uncompromisingly hostile to the establishment. Since taking office, it has become part of it. No one reflects the change more than Mr Di Maio, with his dark suits and sober ties. Some of his own lawmakers were appalled when, discussing next year's budget on social media, he suggested that measures to curb tax-dodging be postponed to make life easier for shopkeepers and professionals. And the movement has suffered from its own success. The last government enacted several measures it had promised, such as an income-support benefit for the poorest, legislation to limit short-term employment contracts and the closure of a loophole through which many convicted of corruption had wriggled free. The M5S having delivered on those pledges, voters see little reason to continue supporting it.

Time out

Piergiorgio Corbetta, research director of Istituto Cattaneo, a think-tank, believes the only way the M5S can recover its oomph is by returning to opposition. He sees its future as not unlike that of the defunct Radical Party, a similarly unconventional movement (its lawmakers included the porn star Cicciolina) which nevertheless played a vital role in politics, snapping at the heels of the mainstream parties and lobbying tirelessly for a more socially and economically liberal Italy.

Mr Grillo has often argued that his movement has played a crucial part in diverting into peaceful, democratic channels much of the rage in Italian society after two decades of economic stagnation. But if the M5S is to be reduced to such a role at the edge of the political stage, it follows that a large part of that discontent will flow to Italy's other, more extreme, Eurosceptic populist movement: the League. That process is already well advanced. In Umbria, where it won only 14% of the vote in 2015, the League took a stunning 37% in October. ■

Britain

The Conservatives
Leaving Brexit undone

If the Tories win

“Get Brexit done”? It’s not as simple as Boris Johnson claims

Under the Conservatives, the spectre of a no-deal Brexit would return in December 2020

Print | Britain Dec 5th 2019

As in 2017, this was meant to be a Brexit election. Also as in 2017, it has quickly morphed into one about the National Health Service, security and terrorism. Yet the pithiest slogan of the campaign is still Boris Johnson’s much-repeated promise to “get Brexit done”. And although his poll lead has narrowed, the odds are that this pledge will help bring him victory.

The question is: what then? With a Tory majority, Parliament seems sure to ratify the Article 50 withdrawal agreement that Mr Johnson renegotiated in October in time for Britain to leave the European Union by January 31st. The European Parliament, whose consent is needed, should do the same. The psychological importance of Brexit formally happening will be profound, not least because it will kill the argument for holding a second referendum.

Yet Brexit will still not be done. On February 1st Britain will move into a transition phase, when it must abide by all EU rules, that ends on December 31st. Mr Johnson’s plan is to negotiate and ratify a best-in-class free-trade deal during this period. There is a provision to extend the deadline by one or two years, but this has to be agreed on before July 1st. And the Tory manifesto declares in bold type that “we will not extend the implementation period beyond December 2020.”

Both houses of Parliament must also pass a mass of other legislation to replace the EU’s laws and regulations when the transition period ends. These include bills on fisheries, agriculture, trade and customs, immigration and financial services. Several are both long and controversial, which is why they have made minimal progress in the past two years.

More problematic will be the talks on future relations with the EU. These will be far more difficult than the Article 50 negotiations, supposedly an easy first stage. A new deal must cover trade, security, data, research, student exchanges, farming and fish, to name but a few areas. The list is so extensive that the result will be a “mixed” agreement, under Article 218, that needs unanimous approval and ratification by 27 national and several regional parliaments. The Institute for Government, a think-tank, notes that less ambitious EU trade deals with Ukraine, Canada, South Korea, Japan and Singapore have taken between four and nine years to negotiate and ratify.

That is why many are urging Mr Johnson to seek more time. But this will be tricky, and not just because of his manifesto pledge. In transition Britain will be in a form of vassalage, obliged to apply all EU laws and regulations with no say in making them. Extending the time limit requires unanimous approval, and that may come with conditions such as access to British fisheries. It would also mean more money, as Brussels would expect a hefty contribution from Britain, probably without keeping its current budget rebate.

Mr Johnson's team responds to such gloom with four arguments. First, he was told that he would be unable to reopen Theresa May's withdrawal agreement, and yet he did it. But this analogy does not work. His substantive change was to accept an original Brussels proposal to avert a hard border in Ireland by in effect leaving Northern Ireland alone in a customs union, implying border checks in the Irish Sea. Presumably Mr Johnson does not want to do a trade deal by a similar process of repeated concessions to the EU.

The second line is that a good trade deal should be easy because Britain and Brussels start in complete alignment. Yet Mr Johnson's explicit plan is to diverge from EU rules and regulations. He has recently even said he wants more flexibility over state aid. Brussels has reacted badly: the EU fears being undercut by a deregulated offshore competitor. Without what it calls a level playing-field, it says it must limit access to its single market. Mujtaba Rahman of the Eurasia Group consultancy says that negotiating a trade deal that erects barriers will always be harder and take longer than a normal deal that does the opposite.

A third claim is that setting a deadline is the only way to galvanise trade talks. With enough political will, a deal can always be done. Yet Sam Lowe of the Centre for European Reform, another think-tank, says the sole practical option in such a short time would be a bare-bones deal that covered goods trade alone. Such a deal might avoid the need for parliamentary ratification. But it would do nothing for services, which make up 80% of Britain's economy and half its trade. It would not cover security, data and much else. And the lesson from the Article 50 experience is that a tight deadline forces Britain to make concessions, which might range from fisheries to Gibraltar.

Fourth, many Tories maintain that if no trade deal can be done in time, leaving on World Trade Organisation terms would be fine. The withdrawal agreement would still cover EU citizens, money and Northern Ireland. Yet reliance on the WTO is dodgy when the system is under threat from Donald Trump. It would imply extensive tariffs and non-tariff barriers. And it would bring back all the fears of lorry queues, shortages of medicine and food, and problems for airlines and energy supplies that led both Mrs May and then Mr Johnson not to press for a no-deal Brexit.

The damage of no deal would be severe, cutting 8% off income per head after ten years. The Institute for Fiscal Studies, a think-tank, suggests the budget deficit would hit 4% of GDP and the public debt would rise sharply. Far from getting Brexit done, as Mr Johnson says, next year promises to repeat 2019's experience of missed deadlines and cliff-edges to no-deal. ■

Britain's general election: *Next week's copy of The Economist goes to press before the results of the general election will be known. Subscribers with digital access will be able to read a special election edition on our apps on December 13th. And all subscribers will be able to read our analysis of the results free online at economist.com/2019UKelection*

Corbyn the dealmaker

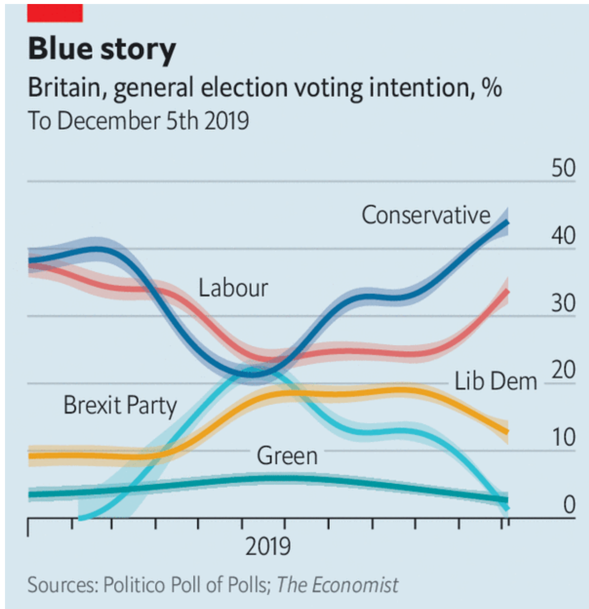
What would happen in a hung parliament?

Labour would be best placed to form a government, even if the Tories won more seats

Print | Britain Dec 7th 2019

IT'S ODDS-ON for a Conservative overall majority and the betting markets put the chances of Labour's getting one at 20/1. But the Tory lead has narrowed slightly (see chart). If it drops to six percentage points Parliament would probably be hung—and, given that during November a fifth of voters changed their preferences (including to and from "don't know"), that could happen. So it's not all over for the Labour Party.

As Vernon Bogdanor of King's College London points out, this is an asymmetrical election. The Conservatives need an overall majority in order to stay in Downing Street, but Labour needs only a hung parliament. That is because Boris Johnson would find it hard to do deals with other parties.



The Economist

The Conservatives' hard-Brexit policy appeals to no other party except the Northern Irish Democratic Unionists, who feel betrayed by Mr Johnson because the Brexit deal he has done with the European Union envisages treating Northern Ireland differently from the rest of the United Kingdom. Mr Johnson has ruled out another referendum on Scottish independence, and thus a deal with Scottish National Party (SNP), which is likely to be the third-biggest party in Parliament. The Liberal Democrats, who are likely to be the fourth-largest, might do a deal with the Conservatives if Mr Johnson offered another referendum on leaving the EU, but he is unlikely to.

Mr Johnson, thus, could have the largest number of seats but be unable to form a government. If that happens, eyes turn to the second-largest party. Labour's policy on Brexit—to put a renegotiated deal to a second referendum—appeals to the SNP. Jeremy Corbyn, Labour's leader, has carefully left open the possibility of another Scottish independence referendum, saying only that he would not hold one in his first two years in power.

But if Mr Corbyn needed support from the Liberal Democrats as well, things would be trickier. Jo Swinson, their leader, has said that she would not put him in Downing Street. And although there is speculation about whether Mr Corbyn might step down if he loses the election, if he were in a position to do a deal with the Lib Dems he would have done well enough to spin the election result as a victory, and therefore would cling to power. Moreover, since Mr Corbyn promises the second EU referendum that the Lib Dems want, they would be very likely to make it possible for him to form a government by at least abstaining. If the alternative were losing the chance of another referendum, they might even support him.

A Corbyn government propped up by the SNP and the Liberal Democrats would presumably remain in office to oversee the two referendums. That might give it enough time to bed down in power and cling on after those were done; though given that there is little support for its more radical policies and minority governments tend to be unstable, another election would probably beckon.

In such circumstances Mr Johnson's position would not be solid, either. He is short of friends in his party, and since his appeal lay in his supposed ability to win elections, he might have outlived his usefulness. But with an instinct for power as strong as his, it would probably be wrong to bet on his ejection: he would be as hard to separate from the leadership of his party as the she-elephant from her calf. ■

Dig deeper:

Our latest coverage of Britain's election

After the fall

How to rehabilitate a terrorist

Usman Khan, the London Bridge attacker, had been convicted before. Can jihadists be reformed?

Print | Britain Dec 5th 2019

WHEN A MAN ran amok with two knives on November 29th, many Londoners followed official advice to "run, hide and tell". But a few brave souls chased Usman Khan onto London Bridge, armed with a fire extinguisher and, of all things, a narwhal tusk, plucked from a display. The attacker took two lives before he was shot dead by police. The editors of Britain's tough-on-crime newspapers—three of whom could watch events from their corner offices across the bridge—didn't know what to make of it. Not all of the terrorist's pursuers made for an easy moral. "One hero was a jailed murderer on day release," the *Daily Mail* acknowledged.

Mr Khan's biography poses a still trickier conundrum. It soon emerged that he had been convicted in 2012 of plotting a terrorist attack, and released early from jail last year, under supervision. He was allowed to come to central London that day to attend a conference on prison education; his victims, Jack Merritt and Saskia Jones, worked on the programme. Do these events amount to a case study in the impossibility of rehabilitating a terrorist?

The question is timely. As Islamic State's "caliphate" crumbled, hundreds of fighters and fellow-travellers returned to European countries, including Britain. Jails in England and Wales house a churning population of 700 or so terrorism offenders and other criminals suspected of terrorist affiliations.

Boris Johnson, the prime minister, offered a simple answer. If voters backed him in the imminent election, he declared, he would make sure that all terrorists were locked up for at least 14 years, without early release. Polls suggest more than four-fifths of Britons support him. Jeremy Corbyn, the Labour leader, was ridiculed for saying that such prisoners should "not necessarily" serve their full sentences.

Yet the case presents more of a dilemma than Mr Johnson acknowledges. Such offenders invite little sympathy even from liberals. Let them out too early and you risk them re-offending. About one in ten convicted terrorists in Britain goes on to commit another terrorism-related offence. This is lower than the overall re-offending rate—29%—but highly concerning given that such offences can range from associating with terrorists and plotting attacks to mass murder.

Yet keeping terrorists behind bars too long carries its own risks. Draconian sentences can transform nobodies into martyrs and radicalise prisoners' relatives. Some experts point to Northern Ireland, where internment during the Troubles turned civilians against the state and hunger strikes created heroes out of inmates.

Perhaps surprisingly, the police do not always support longer sentences. Some differentiate between young men who might be caught browsing terrorist material online and hardened plotters, who have spent years immersed in extremist ideology. One senior police officer says prison is ineffective if inmates can smuggle phones inside and continue plotting their activities. Either way, inmates must be released eventually. If extra years behind bars are poorly funded and structured, they “risk making bad people worse”, says Nick Hardwick, an ex-boss of the parole board.

Battlefields of the mind

Regardless of sentence length, most criminologists favour investment in de-radicalisation, which aims to strip terrorists of their motivating ideology, or “disengagement”, which has the more modest aim of dissuading convicts from future violence, even if they retain hardline views. John Horgan, an expert on extremism at Georgia State University, reckons there are 40-50 such schemes around the world.

Most involve counselling to get to the root causes of extremist sympathies. Britain already has two such schemes: one, in prison, is voluntary; another, on release, is mandatory. Measuring their success is hard. Security considerations mean governments are reluctant to allow academic evaluations. The small numbers and lack of an available control group would anyway make it tricky to draw quantitative conclusions. Even so, Mr Horgan says, “the emerging conclusion seems to be that rehabilitation can work,” but only if prisoners are committed to changing their ways.

A qualitative assessment last year by academics judged Britain’s in-prison scheme to be working well. Most lags said it helped them understand why they offended and gave them reasons to avoid doing so. Britain’s policy of mixing jihadists with other criminals risks radicalising non-terrorists. But it also exposes terrorist convicts to alternative viewpoints. One jihadist prisoner told a researcher that “being forced to mix for once” opened his eyes.

More can be done. Hiring extra psychologists might help: Andrew Silke, a counter-terrorism expert, says there is a waiting list for the in-prison course. And more work is needed on de-radicalisation. Prison governors struggle to divert inmates from violent ideology without promoting peaceful but similarly extreme views. “You have to get into the distorted ideology to tackle it,” says an ex-prison boss, recalling debates about whether to quote statements by the Muslim Brotherhood, an Islamist group.

What is clear is that Mr Khan deceived the authorities. He took part in rehabilitation in and out of prison. And he would have been allowed to take part in the conference only because his handlers believed him to be engaged, says Mr Hardwick. Yet Mr Merritt’s father, Dave, urged politicians not to become more punitive. His son died offering prisoners the chance to redeem themselves. “What Jack would want from this is for all of us to walk through the door he has booted down,” he wrote. “That door opens up a world where we do not lock up and throw away the key.” ■

Swing seats

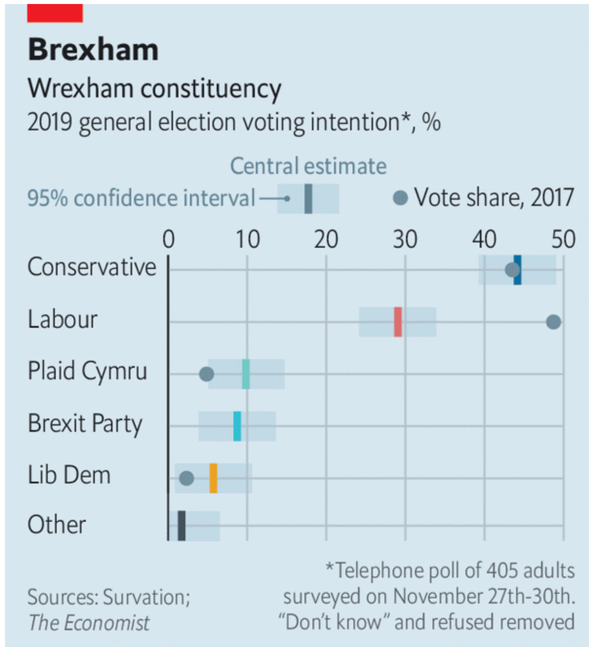
The Tories are well ahead in Wrexham, part of Labour’s “Red Wall”

Our poll gives the Conservatives a 15-point lead in a seat Labour has held since 1935

Print | Britain Dec 5th 2019

CANDIDATES IN MARGINAL seats such as Wrexham find themselves inundated with endorsements from bigwigs during an election. Priti Patel, the Conservative home secretary, has paid a visit to the former mining town. For Labour Eddie Izzard, a cross-dressing comedian, turned up (“All I remember is he had better nails than me,” says Mary Wimbury, Labour’s candidate). Plaid Cymru made do with backing from Bootlegger, a Wrexham AFC fan and vlogger who describes himself as an “alcoholic Welshman, living the dream on jobseeker’s allowance” on Twitter, where he has 213,000 followers.

Despite Bootlegger’s best efforts—and 163,000 views of his endorsement video—Wrexham remains a straight fight between Labour, which holds the seat, and the Conservatives. It is a fight the Tories are winning, according to a poll for *The Economist* by Survation. They stand at 44% as Labour limps along on 29%, down 20 points from the last election (see chart). Having been held by Labour since 1935, Wrexham seems ready to turn blue next week.



The Economist

That is ominous for Labour. Wrexham is part of the "Red Wall", a term used by politicos in Westminster to describe an unbroken stretch of 80-odd Labour-held seats running from north Wales to Yorkshire. If the Conservatives are 15 points ahead in Wrexham, it suggests that nearby constituencies such as Clwyd South and Vale of Clwyd could also fall.

Our poll suggests that in Wrexham the Conservatives' vote-share has not moved since 2017, whereas Labour's has plummeted. Labour voters have other places to go. Plaid Cymru, a leftish party which advocates Welsh independence and remaining in the EU, has doubled its share of the vote, partly thanks to a strong performance in debates by Adam Price, its new leader. Labour-supporting Leavers who cannot countenance backing the Tories have an option in the Brexit Party. About six in ten people in Wrexham voted for Brexit. "I am going to win," repeats Ian Berkeley-Hurst, the Brexit Party candidate, whose relentless optimism belies the fact he is polling in fourth place.

Bonds that once held the Labour vote together have been weakening for years. There has been no working mine in the area for three decades. And the constituency's demography is changing in the Tories' favour as Wrexham becomes a dormitory town. Well-off voters are moving in, splashing out on chunky family homes at bargain prices, points out one Labour activist. In one suburb where houses change hands for about £200,000 ($260,000), many homes have fancy cars outside that are worth almost a quarter that amount.

Labour still hopes that a squeeze on the smaller parties may save it. On the doorstep, wavering voters are reminded that Wrexham is a two-horse race between Labour and the Conservatives. Hopes hang on the party's manpower. Labour boasts 400 activists in the area and has been able to count on help from outsiders: one volunteer had travelled from nearby Shropshire on a sunny Tuesday afternoon; another had come from Australia.

Yet national politics often trumps local activism, and here things are tricky for Labour. Jeremy Corbyn "comes across as such an honest, lovely man", says one resident, who will vote Labour for the first time. More common is the view of another constituent: "Get rid of Jeremy Corbyn and I'll vote for you." Ms Wimbury, the Labour candidate, has the task of winning them all round, taking praise for Labour's leader when it is occasionally offered and (more often) deftly pointing out that it is her name on the ballot and that she will stand up to him in Westminster. For now, however, Wrexham looks like one brick in the Red Wall that will come loose. ■

Dig deeper:

Our latest coverage of Britain's election

Speakers' Corner

The best quotes from the final full week of Britain's election

Key lines from the campaign trail

Print | Britain Dec 7th 2019

Would he lie to you?

"I have nothing to do with it, never even thought about it...If you handed it to us on a silver platter, we'd want nothing to do with it."

Donald Trump protests, perhaps a little too much, that he has no interest in the National Health Service

The last word

"He would be seething at his death, and his life, being used to perpetuate an agenda of hate that he gave his everything fighting against."

Dave Merritt, whose son Jack was killed by a terrorist near London Bridge, criticises the politicisation of his murder. Guardian

Change the channel

"It's on in the morning, usually we have it on some of the time."

Jeremy Corbyn's answer suggests he may not be an avid viewer of the queen's Christmas Day speech, which is in fact broadcast in the afternoon. ITV

Tough questions

"I am sorry that I did that. It was not the right policy. And we should have stopped it. And our manifesto...makes clear that that should be scrapped."

Jo Swinson tells the BBC's Andrew Neil she regrets the Lib Dems' backing of austerity measures while in coalition with the Tories

Not-so-tough questions

"I sometimes succumb to flapjacks...I can drink an unlimited amount of coffee without impeding my ability to go to sleep at the end of the day."

Boris Johnson, who has so far dodged being interviewed by the fearsome Mr Neil, submits to a less searching cross-examination from the Sun

Dig deeper:

Our latest coverage of Britain's election

Capital losses

The Tories are down but not out in London

A predicted Conservative wipeout in the capital may end up a washout

Print | Britain Dec 7th 2019

WHEN GREG HANDS, the Conservative MP for Chelsea and Fulham, stood in the general election of 2017, he had only a dozen Tory disciples helping him deliver leaflets. Back then the Conservatives were focused on scooping up the votes of northern Leavers, rather than worrying about stucco-fronted houses in central London. "There was a bit of complacency," he admits. His majority halved in a bruising night for the Tories across the capital, where they lost four seats to Labour. This time Mr Hands has about 100 volunteers at his disposal, spreading the Tory gospel.

The Conservatives are determinedly clinging on in London. A couple of months ago the consensus was that the Tories' full-throated enthusiasm for Brexit would result in the party being hammered in the Remain-backing capital, making the path to a majority tricky. Yet there is little evidence of this happening. YouGov has the Conservatives on 30% in London, roughly where they were in 2017, while Labour has dipped to 47%, down from 55% at the last vote.

There are three reasons the Tory vote is holding up. For starters, the Conservatives have a low bar to clear. Their performance in London in 2017 was the fourth-worst since 1955. By contrast Labour enjoyed its best-ever night. And so whereas it needs to repeat a record-breaking performance, the Tories simply need to avoid falling on their face again. So far, they are managing it.

Second, the Conservatives' most vulnerable seats have become bitter three-ways. In Kensington, where seven out of ten voters backed Remain, contradictory urges rub against each other. On paper it is a straight marginal between Labour, which won by 20 votes in 2017, and the Tories. Yet in a constituency where the average home costs £1.5m ($2m), fear of Jeremy Corbyn's plans to tax the rich is rife. Smelling an opportunity, the Liberal Democrats are attempting to squeeze through the middle, placing Sam Gyimah, a high-profile Tory defector, in the seat. Local polls suggest they are splitting the Remainer vote down the middle.

A third factor is that the capital may not be as hostile to the Conservatives as many assume. Tory strategists used to regard London the same way Soviet generals thought about Afghanistan. It is a difficult environment for the party, filled with people whom the Conservatives increasingly struggle to reach: the young, graduates and ethnic minorities. Inner-London seats voted overwhelmingly for Remain. Yet it is also the richest part of the country and stuffed with voters who end up with more in their wallets if they vote Tory. Once this stage of Brexit is over, the Tories' path is clearer still.

Relentless optimism is the modus operandi of Labour activists in the capital. Mr Hands may be able to call on 100 pairs of helping hands, but Labour recently mustered several times as many during an event in Chingford and Woodford Green, where it has launched a noisy attempt to knock out Iain Duncan Smith, a Conservative Brexiteer. Swarms of activists may swing some surprising seats. Zac Goldsmith, who lost his seat in 2016 after a self-imposed by-election before regaining it in 2017, is likely to complete his political hokey-cokey and be voted out again. But most Conservative candidates will start sweating only if the local Remain vote shows signs of coalescing around a single candidate. Until then, the predicted Tory collapse in the capital is some way off. ■

Dig deeper:

Our latest coverage of Britain's election

You'll always walk alone

It's lonely being a Tory candidate in deep-red Liverpool

The five safest seats in Britain are all in the city, and all held by Labour

Print | Britain Dec 7th 2019

AS ALEX PHILLIPS makes his case to a burgher of Liverpool Walton, in the city's north, peals of laughter sound a few doors up. "You're asking me to vote Conservative," chortles a local resident to an activist. "Are you having a laugh?" It is a fair question. At the election in 2017 Mr Phillips's party came second with 9% of the vote, to Labour's 86%, making Walton the safest seat in the country. So weak are its opponents, Labour doesn't campaign much either. "In all the years we've lived here you're only the second person to come around," says another local.

During elections, journalists and politicians flock to constituencies that are up for grabs, creating an illusion of frenetic activity. Elsewhere the first-past-the-post electoral system, which ensures there is next to no chance of some seats changing hands, means little happens. That is especially true of Liverpool, which is home to the five safest seats in the country, all held by Labour.

Although the Tories used to vie for control of the city, the party lost its grip in the 1970s. The next decade saw running battles between the Militant Labour local council and the Conservative government in Westminster, during which time "an anti-Conservative identity became quite ingrained in what it meant to be from Liverpool," says David Jeffery of the University of Liverpool. This bunching of Labour voters—in Liverpool and other urban areas—helps explain why the party will need more votes than the Tories to win a majority.

Its dominance in Walton means the battle to be Labour's candidate is more fiercely contested than the election. In 2017 Dan Carden, a former union wallah, went up against Joe Anderson, Liverpool's mayor, for the nomination. Having lost, the mayor vowed never to work with Mr Carden again. Mr Phillips, the Tory candidate this year, has done his homework, but admits he is building experience, hopefully for a run at a more winnable seat. He spends one day in seven in Walton, and most of the rest with the nearby Tory campaign in Southport, which is a marginal constituency.

There is little chance of Liverpool changing hands any time soon. Boris Johnson is known in the city for publishing a leader while editor of the *Spectator* which accused Liverpudlians of seeing themselves "whenever possible as victims", and wrongly blamed drunken Liverpool fans for the Hillsborough disaster. Lib Dems are tainted by having gone into government with the Tories in 2010. Thus the city is likely to remain a training ground for Tory candidates, and a tough one at that. Voters "were horrible", recalls one former candidate. "Someone did a big poo on my election address." Then they sent a photograph of the act to make their displeasure known.

Correction (December 6th): A previous version of this article misspelled David Jeffery's name. Sorry.

Dig deeper:
Our latest coverage of Britain’s election

Bagehot

Truth has been the first casualty of Britain's election

An epidemic of lying is proving corrosive to liberal democracy

Print | Britain Dec 7th 2019

WINSTON CHURCHILL once said that "in wartime truth is so precious that she should always be attended by a bodyguard of lies." If Britain's election is anything to go by, these days lies are so precious that they need to be attended by a bodyguard of further lies. This election has been marinated in mendacity: big lies and small lies; quarter truths and pseudo-facts; distortion, dissembling and disinformation; and digital skulduggery on an industrial scale. The public is so disillusioned with the political process that, when a member of the public asked Boris Johnson during a televised debate whether he valued truth, the audience burst into laughter. Mr Johnson is the favourite by a substantial margin.

A popular parlour game in political circles is to debate which party is the biggest liar. The answer is that the Tories are probably the worst offenders and the Liberal Democrats probably the least bad, though they have a troubling habit of producing fake local newspapers. But this misses the larger point: that both the main contenders have turned disinformation into an art. They both start with big lies—the Tories that Brexit can be delivered quickly and painlessly, and Labour that its gigantic spending plans can be funded by a handful of billionaires (who anyway got rich by stealing from the poor). They then reinforce big lies with smaller ones. The Tories claim they are building 40 new hospitals. Labour insists the Tories are planning to privatise the National Health Service.

Of course, both big lies and small lies have always been part of politics. Anthony Eden told a barefaced lie to the House of Commons in 1956, when he claimed that Britain and France had not colluded with Israel in the Suez invasion. Edward Heath sowed the seeds of Britain's current problems in 1972, when he insisted that entry to the Common Market would not involve any loss of sovereignty. But there is something new about what is going on in this election, and not just in terms of the sheer number of lies. It is a post-truth campaign. The parties are behaving as if truth doesn't matter at all—they don't regard themselves as lying, because they exist in a world of spin. They continue to repeat the same mendacious talking-points even if they have been revealed to be bogus. They accuse each other of peddling "fake news", while peddling it themselves. Their outriders release weird rumours into the political atmosphere: one doctored newspaper article, primarily shared by Labour supporters, falsely accuses Jo Swinson, the Lib Dem leader, of slaughtering squirrels in her garden.

Why has Britain gone through the post-truth door? Some of the blame lies with new technology. The most egregious examples of distortion have taken place online. During one leaders' debate the Conservative Party renamed its Twitter account factcheckUK and used it to pump out partisan messages disguised as independent evaluations. The internet has changed the rules of the political game, weakening the power of gatekeepers in the old media (who are bound by professional ethics and election rules) and opening the battleground to cranks and fraudsters. It has also allowed campaign headquarters to spin different tales to voters in different parts of the country. Tory digital ads targeted at Leave-voting areas such as Rother Valley (67% Leave) emphasise the party's hard line on Brexit, whereas those targeting places such as St Albans (62% Remain) avoid the subject.

Some of the blame lies with the two main candidates. Jeremy Corbyn is immune to the truth because he is in the grip of an all-encompassing ideology about the evils of capitalism and imperialism, and the wonders of socialism and people power. Mr Johnson is indifferent to the truth because he is in the grip of an all-consuming ambition. He has twice been sacked for lying—once by the *Times* over a made-up quote and once by his party over an affair—but has nevertheless made it to the top. He is so worried about being held to account for his various claims that (so far and in contrast to other party leaders) he has dodged an interview with Andrew Neil, the BBC's most forensic interviewer. His slipperiness has been given a sinister twist by his chief adviser, Dominic Cummings, a Machiavellian ideologue who propagated the lie that Brexit would generate £350m ($460m) a week for the NHS.

Truth versus tribalism

But there is also a deeper force at work: the triumph of political tribalism. In the Blair-Cameron era, politics was primarily about policy. Politicians argued about what measure of economic openness would stimulate growth or, after the financial crash, what degree of austerity would keep the markets calm. Organisations like the Office for National Statistics spoke with authority. Today it is about tribalism as much as economics. The Tories are using Brexit to win over Labour voters, while Labour is reasserting its identity as the party of the working class. Experts have lost much of their credibility with the public in large part because they are seen primarily as members of a tribe (the London-based cosmopolitan elite) rather than objective commentators. Even before this election began its corrosive work, only 40% of voters surveyed by the Reuters Institute for the Study of Journalism said they trusted the news. That number is much lower among working-class and Brexit-supporting voters.

The combination of an epidemic of lies and a climate of mistrust is proving noxious. It distorts the selection process. The more voters assume all politicians are liars, the more likely they are to choose a liar to represent them. Mr Johnson is in many ways the ideal politician for a post-truth age, because nobody expects him to keep his word. He exists in a world of us-versus-them and of emotion rather than reason, a world in which cheering people up is more important than depressing them with facts. Liberal democracy depends on people doing something extraordinary: choosing a handful of people to represent their interests and views in Parliament. Without the glue of trust and truth, that extraordinary process will sooner or later come unstuck. ■

Dig deeper:

Our latest coverage of Britain's election

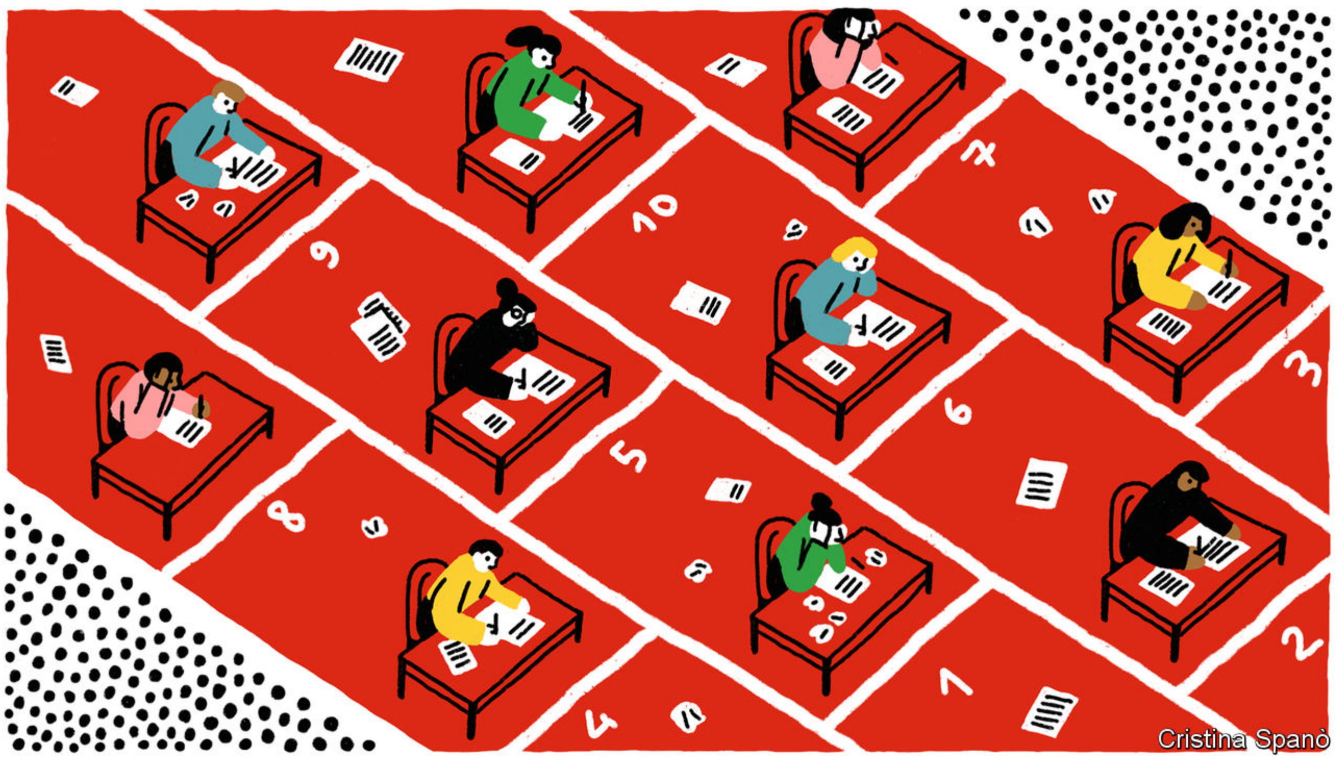
Education
The parable of Finland

The parable of Finland

PISA results can lead policymakers astray

All the more reason to pay close attention to them

Print | International Dec 5th 2019



WHEN ESTONIA gained independence from the Soviet Union in 1991 it took the chance to reshape the country's education system. Mailis Reps, the current education minister, says officials and politicians looked everywhere—from America to the Netherlands—for inspiration. But they kept coming back to their Nordic neighbours. As Ms Reps recalls, the concluding argument in any debate often ran: "Let's try something like that because it works in Sweden or Finland."

Many others have done similarly. Every three years the OECD publishes results from the Programme for International Student Assessment, with the latest out on December 3rd. PISA tests the reading, maths and science skills of 15- and 16-year-olds in the OECD's member states, as well as volunteers not in the club of mostly rich countries. The results provide a means to directly compare different education systems. It is now nearly two decades since the first batch were released. Back then, there was a surprise. Finland, not previously renowned for its education, topped the table when it came to reading, and excelled in other categories, too.

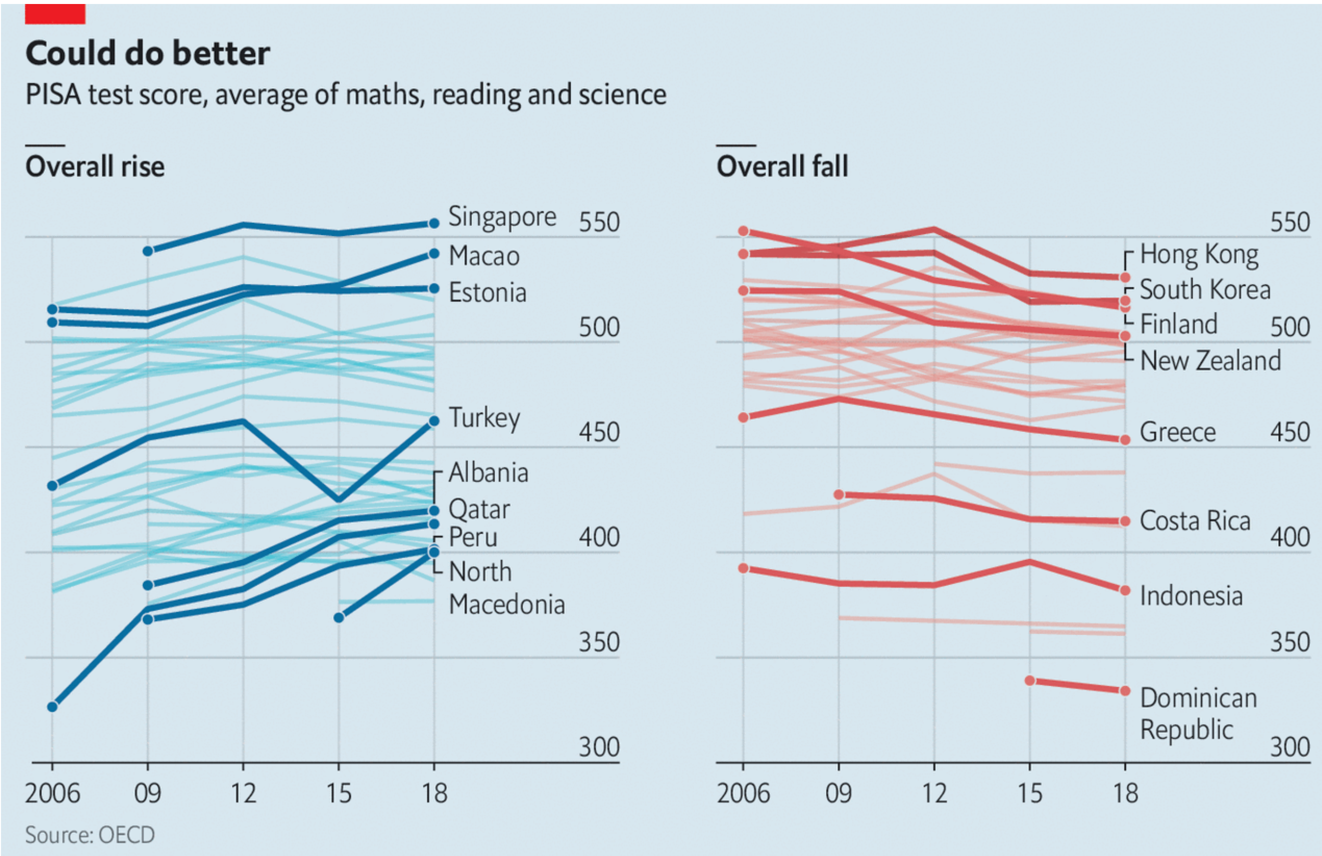
The Nordic country appeared to have discovered a way to get brilliant results without the discipline and intense workload of East Asian champions like Japan and South Korea, which were the other top scorers at the time. Educationalists descended on Helsinki. They reported back that not only was education free and comprehensive, but teachers were highly respected, well trained and left to get on with their jobs, which frequently involved enabling children to discover things for themselves. Schools in countries from Scotland to South Korea sought to mirror Finnish education. Indeed, international visits became so popular that the Finnish government started to charge for them. Those arriving today pay more than €1,200 ($1,300) to visit a school.

Yet Finland's image as an educational Utopia now appears to be somewhat out of date. The latest PISA results show a fall in its average score, as they have every round since 2006. Gaps between rich and poor pupils are widening, something which is distressing for a country that prides itself on equality. Estonia, once a mere imitator, is now the highest achiever among OECD countries. Mart Laidmets, the secretary-general of Estonia's ministry of education, notes with more than a hint of satisfaction that although Asian delegations still fly to Helsinki, they increasingly use it only as a connection on the way to Tallinn.

The parable of Finland helps to explain why there has been little overall progress since PISA began. The hope at the turn of the millennium was that the wealth of new information provided by the tests would help identify why some school systems do so well. Others would follow their lead, causing results to rise across the board. But although spending per pupil in the OECD has risen by 15% in just the past decade, performance in reading, maths and science remains essentially the same as when the tests started.

That's what I'm Tallinn about

As ever, this year's results include plenty of bright spots (see chart). Singapore's sparkling scores have got better still. Even so, it is no longer the highest achiever overall. That is China—or to be more precise, Beijing, Shanghai, Jiangsu and Zhejiang (the OECD declines to include results from farther afield because it cannot guarantee their veracity). Less well-studied countries including Jordan, Poland and Turkey have also seen improvements. And yet for every Jordan, there is a Finland.



The Economist

Part of the reason for the lack of overall progress is that schools have less influence over results than is commonly assumed. Culture and other social factors, such as adult literacy, matter more, meaning that even well-informed policymakers can only make so much difference. As John Jerrim of University College London notes, "You are always going to have East Asian countries coming top." And, as the data suggest, above a certain level (around $50,000 per pupil, cumulatively between the ages of six and 15) there is not much of a relationship between expenditure and PISA scores.

The importance of culture can be seen in Estonia and Finland, both of which have long histories of high levels of literacy, often promoted by the local Protestant church. "There is this kind of general understanding" says Ms Reps, "that we don't have, I don't know, a golden diamond, but that education is the thing." Finland created a series of children's books featuring the Moomins—pale, rounded creatures that are beloved by youngsters around the world. Libraries are scattered throughout the country, including a spectacular, sloping one next to the train station in the centre of Helsinki, called Oodi, which was built to celebrate the country's centenary at a cost of €98m. These kinds of things are difficult for other countries to replicate.

Other factors are also beyond the control of education ministers. Immigration plays an important role, with recent arrivals scoring below locals in most countries. Finland has seen a small uptick in the number of migrant pupils taking PISA over the past decade. More than four-fifths do not speak Finnish at home, helping to explain the big gap in performance between them and local students. Estonia has seen a similar increase in the number of immigrant pupils, but new arrivals are much less likely to be poor than they are in its Nordic neighbour.

Finishing lessons

Finland's decline may make the wonks who rushed to copy its schools seem silly. But looking deeper there are still lessons to learn from Finland's example. Despite the country having a reputation for cuddly teaching, it used to take a slightly more hardline approach. In 1996, four years before the first batch of PISA results, a group of British researchers visited the country. They found "whole classes following line by line what is written in the textbook, at a pace determined by the teacher...We have moved from school to school and seen almost identical lessons—you could have swapped the teachers over and children would not have noticed the difference." As Gabriel Heller Sahlgren, an economist, has noted, most of the children who scored so highly in the first round of tests would have experienced this sort of schooling.

Cristina Spanò

By the time the results came out, many Finnish schools had started to move in a very different direction, confounding touring policymakers. A forthcoming study by Aino Saarinen and colleagues at the Universities of Helsinki and Oulu analyses PISA data from 2012 and 2015, finding that children in schools which gave pupils more freedom to direct their own learning had lower scores in maths and science. Those from poor and migrant families suffered the most. Eschewing the possibility of a happy midpoint between reading from a textbook and leaving children to their own devices, schools have continued to experiment in the years since. A wave of new institutions are being built without classrooms. A new curriculum, which began to be introduced in 2016, encourages lessons without defined subjects.

Despite this, there remain many similarities in the organisation of the Estonian and Finnish education systems. There are very few fee-paying schools, for instance, and both seek to minimise exams and segregation by ability. Belying the slightly staid office in which he sits, replete with portraits of the country's leaders and a large Estonian flag, Rando Kuustik, the head of the Jakob Westholm School in the centre of Tallinn, says that his first priority is his pupils' happiness, and his second is to "help them manage better in the world than when they entered."

But although Mr Kuustik's teachers are beginning to tweak their style of instruction by, for instance, making more use of group work, "we are still a very traditional school," he explains. Before pupils work in groups, the teacher makes sure they have a thorough understanding of what they are working on. Rules are clear, and teachers lead lessons from the front of the class. Academics report a similar picture across the country. Tim Oates of Cambridge Assessment, a testing company, lauds the country's rigorous, coherent curriculum.

Much of this can be learnt from. But any country hoping to import the Estonian model in its entirety is likely to be disappointed. The country has seen fast economic growth over the past three decades, which is associated with better results. And migration out of the country, combined with a lower birth rate, means the school population has fallen by 29% since 2000, leaving an unusual education system. Andreas Schleicher, head of education at the OECD, notes there is a "healthy degree of competition" between schools to attract the remaining pupils. In rural primary schools, it is not uncommon to have classes as small as two or three pupils, says Ms Reps, meaning they receive something akin to private tuition. One school even managed to stay open for two years without any children—something other countries will probably choose not to copy. ■

Asian tigers
Still hunting

Asian tigers

After half a century of success, the Asian tigers must reinvent themselves

They must move from growth-obsessed developmental states, to growth-friendly welfare states, say Simon Rabinovitch and Simon Cox

Print | Special report Dec 5th 2019

THE FOUR Asian tigers—Hong Kong, Singapore, South Korea and Taiwan—once fascinated the economic world. From the early 1960s until the 1990s, they regularly achieved double-digit growth. A generation that had toiled as farmers and labourers watched their grandchildren become some of the most educated people on the planet. The tigers started by making cotton shirts, plastic flowers and black wigs. Before long, they were producing memory chips, laptops and equity derivatives. In the process they also spawned a boisterous academic debate about the source of their success. Some attributed it to the anvil of government direction; others to the furnace of competitive markets.

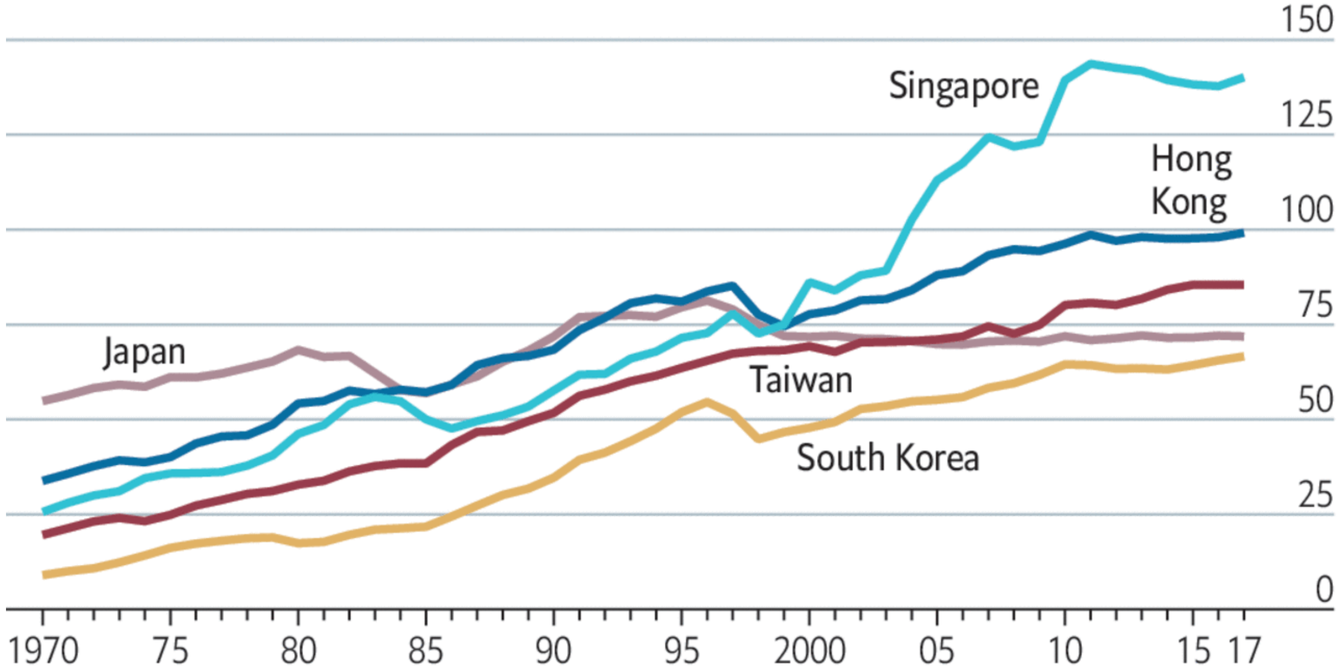
Then the world turned away. The Asian financial crisis destroyed their mystique. China became the new development star, even if, to a certain extent, it followed their lead. The tigers themselves seemed to lose their stride. This year America is on track to grow more quickly than all four of them.

They all have seemingly intractable problems: stagnant wages in Taiwan, the dominance of big business in South Korea, an underclass of cheap imported workers in Singapore and, most explosive, a government in Hong Kong that will not, or cannot, listen to its people.

But it is a mistake to write off the tigers. A closer look at their economic record shows that, contrary to the gloom that sometimes pervades them, they have much to boast about. The trajectory of their GDP per person, calculated at purchasing-power parity, has remained impressive (see chart). They blew past the supposed middle-income trap long ago. And South Korea will soon become the fourth tiger to overtake Japan, its former imperial ruler and economic mentor.

Overtaking Japan

GDP per person* as % of United States



Source: Penn World Table

*At purchasing-power parity

The Economist

They have also gained ground on America. Singapore passed it in the 1990s; Hong Kong drew level in 2013; and the other two have narrowed the gap. Indeed, in the past five years (2013-18), the GDP per person of Singapore and Hong Kong has grown faster than every country above them in the income rankings. With a couple of exceptions, the same is true of Taiwan and South Korea.

In their economic maturity, the tigers merit renewed attention. They face many of the same issues that bedevil the West: how to mitigate inequality; how to gin up productivity; how to cope with ageing; and how to strike a balance between America and China. They do not have all the answers, but they do have novel, albeit sometimes foolish, approaches that are in themselves instructive.

Little dragons

This special report will examine the changing nature of the tigers' economies and make four big claims. The first is that many of the tigers' problems result from economic success, not failure. They have defended their global export share for years, despite steady increases in labour and land costs. Now, though, they will struggle to expand their exports faster than global demand itself. They have also reached the technological frontier in many industries. That makes further improvement harder: they are no longer catching up with global best practices but trying to reinvent them.

Lee Kuan Yew, Singapore's founding father, once claimed that harmony and stability are chief among "Asian values". The tigers still cherish these things (who doesn't?), but many of their citizens see fairness as a precondition for both. That observation leads to this report's second big claim: when a sophisticated citizenry aspires to democracy, frustrating that aspiration can be imprudent as well as unjust. Some argue that the blustery politics of Taiwan and South Korea—complete with high-profile corruption cases, parliamentary fisticuffs and fiercely partisan media—have hindered their growth. But a proper examination of the tigers' record does not support that argument. Instead, what has become clear in Hong Kong is that a lack of democracy is a grave liability, sowing dissatisfaction and mistrust.

Third, the tigers' thin welfare states have also become a hindrance. Their leaders have traditionally worried that redistribution and social spending would sap their populations' motivation to work. But social insecurity instead risks sapping their populations' willingness to embrace technological change. As the tigers' populations get older, their governments also face more pressure to spend on pensions and health care. And they need to alleviate the economic burdens that dissuade young people from having children. The tigers' growth-obsessed "developmental states" must, in short, become growth-friendly welfare states.

Finally, the tigers are important as economic bellwethers for the rest of the world. They are unusually exposed to deep global cycles: in technology, finance and geopolitics. The manufacturing tigers have dominated narrow slices of the technological supply chain, focusing on techniques and chips that are vital for high-speed 5G telecoms networks and "big-data" processing. Hong Kong and Singapore, meanwhile, have positioned themselves as financial bridges between China and the world, making them highly sensitive both to China's success and its stumbles. And all four of the tigers depend on the maintenance of geopolitical calm as America, the incumbent superpower, adjusts to a new rival.

These cycles can be difficult to manage—even in an upswing. Booms in finance and technology can concentrate wealth in a few hands, such as South Korea's *chaebol* chipmakers or Hong Kong's property tycoons. On the downside, the threats are even greater. Twice in the past quarter-century the tigers have been rocked by financial crises. The long boom in demand for semiconductors in smartphones and computers has recently turned, hurting South Korea and Taiwan. But it is the geopolitical challenge that most worries them now: a "new cold war" between China and America would shake the foundations of the tigers' prosperity and security.

Methodologically, this special report begs an obvious question. Does it make sense to lump the tigers together? Two are cities; the others decent-sized countries (Taiwan's population exceeds 20m; South Korea's 50m). Two are sovereign members of the United Nations; one is a territory of China; the other exists in a diplomatic netherworld. Taiwan and South Korea are fierce democracies; Hong Kong and Singapore trust their electorates less. Two still rely on manufacturing; two are now high-end service providers.

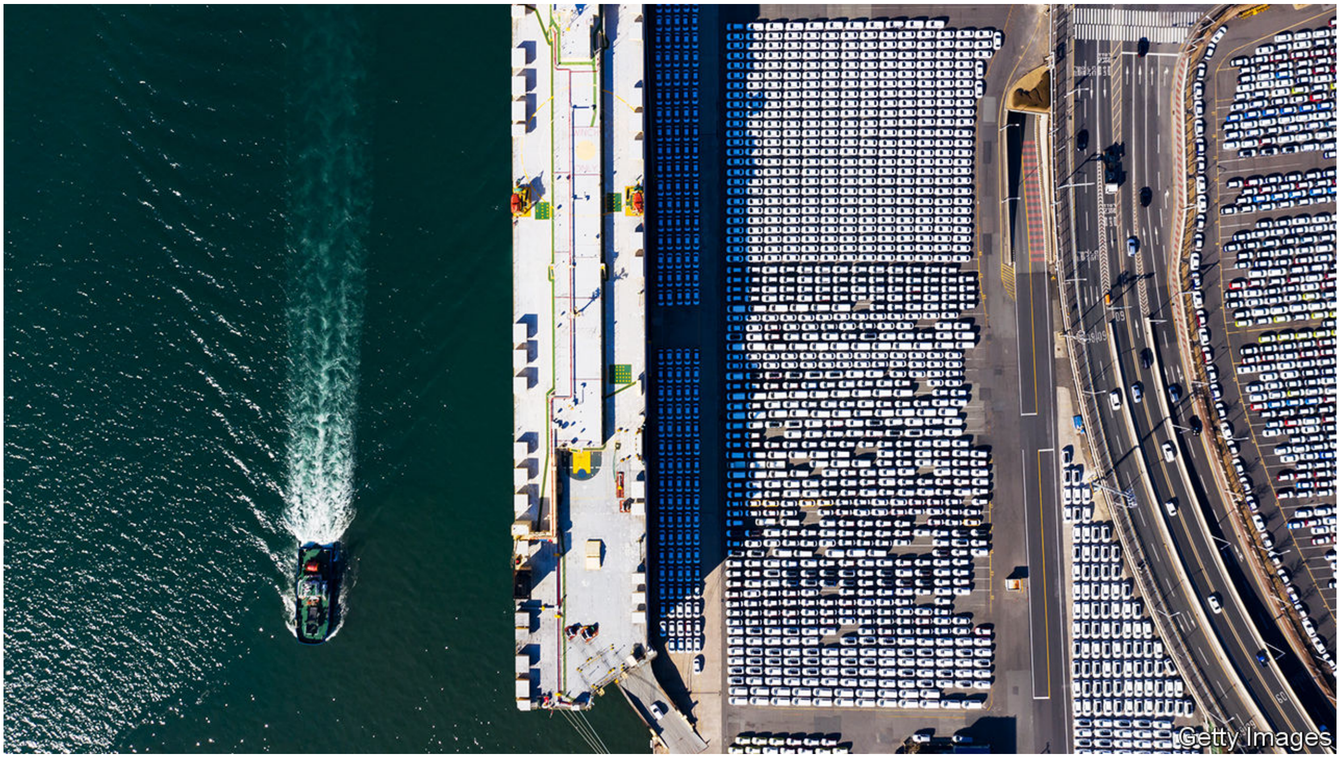
Yet for all these differences, there is much they have in common. They are among the world's most open trading economies, with all the volatility that implies. They have nonetheless maintained high rates of employment and thrift, even as their living standards have improved. They are, to varying degrees, caught between China and America. And all four are faced with complex social problems that stem from their remarkable growth over the past half-century. The four tigers have achieved prosperity without complacency, wealth without repose. Their efforts to remain in front are not guaranteed to be successful. But they are guaranteed to be fascinating. ■

Global trade

It has become harder for the Asian tigers to prosper through exports

The trade war has not helped, either

Print | Special report Dec 5th 2019



BONNIE TU IS laughing. She just discovered the crisp red "Make America Great Again" hat that a colleague left on her desk as a joke. The chairwoman of Giant, the world's biggest bike manufacturer, is no fan of Donald Trump. His tariffs have messed with her supply chains and driven up costs. "It's a tax on biking, the healthiest activity in the world," bemoans the feisty 70-year-old, an avid cyclist herself. In response, Giant has scaled back production in China and ramped up in Taiwan. "We had no choice," she says.

Giant is not alone. Scores of Taiwanese companies have come back recently, including Compal, a computer manufacturer; Delta Electronics, a power-component supplier; and Long Chen, a paper company. In 2018 the government launched the "Invest Taiwan" office, promising low-cost loans for companies' relocation expenses. It has already accepted applications from over 150 firms.

All this might make it sound like Taiwan has benefited from the trade war. Singapore and South Korea have also gained market share in America at China's expense. But it would be a mistake to conclude that the trade war is good for the tigers. Overall, it hurts. It is disrupting three things on which they intimately depend: an open global trading system, their Asia-based production networks and their biggest market, China. Goldman Sachs analysts looked at how 13 economies in Asia were faring relative to their potential this year; the Asian tigers occupied four of the five bottom slots.

That trade friction should unsettle them is only natural. Exports, after all, have been at the heart of their post-war success. South Korea began with tinplate, plywood and textiles. Its exporters benefited from cheap credit, exemptions from import duties and a devaluation of the won in 1964 (ironically, urged on it by America). From February 1965 until his assassination in 1979, President Park Chung-hee attended nearly every monthly meeting of the country's export-promotion committee, sampling products and rallying businessmen over lunch. He cried when South Korea's exports exceeded $100m in 1964, declaring a national holiday known as "export day" (later renamed "trade day").

Taiwan also started with cheap credit and tax breaks for exporters. Entrepreneurs soon emerged. Ms Tu remembers her uncle, King Liu, founder of Giant, remarking with astonishment in 1972 that "Americans are bringing cash here to buy bikes". He soon found that local Taiwanese suppliers were not reliable: rubber tyres had a habit of falling off rims. So Mr Liu travelled around the island to persuade other manufacturers that they would all fare better if they adhered to the same dimensions.

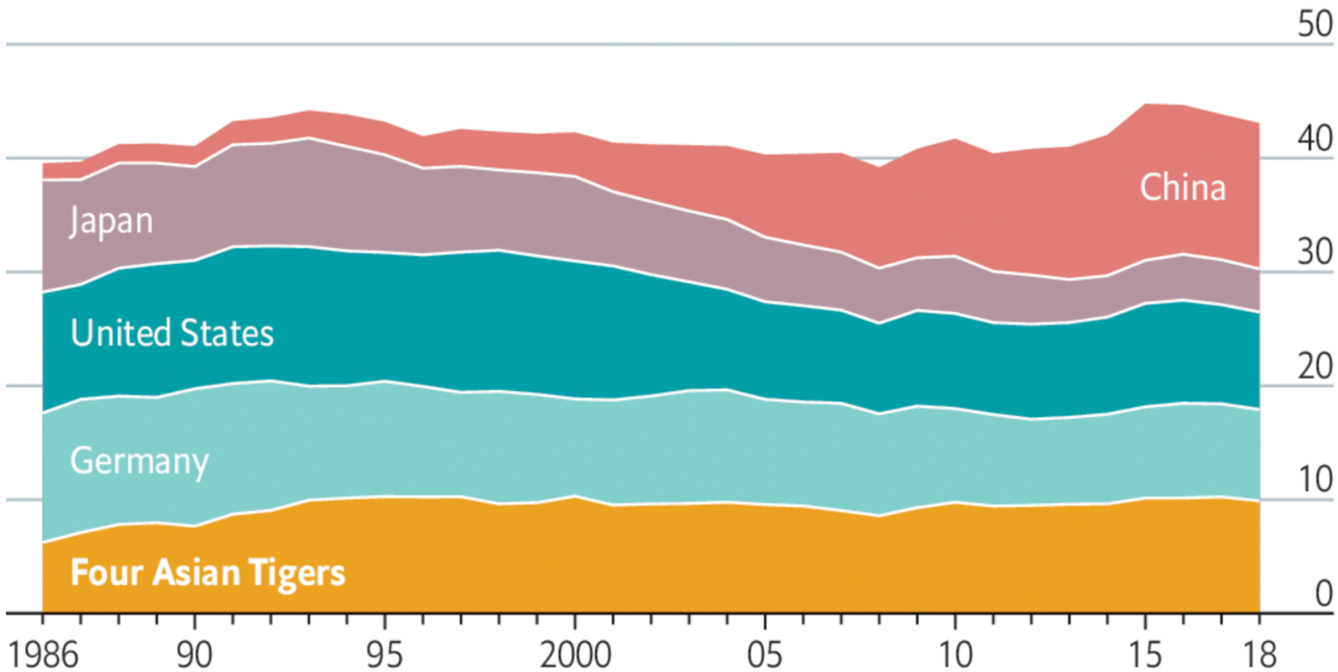
Singapore and Hong Kong are often seen as entrepots. But they, too, were once exemplars of labour-intensive manufacturing. For a time, in the 1970s, Hong Kong was the world's biggest toy producer. When Singapore became independent in 1965, it pitched itself as a base of production. Rivalry with Hong Kong was there from the outset: one of Singapore's first big catches was GE, which chose to set up a clock-radio factory in the city-state, worried that the violence of China's Cultural Revolution might spill over to Hong Kong.

Even as the tigers have grown far wealthier, exports have remained part of their DNA. Their companies became more sophisticated over time, prodded by their governments (which were themselves often prodded by ambitious industrialists). In South Korea, after a decade of success in light industry, officials promoted heavier industries, such as shipbuilding and chemicals. Taiwan created science parks for advanced industries from optoelectronics to semiconductors. Singapore established a National Computer Board in 1981 to train high-tech workers.

Much of the world has lost ground to China over the past 20 years. Yet the tigers' share of global merchandise exports has been steady at 10% (see chart). Japan, their erstwhile mentor, has seen its share fall to less than 4%, half what it was in 2000.

Holding their own

Share of global merchandise exports, %



Source: WTO

The Economist

Like other wealthy economies, they have shifted much of their basic manufacturing to China. Most emblematic is Foxconn, a Taiwanese electronics company known now as the main assembler of iPhones. It opened its first plant in China in 1988; 30 years later it employs roughly 1m people there. But as they offloaded low-end work to China, the tigers moved upstream. South Korea is the world's biggest maker of memory chips. Taiwan has the biggest capacity for fabricating semiconductors. As a result, they each account for more than 12% of China's final demand for electronic and computer products, twice as much as any other trade partner. They are, put simply, making things that China cannot.

They have also ridden on China's coat-tails. As firms have clustered together in China, Asia as a whole has become a more powerful manufacturing region. Asia's share of the global trade in parts and components rose from 19% to 30% between 2000 and 2016. Mainland China is home to four of the world's seven busiest container ports; the others are in Singapore, Busan and Hong Kong.

Both Singapore and Hong Kong have strengthened their roles as the management hubs of "Factory Asia". More than 4,000 companies have chosen Singapore as a regional headquarters, often to oversee South-East Asia. Hong Kong has fewer, with roughly 1,500 headquarters, but it has been far more successful than Singapore at luring Chinese companies to its stock exchange. Its stockmarket is worth more than $4trn; Singapore's is closer to $700bn.

All these connections, however enriching, create vulnerabilities. America's trade war is intended to inflict pain on China. But the tigers are, in many ways, more exposed to the damage because they are smaller and more open. In China, exports are worth about 20% of GDP. In South Korea it is more like 45%; in Taiwan, 65%; and in Singapore and Hong Kong, closer to 200%.

In tearing supply chains asunder, Mr Trump's tactics pose a particular danger to the tigers' cosmopolitan model of manufacturing. They remain highly dependent on inputs from other countries. They also serve an ecumenical range of clients, including some whom the Americans distrust. Taiwanese foundries produce chips for top American firms but also for Huawei, the Chinese telecoms giant that Americans accuse of spying. "We are everyone's foundry. We exclude no one," says an official at TSMC.

Faced with all the uncertainty, the tigers have a couple of options. One is to diversify their customers and their products. Taiwan has long pushed its companies to explore emerging markets other than China. South Korea's government is keen to promote a wider range of products. On the most recent "trade day", President Moon Jae-in of South Korea applauded new industries such as electrical vehicles and robots.

Another response is to try to patch up the global trading order. Before 2000 the tigers were party to just five regional trade agreements; they have since joined 49 more. Singapore was an originator of both the Trans-Pacific Partnership (a trade deal that once aimed to join America, Japan and ten other Pacific-Rim countries) and its supposed rival, the Regional Comprehensive Economic Partnership, which includes China. It is also among the countries working to broker a compromise between China and America that will keep the World Trade Organisation functioning.

But the tigers have little ability to dodge a full Sino-American clash. Hong Kong is most at risk. Its distinctiveness is recognised in American law, which treats it as a separate customs territory from the rest of China. That means it is a non-combatant in the trade war. But some companies appear to be exploiting this, routing goods through Hong Kong middlemen to lower the tariffs they face. America might yet tighten its scrutiny of goods from the city.

Problems in Asia can also be home-grown. A political dispute between South Korea and Japan, rooted in Japan's occupation of South Korea in the first half of the 20th century, has morphed into a 21st-century trade squall. Japan has restricted sales to South Korea of materials vital for making semiconductor chips. The global division of labour is so finely sliced that it is difficult for South Korean chipmakers to find close substitutes.

The upshot of all the turmoil is that it is getting harder for companies to know where to operate and with whom to trade. At Giant Ms Tu's conclusion is that companies need to stick to what they can control. "We have to focus on efficiency and automation," she says. That quest for efficiency is shared across the tigers. Automation is one way to achieve it. But there are others. ■

Innovation

Asian-tiger governments are steering their economies with a lighter touch

They are still involved but more big decisions are made in the boardroom

Print | Special report Dec 5th 2019

Getty Images

FOR AN OPERATION that originated in Singapore, it was improbably grim and bloody. Last month Jack and 49 others boarded a transport aeroplane and parachuted onto an island. Their mission was simple: kill or be killed. Jack picked up grenades and worked his way to an abandoned factory. He crouched for safety, thinking he had escaped detection. He was wrong. After a hail of bullets, silence descended. Jack had once again failed to pass level one.

Welcome to Free Fire, one of this year's most downloaded fighting games for phones. Its developer is Sea Group, an internet company founded in Singapore a decade ago, now worth $17bn. As well as its hit game, the group also has an e-commerce app, Shoppee, which is far more popular in South-East Asia than Amazon. Its success reflects an important shift in the tigers' economies.

During their boom years, many of their biggest companies were outgrowths of government policy. South Korea's *chaebol* were showered with cheap credit and tax breaks. Taiwan's semiconductor champions were spin-offs from an official research institution. Hong Kong's tycoons cultivated close ties with officials and benefited from its land policies. Singapore's biggest firms were ultimately owned by the state.

Sea represents something else. Its success has few direct links to government policy. Singapore's technocrats, the authors of many detailed economic blueprints, presumably never dreamt of a multiplayer fighting game that includes such characters as a beauty queen turned arms dealer. Lee Kuan Yew would have been unamused. Officials today are grateful.

Industrial policy was a big factor in the tigers' take-off. Even the International Monetary Fund, traditionally a sceptic, published a lengthy paper this year about the success of their government-led models. But what works for a developing country does not necessarily help a wealthy one. In the 1970s, the tigers could follow others. South Korea's focus on heavy industry borrowed liberally from Japan. They could also license advanced technology, as Taiwan did in its semiconductor sector. And they could poach researchers.

Progress won't drive itself

Now the challenge is different. When officials and entrepreneurs look ahead, they see only the mists of the future. It might sound clever to develop national strategies for artificial intelligence or quantum computing. But how? There is no technology to copy because it has not been created yet. Genuine innovations are inherently difficult to spot in advance. So the game is more about creating the right conditions for companies to press ahead and to seize on breakthroughs when they arrive.

The tigers' plans these days can sometimes sound like old-fashioned industrial policies. President Tsai Ing-wen in Taiwan has her "5+2 Innovative Industries Plan", eyeing sectors such as green energy and smart machinery. Singapore has its 23 Industry Transformation Maps, covering everything from food manufacturing to aerospace. South Korea aims to invest 30trn won (more than $25bn) over five years in eight emerging industries, from artificial intelligence to autonomous vehicles.

But look a little more closely, and the difference with the schemes of yesteryear becomes clear. These are not top-down exercises in planning but rather the outcome of deliberations with companies and experts. And the point is not to recommend subsidies for this or that sector but rather to work out what building blocks are needed. "The process of developing the plan was just as important as the final product," says Gabriel Lim, permanent secretary of Singapore's Ministry of Trade and Industry.

Some of the elements are obvious: good infrastructure, from ports to internet; openness to trade; highly educated workforces; and high spending on research and development (see chart). But the tigers also have innovative ways to promote innovation.

Taiwan has one of the world's most robust frameworks to encourage lending to small- and medium-sized enterprises (SMEs), the kinds of firms that have ideas but few resources. It combines a centralised information-sharing system about company performance with a menu of credit guarantees, giving banks more confidence. "When I explain our system to bankers in other countries, you can see them salivate," says Lee Chang-Ken, president of Cathay Financial Holdings, Taiwan's largest financial group. Loans to SMEs now account for 64% of bank loans to private enterprises in Taiwan, up from 41% in 2005. Singapore has created a large demonstration factory that gives SMEs access to state-of-the-art 3D printing and robotic equipment. Similar facilities exist in Hong Kong. If an entrepreneur has a brilliant idea, they no longer need a giant dollop of capital to bring it to life.

Nevertheless, the tigers' officials also know their limits. The big decisions these days are made in corporate boardrooms: Samsung's bet on foldable screens; TSMC's huge investment in capacity in Taiwan; the rise of startups like Sea in Singapore; the Hong Kong Stock Exchange's quest to remain Asia's premier financial market (even if its bid for the London Stock Exchange was ill-fated). Economic technocrats now lead from behind.

The tigers have also started to concentrate on the parts of their economies that remain far behind the technological frontier. Despite their flair for manufacturing, their service-sector productivity is little more than half that of America, according to some estimates. Part of the reason is the tyranny of small markets: a retail chain in a country of 6m people is more constrained than one in a market of, say, 1.3bn. But partly it is self-inflicted. South Korea imposes high regulatory barriers on its service and network industries—higher than in any other OECD member except Belgium.

Singapore has been the boldest in trying to whip its service sector into shape, from its restaurants to its construction firms. It has refined its gauges for measuring productivity (for example, floor area completed by a construction worker each day). It identifies promising companies and offers help: developing new business plans, say, or guiding them abroad to expand. Edward Robinson, chief economist of the Monetary Authority of Singapore, believes that rich Asian countries ought to have an advantage in modernising their service sectors. Given that so many of their people are trained for high-tech work, they are well-placed to deploy digital tools to serve the population more efficiently.

Not keeping up

In Hwaseong, 35km south of Seoul, a newly built village enjoys 5G network speeds that would be the envy of any city. Visitors will find other essential amenities, such as a school, a car wash and a restaurant offering chicken's feet. But lest it sound too appealing, be warned: the buildings are all fakes. The counterfeit town, built by the Korean Automobile Testing and Research Institute, is used to test autonomous vehicles, like the Kia car that successfully completed a circuit one recent afternoon. Reaching speeds of almost 70kph, the car coped with flashes of dazzling sunlight and road-markings that can confuse computer vision. The technician in the driver's seat kept his hands on his chest as the wheel turned itself.

South Korea has some of the best infrastructure in the world for autonomous vehicles, including world-class chipmakers and carmakers, as well as a growing 5G network. The government is supportive, permitting tests on real roads for vehicles that prove themselves at test sites. Why then is South Korea ranked only 13th by KPMG, a consultancy, on a list of countries best prepared for autonomous vehicles?

One reason is the country's ambivalence towards other related technologies, such as ride-sharing apps. A popular version, Kakao Mobility, was vociferously opposed at rallies in Seoul by the drivers of traditional taxis. In protest at the emergence of such apps, four older drivers have set themselves on fire.

Innovation, though glorified by businessmen and policymakers, adds nothing to an economy's productivity until it is widely adopted. As Paul David of Stanford University long ago pointed out, it was not until the 1920s, four decades after Thomas Edison's first power station, that manufacturers embraced a killer app for electricity, designing factories to accommodate dynamo-powered assembly lines.

South Korea's wariness towards ride-sharing apps highlights the infrastructure in which the tigers are most lacking: well-functioning social-security systems. The key to progress in a new technology, like autonomous vehicles, may not be a better 5G network but a better pension system. Without a cushion for those left behind by technological progress, it is harder to marshal support for that progress in the first place.

The tigers have always been good at mobilising resources quickly. They are becoming better at allocating them creatively. But as recent signs of social discontent attest, some of them now struggle to muster public support effectively. ■

Discontent

Social unrest in places like Hong Kong is not proof of economic failure

Quite the oppposite, in fact

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THE MOLOTOV COCKTAILS, one blue, one yellow, arrive swaddled in a towel and wedged in a backpack. Wearing builders' gloves and Guy Fawkes masks, the protesters balance them casually on a railing, like mixologists in a bar. Then the bricks arrive, piled on a trolley, hidden under a canopy of umbrellas. The protesters spend a few exultant minutes hurling projectiles and insults down the stairs of a subway exit at riot police below. A burst of flames adds drama, and is enough to provoke a response: a canister of tear gas rocketing up the stairs. The protesters disperse, and a row of police march up behind a tessellation of shields, firing gas as they go.

Once renowned as a city of progress, Hong Kong is now known as a city of protest. Bricks, cocktails and gas have descended on some of the most expensive real estate in the world. The clash described above took place in front of a Bulgari showroom and a branch of Prada. Many analysts, including in Hong Kong's government, argue that the underlying causes of the city's protests are economic grievances, especially high housing prices, stagnant wages and the suffocating ubiquity of dominant conglomerates.

The city is certainly home to vast inequalities. The watches on display in Bulgari sell for more than most residents earn in a month. And the trolleys that now carry protesters' bricks more typically carry piles of recycled cardboard collected by poor old women, their backs hunched with the effort. Property prices are outlandish. A couple recently sold a parking space in a luxury apartment block for $760,000, equivalent to more than 14,000 parking tickets.

If economics is the underlying motive for Hong Kong's unrest, it ought to be possible to satisfy both the protesters and officials in Beijing. A programme of rapid home-building and more progressive taxation would reduce Hong Kong's inequalities without ruffling China's feathers: it would, after all, make Hong Kong look more like the mainland. Pro-Beijing legislators in Hong Kong have backed proposals to buy up to 700 hectares (1,730 acres) of land from private developers whether or not they want to sell.

In a similar vein, many analysts hanker for a Singaporean solution to Hong Kong's problems. The city-state realised early on that widespread home-ownership was essential to social peace. Over 80% of the population lives in homes built by government agencies, sold at subsidised prices. Phang Sock-Yong of the Singapore Management University says that, as far as housing is concerned, Singapore approximates the "ideal society" envisioned by Thomas Piketty in his book, "Capital in the 21st Century". The bottom half of households own a quarter of Singapore's housing wealth.

But glaring inequality and unaffordable housing are old problems in Hong Kong. They have not prompted mayhem in the past. Why now? And if economic grievances are driving the protesters, they are remarkably silent about their true motives. They typically complain about police brutality and the erosion of Hong Kong's autonomy before they mention jobs or inequality. "We see the darkness of the government," said one protester at the Chinese University of Hong Kong (CUHK), angered by the shooting of a vocational student on November 11th. Francis Lee of CUHK and his colleagues surveyed thousands of protesters over the first three months of unrest. Over half identified themselves as middle or upper class and about 75% had received a higher education.

China would never admit it, but there is a parallel in Taiwan. Wages have stagnated for two decades. Housing in Taipei is among the least affordable in Asia. But one of Taiwan's biggest political earthquakes in recent years was the "sunflower" protests of 2014, by students opposed to closer trade links with China. Their cause arguably harmed their own economic interests. But it both reflected and fuelled Taiwan's distinct national identity.

Although Hong Kong's economy is not the principal cause of the city's unrest, it is a prominent casualty. At first, protesters vandalised firms unsympathetic to the cause. More recently, their sabotage has become less discriminate. "We want to give some pressure to the government economically," said a student. From a barricaded bridge at CUHK, he and other protesters guarded a roadblock of uprooted trees, unscrewed railings and traffic cones, scattered on a busy thoroughfare below.

Worse than the physical damage is the psychological toll, which affects spending. Retail sales were down by over a fifth year-on-year in September and the number of visitors to Hong Kong fell by over a third. Restaurants and bars have suffered their biggest fall in revenues since the SARS epidemic in 2003.

If the protests subside, the physical wreckage can be quickly repaired: Hong Kong clears barricades even more efficiently than its protesters erect them. But the harm to sentiment could linger. Mainlanders, who represent over three-quarters of Hong Kong's tourists, could remain reluctant to spend freely in a city that has made them feel unwelcome. Hong Kong should nonetheless retain its standing as a financial hub. The city's stockmarket, bond market and banking system dwarf its GDP and remain semi-detached from the local economy. Mainland firms account for 70% of bonds issued and 55% of its Hang Seng stockmarket index.

The city's role as a financial conduit between China and the world depends on a distinct legal and regulatory infrastructure that cannot be vandalised or barricaded. Even as the protests raged, Alibaba, China's e-commerce giant, raised over $11bn on Hong Kong's stockmarket, the largest haul since 2010. The Hang Seng stockmarket index showed more sensitivity to the Sino-American trade war than to local unrest. And, judging by a 280% spike in stamp-duty payments in October, foreigners can still be convinced to snap up Hong Kong properties by modest dips in price. They perhaps remember the example set by Li Ka-shing, one of Asia's richest men, who made a fortune buying Hong Kong property during the city's violent leftist disturbances in the 1960s.

To some footloose multinationals, Singapore's stability now looks appealing, compared with the threat of unpredictable commutes and closed schools in Hong Kong. But as financial hubs the two cities are less similar than they appear. In Hong Kong, "we go into China and compete," says one Singaporean broker who moved to the city years ago. In Singapore, he adds, "they wait for China to come to them," confident that they can be its gateway to South-East Asia. He likens Singaporean financial professionals to shepherds guarding a flock, whereas Hong Kong professionals are more like hunters prowling for deals.

The protesters have tried to exploit Hong Kong's special status for their own ends. By generating international clamour, they have prompted America's Congress to pass a bill requiring the State Department to assess each year whether Hong Kong remains autonomous enough to justify its separate treatment under American customs, tax and commercial laws. Opposite the CUHK barricades hung the portrait of an unlikely hero: Mitch McConnell, the Republican leader of America's Senate.

The irony is that, in many ways, Hong Kong seems ever more distant from the mainland. Many in China cannot understand how the city can be so dissatisfied with so many more privileges than mainlanders enjoy.

But Hong Kong's political ambitions are a natural by-product of its prosperity. Although it still enjoys far more freedom than the rest of China, it has fewer political rights than a society of its wealth and sophistication would normally expect. Only oil-rich Gulf states combine both a higher income per person and a lower score on the Democracy Index published by The Economist Intelligence Unit (EIU), a sister company of *The Economist*. Although Hong Kong's protests now pose a threat to its progress, they are also a consequence of it. ■

Political economies

Does democracy hurt or help growth in the tiger economies of Asia?

It can be a little of both

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THE TAIWAN STRAIT is often described as a possible flashpoint. Across this narrow body of water, China points thousands of missiles at the country it regards as a rogue province. But for those working on Formosa 1, an offshore wind farm, the strait is something else. "It's the best wind in the world," said one engineer recently, looking out at a cluster of turbines on the turquoise water.

When up and running later this year, it will be Asia's first commercial offshore wind farm outside China, and the first of many planned in the strait. Taiwan's embrace of wind has come alongside a decision to phase out nuclear power. Many businesses fear this will leave the island low on electricity, imperilling its economy. The debate has been unruly at times: legislators have brawled in parliament. In 2017 a massive blackout enveloped the north of Taiwan. But President Tsai is sticking to her plan to create a "nuclear-free homeland" by 2025. For critics, it is a stark example of a political system easily swayed by vocal campaigners, be they environmentalists or anti-free-traders. It also highlights a perennial question: is democracy bad for prosperity?

This view is, conveniently, often heard in China. "What does Taiwan have to show for 20 years of democracy? Above all, a precipitous decline in its economy," Zhang Weiwei, a Chinese academic, wrote in an essay. But similar opinions are voiced in some of the tigers themselves. Among the older generation in South Korea and Taiwan, there is nostalgia for Park Chung-hee and Chiang Ching-kuo, the strongmen who led them in their boom years. "You cannot eat democracy," quipped Terry Gou, the founder of Taiwan's Foxconn. (Nor could democracy stomach him: he eventually decided not to run in Taiwan's presidential election after it became clear that he had no chance of winning).

The freer politics of South Korea and Taiwan have not always covered themselves in glory. Of South Korea's seven elected presidents since 1987, three were indicted for corruption and one committed suicide to escape a scandal. Of Taiwan's four presidents since 1996, three have been charged with corruption, one of whom ended up being sentenced to 19 years in prison. All political lives end in failure, as Enoch Powell, a controversial British politician, once said. Few, though, end as badly as in South Korea and Taiwan.

Hong Kong's leaders since its handover to China in 1997 are, however, no advert for undemocratic rule either. The first chief executive stepped down early, the second ended up in jail and the third was too unpopular to serve a second term. Meanwhile the current chief executive is so widely disliked that she transformed recent local elections, normally low-key affairs, into a devastating de facto referendum on her rule. Singapore has, for years, hewed more closely to meritocratic ideals, but a feud among the children of Lee Kuan Yew, the country's founding father, has revealed an uglier side to its elite politics.

When the four tigers earned that nickname, none of them had ever seen a competitive election. Two of them have since become vibrant democracies; two have not. The quartet therefore provides the kind of variation social scientists want when testing the impact of different variables. The hurly-burly politics of Taiwan and South Korea can be compared with Singapore's "managed democracy" and Hong Kong's unrepresentative system, as well as with their own undemocratic past. What do such comparisons reveal?

Both South Korea and Taiwan grew faster in the decades before they became democracies than they have done since. But Hong Kong and Singapore also grew faster then than they do now. Their shared slowdown cannot, therefore, be blamed on democracy alone. Singapore has grown faster in recent years than the democratic tigers. But Hong Kong has often grown more slowly.

More systematic studies are similarly mixed in their conclusions. A landmark 1996 paper by Robert Barro of Harvard University reached the "unpleasant" conclusion that too much democracy tended to have a (mildly) harmful effect on growth. He speculated that the redistribution required to appease a majority of voters could dilute incentives for investment and work. His statistical exercises suggested that a middling amount of political freedom was best: about as much, in fact, as Singapore now enjoys.

But democrats can take heart from the more pleasant conclusions of newer economic research. Daron Acemoglu of MIT and his co-authors calculate that democracy adds about 20% to a country's GDP per person over the long run. One reason is that it encourages openness and a commitment to education and health. Since Singapore and Hong Kong have remained open and invested heavily in education and health, they have replicated some of the economic benefits of full democracy.

Suffering without suffrage

Democracy's other contribution to growth, according to Mr Acemoglu and his co-authors, is defusing social unrest. The tigers' recent experience bears him out. In 2016 South Koreans discovered that their president, Park Geun-hye, had fallen under the sway of a mysterious backstage adviser. This revelation brought millions of protesters onto the streets, just as Hong Kongers' distaste for mainland influence has brought hundreds of thousands onto the streets since June.

In democratic South Korea, the political system was able to wrap its arms around the problem. The legislature began formal impeachment proceedings; its verdict was upheld by the constitutional court; Ms Park was removed from power and jailed; and an election was held to find a successor. Meanwhile in Hong Kong, the chief executive, Carrie Lam, appears to lack even the power to remove herself from power, confessing in a leaked speech to businesspeople that she has no choice but to soldier on.

Because Hong Kong's half-formed political system has failed to accommodate the protesters' anger, the police have been left to deal with it. Their task has made the police feel both resentful and powerful. They are the only tool at the government's disposal, so it is terrified of upsetting them. That fear has stopped the government opening a more credible investigation into police misconduct. But the lack of accountability has enraged the protesters, some of whom see little reason to respect the rule of law if it does not also apply to the law's enforcers. The stand-off has plunged the economy into a recession that is likely to continue into next year. Whether or not democracy helps growth, the unmet demand for it can certainly hurt.

There is no question that the tiger democracies, barely a couple of decades old, can be difficult. Formosa 1, the Taiwanese offshore wind farm, has been lambasted in local media as too expensive and has faced eight detailed environmental reviews. The process has been "more intense than in Europe", says Matthias Bausenwein, president of Ørsted Asia Pacific, the biggest shareholder in the project. But having gone through all that drama, he says that Taiwan's commitment to wind power looks steadfast.

In any case, Taiwan's legislators have new things to fight over. In 2018 another brawl broke out in the legislature, this time about cuts to public pensions. Fisticuffs or not, it is an issue with which all of the tigers must grapple: growing numbers of elderly citizens and what to do about them. ■

Demography

Will age weaken the Asian tiger economies?

Shorter working weeks and longer working lives may be necessary

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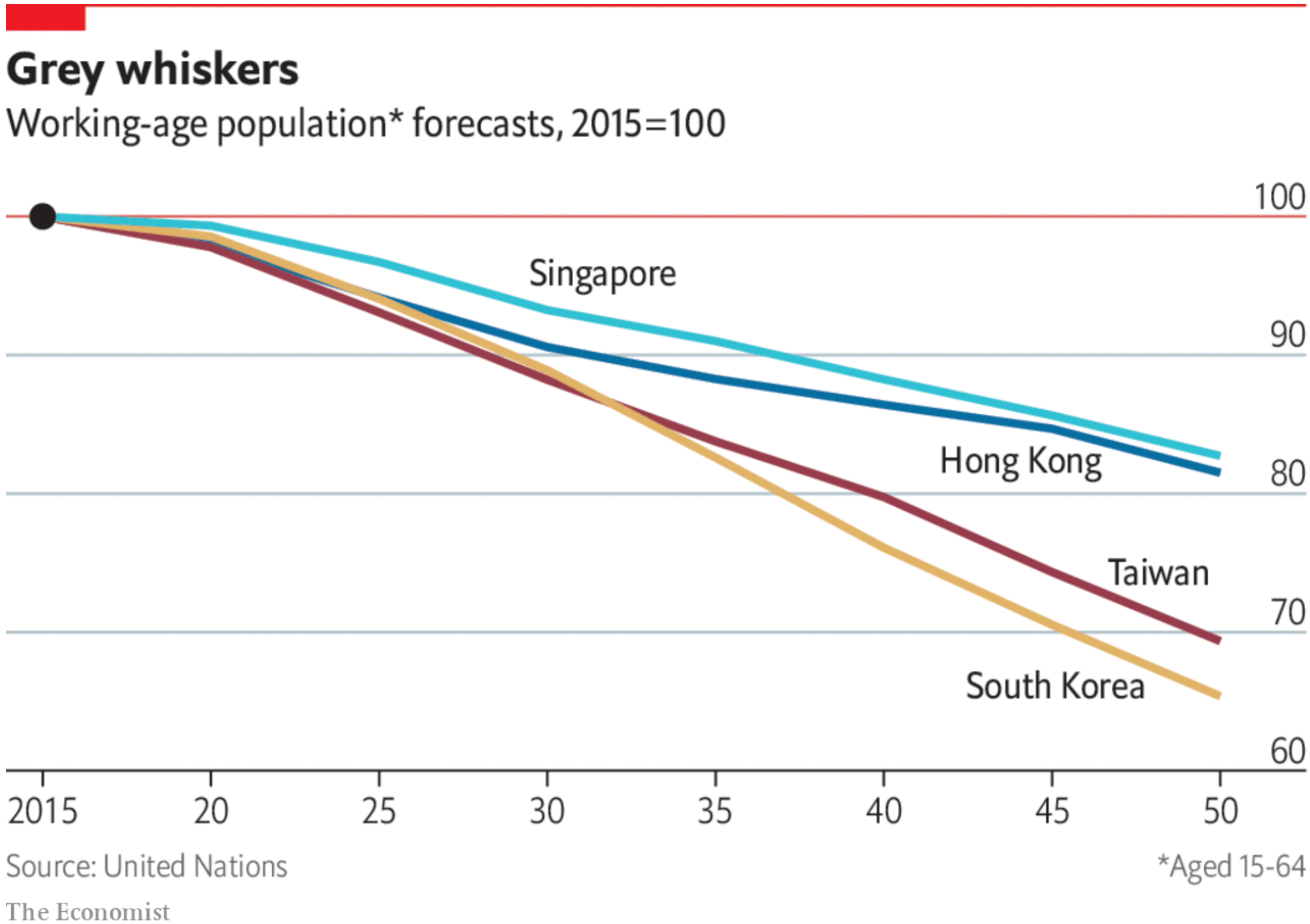
AT 4.30AM hundreds of people are already spilling into the road outside Seoul's Namguro station. They are not here for the trains, which will not begin for another hour. Nor are they attracted by the dawn cafeterias (offering blood sausage and flatbread), the upstairs song rooms (offering the comforts of crooning) or the basement spas (offering who knows what). They are gathered instead to offer their labour in return for a day's wages, at whatever building site needs extra hands. As they wait for a bidder, they smoke, squat and cough. And they speak not in Korean but in gravelly Mandarin.

South Korea used to be a net exporter of labour. In the 1970s its workers built roads in Saudi Arabia, often at night by torchlight. But immigrants, including the Chinese gathered at Namguro, now make up a growing proportion of the workforce.

For all the fear in the tigers about jobs, their unemployment rates remain enviably low: less than 4% in all of them. Their long-term worry will be a shortage not of jobs but of people young enough to do them. The population of traditional working age (aged 15-64) is already declining in all four. By 2040 they will have fewer people in this age bracket, relative to their elderly population, than Japan has today. In a span of 20 years, the tigers will have aged as much as Japan did in more than 30.

The tigers' fertility rates rank in the bottom ten worldwide: low enough that each new cohort is expected to be only 55% the size of its parents' generation. Their governments have tried, without much subtlety or success, to reverse this trend. Some have even tried their hand at matchmaking. Singapore's Social Development Network organises dinners, films and board games. One network-certified dating agency will help you find your ideal partner with the help of Lego bricks. In Taiwan the government has organised speed-dating and bike tours, among other events. But one senior official is blunt in her assessment: "Totally useless."



One reason is the tigers' work culture. "If a country requires its people to be locked up in their workplace, no wonder the birth rate is so low," says Joyce Yang, who quit her public-relations job in Taipei after too many midnight finishes to the day. In South Korea, President Moon's government has cut the maximum workweek to 52 hours (although exceptions persist). Ms Yang chose a more radical solution: moving to Australia, from where she urges her 30,000 Facebook followers to quit their workaholism. "Taiwanese don't have time for life," she says.

Time is one constraint; another is cost. Although society as a whole benefits from the vigour of each new generation, the cost of raising them falls squarely on one group: women of childbearing age. With elderly parents to worry about, little help from their husbands (men do only a fifth of the household chores in South Korea) and inadequate help from the state, many women have chosen to marry late, if at all, and have one child, if any.

Their predicament is worsened by one of the tigers' proudest boasts: their commitment to education. Although the tigers all provide decent public schooling, many parents feel obliged to splash out on expensive private alternatives and additional tutoring. Some of this extra effort may add to a child's knowledge and future productivity. But much of it is mere credentialism, an attempt to improve a child's position in the queue for the best universities, and hence the best jobs. Education has become an arms race in which one parent's additional outlay of time and money forces others to follow suit.

In South Korea, Mr Moon has promised various acts of collective educational disarmament. He wants to merge universities into a single network, flatten the schools hierarchy and even discourage employers from hiring on the basis of academic credentials. Some of these proposals seem unworkable. His critics call it a "war on meritocracy". But there is a distinction between merit, which should be rewarded, and wasteful attempts to signal merit, which are damaging. Tiger parents risk hurting the tigers.

Faced with this burden, some parents fabricate their children's qualifications. One academic paper in 2009 on the genetic precursors of disease was supposedly co-written by the daughter of Cho Kuk, Mr Moon's justice minister, even though she was only a schoolgirl at the time. He was forced to resign in shame.

Shy, but not retiring

To improve their unfavourable age structure, the tigers will have to combine shorter working weeks with longer working lives. They will need more people like Neo Kwee Leng. As he approached 60, he gave up his life as a small businessman to spend his days at the "Loving Heart" centre, an activity hub for the elderly in Singapore. It was not an act of retirement: he joined as a manager. Nor, as it turned out, was it much of a downshift. About 100 people drop in daily, each with different needs. Some come for medical check-ups, others to play ukulele, still others just to chat.

So Mr Neo upgraded his managerial skills, learning Excel and data analysis. "The hardest part is my eyesight," he says. He has also run seminars on using smartphones. His training—of himself and others—is part of SkillsFuture, a government programme to promote lifelong learning.

In the tigers, lifelong can be lengthy indeed. Just as they have some of the lowest fertility rates, they also have some of the highest life expectancies. Even at 60 their people can still expect to live another 25 years or more, enough time to master both Excel and the ukulele.

Another way for the tigers to cope with their ageing is to permit more immigration. The foreign population accounts for 6% of the workforce in Taiwan and about 3.3% in South Korea. That is low by Western standards, but higher than Japan, where foreigners make up only 2%. In the two tiger cities the reliance on immigrants is far more dramatic. Much of Hong Kong's population (39%) was born elsewhere, including over 2.2m from other parts of China. The foreign-born still occupy prominent positions in the courts, regulatory bodies and even the police. The city also relies on over 380,000 maids and nannies (mostly from the Philippines and Indonesia), who constitute over 8% of the workforce.

Singapore has 1.4m foreign workers, more than a third of its labour force. The government believes immigrants are needed to do the lower-skilled jobs that Singaporeans will no longer do. A white paper in 2013 forecast a population of up to 6.9m by 2030, from 5.7m today. In so doing, it inadvertently revealed the limits of openness in the city-state. The projection fuelled worries that immigrants would overburden the city's infrastructure and public services. In the rarest of scenes for Singapore, a few thousand people protested in a park, some holding aloft signs such as "Singapore for Singaporeans".

Immigration is not the only way to take advantage of more abundant workforces elsewhere. As well as importing labour, the tigers can, and have, exported capital. By lending and investing abroad, they have accumulated claims on the output of foreign workforces, without all the difficulties of bringing those workers to their shores. In Hong Kong, the net annual income from these foreign assets already amounts to almost $2,500 per person.

The tigers have accumulated these overseas investments by consistently selling more things to the rest of the world than they buy from it. Singapore's current-account surplus last year was a whopping 18% of GDP. These trade imbalances have not yet provoked much scrutiny or condemnation from America. But that could change. These four economies are, after all, worthy of the world's close attention. ■

The tigers' future

Where do the Asian tiger economies go from here?

Most of all they want to avoid Japan's elegant stagnation

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EVEN IN THEIR prime, the tigers had their detractors. Twenty-five years ago this month, Paul Krugman, an economist, wrote an article in *Foreign Affairs*, an American policy journal, entitled "The Myth of Asia's Miracle". He argued that Asia's seemingly dynamic economies displayed, on closer inspection, "startlingly little evidence of improvements in efficiency". Their growth relied instead on rapidly increasing inputs of labour, capital and so on. It was a miracle based on "perspiration" not "inspiration". Singapore, in particular, "grew through a mobilisation of resources that would have done Stalin proud", Mr Krugman wrote.

This sweaty growth model faced some natural limits. Employment rates could not increase for ever. And the accumulation of capital would eventually run into diminishing returns. Therefore the tigers' pace of expansion would inevitably slow.

On the last point Mr Krugman was unquestionably right. The Asian tigers have averaged growth of 3% this decade, down from 8% in the early 1990s. But their mix of perspiration and inspiration is now better than Mr Krugman feared. As inputs of labour have grown more slowly, total factor productivity, an oft-cited (if theoretically controversial) gauge of efficiency, has made a bigger contribution. Between 2000 and 2017, it grew at least twice as fast in the tigers as in America, according to the Asian Productivity Organisation in Tokyo.

The comparison that most scares the tigers is not with the Stalinist industrialisation of the Soviet Union but with Japan's elegant stagnation. Life in Japan is, for many, comfortable and affluent. But its economy has lost ground. Japan's GDP per person, at purchasing power parity, reached 85% of America's in 1990; today it is closer to 70%. One cause of Japan's prolonged slowdown is ageing: it is now older than anywhere except tiny Monaco. But in the coming three decades the tigers will age even more quickly than Japan has done. The tigers also see much of themselves in Japan's economic model, which once served as an example for their own. South Korea and Taiwan are far stronger in manufacturing than in services and all four are unusually reliant on exports to generate growth in demand. Will they replicate Japan's failure as faithfully as they copied its success?

Emulating Japan's drift would not be a total disaster: many countries, worried about a supposed middle-income trap, would dearly love to fall into the Japan-income trap. But the tigers can still aspire to do better. Despite their parallels with Japan, they are different in many respects.

Compared with Japan during its bubble years, they are paragons of financial conservatism. Since the market mayhem of the Asian financial crisis of 1997-98, they have insisted on big capital buffers for their banks and pioneered macroprudential limits on borrowing. In addition, the tigers are even more deeply ensconced in the global trading system and have also shown great determination to stay at the global leading edge. All four love to boast of their positions at, or near, the top of global rankings like the World Economic Forum's global competitiveness index or the World Bank's "ease of doing business" rankings.

If the tigers stumble, it will be for their own reasons, not because they are repeating Japan's mistakes. Taiwan wants to lessen its economic entanglements with China, but that is difficult now that China is the centre of Asian economic gravity. Anger at the concentration of economic power in South Korea has led to demands for a fairer system. But many of the government's responses have been ineffectual or counterproductive.

Singapore's carefully managed political system has come under more strain, and a backlash against immigration shows that it is not immune to the populism that has reared its head throughout the world. Hong Kong, sadly, is the tiger most at risk of going backwards. Its people, successful and sophisticated, understandably want to make big decisions for themselves. Yet their rulers will have none of it.

So it is only sensible to remain grounded about the tigers. There is still much that can go wrong for them. Nevertheless, there is also much that can continue to go right. They each have plenty of strengths. South Korea has emerged as a research powerhouse, at the same time as building up strong global brands, from smartphones to pop idols. Taiwan, in the toughest of geopolitical circumstances, has made itself an essential player in global supply chains, while also developing a thriving ecosystem of small businesses. Hong Kong, for all its current woes, has established itself as the financial conduit between China and the world. Singapore is top of the tiger class in many ways: it has a diversified economy, despite being a small city-state, and it has mitigated the inequality that has come with its recent flourishing.

The tigers also matter to the rest of the world. Their record in their boom years remains a vital reference for other developing countries trying to get ahead. Their experience over the past two decades shows how countries can climb from middle-income levels to greater heights. Of particular interest to the developed world will be their record in the coming few decades.

The quartet can be seen as test cases for the future. They are often the pioneers for new technologies thanks to their innovative firms. And their societies are facing distilled versions of many of the dilemmas now haunting the rich world: how to cope with ageing; how to cushion workers from the effects of automation; how to revive productivity growth; how to stay close to both America and China; and how to push up stagnant wages and hold down soaring property prices.

Decades before they were nicknamed the tigers, Asia's smaller economies were likened to a different kind of animal: "flying geese", fanning out behind Japan. In nature, as in economics, trailing geese find it easier to fly in the leader's wake, benefiting from the extra lift its wings create. But what the original metaphor forgot is that birds take turns leading and following. Hong Kong, Singapore, Taiwan and South Korea spent decades flying comfortably behind more advanced economies. The good news and the bad is that there is now no one left to follow. ■

Saudi Aramco
Listless

Listless

Saudi Aramco's IPO is the biggest ever

And also a disappointment

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***Editor's note**: On December 5th, soon after this article was published, Saudi Aramco said its IPO had raised $25.6bn, valuing the company at $1.7trn*

THE ASPIRATION was clear. First, list a portion of Saudi Aramco, a state-owned oil giant that is the world's most profitable company. Then use the windfall to diversify Saudi Arabia's economy. Muhammad bin Salman, its crown prince, expected investors to swoon over the company's rich reserves, low costs and $111bn in annual net income. "If you want to invest in Exxon, Chevron, BP," one banker involved in the listing told *The Economist* in October, "why don't you just go and buy Aramco?" It turns out that many investors would rather not.

As we went to press, Aramco was expected to announce its offer price, with trading to begin soon after. The result is likely to be the biggest initial public offering (IPO) in history. It will also prove to be a disappointment.

Prince Muhammad's initial desire—a 5% listing at a valuation of $2trn—would have raised a staggering $100bn, four times what Alibaba, the current record-holder, drummed up in 2014. Aramco's valuation range of $1.7trn or so is lower than the princely target but still too high for many institutional investors. This weak appetite led the company to decide to float just 1.5% of its shares on Saudi Arabia's exchange. It will probably edge past Alibaba's $25bn.

The reasons for listing Aramco have not changed. Saudi Arabia needs to move beyond oil, which accounts for nearly 70% of government revenues. That would be a dangerous dependence in any era, let alone one with swelling youth unemployment and doubts about long-term demand for fossil fuels in a world worried about climate change.

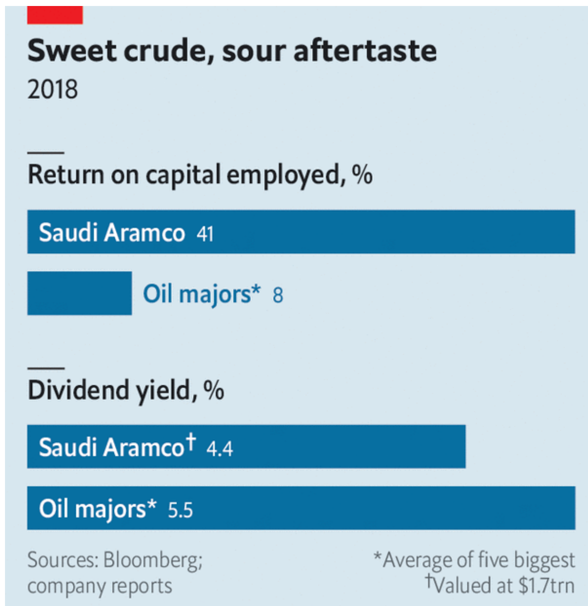
If the rationale was straightforward, execution was not. Prince Muhammad first suggested an IPO in an interview with this newspaper in 2016. The years since have been filled with delays and controversy. Concerns about legal liabilities undermined plans for a listing in London, New York or on another global bourse. The murder of Jamal Khashoggi, a dissident journalist, at the Saudi consulate in Turkey last year cast a pall over Prince Muhammad's sweeping modernisation plan.

Aramco's successful issuance of $12bn in bonds in April helped build confidence in the flotation. Recent months have seen a frenzy of activity to ensure its success. The kingdom hired more than two dozen big banks to shepherd it through, and appointed a new chairman for the company and a new oil minister.

The listing was nevertheless marred by several problems. Some were (mostly) beyond Prince Muhammad's control. Investors' concerns about the global economy and weak demand pushed the oil price below $60 a barrel in August. President Donald Trump's warnings of a protracted trade war with China could weaken it further. Missile and drone strikes (believed to have originated in Iran, which backs Saudi enemies in neighbouring Yemen) knocked out more than half Aramco's oil production in September, highlighting the company's security risks.

He has had more sway over Aramco's offer price and size of the float. Many investors balked at Aramco's valuation range, which was announced in November. Bernstein, one of the few research outfits not linked to a bank collecting Aramco's fees, reckoned $1.2trn-1.5trn was more reasonable—a range confirmed by a survey of institutional investors, who told Bernstein they would buy Aramco at a mean valuation of $1.26trn.

Prince Muhammad's desire for a higher offer price was understandable. On many metrics, Aramco easily outcompetes rivals such as ExxonMobil or BP. Its reserves are 15 times larger, production costs a quarter as big, debt negligible and return on capital superb. Chances are that when the world takes its last sip of oil, it will be Saudi crude.



The Economist

But oil investors in 2019, skittish about the commodity's prospects, care more about cash. At a valuation of $1.7trn, Aramco's dividend yield would be lower than the supermajors' (see chart). Investors surveyed by Bernstein worried about Aramco's governance. Saudi Arabia may lean on the company if national finances deteriorate—the IMF expects Saudi debt to be 23% of GDP this year, up from 17% in 2017. As important, Aramco's sales growth is limited by Saudi Arabia's habit of limiting output to stabilise global oil markets.

Rolling up the magic carpet

Facing a chasm between the prince's preferred, high price and what international investors were willing to pay, Aramco abruptly cancelled road shows in America and Europe. It is expected to secure investments from neighbours, including Abu Dhabi and Kuwait.

But many buyers will be locals. The company and its bankers courted Saudis eagerly, through call centres and advertisements on billboards, social media, even ATMs. The Saudi central bank doubled leverage limits for retail investors buying shares in Aramco. Wealthy families in the capital, Riyadh, feel that participation in the IPO is required to maintain good standing, one local businessman explains.

Of course, $25bn wouldn't be nothing. Still, bankers will get a fraction of the fees they hoped for. Aramco may raise less cash than it would have at a lower price: floating the full 5% at a valuation of $1.2trn could rake in $60bn. Saudi Arabia will see capital flow mostly within the kingdom, not gush in from the outside. A reliance on local shareholders poses a political problem, if a falling oil price depresses Aramco's share price. Prince Muhammad is keenly aware that neighbouring countries have looked fragile of late—leaders have been ousted in Algeria, Lebanon and, most recently, Iraq.

Propping up the oil price looks as tricky as ever. Last year OPEC, an oil-producers' club, and its allies, led by Russia, agreed to lower output by 1.2m barrels a day, or 2.3% of their production. The deal was extended to March 2020. But the cartel may need to seek deeper cuts, as supply surges in Brazil, Guyana and Norway.

Merely encouraging OPEC members to comply with the existing deal, let alone commit to more cuts, will be tough. The group's meeting in Vienna on December 5th-6th promises to be tense. Russia has pumped oil faster this year than before the deal. With partners overproducing Saudi Arabia has consistently had to undershoot its quota. The new oil minister wants more compliance from the others, says Helima Croft of RBC Capital Markets, an investment bank. The question is how forcefully he will seek it. Either way, the listing will leave the kingdom no less dependent on the price of crude than it is today. ■

Galvanised

SMB Winning pays $15bn for rights to Guinea's iron mountain

The Chinese-led consortium faces challenges to exploit one of the world's biggest iron-ore deposits

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WHEN PROSPECTORS discovered a gargantuan deposit of iron ore in the misty Simandou mountains 17 years ago, many Guineans hoped it would transform their impoverished country. The remote location makes its estimated 2.4bn tonnes of iron ore—valued at perhaps $230bn—hard to mine. Gyrating commodity prices scared off investment. So did lurid corruption scandals involving billionaires, government officials and mining companies.

A new chapter has opened in the saga. An embattled Israeli diamond tycoon, Beny Steinmetz, surrendered his claims to Simandou in February, after ten years of legal battles with Guinea's government and Rio Tinto, an Anglo-Australian mining giant. Simandou North was put up for tender. Last month the winner was announced: SMB, a joint-venture owned by a consortium which includes Winning Shipping, a Singaporean maritime firm, UMS, a Guinean-French logistics company, and Shandong Weiqiao, a big Chinese aluminium producer. The entity, in which Guinea's government holds a 10% stake, will pay $15bn to develop the site, build a new deepwater port and a 650km railway to link the two. Guinea's parliament is expected to wave the deal through in the coming weeks.

The successful bid is a coup for SMB, which is barely known outside the west African nation. It is also a departure from SMB's previous business—bauxite. The firm was founded in 2014 to meet China's voracious demand for the ore, from which aluminium is smelted. Guinea has a quarter of the world's proven reserves of the stuff. In 2018 SMB exported 36m tonnes of it, worth around $2.1bn, mostly to China, which imports about half its bauxite from SMB. Winning's vessels ferry about 200 shiploads a year to Chinese ports.

The private joint-venture keeps its finances close to its chest but Bob Adam, an expert on mining in Guinea, reckons that after taxes, royalties and operating costs SMB is making about $800m profit a year. "They are now the most significant economic enterprise in Guinea," he says—and the only one among the world's biggest bauxite producers with a direct link to China.

A shift into iron ore presents challenges. Building a port and a railway through the country's malaria-infested forest will take years and could cost much more than the estimated $10bn. SMB will have to co-ordinate with Rio Tinto and Chalco, a Hong Kong-listed company controlled by Chinalco, a Chinese state-run firm, which jointly control Simandou's southern blocks. The Boké region (the B in the firm's name) has been plagued by riots. Many local residents are angered by lack of access to clean water or health care. But China is keen on Simandou's high-grade iron ore, which emits less pollution when processed, says Eric Humphery-Smith from Verisk Maplecroft, a risk consultancy. It also wants to lock in supply. And it can afford to wait.

Trouble in Taranto

ArcelorMittal gets its fingers burned in Italy's Ilva steel mill

The saga may drive international investors away from Italy

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LAKSHMI MITTAL has grown his company, ArcelorMittal, the world's biggest steelmaker, through a series of deals across the world. Some, like the mega-merger in 2006 with Arcelor, then Europe's largest steel producer, were tough. Perhaps none has given Mr Mittal as much grief as the takeover of a massive steel mill in Taranto, in southern Italy. The bureaucratic and legal troubles, combined with a horrible market for steel, last month led Mr Mittal to walk away from the deal he struck with the Italian government a year ago.

Under that lease-and-purchase agreement ArcelorMittal agreed to buy Ilva, Europe's biggest single-site steel firm, for €1.8bn ($2bn) and to invest another €2.4bn in cleaning up and modernising a plant dogged by charges of corruption and environmental crime. It agreed to pay €45m a quarter for 18 months to lease the facility, to be deducted from the purchase price. "Mittal saw an opportunity to turn around a very badly managed plant," says Jason Fairclough of Bank of America Merrill Lynch. The deal would make his company the strongest in south-eastern Europe.

The timing was poor. Steelmakers everywhere face falling demand from China and a 40% increase in the price of iron ore in the past 18 months. Those in Europe additionally have to contend with reduced appetite for high-quality steel from European carmakers and a 70% rise in the price of EU emissions-trading permits since mid-2018, a big deal for a carbon-belching industry. President Donald Trump's tariffs have also made Europe the dumping ground for steel from Russia, Turkey and other countries that would otherwise have gone to America.

Even so, ArcelorMittal expected Ilva to break even this year. Instead, it will lose more than €1bn. The real trouble started this summer. Rumours surfaced that the Italian government might strip Ilva of legal protection from criminal prosecution over environmental liabilities. The government had introduced a legal shield, valid until the end of 2023, when it nationalised Ilva in 2013 after seizing more than €8bn in assets from the Riva family, the previous owners, amid allegations by prosecutors of financial fraud and environmental crimes. (The Rivas deny wrongdoing.) In 2012 Italian authorities ruled that emissions of dust and chemicals from the plant had caused deaths, tumours and respiratory disease. Taranto still occasionally declares a "wind day", on which schools near the plant close to avoid exposure to dust from open-air mineral deposits.

On November 3rd Italy's government indeed revoked Ilva's legal immunity through new legislation. The next day ArcelorMittal sent three state-appointed administrators a withdrawal notice stating its contractual right to walk away from the agreement if a new law were to "materially impair" its ability to operate the plant or implement its turnaround plan. "The legal protection was a prerequisite for the deal," says Paul Weigh, a spokesman for ArcelorMittal. The company is also incensed by the government's demand that it turn off one of three blast furnaces in Taranto in December, which will considerably reduce its output.

The revocation was engineered by the Five-Star Movement (M5S), an anti-establishment party with strong roots in the south that governs in coalition with the centre-left. Its members had long campaigned for the closure of the plant while in opposition. Having initially backed the legal shield, they then supported ditching it.

Giuseppe Conte, the centre-left prime minister, wants Ilva to survive. It employs 10,700 people directly, and indirectly as many as 60,000—most of them in Puglia, a poor region in Italy's heel. The government is in talks with the Mittals to rescue the deal before a court hearing on December 20th. Mr Mittal and Mr Conte may yet come to an agreement to restore the legal shield.

If the talks fail and the case goes to court the government will prop up Ilva with emergency loans to protect jobs. The government's shabby treatment of someone willing to pour billions into one of its poorest regions is unlikely to encourage other bids. In the meantime, Italy's battered reputation with foreign investors has suffered another dent. ■

Cow cash

Mengniu Dairy gulps down two Australian milk producers

The Chinese giant seeks scale and know-how to meet its country's growing thirst for the stuff

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THIS AUGUST Andrew Cohen, boss of Bellamy's Organic, an Australian maker of infant formula, enthused to investors about having a brand "that's loved in China". So loved, in fact, that a few weeks later Mengniu Dairy, China's second-biggest producer of milk products, said it wanted to buy Bellamy's for A$1.5bn ($1bn). On December 5th its shareholders voted in favour of the deal.

At first Bellamy's seemed to be milking it, not Mengniu. An Australian government committee that reviews foreign acquisitions set out conditions: Mengniu must keep headquarters and most of the board Australian, and pour A$12m into local factories. Mengniu offered a 59% premium on the firm's share price, which had shed three-fifths in the 18 months before the offer (it has rebounded a bit since). Mr Cohen blamed falling Chinese birth rates, a regulatory hold-up on imports and competition in China's thirsty infant-formula market.

Now Mengniu looks like the cat that got the cream. It wasted no time in making another bid on November 25th to buy Lion Dairy & Drinks, Australia's second-largest milk processor, for A$600m. The pair of acquisitions would hand it a rich vat of organic and premium brands that China's middle class covets, including Farmers Union yogurt and licences to the Yoplait franchise. Mengniu can tap high-quality Aussie milk. And it is one in the eye for Yili, its bigger cross-town dairy rival in Hohhot, the regional capital of Inner Mongolia.

The two firms control about half of China's dairy market. If it wins Lion, Mengniu stands a chance at surpassing Yili by revenue next year, reckons Song Liang, an independent dairy analyst (both want to make sales of 100bn yuan, or $14bn). They are expanding in South-East Asia, where Bellamy's and Lion are already popular. Last year Yili acquired Thailand's biggest ice-cream maker. In August it bought Westland Milk Products, a New Zealand co-operative. It envisions "a vast dairy bridge crossing the Pacific Ocean".

In a decade Chinese milk production will meet only half of domestic demand, says Terrance Liu of CLSA, a broker, down from around 70% today. And, as Mengniu and its rival move overseas and upmarket, they need better ways to keep products chilled through production and transport, which rich-world firms can teach them. At home spending on formula per infant is rising thanks to declining rates of breast-feeding in many cities. A deadly tainted-milk scandal in 2008 has put shoppers off local products. CLSA estimates that four-fifths of Bellamy's products have ended up in China thanks to a flourishing informal trade by so-called *daigou*, who buy products overseas and resell them online.

New regulations have recently crimped grey-market sales. But Mengniu is expected to work out the import-clearance delay promptly: COFCO Dairy, a state-owned giant, owns 24% of the Hong Kong-listed firm. China's $62bn dairy market is still little more than a tenth of the world's by value. But Euromonitor, a research firm, predicts that by 2022 it will overtake America as the globe's biggest market for dairy. Welcome to the land of milk and money. ■

Bartleby

Let them eat Christmas cake

Don't make seasonal festivities too formal

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EVERYONE FEELS like winding down in December. Even if you do not celebrate Christmas, the New Year is approaching and most people take a few days' break. In many workplaces this feeling of "mission accomplished" is accompanied by an established tradition: the office party.

In boom times these can be truly lavish affairs. Robbie Williams sang at Deutsche Bank's global-equities party in 2001. A Bloomberg event in 2000, based on the seven deadly sins, was said to have cost £1m (then $1.5m). At the "Googlympus" in 2006, the internet group had tents named after different Greek gods while staff amused themselves at the "wine cork shooting gallery".

Few companies today desire the publicity that tends to follow such events. The natural question is, if you are spending that amount on a party, how much are you charging clients? Companies are rightly more sensitive than they were about the risks involved when workers lose their inhibitions after consuming too much alcohol. A survey of American companies by the suitably named Challenger Gray & Christmas, an outplacement firm, found that 59% had discussed, or planned to discuss, the dangers of "inappropriate celebrating" with staff.

To avoid these dangers, the chief operating officer of BDO, an accountancy firm, has suggested that two chaperones attend seasonal celebrations, along with first-aiders. Other accounting firms have suggested holding daytime events rather than after-hours drinks parties.

There is a lot to be said for daytime celebrations. First, it makes attendance easier for anyone caring for small children, or elderly relatives, and who thus finds it difficult to stay out late. Second, people are likely to be a bit more restrained in their alcohol consumption at lunchtime than in the evenings. And third, celebrating during working hours feels like a genuine break from duties; attending after work seems more like an obligation.

Most workers don't expect their seasonal event to turn into a Bacchanal; they are just hoping to avoid tedium. A survey of British office workers in 2014 found that only a quarter looked forward to their Christmas event and 71% would rather have a small cash bonus than a knees-up.

In Bartleby's experience, office parties come in three types. The first is the sit-down lunch, in which you are inevitably seated next to someone whose name you do not know, even though you have spent five years politely nodding at them when you pass in the corridor. Two hours of social awkwardness ensue. The second type of do is the evening event with excruciatingly loud music. On the plus side, no one can hear you speak so it does not matter if you have forgotten their names; on the down side, after half an hour everyone over 30 is so deafened that they wish they were at home with a nice book or a box set of "The West Wing".

The third sort of event is the stand-up do with drinks and nibbles, when the food is never enough to absorb the alcohol and you are permanently caught in a state of angst over whether you are boring the person you are talking to more than they are boring you.

Naturally, there is an economic answer and it is specialisation. Think of Adam Smith's pin factory where everyone plays their different part; let everyone have the party they want. Some may want to down the prosecco but others may be happier only to gorge on cake.

Seasonal events at *The Economist* are highly segregated. The leader writers sit quietly in a corner, sipping sherry and discussing structural reform; the Keynesians borrow money off the rest of the staff to pay for their drinks; believers in central-bank independence down pints of beer in feats of "quantitative drinking"; neoclassical economists sip water, arguing that no rational person would consume alcohol, given the risks of hangovers and liver damage; while those who favour modern monetary theory guzzle vodka shots on the ground that it is impossible to get drunk if you control your own alcohol supply.

In short, it is easier to enjoy yourself if you can do so in your own fashion. And that may include not partying at all. If managers think staff would rather spend time at home than attend, let them; the company will save money. Last, but not least, if managers must make a speech, keep it short. Something along the lines of "You've all done very well this year, good luck next." Save the Churchillian rhetoric for the annual general meeting.

The future of Google

Alphabet turns a Page and a Brin

What next for Google's parent after its fathers depart?

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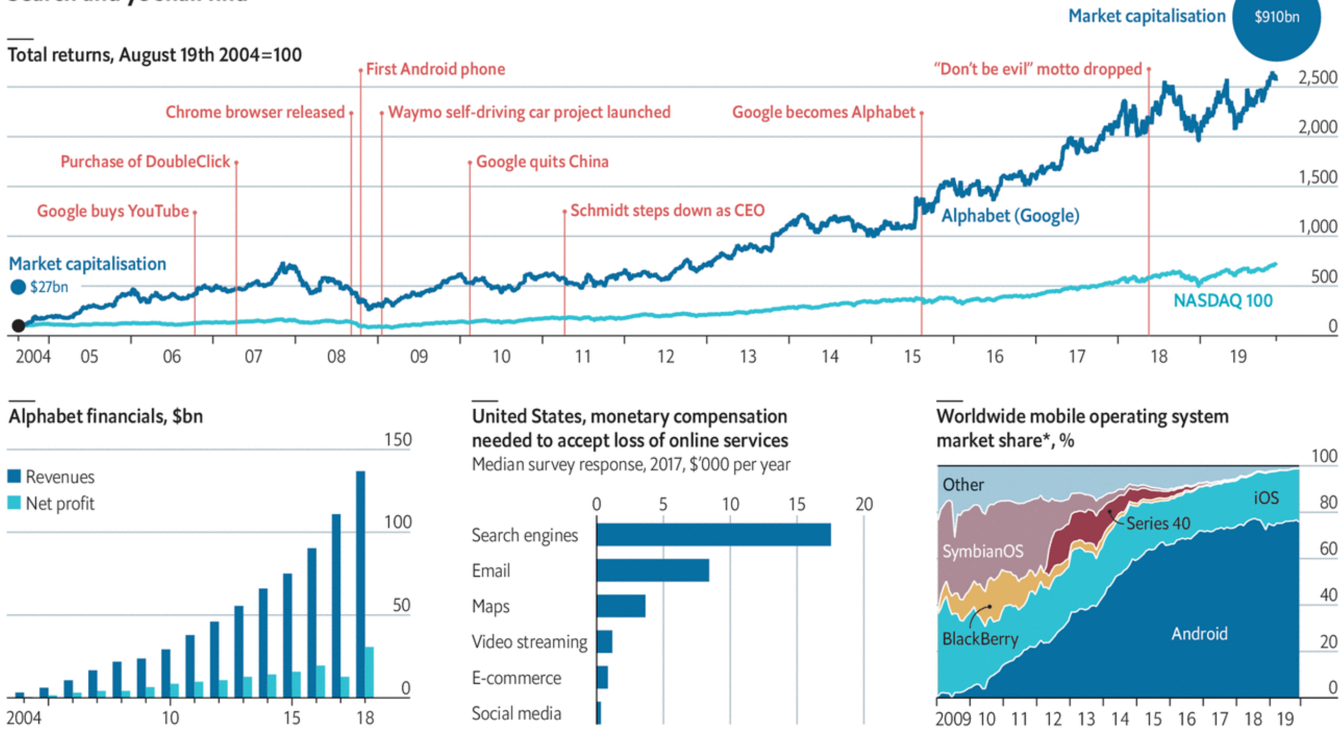
"GOOGLE IS NOT a conventional company," declared Sergey Brin and Larry Page as they took their firm public in 2004. "We do not intend to become one." On December 3rd they bowed out as, respectively, president and chief executive of Alphabet, Google's parent and the world's fourth-biggest listed firm. Their creation remains unconventional in some ways, if not in others. They leave a mixed legacy for Sundar Pichai, a career Googler in charge of its core search-engine business, who assumes both roles.

Messrs Brin and Page lived the Silicon Valley dream. Their solution to the problem of indexing the growing world wide web grew out of government-funded research at Stanford University, and was honed in a friend's garage. Google was founded in 1998. Today it handles over 2trn search queries a year, and produces the Android operating system that powers 80% of the world's smartphones. It has shaped the age of the internet and mobile computing in the way that Microsoft helped define the age of the desktop PC. Its revenues have grown from \$3.2bn in 2004 to \$136bn last year. Its market capitalisation has nearly doubled since 2015, to \$910bn.

Its internal culture is famously casual (visitors were often astonished when meetings were interrupted by volleyball games on the central lawn). It has set the tone for a generation of startups, says Karim Lakhani of Harvard Business School. Yet Google was also quick to embrace professional managers. In 2001 it hired Eric Schmidt, a veteran executive, as CEO. Mr Pichai likewise offers what Mr Brin once jokingly referred to as "parental supervision".

The firm has grown conventional in other ways, too. Its dominance has attracted the gaze of regulators. Like other powerful firms, it has hired legions of lobbyists to fight its corner, but with only limited success: from Brussels to the Beltway, politicians rail against its power and attitudes to user privacy. The EU has fined it \$9bn. Antitrust investigations loom on both sides of the Atlantic.

Search and ye shall find



Sources: Datastream from Refinitiv; Bloomberg; "Using massive online choice experiments to measure changes in well-being", by E. Brynjolfsson et al., PNAS, April 2019; StatCounter

*Based on web page views

The Economist

Its employees are growing restive; 20,000 walked out a year ago over the firm's handling of sexual-harassment cases. Those still wedded to Google's once-official credo, "don't be evil" (ditched in 2018), have condemned decisions to offer a censored search engine in China (also binned) or work with America's armed forces. It has sacked staff involved in unionisation efforts. Several said this week that they will file charges with regulators.

Perhaps the two founders wanted to palm these problems off to someone else. Perhaps they want to focus on the pet projects—from self-driving cars to human-like artificial intelligence and life-extension technology—which Alphabet has cross-subsidised from its ad business. Mr Brin is seldom seen these days; Mr Page did not turn up for Alphabet's annual shareholder meeting this year. Mr Pichai is seen as a safe pair of hands. However, since Messrs Brin and Page retain control via a dual-class share structure, his freedom will be circumscribed. Small wonder its share price moved little on the news.

Although Alphabet rakes in billions, it remains a one-trick pony. Ads bring in over 80% of revenue, little changed from 2015. Its share of the online-ad market is down a bit; that of smaller rivals, such as Amazon, is up a lot. Microsoft has successfully reinvented itself as a cloud-computing firm after Bill Gates stepped down in 2000; it is now worth more than Alphabet. Page-Brin bets on futuristic technologies are intellectually thrilling, but have yet to pay off. How long will investors' patience last?

Schumpeter

The agonising dilemma of Spanish firms in Latin America

Conquistadors in a quandary

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Brett Ryder

THIS IS A year of poignant anniversaries in Spain's relationship with Latin America. Exactly 500 years ago Hernán Cortés launched his conquest of Mexico. In 1939 Mexico's left-wing president, Lázaro Cárdenas, opened the door to Spaniards fleeing fascism at the end of the civil war. It might have been a celebratory year for Spanish business, too. In 1989 Telefónica, Spain's biggest telecoms firm, made its first incursion into Latin America by bidding for a Chilean counterpart, unleashing a flood of Spanish investment into the region in the 1990s known as *la reconquista*. Instead, it has been a year of pot-banging protests and economic turmoil in the region. It says a lot that 30 years after it planted the flag, Telefónica has decided to cut its losses in the former Spanish colonies, and may sell its businesses there altogether.

Telefónica's new strategy, announced late last month, is part of a rethink of the company by its boss, José María Álvarez-Pallete. Its market value has almost halved over the past five years to €35bn ($39bn). It carries a whopping €38bn of net debt. And, common to all global telecoms firms, it faces the challenge of offering customers much faster wireless speeds via 5G and more digital services. As a result it plans to refocus on four core markets, Spain, Brazil, Germany and Britain, and create separate digital and infrastructure businesses. On December 4th Orange, its French rival, announced similar plans to reinvent itself for the digital age.

Yet it is the prospect that Telefónica may sell its businesses in Argentina, Colombia, Mexico, Chile, Peru and other so-called Hispano-American countries, that is most significant. They account for 21% of its revenues. Their sale, which could raise €13bn or more, represents a historic U-turn that is likely to reverberate in Spain's boardrooms. Like Telefónica, Spanish banks, energy firms and other companies have reason to agonise over the slow growth and currency volatility across the Atlantic. Their industries, too, are in the throes of technological disruption. For some Latin America is no longer a land of opportunity, but a distraction.

For years Spaniards celebrated the revival of their imperial ties to the New World. When Latin American countries started to liberalise their economies in the late 1980s, Spain was a country with a meagre population, inward-looking companies, and a pressing need to globalise. Few Europeans believed that it would fulfil its aim of becoming a bridge to Latin America. However, as Lourdes Casanova of Cornell University recalls, its companies needed quickly to build scale there to resist other European firms breathing down their necks at home. Latin America helped turn Spanish firms into global ones.

Within a few decades Spain had become the second-biggest foreign investor in the region after America. Its firms have investments today worth €156bn there. The biggest, such as Telefónica, Santander and BBVA in banking, Iberdrola in utilities, and Repsol in oil and gas, accounted for most of Spain's investment in the region. Their shared language, as well as passable *Portuñol* in Brazil, enabled them to operate service industries in places where telecommunications, banking and utilities were hopelessly backward. Profits from Latin America during a commodities boom helped Spanish firms through the financial crisis of 2008-09.

That is only half of the story, though. After underbidding in 1990 for Telmex, the Mexican telecoms monopoly that turned Carlos Slim into one of the world's richest men, Telefónica went on to overpay elsewhere, sinking over €140bn in the region, a fortune compared with what the assets are worth now. The ride since then has been a rollercoaster. From the tequila crisis in Mexico in 1994-95, through mega-devaluations and political upheaval in Brazil and Argentina, to left-wing dictatorship in Venezuela, Spanish investors have had a crash course in disaster management. Repsol may have suffered the worst. In 2012 Peronists in Argentina—who beat a reformist incumbent in October's presidential election—expropriated Repsol's stake in YPF, the national oil company. It was only partially compensated for the almost $16bn it had paid for the holding in 1999. More recently it has had such trouble sourcing heavy crude from Venezuela and Mexico, it is reportedly considering carrying it from western Canada to its European refineries.

Yet even without crisis, day-to-day business has been a struggle. BBVA and Santander have used their big Latin America subsidiaries to help offset zero interest rates closer to home, and have no plans to pull out. Now Mexico, where BBVA is the biggest bank, is flirting with recession. Santander has done well recently in Brazil, where it is the largest foreign bank. But it suffers from currency weakness in many parts of Latin America. Telefónica's revenues, returns and cash flows in Peru, Chile and Colombia have flagged owing to competition from scrappy new entrants putting market share ahead of profitability.

La Noche Triste

Spain is not yet in full retreat. Telefónica's moves could be a combination of selling assets, as it is doing in Central America, and forming alliances, as it has recently done in Mexico by agreeing to use part of AT&T's network as a way to reduce losses. But it may sell up altogether to reduce debt quickly. Firms such as Liberty Latin America and Millicom are expanding fast around the region, largely through acquisitions. China Mobile is showing interest in Latin America as well. Telefónica's decision to stay put in Brazil, by far its biggest market, suggests that its new mantra is focus.

Other Spanish firms have made similar calculations: BBVA by concentrating mainly on Mexico, and Santander on Brazil. As pressure increases on banks to adapt to the fintech era, and on energy firms like Repsol and Iberdrola to reduce carbon emissions, focus makes more sense than empire-building. Even Cortés was forced to make a tactical retreat in 1520 in what is called "La Noche Triste". For Telefónica, this is undoubtedly a "sad night". But if its retreat is more than tactical, other firms may sound one, too. ■

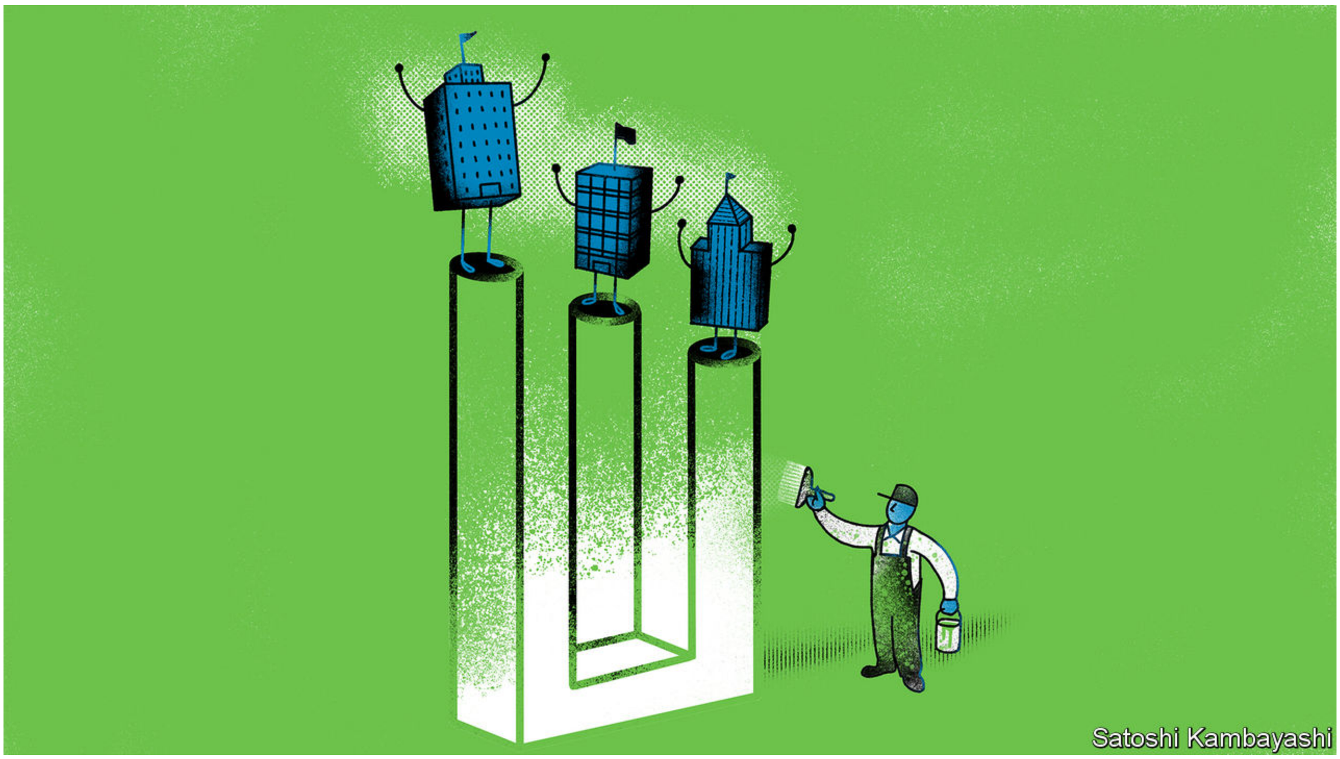
ESG investing
Poor scores

Poor scores

Climate change has made ESG a force in investing

But the figures behind ESG rating systems are dismal

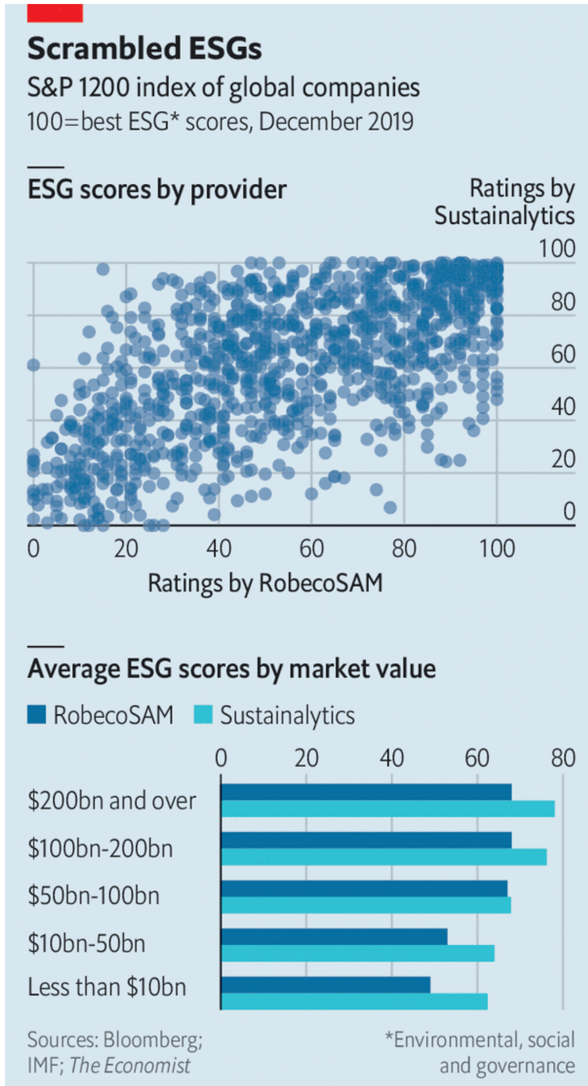
Print | Finance and economics Dec 7th 2019



"LABELLING BASED on incomplete information, public shaming, and shunning wrapped in moral rhetoric," said Hester Peirce, a straight-talking commissioner at America's main financial regulator, the Securities and Exchange Commission, in June. She was taking aim at the scoring systems that purport to assess firms' performance based on environmental, social and governance (ESG) factors. Yet love them or hate them, ESG scores are becoming ever more important in the world of investing and capital markets. At least $3trn of institutional assets now track ESG scores, and the share is rising quickly.

In America and Europe some politicians, bosses and investors want to shift away from measuring corporate performance based mainly on shareholder returns. Climate change is another catalyst. Christine Lagarde, the new head of the European Central Bank, thinks the institution should consider using monetary policy and bank supervision to fight climate change—a shift that would involve assessing which firms are dirtier than others. Mark Carney, the governor of the Bank of England, has championed better disclosures by firms on climate change. Chris Hohn, the head of TCI, a London-based hedge fund famous for its hard-headed approach, has outlined plans to vote against the directors of companies that fail to reveal their carbon emissions.

All this is fuelling demand for ESG ratings, which create a single score from disparate non-financial indicators, such as a firm's carbon emissions or the share of its board members who are female. Using teams of analysts, whizzy software and data from companies, ratings firms collect ESG information and convert it into a single score. Some customers of ESG ratings are seeking to gain an investment edge; others want their money to benefit society as well as themselves. But as Ms Peirce's criticisms suggest, the ratings are not yet ready for the weight they are being asked to bear.



The Economist

The most obvious sign of this is that, unlike credit ratings, ESG scores are poorly correlated with each other. ESG-rating firms disagree about which companies are good or bad. *The Economist* has compared the scores of two big ESG-rating systems, updating an analysis done by the IMF earlier this year (see chart). It shows at best a loose link between the two measurement systems. The same lack of correlation holds even when the E, S and G scores are considered separately, according to the IMF. Small wonder, then, that it found no consistent difference between the performance of ESG funds and that of conventional ones.

Moreover, ratings are often based on business models rather than businesses themselves. It does not matter what firms are selling, as long as it is done sustainably. Tobacco and alcohol companies feature near the top of many ESG rankings. And many funds marketed on their green credentials invest in Big Oil.

The scoring systems sometimes measure the wrong things and rely on patchy, out-of-date figures. Only half the 1,700-odd companies in the MSCI world index reveal their carbon emissions. Some ratings penalise non-disclosure—with strange results. In FTSE Russell's ESG rating Tesla, an electric-vehicle maker, does worse than firms that make gas-guzzlers. (FTSE Russell says it rates the sustainability of a firm's output with another score.) And because bigger firms are better able to afford disclosure, they tend to get better ESG scores. ESG raters say they are tweaking their methods to remove such biases. But even when figures are disclosed, they may be too out-of-date to be useful.

One hope is that the boom raises standards. Bigger firms are getting involved, which could help. On November 21st S&P Global, a credit-rating agency, bought the ESG ratings arm of RobecoSAM, an asset manager. Moody's, a competitor, purchased Vigeo Eiris, an ESG data outfit, in April. In 2017 Morningstar, a research firm, acquired a 40% stake in Sustainalytics, another ESG rater. MSCI, an index provider, has been building up its ESG-scoring expertise. Simon MacMahon of Sustainalytics expects scoring systems to converge over time. The definition of ESG is so broad, he says, that raters may be trying to capture different things.

For now investors who use ESG indices often look past the headline scores—and even, in some cases, create their own ESG ratings. Issues that they find particularly relevant, such as the flood risks faced by an insurer's corporate clients, may be buried because ESG ratings average many disparate data points, says Jessica Alsford of Morgan Stanley, a bank.

If ESG data do eventually become more accurate and consistent it will become harder for bosses and fund managers to engage in "greenwashing"—massaging indicators without truly changing hue. And investors will be able to pursue more varied and sophisticated ESG targets, says Maria Elena Drew of T. Rowe Price, an asset manager. Big insurers, for example, which are heavily exposed to extreme weather events, will be able to invest their capital in a way that hedges against climate risks. But for now the ESG rating industry is still in its infancy and Ms Peirce's criticisms, though blunt, ring true. ■

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Sound and fury

The Trump administration's trade policies clash with each other

The president's tariffs-by-tweet contrast with his officials' deliberate moves

Print | Finance and economics Dec 5th 2019

PRESIDENT DONALD TRUMP'S attempts to orchestrate America's trade relations are causing a cacophony. On December 2nd he trumpeted new tariffs on Brazilian and Argentine steel and aluminium. Hours later the United States Trade Representative (USTR) chimed in with two sets of tariffs on European products. Over the following days noise grew louder in Congress about a bargain that would secure the Democrats' approval for the USMCA, a trade deal with Mexico and Canada. And all this against the drumbeat of trade war with China.

The theme, American unilateralism, is consistent. But the various voices are not, with Trumpian trumpetings vying for airtime with the USTR's measured pace. Start with the week's first announcement, when Mr Trump tweeted that Argentine and Brazilian steel would face American tariffs, "effective immediately". American farmers, he said, were suffering from the two countries' "massive" devaluations. But his response made no sense. Argentina and Brazil have not been trying to take advantage of American farmers by manipulating the peso and real downwards. Rather, as their economies have flailed, they have struggled to prop their currencies up.

Moreover, though Mr Trump surely intended to restrict imports, for some products tariffs could mean they rise. An annual quota for Brazilian slab, billets and blooms (semi-processed steel products) is already full, for example, so switching from quotas to tariffs now would grant American importers greater flexibility. And the new tariffs are unlikely to survive any legal challenge, since relevant deadlines passed months ago. The law Mr Trump has invoked allows tariffs in the service of America's national security. Claiming that it covers propping up farm incomes would be a stretch.

The president's tariffs-by-tweet stood in contrast to the day's other big announcements, which followed much deliberation. One related to a long-running dispute at the World Trade Organisation (WTO) over European subsidies for Airbus, which America won. In October the WTO had said that the Trump administration could penalise the EU by placing tariffs on $7.5bn of its exports. The EU argued that the offending subsidies had been withdrawn. On December 2nd the WTO dismissed that claim, and the USTR started the process for raising new tariffs on European exports.

The other was accompanied by a 93-page report, stuffed with footnotes and legalese. The USTR had spent months investigating a French tax on digital services, which will fall heavily on American tech giants (see article). "If they're going to be taxed, it's going to be the United States [that] will tax them. Okay?" said Mr Trump on December 3rd. The USTR concluded that the tax was "unusually burdensome" for affected American companies, and is preparing to hit $2.4bn of French products with tariffs in response, including $800m of cosmetics, $800m of champagne and $400m of handbags.

Inconsistent trade policy is nothing new from the Trump administration. The tariffs on steel and aluminium imposed in spring 2018 were justified on dubious national-security grounds; by contrast the first round of tariffs on China, in mid-2018, were imposed after a detailed report by the USTR on America's many, and in some cases legitimate, grievances.

Overall, though, some aspects of America's trade policy are making others harder to achieve. Its trade partners can point to Mr Trump picking on Argentina and Brazil, and paint their resistance to American attempts to recast its trade relations with them as standing up to a bully. Implausible claims of harm to national security also go down badly elsewhere.

All this may be part of the reason Mr Trump has so far failed to secure the "substantial" deal with China that he boasted was imminent in October. On December 3rd he teased that he might postpone talks until after the 2020 election, saying that "the China trade deal is dependent on one thing: do I want to make it?" But the more the president predicates success on his mood rather than substantive problems laid out by bureaucrats working on his behalf, the less it makes sense for China to offer meaningful concessions.

Tariffs can be announced by tweet, but crafting deals to remove them is slower and harder. Mr Trump is lucky, then, that the USTR is in charge of delivering his other trade-policy objective: passing the USMCA. Robert Lighthizer, the USTR's top official, has been negotiating with Democratic lawmakers to recast it in a form that they can support. If a deal is done, it will be because politicians and officials have managed to tune the president out. ■

Bottle shock

Tax our tech and we'll blacklist your bubbly

Tariff threats move from trade to tax

Print | Finance and economics Dec 5th 2019

Satoshi Kambayashi

"UNACCEPTABLE", harrumphed France's finance minister. Worthy of a "pugnacious" response, thundered a colleague. The object of this Gallic ire was the Trump administration's threat this week to impose 100% tariffs on some of France's tastiest exports, from cheese to champagne, in response to its government's planned digital-sales tax.

Corporate tax has become a major source of transatlantic tension since various European countries began to cook up levies to capture more revenue from the likes of Google and Facebook, whose effective European tax rates often look suspiciously low—sometimes a mere percent or two. France has gone furthest, with a 3% levy on sales that will be backdated to the start of 2019. Britain's version, levying 2%, is set to kick in next April. America's Treasury calls such taxes "discriminatory".

Both sides accept there is an underlying problem. The IMF reckons governments lose at least $500bn a year from multinationals shifting profits to tax havens. This siphoning has become a gush with the growth of tech and other businesses whose assets are mostly intangible, and thus easier to move.

Most large economies—including America—accept that the treaty-based international corporate-tax system, which dates back to the 1920s, needs a refit. But negotiations, led by the OECD, have dragged on for six years. Frustrated by the delays, the Europeans began working on unilateral taxes (as well as a European Union-wide one, which has gone nowhere), aiming to force the issue in multilateral talks. They view their taxes as stopgaps that would be scrapped if a global deal is reached.

The OECD, prompted by the G20, has stepped up efforts to forge one by the end of 2020. It wants new rules that better capture profits of firms that do business in places where they have no physical presence, and an agreed minimum global tax rate for multinationals.

Even before anything has been agreed, however, critics are circling. A French assessment found that the OECD plan would bring in little extra revenue. ICRICT, a group of economists focused on corporate tax, laments the OECD's reluctance to abandon transfer-pricing, under which multinationals should account for cross-border transactions between subsidiaries at market rates, as if they were unrelated to each other—a principle built on fiction, they complain.

ICRICT and the G24 group of developing countries, which includes China and Brazil, are among those who would prefer a new, "unitary" approach, whereby companies' worldwide operations would be lumped together, and taxing rights divided up according to a range of metrics, including the location of staff and customers. But any global deal, if one can be agreed, is likely to be more modest. Those hoping for a radical overhaul should keep the champagne on ice.

Looking wobbly

Splits in Italy threaten to derail euro-zone reforms

Politicians are quarrelling over reforms to the zone's bail-out fund

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AFTER REPAIR work during the sovereign-debt crisis in 2009-15, further fixes to the euro zone's architecture have been few and slow. Northern countries have been unwilling to assume cross-border risks, as long as debts and non-performing loans in southern ones were high. Now quarrels within one of those southern countries, Italy, threaten what little progress has been made.

Three reforms are on the table: beefing up the European Stability Mechanism (ESM), the euro zone's sovereign-bail-out fund; setting up a common deposit-insurance scheme for banks; and creating a common euro-zone budget. On December 4th finance ministers discussed plans for further work on these "pillars", which are supposed to be agreed by heads of state on December 13th. The meeting failed to clear up much. Among the plans to be signed off was a revisedESM treaty, but eleventh-hour opposition from Italy seemingly delayed that until early next year.

Planned reforms to the ESM include measures to boost support for both troubled banks and sovereigns. It will become the backstop for the zone's bank-resolution fund. The rules for its precautionary credit lines, to which troubled countries can turn even before they lose access to financial markets, have been clarified. And to help countries with unsustainable borrowing to recover, new government-bond contracts will contain clauses that make it harder for investors to block debt restructuring.

All this had been nodded through by members in June—including Italy, which, with its huge public debt and sluggish economy, looks the most likely customer for a future bail-out. But populists from the Northern League and the Five Star Movement (M5S)—the very parties that were governing in June—have begun campaigning against the plans. Matteo Salvini, the League's leader, and deputy prime minister until he quit the government in September, says he did not see them, implying that the prime minister had acted in secret.

Critics claim the reforms would force Italy to restructure its debt in any future crisis. New clauses in debt contracts, they say, would make its bonds less attractive to investors. But the complaints ring hollow. Though some countries had wanted bail-outs to require restructuring, says Lorenzo Codogno, a former chief economist of the Italian treasury, Italy successfully lobbied against that condition. Silvia Merler of Algebris Policy & Research Forum, an advisory group, says that previous steps to make restructuring easier made Italy's bonds look less risky to investors, not more.

By describing the reform as a danger to Italy, Mr Salvini may spy a chance to score political points. For its part, M5S might want to shore up its ebbing support. But by doing so it has created a rift with its current partner in government, the EU-friendly Democratic Party.

The populists want either to reopen talks on the ESM or to gain something in return for acquiescence. But meaningful concessions look unlikely. Reopening talks at such a late stage might even provoke the northerners to walk away.

Nor has much progress been made on the second and third pillars. Politicians have only just agreed to begin talking about deposit insurance. Germany had long dragged its feet, but in November Olaf Scholz, its finance minister, said he would be amenable—if a host of other fixes, some unappealing to other members, were made. The euro-zone budget is a stripped-down version of that first envisioned by Emmanuel Macron, France's president, in 2017. Fiscally hawkish northerners insisted that it must not be used to support economies in downturns, and that it should be funded using the European Union's seven-year budget, not new spending.

The EU budget has itself been the subject of tortuous negotiations for nearly two years. The latest proposal allocates €13bn ($14.4bn) to the euro-zone fund—a paltry €98m per country per year. Once in place, say optimists, it can be beefed up. Yet another fix to be done in a frantic hurry when the next crisis hits. ■

Buttonwood

The perils and rewards of economies in rehab

Why investors in serial recidivists like Pakistan keep coming back for more

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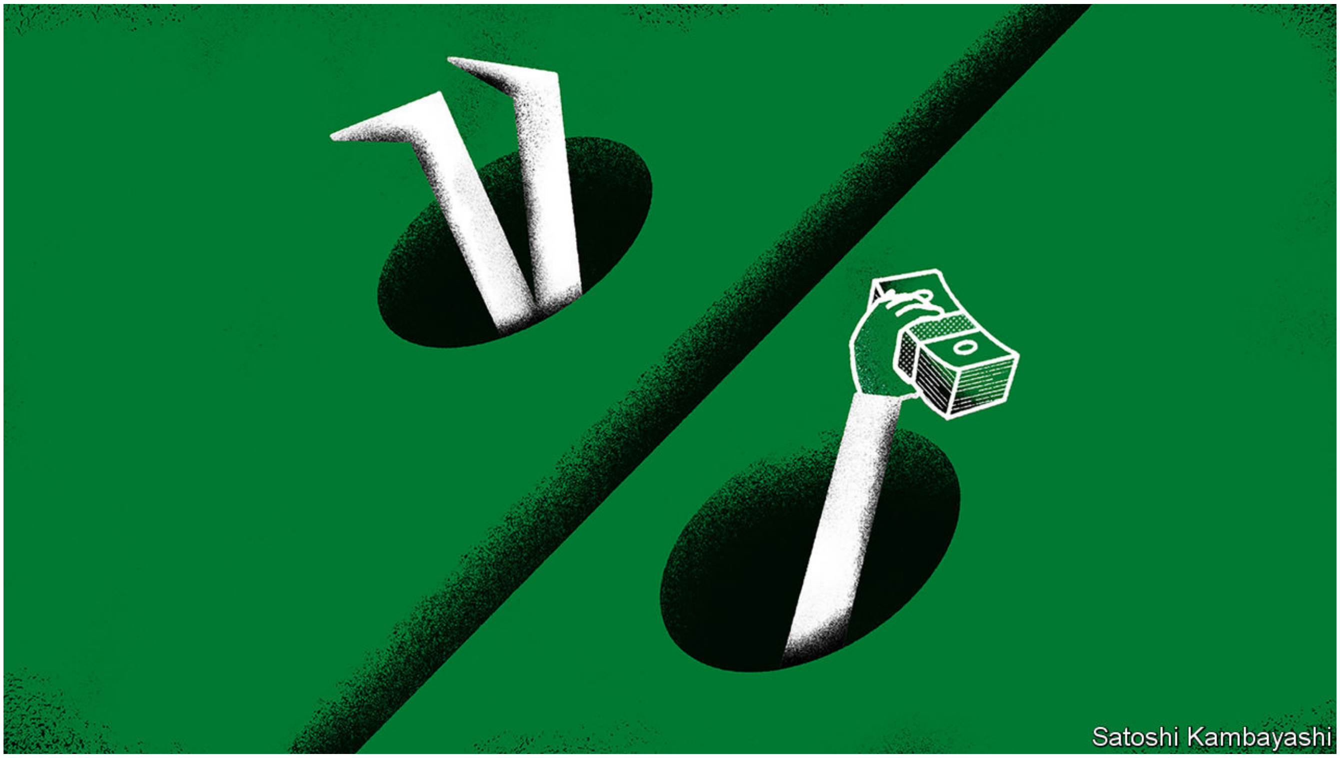

A RECENT EDITION of "The Joe Rogan Experience", a popular podcast, features the comedian Artie Lange. Mr Lange is an engaging personality who, as he candidly admits, has battled with drugs and gambling. Not long out of his umpteenth period in rehab, he is working in stand-up again. "This business keeps taking me back," he says with something like amazement.

Forgiveness for recidivists is found outside show business, too. In July the IMF approved a $6bn bail-out for Pakistan. As the fund acknowledged at the time, with something like weariness, Pakistan is back in rehab less than three years after completing its previous programme. But the fund has not abandoned it. And nor have investors. Pakistan is enjoying a flood of foreign capital on the promise of reform. The Karachi stock index is up 25% since the start of October.

This may seem hard to fathom. The IMF regards the chance that its programme will fail as "particularly high". Yet a band of investors are prepared to bet on success. A rehab economy such as Pakistan offers a rare opportunity. It is one of the few places where investors can find high interest rates, a devalued currency and cheap-looking stocks. True, things could go very wrong. Look at Argentina, which was embraced by investors after Mauricio Macri was elected in 2015 on a platform of orthodox economics, only to be abandoned when his reforms failed. But if things go right, the returns can be substantial.

Rehab economies follow a familiar pattern. The cycle begins when the economy bumps up against a budgetary or balance-of-payments constraint. The trigger may be external: an oil-price shock, say, or a shift in policy by the Federal Reserve. Funding dries up. Then comes capital flight. Foreign-exchange reserves are run down so that the government can sustain the illusion that the local currency is worth more than it really is. Hard currency is then rationed. That leads to shortages of essential imports, which further hamper the economy.

With luck, at this point the authorities recognise the hole they are in. To get out of it, they must embrace more orthodox economics. In practice, this means letting the currency fall, getting rid of subsidies in order to cut the budget deficit, and starting to use monetary policy as a way to tame inflation rather than finance the government. Sometimes (but not always) the IMF is brought in to lend hard currency and give policy advice.

This, more or less, describes events in Pakistan leading up to mid-2019. It also describes the cycle in Egypt up to the start of 2016 when it entered its (successful) IMF programme. And, for that matter, it is the same pattern seen in Pakistan in 2012-13.

At this stage of the rehab cycle, if things are to go well, the fund's money needs to act as a catalyst for other sources of capital. This is needed as a kind of bridge finance—to pay for essential imports and allow the rebuilding of foreign-exchange reserves, until exports pick up in response to a cheaper currency. That might seem a big task. Economies in rehab are typically unstable places (Ireland in 2010 was a rare exception). Pakistan is unlikely to threaten Denmark's place at the top of global rankings of security, governance and development. But investors are not betting that a rehab economy will become a paragon, only that it will improve, at least a bit.

A first task is to lure back capital shifted offshore by rich locals when they saw the crisis coming. The twin attractions are the high interest rates needed to curb inflation and a cheaper currency, which acts as reassurance against a further devaluation. Once the locals come back, yield-hungry foreigners will follow. And before long, so will stockmarket investors. Like Egypt, Pakistan has a wide range of listed companies for investors to buy—from industrial firms to banks to consumer stocks, says Andrew Brudenell of Ashmore, a fund manager. It may take a while for firms to see the benefits of improved economic stability. But investors are tempted to buy when stocks are trading at attractive price-to-earnings multiples.

Such bets can pay off handsomely. Reforms to improve macroeconomic stability have led to bountiful investment returns in surprising places. An obvious danger is that hardship and social unrest derail the reform process. Another is that reformed characters have a tendency to fall from grace again. But progress is never in a straight line. When the potential is great and the price is right, there will always be people willing to bet that next time will be different.

Meant to be

Myanmar admits foreign life insurers

AIA, Chubb and others hope for rich pickings in South-East Asia's most populous mainland country

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KO PHOE THAR is a cheery 22-year-old liquor-store clerk from Mandalay, a city in central Myanmar. Death, and other less-certain future misfortunes, are far from his mind. A host of insurance companies newly arrived in the country would like to change that. Last week the finance ministry issued licences to foreign life insurers for the first time. Five—AIA, Chubb, Dai-Ichi Life, Manulife and Prudential PLC—have been permitted to operate as wholly owned subsidiaries. Others are required to find local partners.

Foreign insurers have long licked their lips at the prospect of moving into Myanmar. South-East Asia's largest mainland country, it is home to 54m people, more than half of whom are under 30. Less than 4% of the population has insurance of any sort. But under military dictatorship, which ended in 2011, the market was monopolised by a state firm.

Not until the country made the transition to democracy, and the government loosened its grip on the economy, were local private insurers allowed to operate. Even after Aung San Suu Kyi, whose ruling party was elected in 2015, promised to allow foreign investment in the sector, there were delays. Fed up with the government's sluggishness, Samsung Life Insurance, a South Korean firm, closed its Yangon office last year.

Other insurers are betting their patience will pay off. IKBZ, a local firm, thinks the insurance market may be worth $2.6bn in annual premiums in a decade's time. But there are bumps on the road to growth. In 2015 just 0.01% of the population had a life policy, a smaller share than in Laos, Cambodia or Vietnam. Some people in Myanmar don't know what insurance is, or think it a waste of money—or even unlucky, because it circumvents karma.

Aung Si Thu Kyaw, a fruit trader in Yangon, has motor but not life insurance because he doesn't understand how this "new concept" works. A freelance agent based in Yangon told a local magazine in February that, while fire and vehicle insurance were popular, life policies were a much harder sell. The only people he could persuade to buy one were his relatives.

Anil Mancham, the boss of IKBZ, also attributes anaemic growth to a lack of trained sales agents—and of attractive products. Until last week the industry regulator required all insurers to sell the same plans at the same price. The need to avoid adverse selection meant products were limited. But he is optimistic that things will pick up. When insurers opened for business in other South-East Asian countries ten to 20 years ago, they encountered, and surmounted, similar obstacles. In Vietnam, for instance, the industry is now growing at 10-20% annually.

Both Mr Mancham and Son Nguyen, the president of Chubb Myanmar, see their industry's future in modern technology. Just 26% of Myanmar's adult population have a bank account, but there are more phones than people. Chubb and IKBZ are experimenting with selling insurance via e-wallets; AIA plans to sell its products via Facebook. Perhaps in time Mr Thar will come to rely less on karma, and arrange a safer future with a tap on his phone. ■

One-way baht

For 15 years two currencies have outperformed all others

What accounts for the consistent strength of the baht and the shekel?

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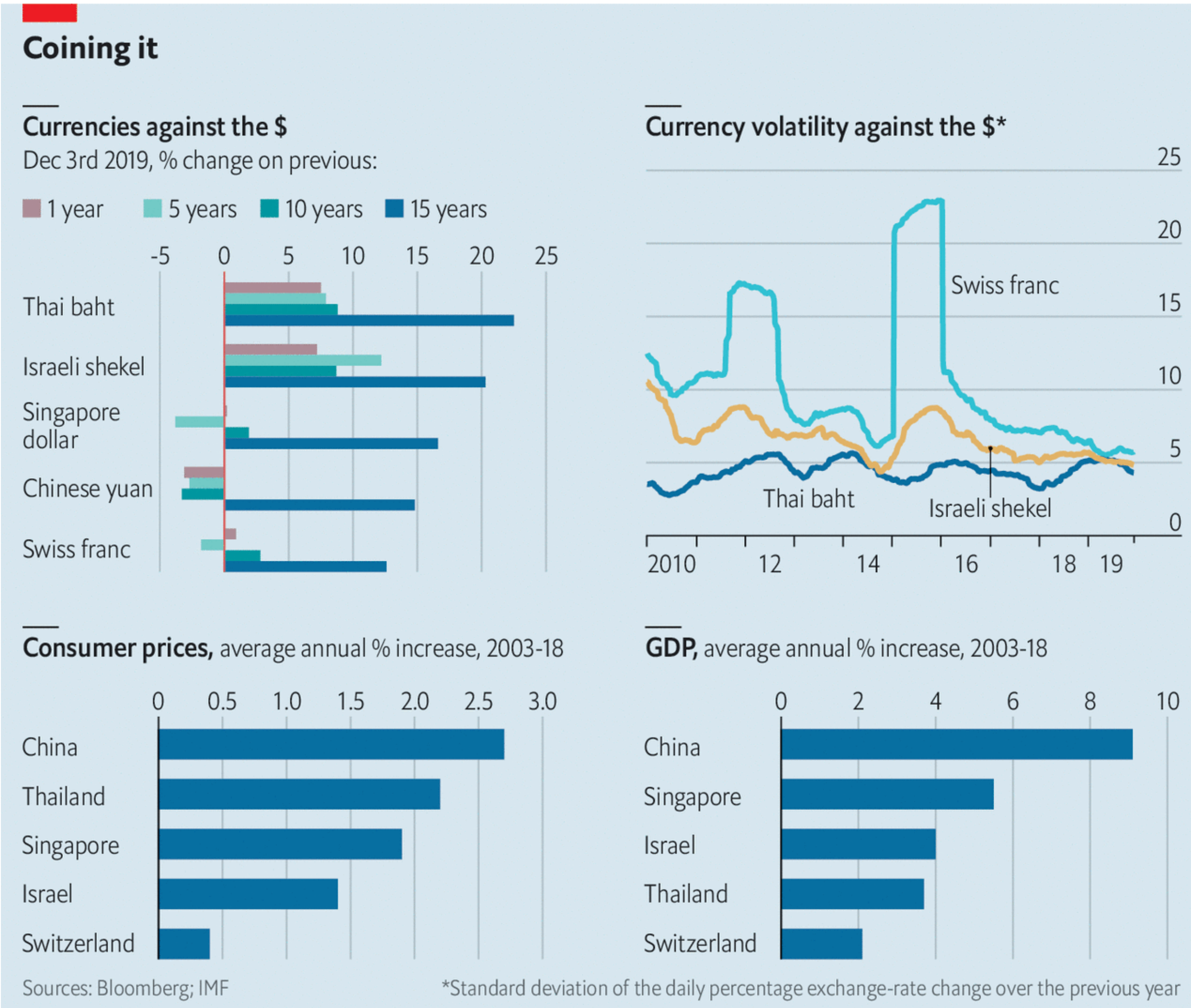
THE PAST decade and a half has seen boom and bust, inflation and deflation, globalisation and trade tensions. Through such economic and political cycles you might expect currencies to go in and out of fashion. In fact the two that have strengthened the most against the dollar over this period—Thailand's baht and Israel's shekel—have done so consistently. They have outshone other currencies over one, five and ten years, too. What explains their popularity?

Inflation is part of the answer. Exchange rates partly reflect relative purchasing power, so a country with low inflation should see its currency strengthen against that of a country where prices are rising fast. Both Israel and Thailand have had low annual inflation: 1.4% and 2.2% respectively, on average, over the past 15 years.



The Economist

Another factor that causes exchange rates to move is one country becoming relatively more productive than another. Economic growth is a reasonable proxy of productivity, and Israel and Thailand have had fast growth. (China has also grown quickly, but the yuan has been hit hard by the trade war.)

One curiosity is why both currencies have performed well over each of the four time horizons. The answer may reflect policy. Both Israel and Thailand intervene in markets to limit upward pressure on their currencies. If they are very strict, currency regimes can end abruptly, as when Switzerland abandoned its peg in January 2015. But Israel and Thailand have been more flexible, which has strung out their appreciations over time.

Nothing personal

Created to democratise credit, P2P lenders are going after big money

But rising red tape and competition could see them stumble

Print | Finance and economics Dec 5th 2019

"GET YOUR money right," says a giant billboard in garish, Instagram-friendly colours in San Francisco's downtown. It is part of a campaign by SoFi, a fintech firm, to position itself as a one-stop shop for alternative finance. Founded in 2011 to cut the cost of student loans by enabling alumni to sponsor undergraduates, last year SoFi spent over $200m courting shoppers, homebuyers and young parents. It now collects funding from a wide variety of investors, including big institutions.

The vision behind peer-to-peer (P2P) lending—allowing one ordinary person with spare cash to help another with a decent plan for spending it—was always a romantic one. Today only a few die-hards like RateSetter, a decade-old British lender, still hew to it; the rest, like SoFi, have diversified. New rules in Britain are the first salvo in a regulatory effort that will bring greater scrutiny. The bets P2P firms have made as they have grown will make or break them.

Zopa was the first P2P lender, in Britain in 2005, closely followed by Prosper and LendingClub in America. The industry took off after the financial crisis of 2008, when consumers lost confidence in banks and started to move their lives online. The idea was that lower costs and less red tape would enable firms to serve clients whom banks shunned.

The retail investors who provided funding could hope for annual returns of 4% or more. The firms would avoid credit risk while making money from transaction fees, and any late fees. Between 2013 and 2015 the stock of P2P loans grew fourfold in Britain, to £2.6bn ($3.4bn), and ninefold in the Americas, to $29bn.

But further growth proved elusive. One reason was the high cost of acquiring customers. Platforms do not know how creditworthy someone who clicks on a Facebook or Google ad is, says Scott Sanborn of LendingClub. "[But] I have to pay for that click regardless." At first they allowed investors to price loans—but gave them limited information about borrowers with which to do it. Investors thus asked for higher interest rates across the board, resulting in adverse selection.

Banks can draw on cheap and plentiful deposits, whereas platforms had to compete for savings held by retail investors. That required a lot of hand-holding, says Neil Rimer of Index Ventures, a venture-capital firm. So from the mid-2010s P2P lenders turned to family offices, and pension and sovereign-wealth funds. They started to securitise loans, bundling hundreds of tiny amounts and selling them together. In 2017 institutional investors snapped up $13bn worth of securitised P2P loans. Last year they funded 90% of Prosper's new loans, 94% of LendingClub's and 64% of those of Funding Circle, a British firm that lends to small businesses.

To cut acquisition costs, many platforms now cross-sell several types of loans. Zopa, which obtained a banking licence last December, offers car finance and wedding loans. LendingClub backs small businesses and refinances credit-card debt. Some also "white-label" their products, originating loans for traditional banks while remaining invisible to the public.

The shift from pure P2P has earned these firms a new moniker: marketplace lenders (MPL). Last year they issued $50bn of loans in America, a tiny but growing slice of the stock of consumer credit ($4trn in 2018). PwC, a consultancy, reckons that figure will hit $1trn by 2030. Large MPLs, including LendingClub and Funding Circle, have gone public. Zopa is rumoured to be planning to follow.

MPLs are now well-positioned for rapid growth, boosters say. Yet that vision is rosy. Born in an era of lax rules and economic expansion, the sector has never been truly tested. That is about to change.

The first challenge is new competition. Fintech startups such as Affirm and Afterpay now provide instalment loans to shoppers at checkout. Payment firms such as PayPal and Square have started lending to small businesses. Amazon sponsors sellers on its marketplace; Uber will soon fund its drivers. Meanwhile banks are snapping up fintechs and investing in software.

Second is a slowing economy. To make more money MPLs need to issue more loans. Since they do not take a hit from defaults, they have a bias towards accepting risky borrowers. That bias is worsened by reliance on institutional investors, who demand higher returns than retail investors, says Rhydian Lewis of RateSetter. A downturn could see defaults spike—and investors flee. Default rates are already rising at platforms that make them public.

That is drawing regulatory attention—the industry's third challenge. Britain is getting tougher on disclosure, governance and wind-down arrangements. From December 9th firms will be allowed to market themselves only to sophisticated investors. Some are preparing by running stress tests; others by creating "provision funds" that will make lenders whole if borrowers default. But rising compliance costs have pushed some smaller ones out of business. Further consolidation is due, insiders say.

The winners may emerge stronger. For now, however, P2P backers are cautious. LendingClub, which was valued at $5.4bn when it listed in 2014, now has a market capitalisation of just $1.1bn. Funding Circle, which listed 15 months ago at a valuation of £1.5bn, is worth £346m. SoFi's $4.3bn valuation has not budged since its 2017 funding round. "At first platforms were valued like tech companies," says Aditya Khurjekar of Medici, a data firm. "But fintech is harder, much harder." ■

Free exchange

Japan’s economic troubles offer a glimpse of a sobering future

As other rich countries age, their economies too will suffer from sluggish demand

Print | Finance and economics Dec 5th 2019

JAPAN ONCE offered a cautionary tale of how macroeconomic mismanagement could transform a juggernaut into a laggard. As weak growth and low interest rates have spread to the rest of the world, however, it looks more like a window into the future. The view it reveals is less bleak than it used to be; “Abenomics”—the growth-boosting policies of the government of Shinzo Abe since 2012—have restored some vim. But as economic growth once again sags towards zero, it is worth asking whether Mr Abe’s programme, bold as it has been, is radical enough.

Japan earned its reputation as an economy adrift in the 1990s, when a popped financial bubble was followed by slow growth, deflation and low interest rates. As the government struggled to pry the economy from its rut, it pioneered policies like quantitative easing (QE; printing money to buy assets such as government bonds) that were used around the world after the global financial crisis. Economists debated how much Japan’s slump owed to weak demand rather than economic rigidities, for example an insufficiently limber corporate sector. Some doubted that, after years of easy money and bulging deficits, there was room left for stimulus to boost growth. Others reckoned that Japan could escape its rut if only its leaders were bold enough.

Abenomics showed that Japan’s economy was indeed suffering from weak demand. Fiscal and monetary stimulus were two of the “three arrows” of Mr Abe’s agenda (the other being structural reform). His government increased public investment and lit a fire under the Bank of Japan, which set an inflation target of 2% (stretching, for a country so deflation-stricken) and engaged in large-scale QE to meet it. The economy quickly responded. The yen tumbled, giving exporters a lift. Stock prices soared, and in 2013 economic growth hit a respectable 2%. Japan has since built on these successes. The economy has grown every year, just about. The unemployment rate has fallen to 2.4%.

But the slump never quite ended. Perhaps it might have, had the government not raised the rate of consumption tax from 5% to 8% in 2014 in an effort to cut its mammoth gross debt pile, which reached 230% of GDP in 2012. Private consumption, which helped power growth in 2013, shrank in 2014 as the economy slowed to a stall. The government postponed a second planned increase for fear of starting a recession. Yet even now, five years on, the economy remains too weak to stomach fiscal tightening. In October the consumption tax was raised once more, to 10%. The increase landed harder than expected, hurting retail sales and squeezing an economy already battered by a slowdown in global trade. The government is now preparing a round of stimulus, hoping to tide Japan through this bout of weakness.

It has become clear, however, that Japan’s demand woes are not simply an after-effect of financial crisis. Rather they are chronic, reflecting a profound demographic shift which depresses both demand and supply—and which is creeping its way across the rich world. Over the past 20 years Japan's working-age population declined by more than 10m workers, or about 14%. It is projected to fall by even more over the next 20. Having fewer workers means lower growth and less need of investment. Although Abenomics reversed a long decline in investment, spending has been too low to prevent a steady increase in corporate hoarding: idle cash, draining demand from the economy. With unemployment so low, you might expect cash to flow to workers, whose spending could then energise growth. But incomes have risen surprisingly slowly—partly, the government reckons, because firms are choosing to automate rather than compete for ever scarcer workers by raising wages. When firms do invest, some spend on robots.

Limp private-sector spending has in turn kept the government from cutting its debt. Were the state to begin saving in earnest, demand in the economy would collapse. Japan has long defied predictions of imminent fiscal crisis. Even so, demography could eventually break the public purse. At 46% in 2018, Japan's old-age dependency ratio—the number of elderly people compared with the number of working age—is the world's highest. It is projected to rise by nearly 20 percentage points over the next 20 years. Shifting the burden of tax away from consumers might reinvigorate household spending. But economists prefer consumption-tax rises to higher levies on income or profits, which they fear would further depress growth. Pressing firms to raise pay, perhaps with faster increases in the minimum wage, could help in the short run but accelerate automation over the medium to long term.

Hit me Abe one more time

Abenomics may yet fulfil its promise. A short burst of stimulus could see the economy through the current headwinds. Given a bit more reform and some luck, growth could rebound—sufficiently, perhaps, to stabilise government debt even as social spending grows. But it would not take much bad luck to spark a recession and reverse the past few years' hard-won gains. To safeguard Japan's economic future, more radical policies may be needed. Large-scale immigration might do the job. But Japan remains a closed society by rich-world standards. Just 2% of its population is foreign-born, compared with 13% in Britain and 22% in Canada.

Instead, Japan may continue to blaze macroeconomic trails. The Bank of Japan, through QE, has spent trillions in newly created yen on stocks and bonds. It might instead try distributing new money to households. That would either raise inflation, prying Japan from the trap that has held it since the early 1990s, or demonstrate how best to manage the macroeconomic challenges posed by ageing and automation. Or it could simply call bond markets' bluff, and borrow and spend as lavishly on public investment as circumstances require. Other countries may boggle at such strategies. Soon enough, they will learn for themselves just how tricky Japan's position is. ■

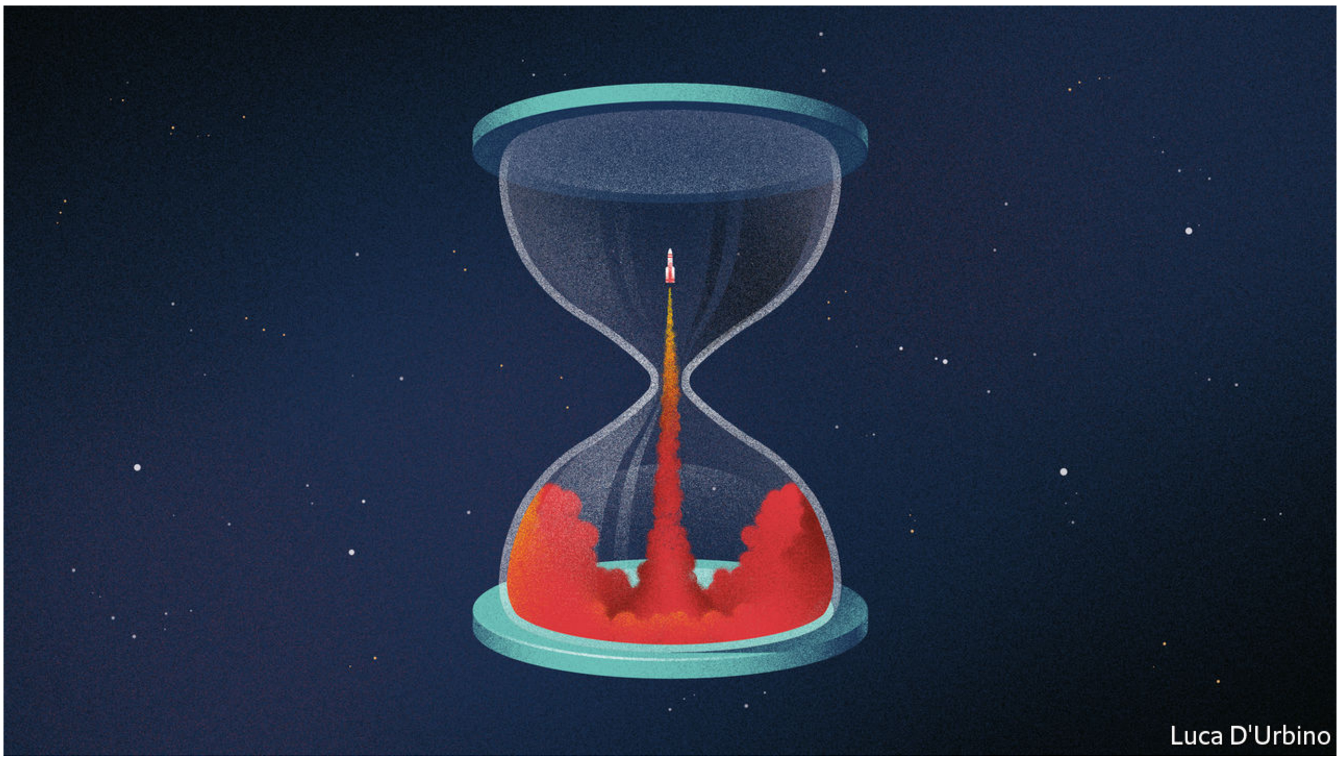
Warfare in space
Quickening the countdown

Warfare in space

America seeks faster ways to launch military satellites

If one gets destroyed, a replacement needs to be on its way soon

Print | Science and technology Dec 5th 2019



BY SHOOTING A missile into one of its own satellites in March, India upped the ante. The immediate intention, suggests Jeffrey Caton, a retired American air-force colonel who teaches at the Army War College, was to fire "a shot across the bow" of India's rival China. The Chinese had, after all, blown up one of their own satellites in 2007, in a similar demonstration of their ability to do such things. India's test, along with the wider profusion of anti-satellite weapons, has lent credence to the worries of defence chiefs around the world who believe that future conflicts between great powers will stretch into space.

Satellites are too militarily useful to pretend that adversaries will consider them off-limits, says William Roper, the air force's assistant secretary for technology and acquisitions. America must therefore ready itself for warfare in space. America is, indeed, especially vulnerable. It has more space assets than any other country and relies on them more for its war-fighting capability. Moreover, as John Hyten, the vice-chairman of America's Joint Chiefs of Staff, eloquently puts it, America's kit in space consists mainly of large, "exquisite" satellites that make for "big, fat, juicy targets".

First responders

One approach to reducing the risk this poses is to make those targets less fat and juicy. That is happening, as both civil and military satellite users shrink their hardware and scatter its functions over multiple pieces of equipment. In particular, people are deploying more of the modular designs known as cubesats. Among other things, that means individual satellites are smaller and cheaper, and therefore easier to stockpile in advance. But for this approach to be really useful, it must also be possible to launch them quickly if, for whatever reason (whether enemy action or otherwise), an orbiting asset stops working and needs replacing.

That concept is known as "responsive space", and, in today's outsourced world, it often means calling on the private sector to do the actual launching. American officials are therefore pleased that a firm called Rocket Lab, whose services they often rely on for lifting payloads of up to 150kg, has quickened the tempo of cubesat launches from its pad in New Zealand to once a month. Rocket Lab hopes that, by early next year, it will have improved this rate to once a fortnight—an objective which will be assisted by its construction of a second launch pad in Virginia.

Rocket Lab is also a pioneer of the 3D printing of rocket parts, such as the nozzles, valves, pumps and main combustion chamber of the motor. That reduces the number of components involved, and greatly speeds up manufacture and assembly. Rockets being expensive, no one wants to carry a large inventory of them. Having a "just in time" approach to launcher availability is therefore desirable.

Relativity Space, another American firm, also plans to print its rocket, the Terran 1. This will carry a payload of 900kg. Its first orbital launch is scheduled for next year. Relativity Space's biggest printers produce five-metre sections of propellant tank. Its most precise ones create engine parts with an accuracy of 40 millionths of a metre. A conventionally manufactured rocket of similar size would contain, the firm says, nearly 100,000 parts. Terran 1 has less than 1,000. That simplifies the supply chain and accelerates the testing of parts.

Bright ideas

Speeding up launcher production in this way helps. But it will not be enough if America is to fulfil its goal of launching replacement satellites with a day's notice. That is one reason, says Mr Roper, why the air force is now buying, at a series of pitching events that started in March, ideas for ways of prevailing in "high end" orbital combat. Encouragingly for proposers of such ideas, little bureaucracy is involved. Settlement for those accepted is immediate—the air force sidesteps its lumbering payments system by using official credit cards to transfer money instantly to people's PayPal accounts. Those who present clever proposals can thus pocket awards exceeding $100,000 within minutes. The latest of these pitching meetings, on November 5th and 6th, resulted in on-the-spot contracts worth $22.5m.

Meanwhile DARPA, America's main military-research organisation, is trying to organise a responsive-space competition of its own. Next year it hopes to hold a challenge in which teams will attempt launches twice in a matter of days or weeks, each time learning only shortly beforehand of the mission's location, destination orbit and payload characteristics. This has never been done before. Programming the computers takes time, and the rocket must be trimmed in advance for the particular trajectory, taking into account such factors as the weather. Prizes of up to $10m will be awarded.

It is a measure of the task's difficulty that, of the 55 teams which signed up initially, only three qualified, and two have subsequently dropped out. The name of the remaining competitor is secret.

At least one of the dropouts has not given up completely, though. That firm, Virgin Orbit, has turned a Boeing 747-400 into a flying launch pad. At an altitude of about 10.7km, the aircraft releases a rocket called LauncherOne. This rocket's engine ignites after 4.8 seconds of freefall.

Such launches, Virgin Orbit says, can take place above nasty weather. They also make it easier to reach east-to-west "retrograde" orbits, because the launching plane can fly in the opposite direction to Earth's spin, reducing the launch velocity required for such an orbit. Though Virgin Orbit's system has yet to put a satellite into orbit, Britain's Royal Air Force seems interested. In July it announced a deal to launch small satellites on notices possibly as short as a week. By today's standards, that is, indeed, pretty responsive. ■

Rome's timber trade

Some planks from ancient Rome started life in eastern France

The tree rings in them tell their story

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THESE OAKplanks, once part of the portico of a property just outside Imperial Rome, travelled a long way before the builders got their hands on them. The science of dating trees by looking at their growth rings is now so good that Mauro Bernabei of Italy's National Research Council and his colleagues were able to say, in a paper just published in PLOS One, where the trees that provided the planks had grown, and when they were cut. Rings' thicknesses are affected by the local climate. Comparison with samples of known origin showed that the trees grew in what is now eastern France, and were felled between 40 and 60AD. That speaks of a sophisticated timber trade, which floated the logs down the Saône and Rhône to the Mediterranean, and thence to the Eternal City.

Tropical disease

Malaria infections have stopped falling

Fine-tuning prevention may help

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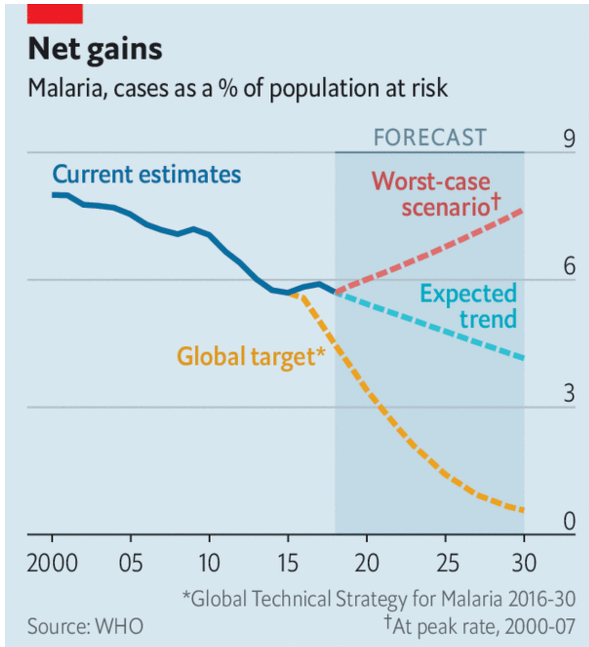
A FEW YEARS ago it looked as if malaria might be on the way out. From 2000 to 2014 the number of cases and deaths fell. As the World Health Organisation's annual report on the disease shows, though, the decline in cases has ended (see chart) and that in deaths has slowed. The report, published on December 4th, says there were 228m cases of malaria in 2018, which resulted in 400,000 deaths. Most victims were young children in Africa. That is a far cry from targets set in 2015 for the near-elimination of malaria by 2030.



The Economist

That strategy of elimination had counted on $6bn a year being poured into malaria-control efforts. Funding in recent years, however, has been about $3bn a year. More money would surely help. But substantial gains can be made by doing things more efficiently—something at which malaria programmes have been dismal.

Stopping malaria relies on three things: insecticide-treated bed nets to prevent nocturnal mosquito bites; the spraying of homes with insecticides; and the treating of pregnant women and children with rounds of preventive medication. These are all "imperfect tools, often used imperfectly", says Pedro Alonso, head of the malaria programme at the World Health Organisation. Countries usually deploy the same package of measures everywhere, even though infection rates and their seasonal patterns vary a lot between regions, and particularly between cities and the countryside. Transmission reaches a peak in the rainy season, when mosquitoes are abundant, so preventive mass-treatment of children then can make a huge difference. Regional variations are particularly pronounced in large countries like Nigeria—a place that, by itself, accounts for a quarter of the world's malaria cases.

The typical approach of a malaria-control programme is to bombard a country with bed nets and then use whatever cash remains for sporadic rounds of preventive medication. But in many big cities, such as Dar es Salaam and Nairobi, cases are few and far between, so deploying nets there is a waste. Overspending on nets at the expense of other things happens partly because nets are easy to count—a feature that aid programmes are particularly fond of. Results which cannot be attributed directly to money a donor spends tend to fall further down that donor's list of priorities. This kind of reasoning tips the scales, because foreign aid accounts for two-thirds of the money spent on malaria.

Another problem is patchy data about local disease patterns. This makes it tricky to work out the best mix of malaria-control measures for a given area—and when to deploy them. Still, it is better to use whatever figures are available, because that will initiate a virtuous circle, says Dr Alonso. As things stand, local health workers responsible for collecting such data often do a sloppy job because they do not see the data being put to use.

Such things matter. The two countries that stand out as successes in this year's report are India and Uganda. Both report dramatic falls in cases of malaria between 2017 and 2018. Not coincidentally, both have been busy fine-tuning their regional malaria-prevention strategies. If other countries followed suit, the world might get back on track to beating the disease. ■

Computing records

The first computer chip with a trillion transistors

It should speed up calculations for artificial intelligence

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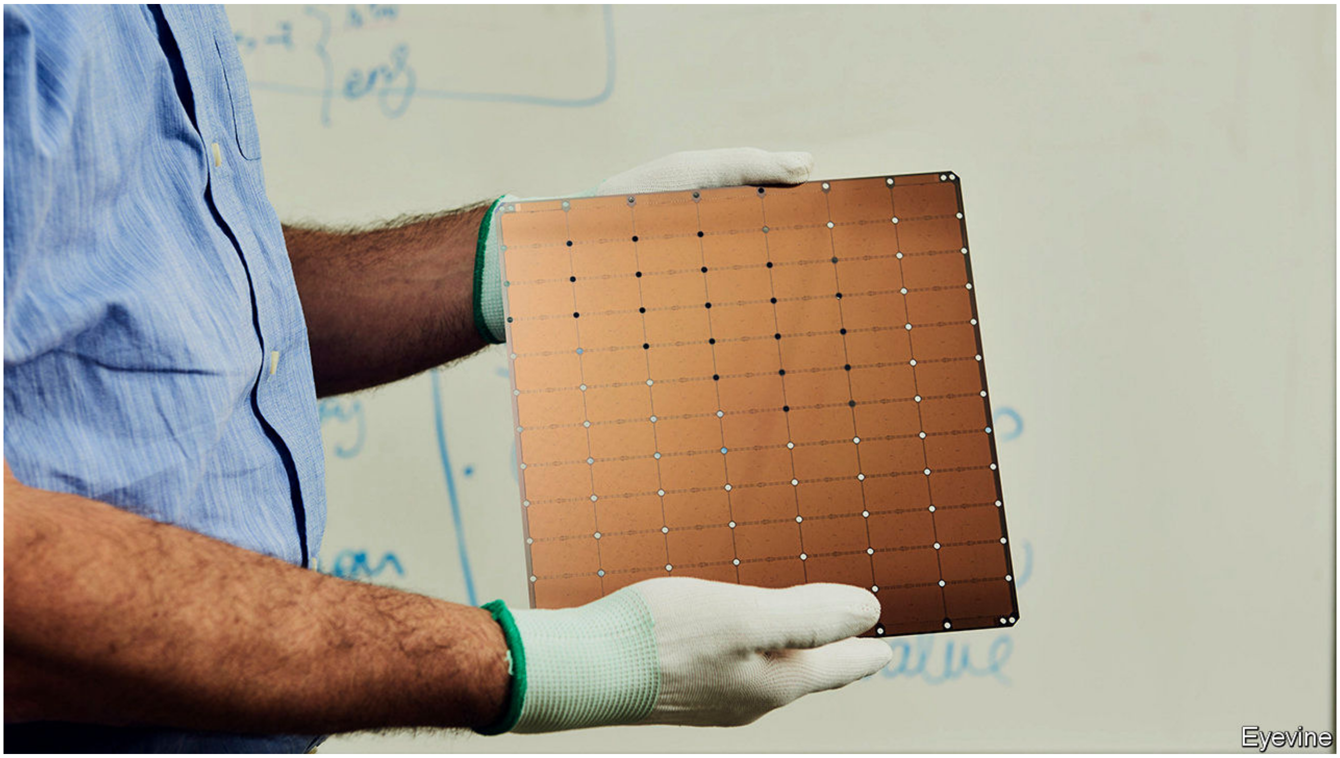
Eyevine

SILICON CHIPS have lonely lives. They are born together, often as tens of thousands of identical siblings a few millimetres across, on a single wafer the size of an old-fashioned vinyl record. They are then broken from their natal wafers like squares of chocolate from a bar, and packaged individually in plastic and metal. Only after this is a chip reconnected to others of its kind, as the packages are wired up to work together on circuit boards and inserted into products.

Many inventors over the years have noted that if chips were instead wired together from the beginning, on the wafer itself, much expense and trouble would be avoided. But efforts to implement such wafer-scale integration have consistently failed, either because the technology just did not work or the resulting circuits could not compete with new versions of conventional designs.

Now Cerebras, a firm in Los Altos, California, thinks the time is right to try again. The heart of its new product, a supercomputer called the CS-1, could hardly be described as a "chip". It is a slab of silicon measuring 21.5cm by 21.5cm that the firm refers to as a wafer-scale engine. But whatever name you give it, it is a record-breaker. A high-end modern computer chip might have billions of transistors on its surface. The wafer-scale engine has more than a trillion of them.

Cerebras's creation breaks many records besides the trillion-transistor barrier (it actually has 1.2trn). Its transistors are organised into 400,000 individual processing units, known in the trade as cores, and it can shuttle nine petabytes (9,000trn bytes) of data per second around inside itself. For comparison, Intel's i9-9900k chips, typical of those found in modern PCs, have a mere eight cores and can shuttle 40 gigabytes per second.

The CS-1 has some notably small numbers, too. Admittedly, IBM's Summit supercomputer, among the snazziest in the unclassified world, offers some 2.4m cores. However, Summit is constructed conventionally, using package-laden circuit boards. It weighs over 340 tonnes and occupies 520 square metres of floor space. A CS-1 weighs around 250kg and is the size of a domestic refrigerator. It also consumes a mere 15-20kW of electricity. Summit requires 1,000 times as much.

The purpose of all this computational heft is to run linear algebra, the mathematics of data processing in general and machine learning in particular. Machine learning is at the heart of the trendy and lucrative field of computing branded "artificial intelligence".

The CS-1's compiler—the software that turns programs written by human beings into binary code which a computer can understand—is tuned to keep the flow of data from core to core as efficient as possible. It does this by matching the structure of the code generated to that of the hardware. Also, as the cores are positioned within fractions of a millimetre of the memory they use, that flow of data is already much faster from one part of a circuit board to another than the long-distance trip which would normally be required.

The wafer-scale engines themselves are made by TSMC, a Taiwanese firm, using a process claimed to be so accurate that each has just 150-200 defects. These are easily worked around, given the number of other transistors available. Wafer-scale integration has many other challenges, such as keeping everything synchronised, pumping in enough electric power, pumping out the resultant heat, and efficiently moving gigabytes of data to and from other parts of a machine. But if the CS-1 survives contact with the real world of commercial use, then wafer-scale integration will at last have proved itself, and the days of the lonely chip may be numbered. ■

Animal behaviour

Even aggressive centipedes will co-operate if they have to

Mothers of different species share nests in the rainforest

Print | Science and technology Dec 7th 2019

CENTIPEDES DO NOT generally get on well together. Even members of the same species may attack one another when they meet. So it is a surprise to find mother centipedes sharing nests and a double surprise to find that those co-residents are sometimes not even conspecifics. This, though, is the conclusion of research published in *Biotropica* by Farnon Ellwood and Josie Phillips of the University of the West of England, in Bristol.

Dr Ellwood studies the invertebrates of the Danum Valley, an area of rainforest in Sabah, a Malaysian state in north Borneo. His past expeditions have found lots of centipedes living in epiphytes called bird's nest ferns. These ferns tolerate the low illumination beneath a forest's light-absorbing canopy and may weigh more than 200kg. They and their inhabitants are hard to investigate because they grow on tree trunks dozens of metres above the ground. But when Dr Ellwood did bring a few down to *terra firma* he found that the largest of them contained, besides the plethora of herbivorous insects he was expecting, 126 centipedes. That led him to wonder whether, rather than migrating from the ground as he had previously assumed was the origin of such myriapods in tree tops, the creatures were actually being born there.

To investigate the matter he and Ms Phillips collaborated with colleagues from Sabah's Forestry Department and the Natural History Museum, in London, to set up climbing lines in local trees and use them to collect bird's nest ferns. Each specimen was, as it broke loose from the tree, decanted straight into a clear plastic bag to stop its centipede inhabitants escaping. It was then lowered to the ground using pulleys. In total, the researchers nabbed 44 ferns in this way—half from the highest part of the canopy, above 40 metres, and the rest from above 20 metres. Once a fern was safely landed they dissected it and dropped every centipede found into a solution of ethanol, to kill and preserve it. Also, before themselves descending the trees, the collectors put data loggers into some of the ferns they had left in place, to measure the temperature within and outside the plants.

It quickly became apparent, when the researchers began pulling the ferns apart, that some of them contained centipede nurseries. Deep inside they discovered special chambers that the creatures had made by chewing through the fern's inner roots. Here, mother centipedes were curled protectively around clutches of eggs or juveniles. The team found ten such nests. And three of them were shared by females of different species.

Maternal behaviour by tropical centipedes is not unknown. In particular, females will hang around to keep eggs and newly hatched larvae clean, to stop fungal infestations developing on them. They also bring prey for the youngsters to feed on. Tolerating nest mates, though, is a different matter. Dr Ellwood and Ms Phillips reckon that this curious behaviour is driven by matters climatic.

The climate in question is not, however, that of the rainforest as a whole. Rather, it is the microclimate inside a fern itself. The data loggers left behind by the fern collectors showed that during the hottest part of the day the temperature inside a fern is as much as 6°C lower than that outside. Dr Ellwood suspects this heat-shielding makes ferns attractive places for centipedes to raise their heat-sensitive young—and that the limited space available inside a fern has caused natural selection to put mother centipedes' aggressive instincts on hold and make them considerably more tolerant of one another's company when nesting than might otherwise be the case. ■

Aviation

If aircraft can copy the way geese fly, they will save fuel

One plane rides on another's wake

Print | Science and technology Dec 7th 2019

IN THE CUT-THROAT business of civil aviation, every little helps. So researchers at Airbus, Europe's biggest aircraft manufacturer, have been experimenting with a wheeze which they hope might shave up to 10% off an airliner's fuel consumption. This is to hitch a ride on the wake of the plane in front.

It is a familiar idea. Evolution blundered across it millions of years ago, and it explains why skeins of geese, swans and so on adopt a V-shaped formation when flying in groups. Vortices of air shed from the tips of a bird's wings represent wasted effort. But that effort can be captured as lift by another bird trailing at the correct distance and angle.

Aeronautical engineers have long dreamed of flying platoons of planes in a similar way, with trailing aircraft surfing the wakes of those leading the convoy. The problem is catching the supportive updraft at one side of a vortex rather than the turbulence-inducing downdraft on the other side—and doing so far enough from the vortex's powerful core to ride it safely and without spilling the passengers' drinks.

Airbus's researchers, under the aegis of Sandra Bour Schaeffer, head of Airbus Group Demonstrators, have been trying to work out the details by flying a series of tests in which an A350-900 follows in the wake of an A380, both having been loaded with ballast to simulate the weight of passengers and cargo. To do this, the test pilots needed a way to see the vortices' cores, in order to avoid steering into them—which would risk crashing the plane. Early experiments used smoke to make vortices visible. This approach was then replaced with lidars (the optical equivalent of radars). Using these, Airbus's researchers were able to measure the shape of a vortex at different distances behind the leading aircraft.

The trailing pilots then proceeded, in careful stages, to approach closer and closer to the outer portion of the wake, while engineers in the back of the plane crunched data such as fuel consumption and the speed and accelerations of the two aircraft. Early in the tests, in 2016, over southern France, the team observed that by positioning the trailing aircraft at a particular distance—a "sweet spot"—the ride would be especially smooth, with the fuel-burn reduced by more than 10%.

This sweet spot, they found, is between one and a half and three kilometres behind the leader, and slightly to its side. Since the vortex shape and position change with altitude and temperature, as well as the velocity and weight of the leading aeroplane, so does the location of the sweet spot.

Working out how to incorporate all this into an aircraft's autopilot will take a while. Ms Bour Schaeffer hopes to run further tests next year and then, in 2021, to extend these to involve a pair of commercial airlines. The biggest obstacle, if those tests prove satisfactory, will be gaining the approval of air-traffic controllers and regulators. At a typical cruising speed a distance of two or three kilometres takes only a few seconds for a plane to cover, and the idea of flying that close for long distances has raised eyebrows among both pilots and engineers. Flight-control and precision-navigation technology are, though, getting better and better. And regulators may also wish to take into account the disfavour the air-travel industry is experiencing as a result of the carbon dioxide it is adding to the atmosphere. Saving fuel not only saves money, it also saves CO. ■

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Our books of the year
Word up

Word up

Our books of the year

They were about the IRA, Harper Lee's lost work, rational economics and an Ohio housewife

Print | Books and arts Dec 7th 2019

Politics and current affairs

Dignity: Seeking Respect in Back Row America. By Chris Arnade. *Sentinel; 304 pages; $30 and £25*

Over several years the author of this book, a former Wall Street trader, conducted thoughtful interviews in neglected communities across America, and took moving photographs of his subjects. The result is a quietly revelatory portrait of what he calls the country's "back row".

An American Summer: Love and Death in Chicago. By Alex Kotlowitz. *Nan A. Talese; 304 pages; $27.95*

Chicago has suffered 14,000 murders in the past two decades; overwhelmingly the victims are African-American or Hispanic. This is an intimate and sympathetic depiction of several people involved in, and affected by, deadly crime. The killings seem senseless, but, says the author, the city can do more to grasp their causes.

Winners Take All: The Elite Charade of Changing the World. By Anand Giridharadas. *Knopf; 304 pages; $26.95. Allen Lane; £12.99*

A timely polemic against philanthrocapitalism, which argues that supposedly do-gooding companies merely offer sticking-plaster solutions to social problems that they have helped create. Such efforts, the author says, do little to make up for a winner-takes-all philosophy that is holding down wages and transferring the burden of risk onto employees.

No Visible Bruises. By Rachel Louise Snyder. *Bloomsbury; 320 pages; $28*

It is the dark matter of violent crime: unseen but everywhere. This investigation into domestic violence in America blends harrowing testimony with persuasive recommendations on how to help victims and perpetrators. A book that manages to be both personal and panoramic, angry and hopeful.

Assad or We Burn the Country. By Sam Dagher. *Little, Brown; 592 pages; $29 and £25*

Although the horrors of Syria's civil war are well documented, this chronicle by a *Wall Street Journal* correspondent still offers new insights into a struggle that has reshaped the Middle East. Many are based on his rare access to Manaf Tlass, a one-time confidant of Bashar al-Assad, who charts the accidental president's metamorphosis into a blood-soaked dictator.

The Light that Failed. By Stephen Holmes and Ivan Krastev. *Pegasus Books; 256 pages; $26.95. Allen Lane; £20*

When the Soviet Union collapsed and communism fell, the countries of eastern Europe set out to emulate Western democracies. But, as the authors of this perceptive book eloquently relate, their attitude to liberal democracy soured amid globalisation and the financial crisis—forces that also fed the rise of nationalism in the West. Russia, meanwhile, replaced Soviet rule with a revanchist autocracy.

Presidential Misconduct: From George Washington to Today. Edited by James Banner junior. *New Press; 512 pages; $29.99*

In 1974 the special counsel to the impeachment inquiry commissioned a survey of presidential misconduct from Washington to Lyndon Johnson. Brought up-to-date with chapters on presidents from Richard Nixon to Barack Obama, this useful study supplies the scales on which more recent wrongdoing can be weighed.

History

Say Nothing. By Patrick Radden Keefe. *Doubleday; 464 pages; $28.95. William Collins; £20*

Framed as an inquiry into the death of Jean McConville, a mother of ten who was abducted and murdered by the IRA in 1972, this is a masterful exploration of the motives of terrorists, the stories they tell themselves and how they make the transition to peace—or, in some cases, fail to.

Remembering Emmett Till. By Dave Tell. *University of Chicago Press; 312 pages; $25 and £19*

A fine history of racism, poverty and memory in the Mississippi Delta told through the lynching of Emmett Till, a black 14-year-old from Chicago whose murder in 1955—and his mother's determination to display his mutilated features in an open coffin—made him an early martyr of the civil-rights movement.

Amritsar 1919: An Empire of Fear and the Making of a Massacre. By Kim Wagner. *Yale University Press; 360 pages; $32.50 and £20*

At least 379 people were killed by British soldiers in the Amritsar massacre on April 13th 1919, making that one of the darkest days in the history of the empire. On the event's centenary, this book persuasively argues that it was less of an aberration than apologists for empire, including Winston Churchill, have chosen to believe.

Maoism: A Global History. By Julia Lovell. *Knopf; 610 pages; $37.50. Bodley Head; £30*

Mao Zedong was a despot who caused tens of millions of deaths; yet his name does not attract the same opprobrium as Hitler's or Stalin's. Indeed, his legend and ideas have inspired revolutionaries around the world. As the author of this book shows, his manipulated image retains a powerful allure in China and beyond. "Like a dormant virus", she writes, "Maoism has demonstrated a tenacious, global talent for latency."

The Regency Years. By Robert Morrison. *W.W. Norton; 416 pages; $29.95. Published in Britain as "The Regency Revolution"; Atlantic Books; £20*

"I awoke one morning and found myself famous," Lord Byron, a Regency poet, once said. The period itself has suffered from the opposite problem—eclipsed by the more solemn and substantial Georgian and Victorian ones that preceded and followed it. Arguing that Britain truly started to become modern in the Regency era, this delightful book explains why it deserves to be better known.

How to be a Dictator. By Frank Dikötter. *Bloomsbury; 304 pages; $28 and £25*

What do Mussolini, Hitler, Stalin, Mao, Kim Il Sung, Nicolae Ceausescu, Papa Doc Duvalier and Mengistu Haile Mariam have in common? This insightful handbook for gangsters is written by a distinguished historian of 20th-century China.

Biography and memoir

An Impeccable Spy: Richard Sorge, Stalin's Master Agent. By Owen Matthews. *Bloomsbury; 448 pages; $30 and £25*

Richard Sorge's bravery and recklessness in the Soviet cause in Tokyo—where boozing and seduction were among his main espionage techniques—were matched by the venality and cowardice of his masters in Moscow. Despite their brutal incompetence, his intelligence helped turn the course of the second world war. A tragic, heroic story, magnificently told with an understated rage.

The Education of an Idealist. By Samantha Power. *Dey Street Books; 592 pages; $29.99. William Collins; £20*

An engaging insider's account of foreign-policymaking in what now seems like a different era of diplomacy. It describes the efforts of its author—Barack Obama's Irish-born ambassador to the United Nations—to juggle idealism with the realities of governing, while also juggling motherhood with the demands of representing America on the world stage.

Family Papers: A Sephardic Journey Through the Twentieth Century. By Sarah Abrevaya Stein. *Farrar, Straus and Giroux; 336 pages; $28*

This history of the Levy family of Salonika follows its subjects through interwar Greece to the present day. It is a painstaking feat of reconstruction that draws on correspondence in Ottoman Turkish, Hebrew, French and especially Ladino, the language of Sephardic Jewry. Much of the clan was murdered in Auschwitz in 1943; those who survive are now spread across the globe. And yet, the author says, they retain a family resemblance.

The Last Stone. By Mark Bowden. *Atlantic Monthly Press; 304 pages; $27. Grove Press; £16.99*

True-crime writers in America face a high bar, set by illustrious predecessors such as Truman Capote. The author of "Black Hawk Down" rises to the challenge in this reconstruction of how a horrific crime—the disappearance of two sisters from a mall in Maryland in 1975—was partially solved 40 years later. Dogged and ingenious interrogation of a mendacious suspect finally gets at the truth.

Economics

Good Economics for Hard Times. By Abhijit Banerjee and Esther Duflo. *PublicAffairs; 432 pages; $30. Allen Lane; £25*

The real meaning of this book by a Nobel-prizewinning duo of economists lies in its method—a patient attempt to take on tough problems through empirical evidence. Known for pioneering the use of randomised controlled trials, the pair offer insights into thorny global issues ranging from inequality to corruption, all with refreshing humility.

Open Borders. By Bryan Caplan. Illustrated by Zach Weinersmith. *First Second; 256 pages; $19.99. St. Martin's Press; £15.99*

An enlightened polemic in cartoon format, this book—by a team comprising an economics professor and an illustrator—persuasively rebuffs the arguments against migration commonly made by politicians. At the same time it shows how an accessible and respectful case can be made on a neuralgic subject.

Narrative Economics. By Robert Shiller. *Princeton University Press; 400 pages; $27.95 and £20*

The author, another Nobel laureate, explores how the public's subjective perceptions can shape economic trends. The result is a sensible and welcome escape from the dead hand of mathematical models of economics.

Schism. By Paul Blustein. *CIGI Press; 400 pages; $27.95. McGill-Queen's University Press; £27.99*

A fascinating, detailed account of the history of tensions in America's trade relationship with China. It explains the back story to today's conflict—and reveals how difficult it will be to escape it.

Capitalism, Alone. By Branko Milanovic. *Belknap Press; 304 pages; $29.95 and £23.95*

A scholar of inequality warns that while capitalism may have seen off rival economic systems, the survival of liberal democracies is anything but assured. The amoral pursuit of profit in more liberal capitalist societies has eroded the ethical norms that help sustain openness and democracy, he argues; now that tendency threatens to push such places in the direction of more authoritarian capitalist societies, such as China.

Culture and ideas

Furious Hours: Murder, Fraud and the Last Trial of Harper Lee. By Casey Cep. *Knopf; 336 pages; $26.95. William Heinemann; £20*

An ingeniously structured, beautifully written double mystery—one concerning the Reverend Willie Maxwell, who was accused of murdering five relatives for the insurance money in Alabama in the 1970s (before being fatally shot himself); the other, Harper Lee's abortive efforts to write a book about the case. Tom Radney, a lawyer who is the story's third main character, defended Maxwell—and his killer.

Kafka's Last Trial: The Case of a Literary Legacy. By Benjamin Balint. *W.W. Norton; 288 pages; $26.95. Picador; £14.99*

An account of the struggle over Kafka's papers between competing archives in Israel and Germany—plus a woman who inherited them from a friend of his editor, Max Brod—which played out after most of the writer's family had died in the Holocaust. A book about the provenance of art, and how much, in the end, it matters.

Underland: A Deep Time Journey. By Robert Macfarlane. *W.W. Norton; 384 pages; $27.95. Hamish Hamilton; £20*

A haunting examination of the world below the surface—a place that has always been envisioned as a zone of treasure and of dread. From the Paris catacombs to the soil of Epping Forest to caverns in remotest Norway, the author, a celebrated nature-writer, re-envisions the planet from the ground down.

Three Women. By Lisa Taddeo. *Simon & Schuster; 320 pages; $27. Bloomsbury Circus; £16.99*

Eight years of reporting went into this portrait of American sexuality from a female perspective. The author's three subjects "stand for the whole of what longing in America looks like"; she spent time in their home towns to study their daily routines, jobs and, above all, their desires. With a novelist's eye for detail, she captures the pain and powerlessness of sex, as well as its heady joys.

A Month in Siena. By Hisham Matar. *Random House; 126 pages; $27. Viking; £12.99*

The author's life and writing have been shaped by his Libyan father's kidnapping in 1990 by the regime of Muammar Qaddafi. In previous work he tried to uncover what happened; in this slim, bewitching book he finds answers, of a sort, by travelling to Siena. Meditating on art, history and the relationship between them, this is both a portrait of a city and an affirmation of life's quiet dignities in the face of loss.

This is Shakespeare. By Emma Smith. *Pelican; 368 pages; £20*

A brilliant and accessible tour of Shakespeare's plays that is also a radical manifesto for how to read and watch his work. Witty, irreverent and searching, this book, by a professor at Oxford University, shines dazzling new light on the oeuvre of the world's greatest literary genius.

Fiction

Stalingrad: A Novel. By Vasily Grossman. Translated by Robert and Elizabeth Chandler. *NYRB Classics; 1,088 pages; $27.95. Harvill Secker; £25*

At last, the Russian novelist-journalist's mighty prequel to "Life and Fate", his epic of the battle of Stalingrad and its aftermath, has received a definitive—and hugely powerful—English translation. A seething fresco of combat, domestic routine under siege and intellectual debate, it confirms that Grossman was the supreme bard of the second world war.

Ducks, Newburyport. By Lucy Ellmann. *Biblioasis; 1,040 pages; $22.95. Galley Beggar Press; £14.99*

The year's unlikeliest literary triumph: a 1,000-page fictional monologue delivered by a worried Ohio housewife and baker, much of which is made up of a single sentence. A prize-garlanded novel that is funny, angry, erudite, profound—and full of great cake recipes.

10 Minutes 38 Seconds in This Strange World. By Elif Shafak. *Bloomsbury; 320 pages; $27. Viking; £14.99*

The protagonist of this story is dead when it begins. The body of "Tequila Leila" has been dumped in a wheelie bin on the outskirts of Istanbul; yet, somehow, her mind remains active. While it does, she scrolls back through her life—a pained childhood, stalwart friends in adulthood—in a powerful, unflinching novel that, like all of the Turkish author's work, is political and lyrical at once.

Homeland. By Fernando Aramburu. Translated by Alfred MacAdam. *Pantheon; 608 pages; $29.95. Picador; £16.99*

A monumental novel—and a bestseller in Spanish—which explores how ETA's terrorism divided families and lifelong friends in a claustrophobic Basque town. Empathetic but morally acute, this may be the definitive fictional account of the Basque troubles; it suggests that redemption is hard but not impossible.

The Volunteer. By Salvatore Scibona. *Penguin Press; 432 pages; $28. Jonathan Cape; £16.99*

This intricate novel spans decades and continents and incorporates multiple, looping stories. After being captured in Cambodia, Vollie returns to America and is dispatched to New York to conduct surveillance on a supposed renegade Nazi. This assignment will come to haunt him, too. "Who among us", he asks, "has lived only once?" A searing yet poetic record of war and the lies people live by.

The Far Field. By Madhuri Vijay. *Grove Press; 448 pages; $27 and £14.99*

A courageous, insightful and affecting debut novel—and the winner of the prestigious JCB prize for Indian literature—which places a naive upper-class woman from southern India in the midst of far messier realities in Kashmir. Along the way, the story challenges Indian taboos ranging from sex to politics.

Trust Exercise. By Susan Choi. *Henry Holt; 272 pages; $27. Serpent's Tail; £14.99*

The title of this tricksy, beguiling novel, winner of a National Book Award, refers to the relationship between writer and reader, as well as to the bonding exercises undertaken by the theatre students in the story—and to the trust between teenage girls and predatory men. A tale of missed connections and manipulation, and of willing surrender to the lure and peril of the unknown.

Black Sun. By Owen Matthews. *Doubleday; 320 pages; $26.95. Bantam Press; £16.99*

Based on real events—the bid by Andrei Sakharov to develop a bomb to end all bombs—this story is set in a secret Soviet city in 1961. Featuring murder and betrayals, and a flawed but principled KGB man as its hero, it unfolds in the aftermath of Stalinism, amid the scars left by the purges, denunciations and Great Patriotic War. The prolific author (see Biography), a former Moscow correspondent, knows his terrain inside out.

Science and technology

The Uninhabitable Earth: Life After Warming. By David Wallace-Wells. *Tim Duggan Books; 320 pages; $27. Allen Lane; £20*

One of the most persuasive of the many books that spell out the consequences of climate change—and one of the most terrifying. As Earth moves beyond the conditions that allowed people to evolve, the author warns, "the end of normal" has arrived. Yet amid the rising seas, floods, fires, droughts and hurricanes, both current and impending, he remains optimistic about humanity's ability to deal with the havoc it has caused.

The New Rules of War: Victory in the Age of Durable Disorder. By Sean McFate. *William Morrow; 336 pages; $29.99*

A former paratrooper and mercenary makes the case that the American armed forces are ill-equipped for the conflicts of the 21st century. To keep the country safe, he contends, the top brass need to modernise their thinking, and respond to the information warfare that is now waged by their adversaries.

Good Reasons for Bad Feelings. By Randolph Nesse. *Dutton; 384 pages; $28. Allen Lane; £20*

A fascinating study of the evolutionary roots of mental illness. The author, a professor of psychiatry, argues that, in the right proportion, negative emotions may be useful for survival in a similar way to physical pain. Humans, he says, may have "minds like the legs of racehorses, fast but vulnerable to catastrophic failures".

Novacene: The Coming Age of Hyperintelligence. By James Lovelock with Bryan Appleyard. *MIT Press; 160 pages; $22.95. Allen Lane; £14.99*

In a brief but thought-provoking book, the scientist who developed the "Gaia Theory" about the Earth's life and climate—and who this year turned 100—predicts that cyborgs may eventually evolve to supplant carbon-based humankind. But don't despair: the robots, he suggests, might decide to keep people around as pets.

Giant leaps

To the Moon and back

These are the books our writers published in 2019

Print | Books and arts Dec 7th 2019

Genesis. By Geoffrey Carr. *Elsewhen Press; 285 pages; £9.99*

Our science editor's debut novel is a techno-thriller in which computerised devices suddenly go haywire; scientists and researchers perish in a string of mysterious accidents; and a billionaire inventor schemes to colonise Mars. Meanwhile, deep in the Cloud, someone—or something—is watching the havoc unfold.

Extreme Economies. By Richard Davies. *Farrar, Straus and Giroux; 416 pages; $28. Bantam Press; £20*

An exploration of the lessons to be drawn from disaster-stricken economies and imperilled (but innovative) people, which ranges from the jungles of Panama to post-tsunami Indonesia to the prison system of Louisiana and Syrian refugee camps. By a former economics editor, now at the London School of Economics.

The House on the Hill. By Christopher Impey. *Tangerine Press; 215 pages; £14*

This history of Brixton prison (now 200 years old) recalls the stints behind its bars of Mick Jagger, Oswald Mosley and Bertrand Russell, and chronicles its place in criminal-justice policy, from treadmills to rehabilitation schemes. By a senior producer on "The Intelligence", our daily podcast, who was formerly editor of National Prison Radio.

The Moon: A History for the Future. By Oliver Morton. *Hachette; 352 pages; $16.99. Economist Books; £20*

A multifaceted account of humankind's past relationship with the Moon—from the imaginings of artists to the Apollo missions—and of its possible future, from space tourism to Moon-mining and (perhaps) human settlement. "Brilliant and compelling", said the *Sunday Times*. "Engrossing", reckoned the *Washington Post*. By our briefings editor.

Uncommon Knowledge: The Economist Explains. Edited by Tom Standage. *Economist Books; 272 pages; $11.99 and £8.99*

A compendium of our explainer articles and daily charts, which spell out why Americans are sleeping more, why the global suicide rate is falling and why carrots were not always orange. Compiled by one of our deputy editors.

Cricket 2.0: Inside the T20 Revolution. By Tim Wigmore and Freddie Wilde. *Polaris; 320 pages; $28.95 and £17.99*

Through dozens of interviews with players and executives, Mr Wigmore, a frequent contributor on sport, and his co-author show how the shortened Twenty20 format has transformed cricket for an age of globalisation and big data. The *New Statesman* called it "a lucid and thoughtful guide".

Economic data, commodities and markets

Economic data, commodities and markets

Print | Economic and financial indicators Dec 5th 2019

Economic data

	Gross domestic product % change on year ago: latest		quarter*	2019†	Consumer prices % change on year ago: latest		2019†	Unemployment rate %	
United States	2.1	Q3	2.1	2.2	1.8	Oct	1.8	3.6	Oct
China	6.0	Q3	6.1	6.1	3.8	Oct	2.7	3.6	Q3§
Japan	1.3	Q3	0.2	1.0	0.2	Oct	0.9	2.4	Oct
Britain	1.0	Q3	1.2	1.2	1.5	Oct	1.8	3.8	Aug††
Canada	1.7	Q3	1.3	1.6	1.9	Oct	1.9	5.5	Oct
Euro area	1.2	Q3	0.9	1.2	1.0	Nov	1.2	7.5	Oct
Austria	1.5	Q3	-0.7	1.5	1.1	Oct	1.5	4.6	Oct
Belgium	1.6	Q3	1.7	1.3	0.4	Nov	1.3	5.6	Oct
France	1.4	Q3	1.1	1.3	1.0	Nov	1.3	8.5	Oct
Germany	0.5	Q3	0.3	0.5	1.1	Nov	1.3	3.1	Oct
Greece	1.9	Q2	3.4	1.9	-0.7	Oct	0.6	16.7	Aug
Italy	0.3	Q3	0.2	0.2	0.4	Nov	0.6	9.7	Oct
Netherlands	1.9	Q3	1.8	1.7	2.7	Oct	2.7	4.3	Oct
Spain	2.0	Q3	1.7	2.1	0.4	Nov	0.9	14.2	Oct
Czech Republic	3.4	Q3	1.5	2.6	2.7	Oct	2.8	2.2	Oct‡
Denmark	2.1	Q3	1.3	2.1	0.6	Oct	0.8	3.7	Oct
Norway	1.3	Q3	0.1	1.0	1.8	Oct	2.2	3.9	Sep‡‡
Poland	4.2	Q3	5.3	4.0	2.6	Nov	2.2	5.0	Oct§
Russia	1.7	Q3	na	1.1	3.8	Oct	4.5	4.6	Oct§
Sweden	1.7	Q3	1.1	1.2	1.6	Oct	1.8	6.0	Oct§
Switzerland	1.1	Q3	1.6	0.8	-0.1	Nov	0.4	2.3	Oct
Turkey	0.9	Q3	na	-0.3	10.6	Nov	14.8	14.0	Aug§
Australia	1.7	Q3	1.8	1.6	1.7	Q3	1.6	5.3	Oct
Hong Kong	-2.9	Q3	-12.1	-0.3	3.1	Oct	3.0	3.1	Oct‡‡
India	4.5	Q3	4.5	4.9	4.6	Oct	3.4	7.5	Nov
Indonesia	5.0	Q3	na	5.1	3.0	Nov	3.1	5.3	Q3§
Malaysia	4.4	Q3	na	4.5	1.1	Oct	0.8	3.3	Sep§
Pakistan	3.3	2019**	na	3.3	12.7	Nov	9.8	5.8	2018
Philippines	6.2	Q3	6.6	5.7	1.3	Nov	2.3	4.5	Q4§
Singapore	0.5	Q3	2.1	0.5	0.4	Oct	0.6	2.3	Q3
South Korea	2.0	Q3	1.7	1.8	0.2	Nov	0.4	3.0	Oct§
Taiwan	3.0	Q3	2.4	2.5	0.4	Oct	0.5	3.7	Oct
Thailand	2.4	Q3	0.4	2.4	0.2	Nov	0.7	1.0	Oct§
Argentina	0.6	Q2	-1.3	-3.3	50.5	Oct‡	53.7	10.6	Q2§
Brazil	1.2	Q3	2.5	0.8	2.5	Oct	3.6	11.6	Oct§‡‡
Chile	3.3	Q3	3.0	1.8	2.5	Oct	2.4	7.0	Oct§‡‡
Colombia	3.3	Q3	2.3	3.1	3.9	Oct	3.5	9.8	Oct§
Mexico	-0.3	Q3	0.1	0.1	3.0	Oct	3.6	3.6	Oct
Peru	3.0	Q3	2.9	2.6	1.9	Nov	2.1	6.7	Oct§
Egypt	5.6	Q3	na	5.6	3.1	Oct	8.4	7.8	Q3§
Israel	4.1	Q3	4.1	3.2	0.4	Oct	0.9	3.4	Oct
Saudi Arabia	2.4	2018	na	1.0	-0.3	Oct	-1.2	5.6	Q2
South Africa	0.1	Q3	-0.6	0.6	3.7	Oct	4.2	29.1	Q3§

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. ‡‡3-month moving average.

The Economist

Economic data

	Current-account balance	Budget balance	Interest rates			Currency units	
	% of GDP, 2019†	% of GDP, 2019†	10-yr gov't bonds latest,%		change on year ago, bp	per $ Dec 4th	% change on year ago
United States	-2.4	-4.8	1.8		-135	-	
China	1.5	-4.3	3.0	§§	-12.0	7.07	-3.3
Japan	3.2	-2.9	-0.1		-19.0	109	3.9
Britain	-4.2	-2.1	0.8		-64.0	0.76	4.0
Canada	-2.3	-0.9	1.5		-63.0	1.32	nil
Euro area	3.1	-1.1	-0.3		-57.0	0.90	-2.2
Austria	1.7	0.1	-0.1		-61.0	0.90	-2.2
Belgium	-0.1	-1.6	nil		-82.0	0.90	-2.2
France	-0.7	-3.2	nil		-66.0	0.90	-2.2
Germany	6.6	0.5	-0.3		-57.0	0.90	-2.2
Greece	-2.5	0.4	1.6		-265	0.90	-2.2
Italy	2.9	-2.2	1.4		-178	0.90	-2.2
Netherlands	9.6	0.6	-0.2		-66.0	0.90	-2.2
Spain	0.8	-2.3	0.5		-103	0.90	-2.2
Czech Republic	0.5	0.2	1.5		-54.0	23.1	-1.0
Denmark	7.8	1.6	-0.3		-52.0	6.74	-2.5
Norway	5.4	6.5	1.4		-41.0	9.16	-7.3
Poland	-0.7	-2.0	2.0		-106	3.86	-2.3
Russia	6.2	2.3	6.5		-221	63.9	4.2
Sweden	3.5	0.4	nil		-48.0	9.51	-5.3
Switzerland	10.2	0.5	-0.6		-55.0	0.99	1.0
Turkey	-0.2	-2.9	11.9		-478	5.75	-6.3
Australia	0.1	0.1	1.1		-147	1.46	-6.8
Hong Kong	4.4	0.1	1.6		-64.0	7.83	-0.4
India	-1.8	-3.9	6.5		-111	71.5	-1.4
Indonesia	-2.2	-2.0	7.1		-62.0	14,105	1.3
Malaysia	3.1	-3.5	3.4		-65.0	4.18	-0.7
Pakistan	-3.5	-8.9	11.3	†††	-119	155	-11.3
Philippines	-1.3	-3.2	4.6		-240	51.0	3.0
Singapore	14.3	-0.3	1.7		-58.0	1.36	nil
South Korea	3.0	0.6	1.7		-44.0	1,194	-7.4
Taiwan	12.0	-1.0	0.7		-25.0	30.5	0.7
Thailand	6.0	-2.8	1.4		-96.0	30.3	7.9
Argentina	-1.4	-4.3	11.3		562	59.9	-38.0
Brazil	-1.9	-5.8	4.7		-330	4.19	-8.6
Chile	-1.5	-1.7	3.4		-105	793	-15.8
Colombia	-4.4	-2.5	6.1		-82.0	3,482	-8.8
Mexico	-1.1	-2.7	7.1		-202	19.5	5.3
Peru	-2.1	-2.0	5.6		64.0	3.38	nil
Egypt	-0.8	-7.0	na		nil	16.1	11.1
Israel	2.4	-3.9	0.8		-162	3.47	7.5
Saudi Arabia	1.9	-6.0	na		nil	3.75	nil
South Africa	-3.9	-5.9	8.4		-50.0	14.6	-6.1

Source: Haver Analytics. §§5-year yield. †††Dollar-denominated bonds.

Markets

In local currency	Index Dec 4th	% change on: one week	% change on: Dec 31st 2018
United States S&P 500	3,112.8	-1.3	24.2
United States NAScomp	8,566.7	-1.6	29.1
China Shanghai Comp	2,878.1	-0.9	15.4
China Shenzhen Comp	1,608.5	0.4	26.9
Japan Nikkei 225	23,135.2	-1.3	15.6
Japan Topix	1,703.3	-0.5	14.0
Britain FTSE 100	7,188.5	-3.2	6.8
Canada S&P TSX	16,897.3	-1.2	18.0
Euro area EURO STOXX 50	3,660.0	-1.4	21.9
France CAC 40	5,799.7	-2.1	22.6
Germany DAX*	13,140.6	-1.1	24.4
Italy FTSE/MIB	23,034.2	-1.9	25.7
Netherlands AEX	591.0	-1.2	21.1
Spain IBEX 35	9,270.8	-1.0	8.6
Poland WIG	56,123.7	-3.0	-2.7
Russia RTS, $ terms	1,430.0	-0.8	34.1
Switzerland SMI	10,334.6	-1.8	22.6
Turkey BIST	107,701.3	1.8	18.0
Australia All Ord.	6,714.4	-3.4	17.6
Hong Kong Hang Seng	26,062.6	-3.3	0.8
India BSE	40,850.3	-0.4	13.3
Indonesia IDX	6,112.9	1.5	-1.3
Malaysia KLSE	1,560.9	-1.7	-7.7
Pakistan KSE	40,270.5	5.6	8.6
Singapore STI	3,159.8	-1.7	3.0
South Korea KOSPI	2,068.9	-2.8	1.4
Taiwan TWI	11,510.5	-1.2	18.3
Thailand SET	1,565.5	-2.6	0.1
Argentina MERV	34,691.6	2.2	14.5
Brazil BVSP	110,300.9	2.4	25.5
Mexico IPC	42,191.9	-2.0	1.3
Egypt EGX 30	13,635.5	-0.9	4.6
Israel TA-125	1,600.7	-1.0	20.1
Saudi Arabia Tadawul	7,871.2	0.2	0.6
South Africa JSE AS	55,022.9	-2.0	4.3
World, dev'd MSCI	2,275.5	-1.2	20.8
Emerging markets MSCI	1,036.6	-1.6	7.3

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2018
Investment grade	155	190
High-yield	511	571

Sources: Datastream from Refinitiv; Standard & Poor's Global Fixed Income Research.
*Total return index.

Commodities

The Economist **commodity-price index**

2015=100	Nov 26th	Dec 3rd*	% change on month	% change on year
Dollar Index				
All Items	111.2	111.2	nil	6.7
Food	97.7	98.5	1.6	6.4
Industrials				
All	123.8	123.0	-1.2	6.9
Non-food agriculturals	98.9	99.0	2.1	-10.0
Metals	131.2	130.2	-2.0	11.6
Sterling Index				
All items	132.2	130.6	-1.0	4.5
Euro Index				
All items	111.9	111.3	-0.1	9.2
Gold				
$ per oz	1,459.7	1,478.8	-0.4	19.4
Brent				
$ per barrel	63.9	61.2	-2.8	-1.5

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.

The Economist

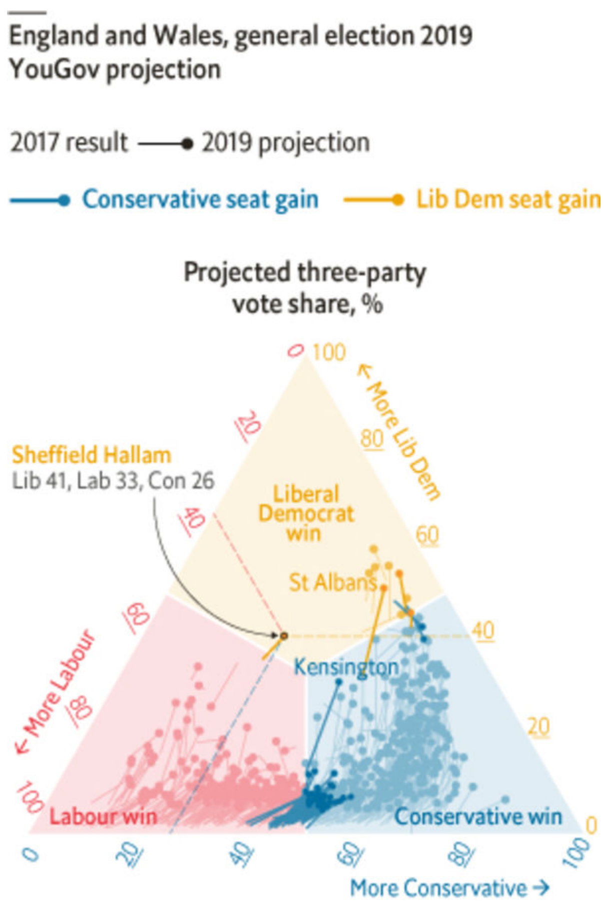
Britain's election
Yellow submarine

Dual threat

Voting Lib Dem could hurt the Tories as much as Labour

The third party could pick off Tory Remain seats, while harming Labour in marginals

Print | Graphic detail Dec 7th 2019



PERHAPS THE only view shared by Britain's big parties is that backing the Liberal Democrats is a dire risk. "A vote for the Lib Dems gets you Brexit," Labour warns. "A vote for the Lib Dems risks putting Corbyn in Downing Street," claim the Tories.

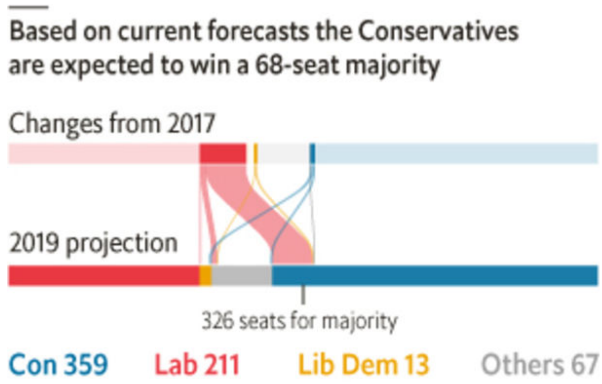
Both sides cannot be right. However, survey data of 100,000 Britons from YouGov, a pollster, imply that both parties are wrong. Because the Lib Dems have pulled votes equally from their two rivals, further growth in their support would probably cost both Labour and the Tories seats.

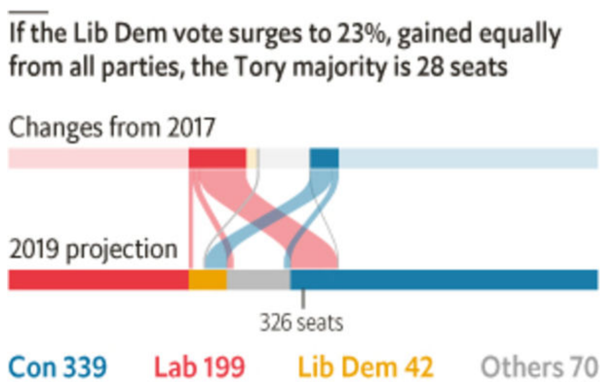
With Labour neutral on Brexit, the Lib Dems are the main national pro-Remain party. Voters have noticed. YouGov's data show that the few Leavers who backed the Lib Dems in 2017 largely plan to defect. But the party should pick up a fifth of the Remainers who voted Conservative last time, and 13% of Remain-supporting Labourites.

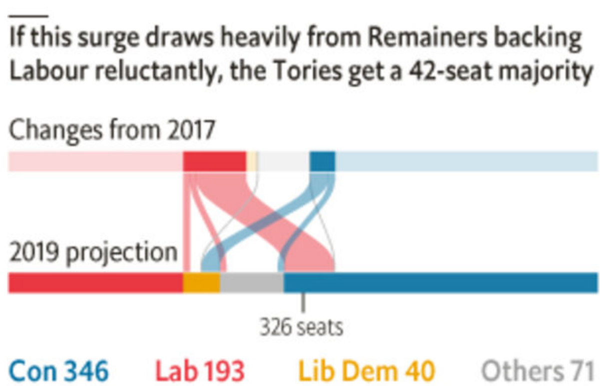
This has doubled the Lib Dems' vote share, from 7% in 2017 to 14% in YouGov's poll. But it may not yield many new seats, because Lib Dem voters are spread out geographically. YouGov matched personal data from respondents with the demography of each constituency to estimate voting results in every seat. The Lib Dems come first in just 13.

Jo Swinson's party has fallen back in recent polls. However, late surges are common in British elections, particularly when tactical voting is widespread. How might the race change if the Lib Dems approach the 23% vote share they won in 2010?

To find an answer, we scaled up their popularity in every constituency to reach a scenario in which their national vote share was 23%. First, we grouped Britons based on their Brexit vote and whom they supported at the last general election—for example, Leavers who voted Lib Dem in 2017. According to YouGov, just 30% of these people plan to stick with the Lib Dems. To get to a national share of 23%, the party would need its support in this category to double. Next, we estimated how many voters in each group (such as Labour Leavers) live in each constituency, to determine the seat-by-seat impact of a Lib Dem surge.







In terms of winning seats in England for themselves, the Lib Dems pose a serious threat only to the Tories. There are 13 seats in which those two parties are the front-runners and are separated by a single-digit margin. Between the Lib Dems and Labour, the only close fight is in Sheffield Hallam.

However, the Lib Dems could still hurt Labour, by taking votes from the left-wing party and letting the Tories sneak through. This is especially likely in Tory-Labour marginals in the north and Midlands.

Which of these two effects is larger depends on tactical voting. We explored two endings for our hypothetical scenario: one in which Lib Dems surge uniformly, and one in which they disproportionately rally in seats where their former supporters have reluctantly flipped to Labour, hoping to prevent a hard Conservative Brexit.

If the swing is uniform, the Tories will lose out most, with perhaps 25 seats going from blue to yellow. If tactical Labour voters flock back to the Lib Dems, it will be Jeremy Corbyn who suffers more. But in both cases, late gains for Britain's third party would leave the main two worse off. ■

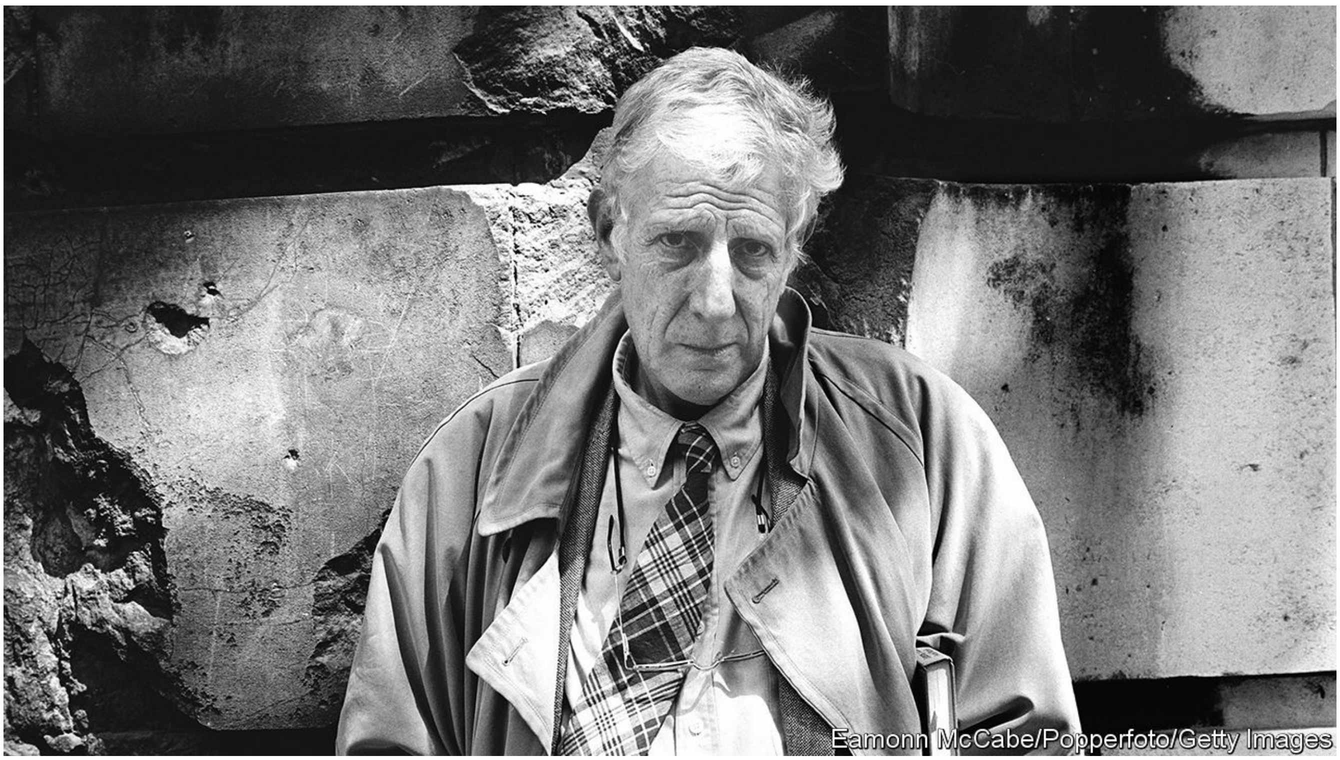
Sources: Electoral Commission; British Election Study; YouGov; Chris Hanretty, *Political Studies Review*, 2019; *The Economist*

Intention and accident

Obituary: Jonathan Miller died on November 27th

The alternate pillar and goad of the British cultural scene was 85

Print | Obituary Dec 5th 2019



WHENEVER HE ERUPTED onto a set or into a studio, Jonathan Miller made an instant impression. Part came from his height and gawkiness, the tweed jacket, the excessively angular elbows and knees (since the body was not only possesssed *by* him but also possessed him, making up a large part of what he actually was, including his notions of effort and success). But he also drew attention because, as often as not, he had a book of neuroscience in his hand.

The point he was making was this. Science was hard, and needed constant application. But the sort of thing he spent five decades doing, putting on plays, making television documentaries, directing more than 50 operas, he could achieve with his left hand behind his back. Art was easy, ridiculously so. Most television was utter banality; most opera forgettable, vulgar and sentimental. So it took very little originality to make them memorable. He liked to invoke the psychologists' duck-rabbit sketch, in which the seeing of the duck precluded the alternative seeing of the rabbit, and vice versa; to bring to the fore "aspects" of a work, as Wittgenstein said, that had previously been invisible, so that audiences would perceive it in a completely different way.

For the BBC in 1966, for example, he turned "Alice in Wonderland", which had been horribly Disneyfied, into a Victorian child's dream of a hot Oxford summer in which all the characters were prating or dozing dons. That was what the story was about: Oxford, childhood. (People who said it was Freudian clearly knew nothing about Freud.) In 1982 he set Verdi's "Rigoletto" in Little Italy in New York, with mobsters swaggering and "La Donna è Mobile" kicked out of a jukebox, because Verdi's duke was clearly a hoodlum too, and the atmosphere that of "The Godfather". His "Così fan Tutte" in 1995 had costumes by Armani, huge mirrors and mobile phones, a comment on the narcissism of the modern age. His "St Matthew Passion" took the performers out of their tuxedos and inert choirs and put them in a circle, in their own clothes, acting out the drama; his film of "The Symposium", called "The Drinking Party", put the actors into dinner jackets as old boys at a school reunion, reading Plato's discourse on love in one of the temples at Stowe.

All those were great successes, cementing his reputation as the most brilliant mind on the British cultural scene, and yet even then he agonised over why he was doing this. He had meant to be a doctor, specifically a neurologist. Instead, probably out of weak-mindedness, he always said "yes" whenever anyone turned up at his door and asked if he would like to play. (It was almost involuntary, like blushing or sneezing, and he could never identify the point at which the conscious exercise of intention occurred.) The first of these accidents happened when he was lured away from his medical training by three Cambridge friends, Alan Bennett, Peter Cook and Dudley Moore, to write and perform in "Beyond the Fringe" in 1960, a revue which pilloried everything the English held dear, from the Battle of Britain to tea to Shakespeare. After this had electrified both London and New York, it was hard to go back to hospital work. But he would have done, had he not been invited to direct a play at the Royal Court…then to direct opera for Sadler's Wells…then to the National Theatre…and so it went. He fell into work as he fell into long-lasting love, accidentally.

Yet he should have stayed intentionally with medicine. First, because what he was doing was ephemeral, even when his "Rigoletto" and his "Mikado"(translated to the Marx Brothers' Fredonia, and with the Japanese stripped out) were both in the repertoire for decades. By contrast, originality in medicine could bring lasting benefit. And second, because in science one was either right or wrong, and one's work was peer-reviewed by people who at least knew the topic. Instead he had to put up with critics, snivelling pipsqueaks who knew 100% less than he did about the piece in question but whined that he was messing it around. When they called him a polymath, a term he loathed, they really meant he was a jack of all trades and master of none. What idiot invertebrates they all were, like the sea slugs he had collected as a boy and then had the greatest pleasure dissecting and slicing for his microscope. God (though it had never occurred to him that there might be a God) could rot the lot of them.

As some consolation, he could bring his medical expertise to bear on art. For the BBC he produced a television series, "The Body in Question", in which among a firework display of observations he compared red blood cells clotting to Duchamp's "Nude descending a staircase" and the movement of cilia on cells to Van Gogh's "Wheatfield with Lark". His radio series on madness featured the voices of both experts and those being treated. In opera, too, he applied the knowledge gained from listening to, and watching, patients. In "La Traviata" he asked Violetta to twist her hair as she sang, another almost involuntary gesture, and strictly made her stay in bed for her death aria. It was a full-time business, dying.

The incremental world

England he found difficult, with its snobberies and condescensions. His knighthood (though of course he said yes to it, weakly, as ever) made him shrivel up. He could have lived in New York, where he briefly worked for the *New Yorker* and where, for the first time, he felt Jewish. But he stayed put, moving all of a mile from Park Crescent NW1, where he was born, to Gloucester Crescent NW1, with Alan Bennett over the road. He lived among countless books, the notebooks in which he recorded his curiosity about everything, and his photographs of bits of buildings and superimposed layers of posters on walls, the discrete instalments from which his perception of the world incrementally emerged.

Did all this add up to a triumphant life? Many would have thought so. In moments of relaxation and satisfaction he would rock his long frame back and clasp his hands behind his head. But Wittgenstein's nagging question remained: exactly what made the difference between "I lift my arms," and "My arms go up"? ■