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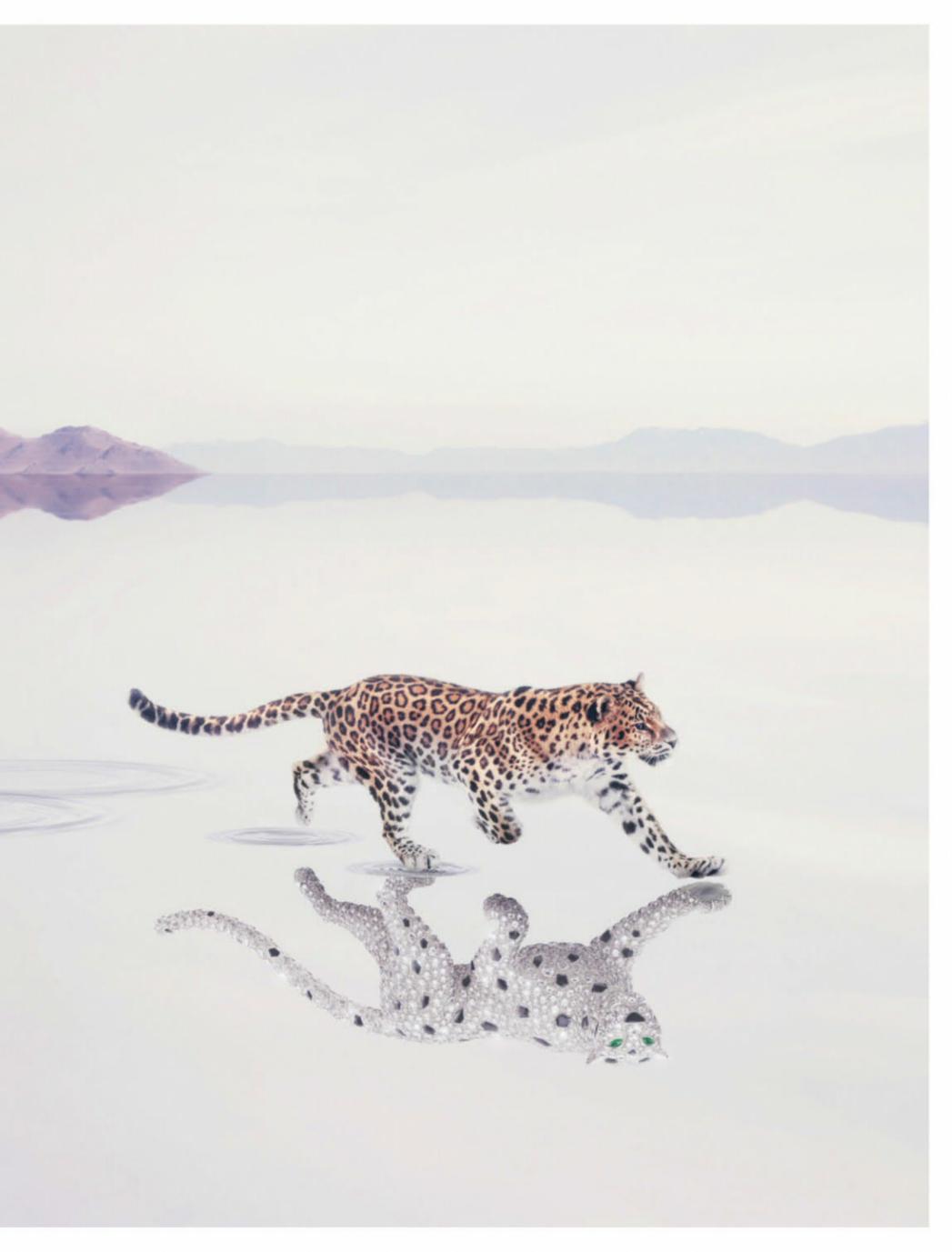
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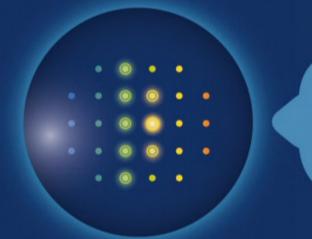
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King Bibi

The parable of a modern populist







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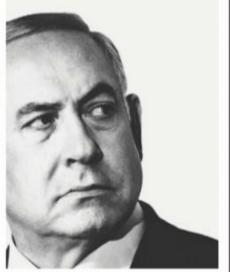
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then we can conquer Par rinson's

Rich / Parkinson's Patient

Doug / Parkinson's Researcher

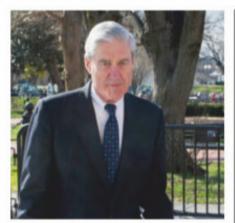
Rich, a former astronaut, is one of nearly 1 million Americans living with Parkinson's. Doug is one of the thousands of American researchers working each day to stop it. With over 500 new medicines in development for neurological disorders, the brain is truly the final frontier.

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Biopharmaceutical Companies

^a The world this week Politics



After almost two years investigating Russian interference in America's presidential election of 2016, Robert Mueller presented his report to William Barr, the attorneygeneral, who released a summary. The special counsel found no collusion between anyone on Donald Trump's campaign and the Russians who had meddled in the election. Questions about whether the president tried to obstruct justice were left "unresolved". Democrats were not pleased; they want Mr Barr to release the full report to Congress.

In a sharp reversal of its earlier position, the Justice Department said it would now support striking down the whole of **Obamacare**, rather than certain aspects of it. The health-care act is going through a tortuous legal appeals process and will probably end up before the Supreme Court.

Mr Trump caused confusion when he tweeted that he had overturned "additional largescale sanctions" against **North Korea**. That led to much head-scratching, since no such sanctions had been announced. He may have been thinking of planned measures, or of penalties for Chinese firms involved in sanctionsbusting.

Historical revision

Mexico's president, Andrés Manuel López Obrador, asked Spain to apologise for crimes committed against indigenous Mexicans by the conquistadors 500 years ago. He also asked the Vatican to say sorry. Spain refused to apologise, saying the conquest "cannot be judged in the light of contemporary considerations".

Two Russian military planes with some 100 troops and tonnes of equipment aboard arrived in Caracas, **Venezuela's** capital. Russia backs Nicolás Maduro, the country's leftwing dictator. America's secretary of state, Mike Pompeo, told the Russian foreign minister, Sergei Lavrov, that "the United States and regional countries will not stand idly by as Russia exacerbates tensions in Venezuela."

Michel Temer, **Brazil's** president until this year, was released from jail four days after being arrested at the request of prosecutors investigating corruption. He was not charged with a crime.

An ever-present danger

Israel exchanged heavy fire with Palestinian militants in Gaza. The fighting started when a rocket from Gaza hit a house north of Tel Aviv. No deaths were reported. Binyamin Netanyahu, Israel's prime minister, cut short a trip to America to deal with the crisis.

Donald Trump signed a proclamation recognising Israel's control of the **Golan Heights**, which it captured from Syria in 1967. Arab countries rejected the move, which was seen as a political gift to Mr Netanyahu just weeks before Israel holds an election.

An American-backed Kurdish and Arab militia ousted the jihadists of **Islamic State** from their last foothold in Syria. IS now resembles a more conventional terrorist group, with lots of money but no territory.

After weeks of protests against the ailing president, Abdelaziz Bouteflika, **Algeria's** army chief, Ahmed Gaid Salah, demanded that he be declared unfit to rule. Mr Salah had previously stood by Mr Bouteflika's attempt to remain president while holding a national conference on Algeria's political future. Many

Algerians think Mr Salah should go, too.

The UN investigated a massacre of Fulani villagers in central **Mali** in which perhaps 160 people were killed by militias from the Dogon ethnic group. Intercommunal violence has led to as many as 600 deaths in the region over the past year.

Estimates of the number of deaths caused by a tropical cyclone in **Mozambique** increased to the thousands. Rescue workers believe that several thousand people have died and that their bodies have been washed out to sea. Another 180 are thought to have died in Zimbabwe.

A close-run thing



Initial results from **Thailand's** election suggested that parties opposed to the current military junta had won roughly half the seats in the lower house of parliament. Leaders of the biggest such party, Pheu Thai, claimed the right to form a government. But they also expressed fears that the Election Commission would find ways to deprive them of their victory.

India's prime minister, Narendra Modi, announced that the armed forces had successfully tested an antisatellite missile; he declared India to be a "space power". Opposition politicians dismissed the test as an electoral stunt.

The ruling Liberal Party won a third term in government in **Australia's** most populous state, New South Wales. The result defied the national polls, which show the Liberals trailing the opposition Labor Party, giving them hope ahead of the national election due in May.

An explosion at a pesticide factory in Xiangshui, a county in the **Chinese** province of Jiangsu, killed at least 78 people. It was China's worst industrial accident since 2015.

The Chinese Communist Party expelled Meng Hongwei, a former president of Interpol and vice-minister of public security. The party accused Mr Meng of accepting "huge amounts" of money and gifts in exchange for appointments, and of using public money to fund his family's "extravagant" lifestyle. He was detained last year, while still in office at Interpol's headquarters in France, during a trip to Beijing.

China's **Tsinghua University** suspended a legal scholar, Xu Zhangrun, from his teaching posts and placed him under investigation because of articles he wrote criticising China's president, Xi Jinping.

Day by day

After voting to wrest control of the Brexit process from the government, British MPs failed to come up with any alternative, rejecting eight amendments that attempted to find a path out of the chaos. This was after the EU granted the government a short extension to the date on which Britain will leave, which could be April 12th if the withdrawal agreement struck between Theresa May and the EU does not pass Parliament. In a bid to woo support for that deal, Mrs May offered to resign as prime minister before the next phase of the negotiations.

China's president, Xi Jinping, visited Europe. In Rome, the **Italian government** signed an agreement to take part in China's Belt and Road Initiative, the first G7 country to do so. Dozens of trade deals were signed with other European countries. Mr Xi also attended a summit with Emmanuel Macron and Angela Merkel.

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The world this week Business

At a product launch focused squarely on digital services (rather than a new device) Apple unveiled its videostreaming **Apple TV**+ app. Featuring original programmes as well as content from cable channels, such as HBO, the app will be available on certain smart televisions and on Amazon Fire and Roku. The move into Netflix's territory comes as Apple faces slowing demand for the iPhone.

Purdue Pharma, which makes OxyContin, an opioid painkiller blamed for a surge in addiction and overdose deaths in America, paid \$270m to settle a civil lawsuit brought by the state of Oklahoma. Dozens of lawsuits have been lodged against Purdue and other drug companies in America. Oklahoma claimed that Purdue's aggressive marketing of Oxv-Contin drove the epidemic of opioid addiction. Charitable trusts funded by the **Sackler** family, which owns Purdue, are on the defensive; several museums say they will not accept further donations.

Moore's law

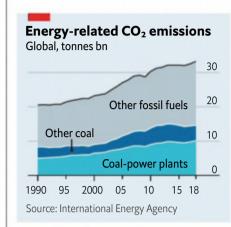
Donald Trump said he would nominate **Stephen Moore** to the board of the Federal Reserve. Mr Moore founded the Club for Growth, which backs politicians who pursue lower taxes and smaller government. He is a controversial choice, having called for the Fed to target commodity prices and described Jerome Powell, its chairman, as "totally incompetent" (he says he now regrets making the remark).

The board of **Swedbank** sacked its chief executive, shortly before a shareholders' meeting that was going to discuss her fate. A day earlier Swedish authorities had raided the bank's offices in Stockholm as part of a growing moneylaundering investigation, amid allegations that €135bn (\$152bn) of money from mostly Russian clients had passed through Swedbank's branch in Estonia. A regulator in New York state has also reportedly opened inquiries into Swedbank on several fronts.

After another plunge in the lira, Turkey's central bank said it would use its "liquiditymanagement tools" to prop up the currency. The banking authority, meanwhile, began an investigation into JPMorgan Chase, because of what it described as the bank's "manipulative" advice to sell the lira. Data showing a drop in Turkey's foreign-currency reserves triggered more volatile trading.

Criticism of the relationship between **Boeing** and aviation regulators continued to mount following the crash of a second 737 MAX 8 aircraft. The acting head of the Federal Aviation Administration was hauled in front of Congress, where he defended the plane's certification process. To add to the pressure on Boeing, Airbus sealed a huge order for 300 jets from China.

The European Parliament voted in favour of a controversial **digital copyright law**. Two bits of the new directive have drawn the most ire from opponents: getting search engines and news aggregators to pay for links from news websites, and holding internet companies responsible for material published without permission. On the latter measure, websites such as YouTube worry they will need to implement pre-emptive blocking to avoid being sued.



Energy-related carbon emissions grew by 1.7% in 2018 to a historic high of 33bn tonnes, according to the International Energy Agency. That was in part because of adverse weather, which increased demand for heating and cooling. China's emissions were up by 2.5%, and America's by 3.1%. Emissions declined in Britain, France, Germany and Japan.

The British government said that telecoms gear made by **Huawei** remains riddled with bugs and security flaws, and that the Chinese firm shows little sign of addressing the problems. America has publicly warned its allies against using Huawei's kit, citing espionage worries, though not all have followed its advice.

Ahead of **Lyft's** long-awaited IPO, **Levi Strauss** made a successful return to the stockmarket. The jeansmaker's share price did a zippy trade on its first day, closing well above the offer price of \$17.

Uber, which is expected to make its stockmarket debut next month, struck a deal to buy Careem, a rival ride-hailing firm that operates in 15 countries in and around the Middle East. Valued at \$3.1bn, it is Uber's biggest acquisition.

On a mission

American boots might be back on the Moon sooner than had been thought. Mike Pence, America's vice-president, said the administration aimed to put someone on the lunar surface by 2024, four years ahead of NASA's estimate of 2028 (and before the end of a possible second term for Donald Trump). That is one giant leap in ambitions. A new launch system to propel crews into deep space has been plagued by delays. If Mr Pence wants to win what he said is a new "space race", he might have to turn to SpaceX or other commercial rocket-providers.





King Bibi: a parable of modern populism

In Israel, as elsewhere, politics is a perplexing mix of sound policy and the cynical erosion of institutions

H IS DEVOTEES call him "The Magician", "The Winner" and the ultimate accolade—*melekh yisrael*, "King of Israel". Binyamin Netanyahu is Israel's most gifted politician in a generation. He is his country's second-longest-serving prime minister and, if he wins his fifth election on April 9th, may beat the record of the country's founding father, David Ben Gurion.

"Bibi", as he is known by all, is important beyond Israel, too, and not only because he speaks in perfect soundbites in both Hebrew and English and stands tall in today's chaotic Middle East. He matters because he embodied the politics of muscular nationalism, chauvinism and the resentment of elites long before such populism became a global force. Mr Netanyahu counts among his friends and allies such nationalists as Donald Trump and Narendra Modi, not to mention European ones from Viktor Orban in Hungary to Matteo Salvini in Italy.

The reign of King Bibi is thus a parable of modern politics: the rise of a talented politician and a long success based on a perplexing mixture of carrying out sound policy and cynically sowing division. As his power is threatened, he has turned to railing more loudly against the free press, the judiciary and shadowy forces. Now Bibi faces his greatest danger, in the form of criminal charges for corruption. In a different age he would have had to resign, and would now be defending himself as an ordinary citi-

zen. But he is intent on remaining in office, and hopes that voters will yet save him from the policemen, prosecutors and judges. Israeli politics is turning into a contest between genuine achievement and demagoguery on one side and the rule of law on the other. All who care about democracy should watch closely.

Little Israel commands attention because it has a big history: biblical romance and techno-

logical talent; the slaughter of the Holocaust and military prowess; energetic democracy and the long occupation of land claimed and inhabited by Palestinians. That said, Mr Netanyahu is a big figure in his own right (see Briefing). He is more intelligent and capable than many populists, and can claim plenty of successes. By shrinking the bloated state he has helped Israel's economy flourish, particularly its tech startups. With deft use of diplomacy and the mostly cautious use of military force, he has boosted security without being sucked into disastrous wars. Thanks to that and a shared hostility to Iran, relations with many Arab rulers are better than at any time in Israel's history.

Yet Mr Netanyahu is also worryingly dogmatic. He has paid lip service to peace with Palestinians but has taken no meaningful steps towards it. He has denounced any Western co-operation with Iran, even if it served to limit Iran's nuclear programme. In Bibi's pessimistic view, Israel is surrounded by wolves in sheep's clothing and wolves in wolves' clothing. Israel can only manage conflicts, not solve them, he believes, so it must rely on an iron wall and the passage of time.

Such "anti-solutionism" risks storing trouble for the future. It increases the danger of war with Iran, or of its hardliners making a dash for nukes. The more Israel entrenches itself in the West Bank, the more its "temporary" military occupation looks like

ALL A

the permanent subjugation of Palestinians under a separate law, even apartheid. This is made worse by the absence of America's restraining influence. Mr Netanyahu has warmly embraced Mr Trump, who in turn has showered him with gifts, most recently his endorsement of Israel's annexation of the Golan Heights. Might Mr Trump also back Israel's annexation of bits of the West Bank, so denying Palestinians the hope of statehood? In the long run Bibi's overt alignment with America's Republicans and the evangelical right endangers the bipartisan pro-Israeli consensus in Washington that is the foundation of Israel's security.

But the greatest threat from Bibi's reign has been at home. He has kept power not just on the strength of his record but also by seeking political advantage at the cost of eroding Israel's democratic norms. In claiming that no peace with Palestinians is possible (or desirable), members of his right-wing coalition outbid each other to pass measures asserting Jewish supremacy. Mr Netanyahu pushed for an electoral pact with the hitherto untouchable far-right Jewish Power group, which wants to annex all the occupied territories and "encourage" Arabs, including Israeli citizens, to leave. He has played us-and-them politics for so long that he has exacerbated the country's many schisms—between Jews and Arabs, diaspora Jews and Israelis, western Ashkenazi and eastern Mizrahi Jews, and secular and religious ones.

> By casting himself as uniquely able to protect Israel against its enemies, he often treats those who say otherwise as wimps or traitors.

> Mr Netanyahu and his friends denounce as backstabbers any Jews who stand in their way. The free press peddles fake news. Political opponents, even the generals who pack the new Blue and White opposition party, are in cahoots with the Arabs. Bibi has flirted with the conspiracy

theory beloved of anti-Semites that George Soros, a Jewish billionaire, is plotting to undermine nationalist governments around the world.

The corruption charges against him, says Mr Netanyahu, amount to a "blood libel"—a vile medieval canard that accused Jews of mixing the blood of murdered Christian children in their Passover bread. Yet the police chief who investigated the charges, and the attorney-general who ordered his indictment, were both hand-picked by Mr Netanyahu. His allies want a law that would grant a prime minister immunity from prosecution.

Israel is an outlier among Western democracies. It was born as the state of the Jews; Zionism and Palestinian nationalism claim the same land. Israel must contend with a genuine "other" and existential threats, not the bogeymen invented by populists elsewhere. The left, in disarray in many countries, suffered a body-blow in Israel because its attempt to negotiate a land-forpeace deal with Palestinians collapsed into bloodshed.

Yet precisely because of these pressures, Israel offers an important test of the resilience of democracy. On April 9th Israeli voters face a fateful choice. Re-elect Mr Netanyahu and reward him for subverting the independence of Israel's institutions. Or turf him out in the hope of rebuilding trust in democracy—and aspiring to be "a light unto the nations".

Brexit after May The Silly Isles

The prime minister's promise to resign does nothing to solve Britain's Brexit mess

THERESA MAY was supposed to be leading Britain out of the European Union this week. Instead, Britain stayed put and the prime minister found herself announcing her own departure. After weathering months of criticism over her handling of the Brexit negotiations, in which Britain was last week forced to ask for an extension of the March 29th deadline, Mrs May surrendered to calls for her to say that she would quit. She promised her Conservative MPs she would step down if Britain formally left the EU, handing the next, crucial phase of negotiations, on Britain's future relationship with the continent, to her successor.

After weeks of chaos, the past few days' developments might make it look as if Britain is at last feeling its way towards a solution to its crisis. Mrs May's supreme sacrifice is designed to persuade her rebellious Tory MPs to vote for her unpopular Brexit deal. More promisingly, Parliament is working on a backup plan of its own, beginning this week with a series of votes designed to winkle out what kind of Brexit deal could command a majority if Mrs May's fails (see Britain section).

Yet in reality the prime minister's promised departure does nothing to resolve the disagreements that are preventing Britain from settling on an exit deal. It may even exacerbate them.

Mrs May's announcement came after weeks of arm-twisting. A prime minister who two years ago looked almost invincible

has been slowly bled dry of authority, starting with her calamitous loss of the Tories' majority in 2017 in an election which they had been fancied to win with a landslide (see Bagehot). Her unpopular Brexit deal has twice been defeated in Parliament by record and near-record margins. She has no domestic achievements to speak of. And she is barely in control of her cabinet, let alone her party. Mrs May was dealt a bad

hand in Brexit; she has played it extraordinarily badly.

Such is the mess Britain finds itself in that even jettisoning a powerless prime minister is not really a step forward. Despite her offer, a last desperate plea for the backing of Tory rebels, her deal remains unchanged and unloved. There is a faint chance that this *kamikaze* gesture could succeed. Some hardline Brexiteers, including Boris Johnson and Jacob Rees-Mogg, who have long rubbished Mrs May's deal, now see that the most likely alternative is something cooked up by Parliament which would keep Britain closer to the EU. Her promise to resign gives them an excuse to make their screeching U-turn. But the odds remain against her even now. The ten MPs of the Northern Irish Democratic Unionist Party along with dozens of "Spartan" Tory Brexiteers are doggedly holding out. There is a limit to the number of times Mrs May can be defeated on her deal before it dies.

A more fundamental reason Mrs May's offer does not solve Brexit is that it leaves Parliament's divisions as wide as ever. Even if enough MPs were willing to hold their nose and vote for her deal, this would not be because they suddenly agreed on the way forward, but because each faction believed that, after Mrs May goes, it would have a chance to wrench away control of the next stage of the negotiations. Diehard Brexiteers dream of one of their own at last calling the shots in Brussels and showing the world how to out-negotiate the EU. Pro-Europeans, licking their wounds, would strive to salvage a soft Brexit. Both Leavers and Remainers still think they have a chance of winning if they push hard enough, and the removal of Mrs May the fence-straddler would only confirm their conviction. It is a fantasy that risks taking Britain back to square one of its debate on Brexit's trade-offs.

This week's most promising news is that Parliament has begun the search for a way out of this delusion. After dramatically seizing control of the Commons agenda, Parliament has begun debating the various realistic Brexit options before holding votes on them. After two years indulging in all kinds of fantasies about what life outside the EU would be like—"no downside...only a considerable upside", as the first of Britain's three Brexit secretaries fatuously put it-Parliament has started to reconcile itself to Brexit's harsh trade-offs. Restricting immigration from Europe means leaving the single market; regulatory divergence necessarily erects barriers to trade; maintaining open borders in Northern Ireland precludes an independent trade policy. This week's indicative votes offer a way to find a compromise deal that has the genuine consent of MPS. It is a rebuke to Mrs May, who might be in a better position today had she sounded out opinion before the Brexit negotiations began.

None of the votes this week produced a clear majority-de-

spite a second attempt next week, they may never do so. But do not write them off just yet. A large number of MPS looked favourably on the idea that any deal approved by Parliament should be put to a confirmatory referendum. And a proposal for a customs union fell only eight votes short. The trouble is that, if she hangs on because her deal has not been passed, as Downing Street suggests, Mrs May could well

stand in the way of a Brexit produced in Parliament. Yet, if she goes, a new prime minister might not feel bound by it at all.

And that leads to the last reason Mrs May's offer could complicate Brexit: the dubious mandate of her successor. A freshly installed leader will probably want to set his or her own course, rather than take orders from MPs. The new prime minister will have been selected by the 120,000 members of the Conservative Party, who are whiter, older and richer and much keener on a hard Brexit than the divided country that elects Parliament. The new leader's mandate would not reflect the 17.4m who voted to leave, let alone the 16.1m Remainers. Why should Parliament suddenly feel bound to fall into line?

Look at it any way and Mrs May's departure leaves the course of Brexit as radically uncertain as it has ever been. All options including crashing out, a long delay and the revocation of Brexit—are still feasible.

That is why a better way—perhaps the only way—to agree on Brexit and to pass the dozens of bills it requires would be for Parliament to compromise on a plan and for the country to confirm it in a referendum. A stable, consenting majority in Parliament and the country is an essential foundation for the next stage. If Mrs May were to dig in her heels against such a plan, her departure would be necessary. Even then it would not be sufficient.





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The world economy Inversions and aversions

Bond markets are sounding warnings on both sides of the Atlantic. But the message is much worse in Europe

O^{N MARCH 22ND} Germany's worst manufacturing survey in seven years sent investors rushing to buy bonds. For the first time in three years yields on German ten-year government debt fell below zero, meaning that investors are willing to pay to hold it. And later that day in America the yield on ten-year Treasury bonds fell beneath that on the three-month variety. The last time that happened was 2007, one of the "inversions" in bond-market yields that preceded each of the past seven American recessions.

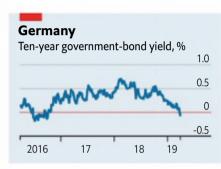
These bond-market blues are fuelling concern that the global upswing in 2017 and 2018 is making way for a slump. There are

reasons to worry. Tax cuts have boosted demand in America but will not be repeated; China has slowed; the trade war grinds on. However, indiscriminate global gloom is a mistake. America and Europe are in vastly different positions. Only Europe should be a cause of deep concern.

America's inverted yield curve suggests that the Federal Reserve's interest-rate rise in December, its ninth in three years, will be its last

for now. But that does not mean recession is imminent. The Fed has recognised—belatedly—that the risks to growth have risen, as Jerome Powell, its chairman, confirmed on March 20th. And America is in a position of relative strength. Unemployment is low; consumers are flush with cash; and underlying inflation is close to the Fed's 2% target (see Finance section).

Europe is in a tighter spot. Although America may have finished raising rates, the euro zone has never got started. Growth this year could be little more than 1%. Wage growth is muted, inflation is below target and Italy is in recession. With rates close to zero, the response of the European Central Bank (ECB) has been



to postpone monetary tightening and to provide more cheap funding for banks. Its willingness to do more may be limited. On March 27th Mario Draghi, its head, said that the ECB sees its inflation forecast as having been "delayed rather than derailed".

The primary cause of Europe's slowdown—and particularly Germany's—is falling global trade, notably China's slackening demand for goods. The continent relies on Asian markets far more than America does and China slowed in late 2018. Policymakers there are now trying to stimulate the economy. A rebounding China could yet come to Europe's rescue, especially if

Donald Trump and Xi Jinping strike a trade deal.

That the fate of the euro zone should depend on Beijing and Washington is a dereliction of duty. It is an economic superpower with its own fiscal and monetary levers. It should be countering downturns itself. More unconventional monetary stimulus will be hard thanks to northern Europe's horror of appearing to create money to finance deficits. But the euro zone has

room for fiscal stimulus. Its aggregate budget deficit was just 0.6% of GDP in 2018. Its net public debt was 69% of GDP.

Because Europe lacks a centralised fiscal policy—itself a failure of politicians—the onus is on individual countries. Those with healthy finances, such as Germany and the Netherlands, could enact a co-ordinated budgetary loosening. They should focus on tax cuts and boosting public-sector infrastructure and defence spending. Unless they do, the euro zone risks falling back into stagnation—the trap it faced after the financial crisis. For the euro zone to tolerate that risk in the name of prudence is selfdefeating. Astonishingly, the chances are that it will.

American politics Trump resurgent

The lessons of the Mueller report

ROBERT MUELLER toiled over his report for two years, slightly longer than it took Herman Melville to write "Moby Dick". Going by a summary provided by the attorney-general, though, the endings are the same: the whale gets away. The special counsel did not find that members of the Trump campaign conspired with the Russian government when it interfered in the 2016 election. The president is crowing. Democrats in Congress point out that Mr Mueller did not exonerate the president over obstruction of justice, which is also true. But make no mistake: this is as good an outcome as Donald Trump could have wished for.

For the rest of his first term, and perhaps long into his second, he will be able to point to an exhaustive investigation and say he was right all along. The president thrives on grievance—against the media, the federal bureaucracy, or anyone he suspects of feeling superior. The outcome of the Mueller report will feed that. As a result, the silver harpoon that some Americans hoped would finish off Mr Trump may in fact strengthen him.

A few lessons can be drawn from this episode. The first is not to confuse a legal process with a political one. Ever since Mr Trump won power, those Americans who could not bear the idea of him as president have dreamed of some non-political way to erase the result—of a jurist who could simply declare it all over. Mr Mueller seemed the likeliest candidate for this role, just as Kenneth Starr did in the campaign to remove Bill Clinton.

In fact the fate of Mr Trump's presidency will depend on politics, probably through the ballot box in 2020. Even those Democrats who cling to the fantasy of using Congress to impeach and remove him need to understand just how political this process would be. The fevered speculation during the two years of the Mueller investigation has often masked that.

The other lesson Democrats should heed is to keep quiet about a legal process until it is over. That is worth bearing in \blacktriangleright

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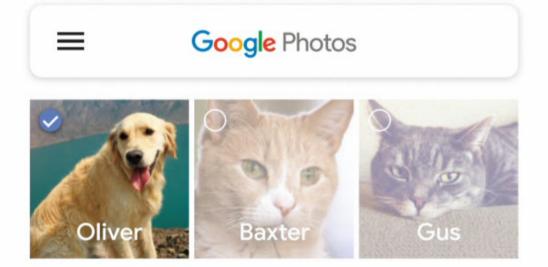
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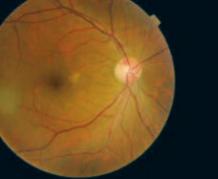




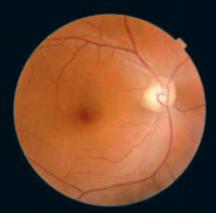
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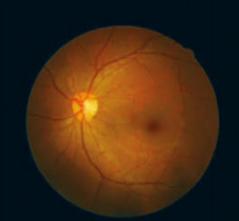
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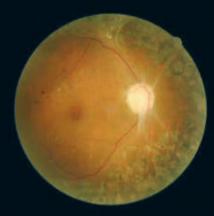
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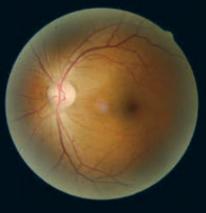


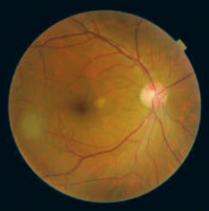






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mind as House committees under Democratic control pursue their own investigations, and courts and prosecutors look into allegations about Mr Trump and his family. Some of his opponents have prejudged these investigations. If it turns out that he did not commit the crimes they expect, they risk not just having distracted voters from the real agenda, but also giving him a boost. They should not make the same mistake twice.

The Mueller investigation also holds lessons for those Republicans emboldened to seek vengeance for what they say was treason against their president. Thanks to Mr Mueller, the president's campaign manager and personal lawyer are both heading to prison. His national security adviser pleaded guilty to lying to the FBI about his conversations with the Russian ambassador. Since Watergate, nothing like this has happened in American politics. By revealing duplicitous and corrupt behaviour among Mr Trump's team, and by bringing prosecutions, Mr Mueller has helped cleanse political campaigning.

The investigation also revealed that the president misled vot-

ers about his business interests in Russia. While the candidate was rewriting orthodox Republican Party policy towards Vladimir Putin, his company was trying to build a skyscraper in Moscow. His retrospective justification was that he might have lost the election, in which case it would have been a shame to give up on a deal. This conflict of interest did not amount to criminal collusion or conspiracy, in the special counsel's view. It is nevertheless the sort of transgression that America's political system would not have tolerated before Mr Trump came along.

There is a last reason to be thankful to Mr Mueller. Each time America's political system goes through an upheaval, it sets a precedent for how its institutions will handle the next one. Mr Mueller's conduct was exemplary. If widespread misconduct once again occurs in an American presidential election, the expectation will be that a special counsel will investigate. Though Mr Trump repeatedly denounced the investigation as a witchhunt, he did not fire the witch-finder. Mr Mueller was able to finish his work. For that, at least, Mr Trump deserves credit.

Museums and protests Culture vultures

The case for returning stolen art is strong. For refusing tainted donations, less so

T DIDN'T TAKE much. A theatrical "die-in" at the New York Guggenheim Museum in February; a threat by Nan Goldin, a photographer, to pull her works from the National Portrait Gallery in London; a warning of unspecified "guerrilla actions" against British museums. Since mid-March the Guggenheim, the National Portrait Gallery and the Tate galleries have all cracked. None will accept future gifts from the Sackler family, prolific philanthropists who own Purdue Pharma, a firm that created an opioid, OxyContin, and claimed it was not terribly addictive.

So Western museums will be a little poorer. They might also have less stuff to show, if another sort of campaign prevails. In November a report commissioned by Emmanuel Macron, France's president, argued that museums should hand back to

former colonies artworks that were acquired by force or "through inequitable conditions". Since colonialism was inequitable, that implies France should hand back almost everything (see International section).

To museums and their defenders, this is all silly—a thoughtless attack on cultural temples by a generation too easily outraged. But the campaigns ought to be distinguished from each oth-

er. The arguments for returning art acquired in dodgy ways are stronger than the arguments for giving back money.

To take an egregious example of looted art, the Benin bronzes were stolen from a royal palace in what is now Nigeria during a punitive British expedition in 1897, then flogged off to finance the raid. They ended up in European and American museums. Because the raid cannot possibly be defended, and because the bronzes would make more sense as a group, they should go back.

Some will argue that returned objects are likely to be poorly preserved, stolen or smashed by jihadists, as has sometimes happened. Besides, if you start giving things back, where do you stop? The first is a worry. The risk can be minimised, though not eradicated, by making copies and by returning objects only to reasonably stable countries. Nigeria just about qualifies. The Democratic Republic of Congo does not.

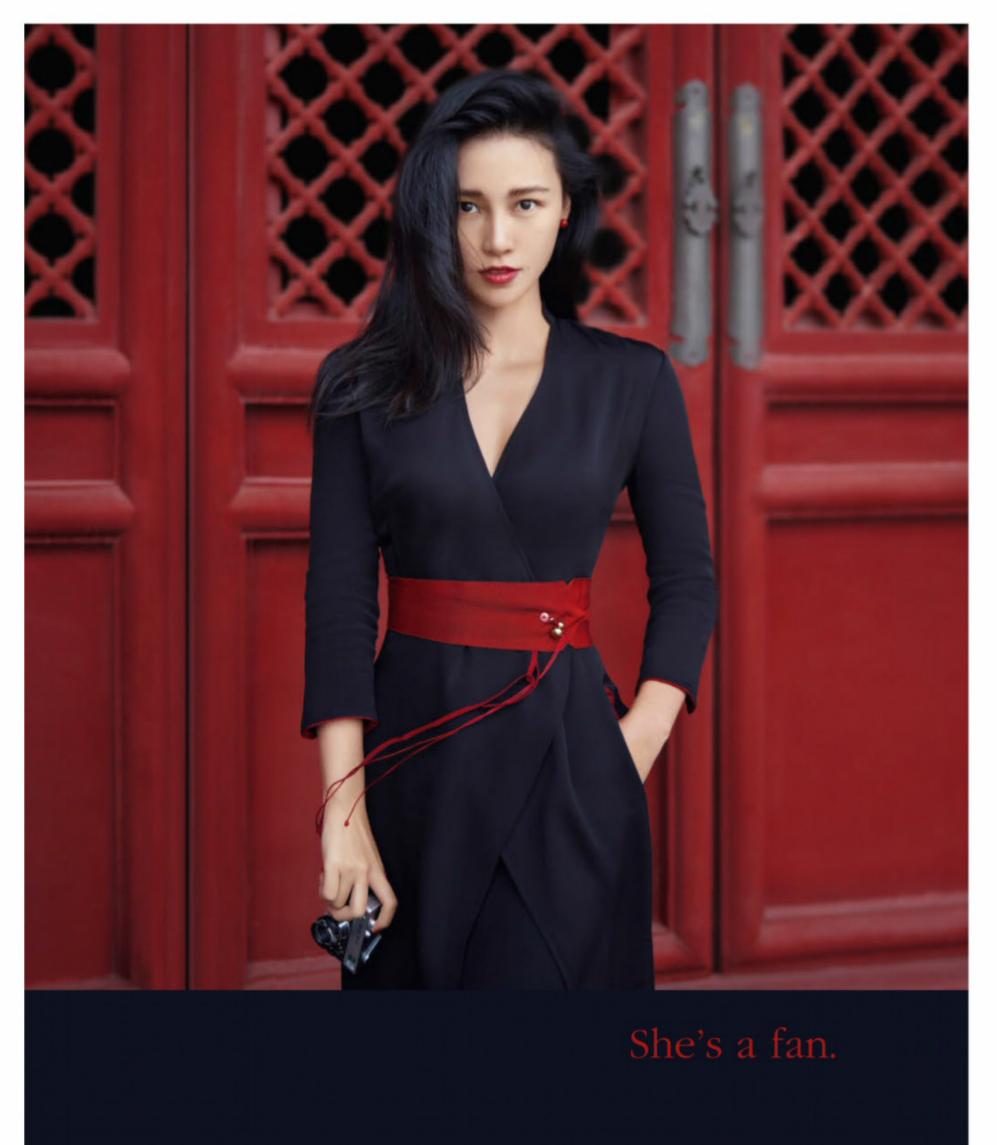
The second argument is flawed. It is already accepted that recently stolen objects ought to be returned, as when, in February, the Metropolitan Museum of Art in New York relinquished to Egypt a gilded coffin that turned out to have been looted in 2011. It has become accepted that art taken from Jews by the Nazis should be returned to their descendants. This shows that a line between the intolerable and the just about tolerable, between the past and the distant past can be drawn—and moved—without a free-for-all in which vast amounts of art are suddenly up for grabs. Objects demonstrably stolen in the colonial era belong on the intolerable side of the line, and should be returned.

> The campaigns against tainted philanthropy are weaker, however. If money was legally earned, museums should in most cases feel free to accept it. Does it benefit humanity more to return a sack of cash to the Sacklers, or to spend it on bringing culture to multitudes? Museums should not accept stolen money, of course. And if they decide that the reputational risk of taking a particular donation is not worth it, fine. But

they should remember that controversies can be fleeting, and that their successors may curse them for their squeamishness.

Those who decry the laundering of corporate reputations through charity forget something: it does not work well. All their good works did not prevent Andrew Carnegie and John D. Rocke-feller from being remembered as robber barons. The Sacklers are a target for protests partly because the family name appears on so many buildings, not in spite of that. So suspicious do big do-nors seem that Henry Tate, a sugar baron who established the London museum, is sometimes said to have profited from slavery, though he did not. (Indeed, he was an unusually kindly employer.) People give to museums in the hope that they will be remembered well. All they really achieve is to be remembered.







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The venue for the Boao Forum for Asia in the resort town of Boao, south China's Hainan Province

Asia in the Middle

The BFA is boosting economic integration in Asia as well as globalization

By Zhou Xiaochuan

The annual meeting of the Boao Forum for Asia (BFA) held from March 26 to 29 covers various aspects of Asia, emerging markets and the world economy. Its participants include state leaders, ministers, executives of the world's top 500 enterprises and opinion leaders. It is a feast of ideas in terms of the depth and breadth of its topics.

The theme this year is Shared Future, Concerted Action, Common Development. The aim is to build consensus on globalization, free trade, multilateralism and global governance, while offering fresh ideas on innovation and structural reform.

The current situation

Since the outbreak of the global financial crisis a decade ago, countries have worked together to help the global economy out of the crisis. Global economic growth returned to pre-crisis levels in 2017.

A synchronized global economic recovery greeted the start of 2018 but suffered a series of shocks later in the year. Global trade frictions escalated, the U.S. Federal Reserve (Fed) raised interest rates four times, many emerging economies'currencies depreciated sharply, oil prices plunged and global stock markets tumbled.

A very important reason for all this is that in the decade after the global financial crisis outbreak, many countries neither carried out enough structural reforms nor solved the problems of weak endogenous economic power and social polarization. As a result, populism, unilateralism and trade protectionism are on the rise, posing challenges to existing international economic, trade and financial systems.

The International Monetary Fund (IMF) has toned down the expected global economic growth rate for 2019 and 2020 to 3.5 and 3.6 percent respectively. So the international community

needs to make great efforts to improve the situation.

Nevertheless, in the past year the Asian economy showed strong resilience and overall good performance. Asia was still the fastest growing region, contributing more than 60 percent to world economic growth. The IMF estimated that Asia grew at 5.6 percent in 2018 and would grow at 5.4 percent in 2019. Despite downturn pressure from external risks, high savings and investment rates, balanced current accounts, sustained investment in human capital and technological innovation, and the Regional Comprehensive Economic Partnership (RCEP) under negotiation will drive sustainable development in Asia.

Reasons for chaos

The escalation of trade frictions has become a major disturbance for the sustainable growth of the global economy. Since 2018, the United States has imposed tariffs on a variety of imports, triggering countermeasures by trading partners and resulting in a tense global trade situation.

In the third quarter of 2018, the growth rate of new export orders slowed down significantly, with the Global Trade Outlook Indicator dropping to 100.3, approaching a tipping point between boom and bust.

Increased trade tensions can directly deflate business and market confidence as well as weaken investment and trade. Increased trade barriers can increase commodity transaction costs, reduce the efficiency of global resource allocation, disrupt global supply chains and hinder the dissemination of new technologies, reducing productivity. In the long run, trade tensions could cloud the medium-term growth prospects of the global economy.

The tightening of global financial conditions is a significant external factor affecting the steady growth of emerging market

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economies. After the global financial crisis, major countries implemented a long-term quantitative easing monetary policy. As a result, low-cost capital flooded in. In 2018, as the Fed hiked interest rates more frequently, as the U.S. dollar strengthened and as the European Central Bank sent signals to stop quantitative easing, global financial conditions gradually tightened, exposing emerging market economies to increased financing difficulties and market shocks.

In addition, trade frictions and geopolitical risks have created fluctuations in commodity prices. Exchange rates of emerging market economies such as Argentina, Turkey and South Africa fluctuated dramatically, greatly affecting the stable development of the domestic economy. The financial markets in some Asian economies with better domestic economic fundamentals have also been affected by spillover effects.

Disruptive technological innovation, while promoting leapfrog economic development, has also created difficulties for policymakers. Artificial intelligence, block chains, big data, cloud computing and other technologies have spawned a variety of businesses, rapidly changed people's way of life and work, reconfigured the value system and inspired new products and services.

However, it can also be used to evade traditional regulation. The vigorous development of financial science and technology has created thorny and wideranging problems like the distortion of market supply and demand caused by highfrequency transactions, the use of virtual money for illegal transactions, consumer financial data leaks and cyber-attacks on important financial infrastructures.

Asia's role

It is urgent to reform the World Trade Organization (WTO) and safeguard

the multilateral trading system. WTO reform cannot be accomplished by one country or one party alone; WTO members need to deepen mutual understanding and cooperation, improve trade negotiation frameworks and establish a new global trade order.

The international community should continue to reform the international monetary system and build a global financial safety net. As the core institution of this safety net, the IMF needs to ensure sufficient liquidity while improving the flexibility and pertinence of loan conditions.

More equitable globalization should be promoted by strengthening infrastructure interconnection. According to World Bank estimates, about 60 percent of the world's economic output comes from coastal areas while some countries,

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- Deep Blue: the Familiar Unknown
- Emerging Economies: Resolving the Dilemma With New Wisdom
- Belt & Road: Building "Road" for Globalization
- Opening up the Service Sector
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- Energy Sector in Transition
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- 5G: Bringing Things to Life With the IoT
- Opportunities and Challenges Facing FinTech
- A Sustainable Future for Rural Asia and Cities
- How Much Can We Borrow?

(Compiled by Beijing Review; designed by Pamela Tobey) especially landlocked countries, are marginalized in economic globalization. Experts estimate tariff concessions can promote world economic growth by up to 5 percent, while interconnectivity can do so by 10-15 percent.

For this reason Chinese President Xi Jinping proposed the Belt and Road Initiative to promote a new type of globalization. The initiative has been recognized and supported by more than 100 governments and international organizations.

Faced with the rise of anti-globalization sentiment and trade protectionism, Asian leaders have jointly voiced their support for economic globalization and trade and investment facilitation through various platforms. In May 2018, the leaders of China, Japan and the Republic of Korea reiterated that they should jointly safeguard free trade and promote regional economic integration.

The Qingdao Declaration of the Shanghai Cooperation Organization Summit in last June pointed out that economic globalization and regional integration are the general current trend, so all parties should safeguard the authority and effectiveness of WTO rules, consolidate an open, inclusive, transparent and rule-based multilateral trading system, and oppose any form of trade protectionism.

In mid-November 2018, the East Asian leaders' meetings proposed trade facilitation in East Asia be strengthened, e-commerce and the digital economy promoted, and RCEP negotiations completed as soon as possible.

As global economic growth faces bottlenecks and trade rules are challenged, Asian countries hope to work with other countries for restructuring the international trade and economic order, formulating new rules, and contributing to

the sustainable growth of the world economy.



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The author is Vice Chair of BFA and former governor of the People's Bank of China



²² Letters

The aftermath of Chernobyl We were dismayed by your review of Kate Brown's "Manual for Survival", a book about the effects of the Chernobyl disaster ("A view from the bridge", March 9th). Professor Brown has never sat on one of the committees that scrutinises carefully conducted, peer-reviewed scientific studies prior to producing reports by international bodies, such as the IAEA and UNSCEAR. We have.

The scientific evidence on the aftermath of the Chernobyl and Fukushima disasters, which has taken millions of man-hours to gather and been funded mainly by the public purse, has been ignored by Professor Brown, thus contributing to the largest health effect of both accidents, the psychological effects of the fear of radiation. Your readers should be invited to read reviews provided by those of us who have been involved in studies that have been conducted using the appropriate scientific methods to evaluate the real health effects of Chernobyl.

Indeed, should we be reconsidering the use of public money to fund properly conducted science if it is to be ignored? It is impossible to have a proper debate when we are encouraged, by publications such as yours, to make policy decisions based on urban myth rather than scientific evidence. **GERRY THOMAS** Professor of molecular pathology Imperial College London JIM SMITH **Professor of environmental** science University of Portsmouth

America's Irish Protestants

Another factor behind the "Irish conquest of America" (Lexington, March 16th) is the role of Presbyterians from Northern Ireland, who emigrated in the early 18th century after England's protectionism shut down their fishing and linen industries. In revenge, their descendants made up about a quarter of the American revolutionary army. They went on to populate frontier regions. The twang in American accents comes from them. They account for maybe 14 American presidents. PATRICK SLATTERY Dublin

Shopping for investments

Local authorities investing in retail sites isn't as chancy as you think ("Risky business", March 2nd). It is a legitimate way for councils to diversify revenue streams after years of crippling austerity and slashed budgets. The key is investing in the right asset. Although the high street is struggling, outof-town retail sites and shopping centres are still profitable and have great strategic potential. Large retail sites not only deliver strong returns on investment but become hubs of residential and commercial activity as well.

By developing mixed-use schemes, with homes sitting alongside or above shops, councils across Britain are using retail to shape employment, housing quality and community services, ticking several boxes left empty by years of underfunding. JAMES DUNCAN Real-estate finance partner Winckworth Sherwood London

A reckless action

I was surprised to read Bagehot describing Tom Watson as a "more responsible politician" than those on the political fringes who are developing a British version of Richard Hofstadter's "paranoid style" (March 9th). Perhaps I am behind the conspiracy-theory curve on this one. I concede that the deputy leader of the Labour Party is today lean and calm on the frontbench. But this is not the Tom Watson, who several years ago made wild and unsubstantiated allegations about a paedophile ring in Westminster. GARAN HOLCOMBE Ely, Cambridgeshire

Mapping the energy industry

Amazon, Google, Microsoft and others may well be touting their services to the energy industry. However, cloud computing may not be as attractive to the oil and gas industry as you suggest ("Oil rush", March 16th). The volumes of data that oil and gas generates would make it difficult to swap cloud companies. That would encourage rent-seeking behaviour among such firms, a phenomenon we are already experiencing with cloud-based software providers. Ownership and control of data is also a concern in the energy industry, which views its oil-well and pipeline data as private and proprietary.

Although the long-range forecast is for increased cloudiness in the industry, tech companies should expect a light drizzle of investment, and not a downpour, until these worries are addressed. GEOFFREY CANN Calgary, Canada

China in Africa

Regarding your reporting on "The new scramble for Africa" (March 9th), China acts with sincerity, friendship, justice and shared interests with African countries and respects their development paths. Together we have helped tackle Africa's development bottlenecks. The Mombasa-Nairobi railway is one example of such co-operation. With its completion, the cost of transport could be brought down by 40%. The project created 46,000 jobs, provided training programmes for 45,000 people and contributed to 1.5% of Kenya's GDP growth.

Efficient growth, improving infrastructure and sustainable development are high priorities. China has been a responsible investor and lender in Africa, taking measures to help Africa control debt risks. Our co-operation is open, transparent and nonexclusive. China is not seeking a sphere of influence. We are just one of Africa's global partners and have worked alongside the United States, Britain, Germany, France and many others on the continent.

Africa's longest suspension bridge was built in Mozambique by a Chinese company under the supervision of a German one. An industrial park in Ethiopia was built and operated by a Chinese company, and an American firm helped attract more companies to settle there. The franchising of the N1 Road in Congo was won by a Chinese-French conglomerate.

With the consent of African countries, our co-operative projects are open to third parties from outside Africa. ZENG RONG Spokesperson of the Chinese embassy London

Turning in their graves

Regarding "Brextension time" (March 23rd) I find it amazing that a country which produced Churchill, Disraeli, Newton, Bacon, Shakespeare and even Karl Marx can't find someone smart enough to disentangle Britain from Brexit. KEN OBENSKI Kona, Hawaii

Some plane facts

Reading about the stagnating demand for first-class air travel ("The people in front", March 9th) reminded me of the worldweary reaction of Richard Tull, an unsuccessful writer, in Martin Amis's "The Information". When invited forward to the sharp end of the plane by his privileged travelling companion:

"'The sickbags', Richard said dully, 'look no better or bigger than the ones in coach. And they still have turbulence here. And it still takes seven hours. I'll see you on the ground'."

SIMON ATKINS London

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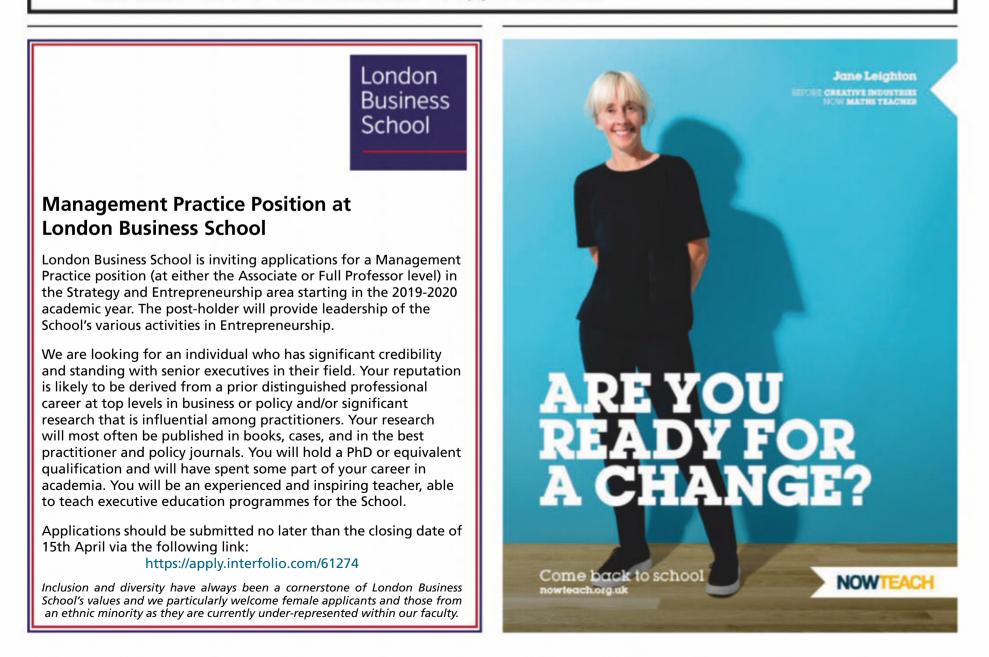


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Briefing Binyamin Netanyahu



Statesman and schemer

JERUSALEM

Victory in the forthcoming election would be further evidence that Binyamin Netanyahu's divisive politics work

T^{HE YOUNG} Israeli diplomat was visibly flustered, tie askew, forehead glistening. A senior American official had just chewed him out inside the State Department and he had no idea what to say about it to the reporters clamouring for comment outside. He blinked helplessly into their cameras, struggling for words.

It is a long time since the world has seen Binyamin Netanyahu as flummoxed as he was in 1982 when, as Israel's deputy ambassador to Washington, he was called on to explain why his country's tanks were rolling north through Lebanon. The unease he showed in a recent television interview about a corruption scandal surrounding some German submarines, while palpable, was not on the same scale.

The difference between the "King Bibi" who has been prime minister of Israel for the past ten years and the callow youth of four decades ago is remarkable. Mr Netanyahu has kept Israel prosperous and safe. He has used its military might without getting sucked into wars; he has improved relations with once hostile neighbours and gained the respect of world leaders. His country looks strong. But to judge him by this statecraft is not to do full justice to the man. The means by which he has won and maintained power matter, too. They have seen Israel become more divided—and, in some ways, weakened.

After the State Department fiasco Mr Netanyahu drilled himself assiduously on the presentational skills a modern politician benefits so much from mastering. He soon became a fluent fixture on American news shows. When he returned to Israel in 1988 to compete for a seat in the Knesset the press was captivated by his eloquence. His powerful speeches and media expertise contributed to the four election victories which made him prime minister from 1996 to 1999 and from 2009 until today.

One result of that sojourn in power is that no Israeli diplomat today need worry about humiliation at the hands of a Republican administration. It is hard to imagine a feather sliding between President Donald Trump's Republicans and Mr Netanyahu and his Likud party. When he arrived in Washington on March 24th for a fleeting visit Mr Netanyahu was treated like royalty. Mr Trump presented him with a princely gift: American recognition of Israel's annexation of the Golan Heights, seized from Syria in the Arab-Israeli war of 1967.

One way to read that generosity is as an election fillip. Mr Netanyahu's hawkish Likud party, which leads a religious and nationalist coalition, is in a tight race with Blue and White, a new party led by Benny Gantz, a former chief of staff of the Israel Defence Forces. The campaign has, like its most recent predecessors, been about Mr Netanyahu himself. Also like its predecessors it is close (see chart on later page), not least because of corruption allegations.

Another reading of Mr Trump's action, though, is that it is a tribute to a forerunner and kindred spirit. Mr Netanyahu was a trailblazer in his skilful intertwining of ethnic nationalism and anti-establishment populism. He has long branded opponents as threats to Israel's security and whipped up fears of Arab encroachment. He blames his legal troubles on the liberal elite and leftist media; he is beset by witchhunts and fake news.

Mr Netanyahu's supporters see him as an indispensable statesman who has achieved remarkable things in the world most notably, in standing up to Iran while keeping the world's concerns about **>>** ▶ Israel's conflict with the Palestinians at bay. As one Likud supporter, Ronen Sharabi, a teacher from Rosh Ha'ayin in central Israel, puts it: "Netanyahu, with all his experience and all his knowledge…is a leader that Israel can't afford to give up."

His opponents counter that Mr Netanyahu's politics have put Israel's future at risk. He has done nothing to solve the country's fundamental trilemma: that it cannot forever remain in control of the land from the Jordan to the Mediterranean, a majority-Jewish state, and a democracy. Instead Mr Netanyahu reinforces the status quo. He has bottled up trouble in Gaza, where 2m people live under the oppressive Islamists of Hamas. As supposedly temporary occupation becomes permanent conquest, Israel's rule over the West Bank starts to bear comparison to South African apartheid. When the zealots on whom he depends for power in the Knesset push for annexation of the occupied territories he resists, to some extent. But he makes almost no effort to push back.

The enemy below

Charges of corruption provide another line of attack. Mr Netanyahu has been indicted for bribery and fraud, pending a hearing, in three investigations. In the first, known as Case 1000, he is accused of accepting expensive gifts from rich patrons (which he admits) in return for political favours (which he denies). The second, Case 2000, hinges on a recording in which he tells a newspaper publisher that he will curb a competitor in exchange for favourable coverage, though the benefit to the publisher never emerged. In the third, Case 4000, he is alleged to have intervened in regulatory decisions on behalf of Bezeq, a telecoms company which owns one of Israel's largest websites, in return for favourable coverage.

Then there are the submarines. Mr Netanyahu's cousin, who has long been his lawyer, and his former chief of staff, among others, have been arrested in an investigation into contracts awarded to Thyssen-Krupp, an engineering conglomerate which has supplied submarines both to Israel and, subsequently, Egypt. Mr Netanyahu pushed the armed forces to buy submarines they did not want and approved the sale to Egypt without consulting his defence minister or army chief. His opponents note that he once owned shares in a supplier to ThyssenKrupp and suggest that he may have profited from the deals. Mr Netanyahu's response to all the charges has been to sow division and stoke mistrust in state institutions.

Mr Netanyahu's deep divisiveness is not just a side-effect of a forceful personality and trenchant views. It is a tool-one he has used since his early days as Likud leader in the 1990s. "You are worse than Chamberlain," he told Yitzhak Rabin, the prime minister, in a speech to the Knesset following the Oslo accords that Mr Rabin's government had negotiated with the Palestine Liberation Organisation (PLO) in 1993. "He endangered another nation, but you are doing it to your own nation." As Likud leader, he participated in rallies where placards portrayed Rabin as a Nazi and in the sights of a gun. When the prime minister was assassinated by a Jewish zealot in 1995, his widow, Leah, refused to shake Mr Netanyahu's hand at the state funeral. "He didn't say a word when Yitzhak was being called 'murderer' and 'traitor', and I will not forgive him as long as I live," she said.

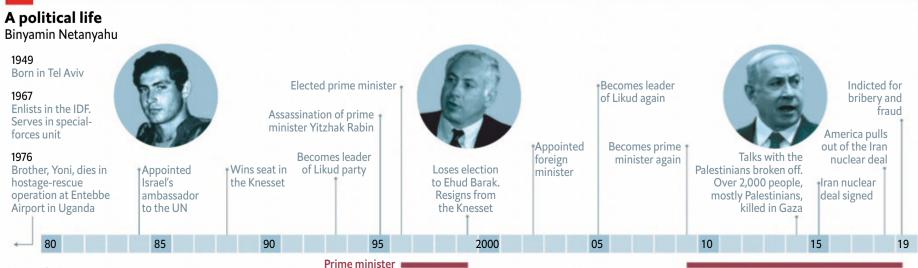
Sorrow for their fallen leader saw Israelis preferring Shimon Peres, Rabin's successor as prime minister and leader of the Labour party, over Mr Netanyahu by 20 points in the polls at the beginning of the following year's election campaign. But a wave of suicide-bombings, for which Hamas was largely responsible, changed the mood of the electorate. Mr Netanyahu put out campaign ads showing Peres shaking hands with Yasser Arafat, chairman of the PLO; he accused him, without evidence, of wanting to divide Jerusalem. He won the election by less than a percentage point.

It was in the following election, that of 1999, that Mr Netanyahu fully embraced the tactics that have come to define his brand of politics. Voters from conservative religious and working-class backgrounds, Russian-speaking immigrants and Mizrahi Jews (who are descended from immigrants from the Arab world) had been supporters of Likud since its founding. But whereas the party's earlier leaders, including its founder, Menachem Begin, appealed to these groups on the grounds of national unity, Mr Netanyahu stoked their resentments. Having been forced to hold the election by a vote of no confidence he portrayed himself, like them, as a victim of the establishment. "The rich, the artists ...these elites. They hate everyone. They hate the people," he told his supporters. "They hate the Mizrahis, they hate the Russians, hate anyone who is not them." He accused the media of conspiring with the left to bring him down and urged crowds to chant: "They. Are. Afraid."

On that occasion, whatever fears "they" may have had proved groundless. Mr Netanyahu lost by 12 percentage points and left the Knesset. He returned to government a few years later, soon becoming finance minister. The bloated public sector was acting like a fat man riding on the back of a thin man, the private sector, he said, and embarked on radical reforms. He froze public spending, cut red tape and slashed taxes. State assets, including the national airline, El Al, were privatised. Soon thereafter unemployment fell and GDP per head rose. Israel's technology sector became the envy of almost all who behold it.

Don't run silent, don't run deep

When it came to the 2009 elections Mr Netanyahu, again Likud's leader, followed the same tactics as he had a decade earlier. This time, as in every subsequent election, they worked. Likud did not win a majority—no Israeli party ever does-but Mr Netanyahu became prime minister with the support of other smaller parties. Thus, although most Israelis support moves that would reduce the role of religion in public life, such as allowing buses to run on Shabbat and permitting civil marriage, they will not see such change as long as Mr Netanvahu needs the support of the ultra-Orthodox minority which will have none of it.



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ARE WE LIVING UP TO OUR RESPONSIBILITIES TO CHILDREN?

Assessing national progress in preventing sexual abuse

A new study by The Economist Intelligence Unit highlights the strong moral and economic case for devoting more attention to the prevention of sexual violence against children.

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"Out of the Shadows: Shining light on child sexual abuse and exploitation"

finds that sexual violence against children is a growing challenge in an increasingly connected world. Sexual violence is happening everywhere, regardless of a country's financial resources. At the same time, many countries are redesigning their governmental and legal systems to protect children and are involving industry, civil society and media in these vital changes. But progress has not been fast, consistent and joined-up enough to keep children safe and thriving. Boys in particular are being overlooked in terms of legal protections and monitoring systems.

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30 Briefing Binyamin Netanyahu

Despite the fact that prime ministers from Likud have led Israel for 30 of the past 41 years, Mr Netanyahu continues to stoke resentment of the so-called establishment. The press is his favourite target. When he lost power in 1999 he blamed reporters for downplaying his accomplishments and accentuating his failures. "I need my own media," he told his financial backers, exhorting them to purchase news organisations. In 2007 Sheldon Adelson, an American casino mogul who is one of the Republican Party's biggest donors, founded a freesheet called Israel Hayom, which is now Israel's most popular paper. Its coverage of the prime minister is reliably glowing; Avigdor Lieberman, Mr Netanyahu's defence minister until late last year, has compared it to Pravda.

Meanwhile the non-lickspittle press sees photos of its journalists on Likud campaign posters beneath the slogan, "They Won't Decide!" This is in return for the media's work breaking a number of the corruption stories that the police and judiciary are following up. Those investigators also come in for stick from Mr Netanyahu, despite the fact that he appointed the people responsible for the investigations, the attorney-general and a former police chief.

In the current campaign Mr Netanyahu has crossed new lines. He has helped broker an electoral pact between Jewish Home, a religious party, and Jewish Power, a farright outfit. Until recently Likud felt that Jewish Power's racist policies put it beyond the pale. But it would not, on its own, receive more than 3.25% of the vote, the threshold needed to take seats in the Knesset. The pact aims to make sure that votes for Jewish Power help Likud's coalition.

All of this has taken a toll on the state, Mr Netanyahu's critics say. "There is no question that when you look at the strength and health of Israeli democracy, it looks a lot shakier now than it did five years ago," says Michael Koplow of Israel Policy Forum, a think-tank in Washington.

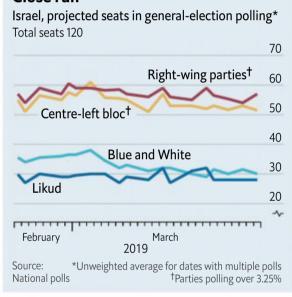
The division is not simply political. The wealth generated by the economic reforms of the 2000s does not impress those who see the country marred by inequality, low productivity and, owing to a lack of state investment, poor infrastructure. Israel has the busiest highways in the OECD, with more than three times as much traffic as the average. The main wards of Israeli hospitals have just 1.8 beds per 1,000 people, well below the rich-country mean. It has the highest level of poverty and peculiarly onerous tax procedures for businesses.

Despite this, Likud did not even bother to draft an economic platform before the election. It says its record speaks for itself. When asked about the problem of sky-high house prices in the 2015 campaign, Mr Netanyahu contrived to avoid an answer by steering the conversation to the threat that was posed by Iran.

A neat trick; also a telling one. Iran is Mr Netanyahu's obsession. In his speech to the UN general assembly last September he mentioned the country nearly 60 times. "Israel will do whatever it must do to defend itself against Iran's aggression," he said. He was a vehement opponent of the deal that Iran negotiated with the permanent members of the UN Security Council and the EU, which saw it curb its nuclear ambitions and open its programme up to inspections in return for sanctions relief. Last year he was overjoyed at Mr Trump's decision to pull America out of the agreement. Neither leader offered any alternative. Pundits took to calling Mr Netanyahu's strategy "anti-solutionism".

Mr Netanyahu treats the problem of the Palestinians in much the same anti-solutionist way. He has sought to convince Israelis that the conflict can be managed, if the right people are put in charge of manag-

Close run



ing it, and thus needs not be solved. The last peace talks collapsed in 2014. Though a wave of stabbing attacks in 2015 and 2016 killed dozens of people, it was a far cry from the suicide-bombings of the second intifada of the early 2000s. Missile attacks from Gaza are a chronic, if intermittent, incitement. But more intense violence, which flares up every few years, is soon quelled. Mr Trump's peace plan, which he calls "the deal of the century", will be dead on arrival, should it ever arrive. The percentage of Israelis favouring talks with the Palestinians has dropped from over 70% to closer to 50% over the past decade. Among Mr Netanyahu's supporters it is 30%.

These positions on Iran and the occupied territories have the merit of being politically effective, in that his adversaries have not found it possible to counter them. Take the Iran deal. Generals, retired spy chiefs, a former head of the nuclear agency: all said that, although it was flawed, it served Israel's interests. But Mr Netanyahu's political rivals dared not criticise his opposition to it. "There's no daylight" between us, declared Isaac Herzog, then the opposition leader, in 2015. During that campaign Mr Herzog preferred discussing solar panels and mortgages to dwelling on Israel's continued rule over 4.5m Palestinians. Mr Gantz has been similarly mute this time round. Mr Netanyahu faces no true ideological opposition; just a succession of vaguely centrist parties defined by little more than the personalities of their leaders and their dislike of him.

Red skies over paradise

It is true that even a well-intentioned Israeli leader could not hold meaningful talks with either Hamas in Gaza or Mahmoud Abbas, president of the Palestinian Authority (PA) in the West Bank. Mr Abbas, who ran out of legitimacy years ago, is obsessed with preserving his endless rule and more enthusiastic about putting sanctions on Hamas than trying to end the occupation. But Mr Netanyahu has not just avoided negotiations. He has worked to deepen the split between the West Bank and Gaza and to convince Israelis that no deal is possible and no efforts towards it advisable.

The army has recommended easing the blockade of Gaza to prevent another war, and even hawkish members of Mr Netanyahu's coalition agree. Yet the embargo persists. In February, again against security officials' advice, the government decided to withhold 500m shekels (\$138m) in taxes it collects on behalf of the Palestinians as a way of punishing the PA for making welfare payments to the families of jailed militants. It was, it seems, a useful campaignseason flourish.

Happy to do short-term damage, Mr Netanyahu refuses to confront the longterm issue that a territory with an Arab majority cannot be a Jewish democracy. Though he is notionally committed to a two-state solution (which his party is not) it is not a notion to be seriously entertained. Temperamentally conservative, warv of change, he governs as if Israel needs no change. The economy is fine for the well off, even if it does not feel that way for millions of people. The religious status quo remains in place, despite public opinion. Because the Palestinian issue cannot be solved, "we will forever live by the sword," as he said in 2015.

Israel and its circumstances are unique. But inequality, reactionary nationalism and mistrust of democratic institutions are problems shared across the developed world. Mr Netanyahu's long rule shows that, in some circumstances, they can feed off each other in a way that persists. Things wear down, but they do not break. After a decade of King Bibi, Israeli politics feels tired and uninspired, an unhealthy democracy where nothing is debated other than who should lead.

United States



The Mueller report He told you so

WASHINGTON, DC

Donald Trump and his supporters claim vindication, but the Mueller report may not prove as deflating for Democrats as it seems

¬OR TWO years, Democrats have remind-**F** ed voters about the federal investigators pursuing the president, while Republicans have considered that investigation to be a distraction from the vital work of making America great again. Now those roles are reversed. Robert Mueller's investigation is over, and according to a summary prepared by William Barr, the attorney-general, Mr Mueller cleared Donald Trump of having conspired with Russia and did not recommend charging the president with obstruction of justice. Republicans want revenge: Rand Paul, a Republican senator from Kentucky, wants Congress to investigate Barack Obama. The White House wants Democrats and the media to apologise. Most Democrats themselves would now rather talk about jobs and health care.

The conclusion of the investigation will not heal a divided country. Before the Mueller report landed, 44% of Americans thought the president should be impeached, according to a poll of 6,800 people by the Voter Study Group. That is almost identical to the proportion of Americans who approve of the job the president is doing in the *Economist*/YouGov poll. One rule of thumb in American politics in 2019 is that nobody changes their mind, and indeed post-Mueller the president's approval rating has barely budged. The faction that wants Mr Trump canonised and the faction that wants him ejected from the White House immediately remain about equal in strength, and they still loathe each other.

Mr Trump, at least, has cause to cheer. For 22 months, Mr Mueller's investigation hung over his administration. Cable news offered daily speculation about just how damaging it would be for the president. He can now point to some of the pronouncements from former officials like John Brennan, a former head of the CIA turned cablenews talking-head, who called Mr Trump "treasonous" and "in the pocket of Putin", as yet more evidence of an incompetent establishment set against him. In December Mr Brennan had warned the president to get ready for the "forthcoming exposure of your malfeasance & corruption." After Mr Barr's summary landed he sounded a bit sheepish. "I don't know if I received bad information, but I think I suspected there was more than there actually was," Mr Brennan told MSNBC.

In the short term, then, Mr Barr's summary is a boon to Mr Trump. The longer-

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term effects may be more equivocal.

While the investigation was under way, two views of Mr Mueller's work prevailed on opposite political poles. Mr Trump insisted it was a "witch hunt" that stemmed from Democrats' inability to accept that he had defeated Hillary Clinton, and the Washington establishment's disdain for his outsider status. His contacts with Russia were unusual, but he was an unorthodox politician, guilty of nothing more than trying to improve relations with a longtime adversary. That view was hard to square with the 37 indictments and seven guilty pleas or convictions produced by Mr Mueller's digging, but those, Mr Trump insisted, had nothing to do with him.

Conversely, some of Mr Trump's opponents embraced Mr Mueller with a quasireligious zeal (witness the Mueller-face earrings and Mueller devotional candles available on Etsy, the e-commerce equivalent of a hippie grandmother's attic). Beto O'Rourke, a presidential candidate, said that Mr Trump "beyond a shadow of a doubt sought to...collude with the Russian government...to undermine and influence our elections." Many hoped that Mr Mueller's digging would provide the requisite proof for such sentiments.

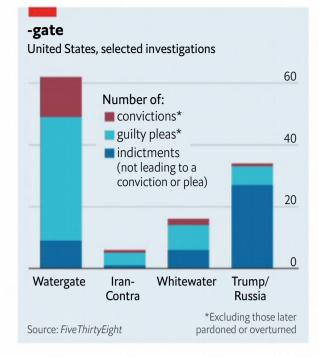
It did not. According to Mr Barr's summary, Mr Mueller divided his report into two parts. The first concerns Russia's interference in the 2016 election. Mr Mueller's probe "did not establish that members of the Trump campaign conspired or co-ordinated with the Russian government in its election interference activities"—with coordination defined as an "agreement—tac- **>>**

32 United States

Mr Mueller seems to have found no proof that Mr Trump or his staff worked with Russia in its hacking and disinformation efforts. He did, though, provide plenty of evidence that they welcomed Russia's efforts. Paul Manafort, the campaign chairman, shared confidential polling data with a Ukrainian political consultant whom America's intelligence agencies believe has links to Russian intelligence. Roger Stone, who worked on the initial stages of Mr Trump's campaign, seemed to know that emails and documents stolen by Russian intelligence would be released at times favourable to Mr Trump. Donald Trump junior took a meeting with a Russian lawyer offering "dirt" on Mrs Clinton. And Mr Trump himself implored Russia to hack into Hillary Clinton's server to "find the 30,000 emails that are missing." Mr Mueller may have found more such instances, which is one reason Democrats want the full report to be released.

Even if that fails, Congress will continue to investigate Mr Trump. Mr Mueller appeared to concern himself with whether members of the campaign broke criminal law. Congress has a broader remit: it can investigate behaviour it deems inimical to the national interest, even when such behaviour is not criminal. Congressional Democrats should not expect to find clearcut evidence that Mr Mueller missed, but America has traditionally demanded more from its presidents than simply not being a criminal or an agent of a foreign power.

The second part of Mr Mueller's report concerns obstruction of justice. According to Mr Barr, Mr Mueller examined "a number of actions by the President…as potentially raising obstruction-of-justice concerns." These might include Mr Trump firing James Comey, his FBI director, or his efforts to discredit the investigation, or

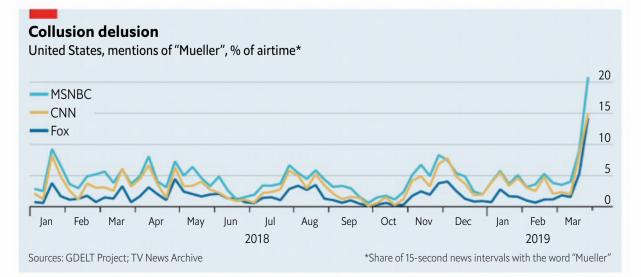


publicly attacking Michael Cohen, his former lawyer, after he pled guilty and implicated Mr Trump in a hush-money scheme that may have violated federal campaignfinance law. In the end, for reasons that were foreseen, he felt that he could not recommend that Mr Trump be prosecuted for obstructing justice (see Lexington).

Republicans have treated Mr Barr's conclusions as dispositive. Democrats, they say, misled America for two years. That is not quite right. Some in the fever swamps drew unsupported conclusions and made up elaborate theories that now appear silly. But Mr Trump's fondness for Russia really is unusual, and he entered office under a counter-intelligence investigation for his links with Russia. That had to be completed, and had the roles been reversed, Republicans would certainly have made just as much noise about it as Democrats have.

The investigation's completion leaves Mr Trump emboldened, and the presidency more powerful. Mr Barr's reasoning that the president cannot obstruct justice through the lawful exercise of his power—is now precedent. Future presidents will be even less hesitant about using the power of their office to help themselves out of legal trouble.

No sooner had Mr Barr issued his summary than a political battle over the com-



The Economist March 30th 2019

plete release of Mr Mueller's report began. Democrats want everything released except information redacted for national-security reasons. Hakeem Jeffries, a member of the House Democratic leadership, argues that "compelling public interest" can outweigh the need for grand-jury secrecy. Democrats may also want to see Mr Trump's written answers to Mr Mueller's questions, which will also be a battle: Jay Sekulow, one of Mr Trump's lawyers, said those answers were "confidential".

Beyond the Mueller report, Mr Trump is not out of the woods. The Southern District of New York is investigating him for possible campaign-finance violations. New York's attorney-general is probing allegations of bank and insurance fraud. Democratic-led congressional committees are looking into a range of misdeeds, including giving his son-in-law a security clearance despite serious vetting concerns, possible breaches of the constitution's emoluments clause, accusations of money-laundering and entanglements with Russian and Saudi companies.

At the same time, Democrats are eager to move on. Mr Mueller's report may prove a blessing in disguise, because it relegates talk of impeachment to the party's fringes. Voters did not much care about the Russia investigation, and now Democrats will not have to talk about it on the campaign trail. A poll from Navigator Research taken shortly after the 2018 mid-terms showed it was the seventh-most important issue for Democratic voters. The second-most important was government corruption, which those state, federal and congressional investigations will keep current.

The most important was health care, toward which Democrats are again turning their attention. On March 26th they unveiled reforms designed to shore up the Affordable Care Act, including an expansion of tax credits, the creation of a national reinsurance programme, and an obligation for the White House to persuade people to sign up for health insurance.

Mr Jeffries accused Republicans of "launching an assault on health care." He has found an unlikely ally in Mr Trump. To the consternation and surprise of many in his own party, on March 25th the Justice Department asked a federal court to invalidate the Affordable Care Act. Mr Trump has long been determined to tear down the legacy of his predecessor, but the electoral benefits of trying to strip health insurance from millions of Americans one year before a national election are unclear.

Democrats, conversely, are eager to fight on this ground. With Mr Mueller's report finished, they no longer have to engage in a fruitless debate over whether Mr Trump is treasonous felon. Now they can simply ask voters to decide whether he is a good president.

Gerrymandering Election doping

WASHINGTON, DC

Can the Supreme Court clamp down on a scourge of American democracy?

N INVISIBLE LINE in Greensboro di-Avides the campus of North Carolina A&T State, America's largest historically black university. On one side of Laurel Street lies the state's sixth congressional district; on the other is the 13th. For Love Caesar, who is studying political science and history, the school's 12,000 mostly "liberal thinking" students are "cracked" in two, diluting their votes into a sea of Republicans on either side. Republican legislators in North Carolina are happy to admit that Ms Caesar is quite right. In 2016 David Lewis, an architect of the plan, said the electoral map was designed "to gain partisan advantage". The statewide vote has been nearly tied in recent elections, but the Republican Party's cartographic acumensplitting some Democratic constituencies and stuffing others into as few districts as possible—helped to win the party ten of the state's 13 congressional seats (see map). Mr Lewis lamented only that it wasn't "possible to draw a map with 11 Republicans and two Democrats".

On March 26th, the Supreme Court scrutinised North Carolina's map and another brazen gerrymander that turned a reliably Republican district in Maryland Democratic, boosting Democrats' share of the state's eight congressional seats from six to seven. No justices spoke up in favour of politicians warping district lines to entrench their own power. Justice Brett Kavanaugh, for one, said the practice is "a real problem for our democracy". But it was uncertain, after more than two hours of oral arguments, whether a majority of the justices will decide that even ghastly gerrymanders violate America's constitution.

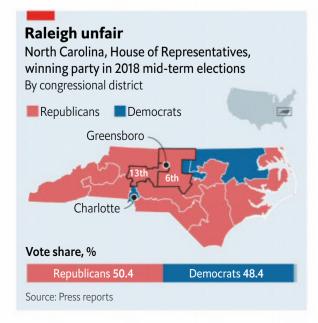
In 2018 the court also heard a pair of partisan redistricting cases—an earlier iteration of the same matter from Maryland, and a challenge from Wisconsin. Reformers had hoped Justice Anthony Kennedy might join the court's liberal bloc to rein in gerrymandering, but both cases ended in a procedural fizzle. This time round, neither Rucho v Common Cause, the North Carolina case, nor Lamone v Benisek, out of Maryland, included more than a whisper about eligibility to sue, the matter on which the Wisconsin case foundered last June. Instead, the justices dwelt on the question of "justiciability"—whether gerrymandering is even something courts can tackle.

The lawyer representing North Carolina's legislators, Paul Clement, began by noting that the Supreme Court has never pinpointed "a justiciable standard for partisan gerrymandering claims". That is true. In a case from 2004, Justice Kennedy held open the possibility that a workable standard might one day emerge to distinguish extreme from acceptable levels of partisanship in map-making. That the court has never arrived at one. Mr Clement said, is not for lack of judicial imagination, but because the framers entrusted districting to state legislatures, with Congress playing a supervisory role. All three authors of the "Federalist Papers" were concerned about gerrymandering, he said, but neither Alexander Hamilton, James Madison nor John Jay prescribed "a judicial solution".

Justice Stephen Brever pressed Mr Clement to consider "a way to catch real outliers". What if a party "wins a majority of the votes in a state", he mused, "but the other party gets more than two-thirds of the seats?" Is that result extreme enough to warrant judicial intervention? Perhaps, Mr Clement replied, if the constitution had "one-standard-deviation-from-proporа tional-representation clause" But it does not. There are no moorings for a judicial foray into the waters of partisan gerrymandering. Luckily, Mr Clement said, citing a suggestion from retired Justice Sandra Day O'Connor, the problem is "largely self-healing", as voters will push for reforms and punish excessive gerrymanders by voting out governors who approve them.

Justice Neil Gorsuch picked up on this in response to the claim that the Supreme Court "must act because nobody else can". About 20 states, he noted, have "dealt with this problem through citizen initiatives" handing over map-drawing to bipartisan or independent commissions, and a "bunch more" will be on the ballot in 2020. Justice Kavanaugh agreed that "a fair amount of activity" in the states may free the Supreme Court from the "big lift" of policing partisan gerrymandering.

But in the hearing on Maryland's gerrymander, Justice Kavanaugh, who grew up in the state and lives in Chevy Chase, a sub-



urb of Washington, DC, seemed to envision a role for the courts in checking legislators who "penalise [voters] because of their political affiliation". Teaming up with Justice Elena Kagan, who said a ruling against extreme partisanship could weed out "the worst of the worst" gerrymanders by putting legislators on notice, Justice Kavanaugh appeared to think a line might be drawn. Whereas a mild partisan effect from an electoral map would not trigger judicial reprimand, he said, "something that's really extreme...would not be okay."

Some justices fret that gerrymandering will only get worse with, as Justice Breyer put it, "computers in the future" drawing districts with increasing precision. But none of the nine seems hungry for an avalanche of challenges after electoral maps are redrawn with 2020 census data. The court's decision will probably turn on its response to a warning from Mr Clement. "Once you get into the political thicket", he cautioned, "you will not get out."

Colorado's governor Sound of the Polis

DENVER

Jared Polis is an unusual breed: a libertarian Democrat

F COLORADO WERE a piece of jewellery it L would be a mood ring, changing with the country's political temperature. Or at least that used to be the case. Today Colorado looks more like a sapphire, featuring varying shades of blue depending on one's angle. After the 2018 election it became a Democratic trifecta, with the party controlling the governor's office, statehouse and senate. One of the state's two senators, Corv Gardner, is a Republican, but he has a low approval rating and may not win re-election in 2020. Last autumn's election was the most significant for Colorado's political realignment in more than 40 years, says Floyd Cirulli of Cirulli Associates, a political consulting firm.

"The type of Republican who does well here is not a Trump Republican. Our suburban, swing electorate is more attracted to the Reagan version of Republicanism, the hopeful version of Republicanism," says Jared Polis, the state's new governor. In recent years Colorado's economy has boomed, with the state attracting young and educated immigrants from other states, who tend to be more Democratic.

Mr Polis, the first openly gay man to be elected as governor of any state, championed a progressive agenda on the campaign trail, but he does not sound like your average Democrat. He backs universal **>>** health care, an expansion of full-day kindergarten, paid parental leave and investments in renewable energy. But he also wants to lower the income-tax rate. He identifies as a libertarian. "The less government intervention in our private lives, the better. I think that's a value many Coloradans have on the left and right," he says.

The legislature, which is now in full session, will not share that sense of moderation and is likely to pull Mr Polis further left than he wants, according to Mr Cirulli. Legislators are considering bills that could enrage conservative voters, including eliminating the death penalty and passing a "red flag" law that would make it possible to seize guns from someone who is deemed mentally ill after a judicial process. Lawmakers are unlikely to let Mr Polis lower income-tax rates, which he wants to do.

For years Republicans have warned that Colorado could become like California if Democrats got too much power. That prediction sounded far-fetched. Since the start of this legislative session, however, the state stands to look more like Californian than it ever has before. National Democrats should watch what solutions Colorado adopts on questions facing all states, such as health care, parental leave, public education and the environment.

Mr Polis himself deserves some credit for this political transformation. He is one of a group of liberal donors, called the "Gang of Four", who helped Democrats flip the state assembly in 2004. Mr Polis, who is 43, spent his youth as an entrepreneur, building companies. He helped to transform his parents' company, Blue Mountain Arts, into an online greeting-card firm that was sold for around \$780m in 1999, and built up ProFlowers, an online florist, which was sold for nearly \$480m in 2006. Todav his net worth is estimated at several hundred million dollars, and he has freely used his fortune to pursue his political career. He won his first post in Colorado in 2000, after he reportedly spent \$1.2m to win a seat on the Board of Education (his opponent spent \$10,000). He went on to serve five terms in Congress before running for governor last year. He spent more than \$23m of his own money on his campaign, or around 97% of the total raised.

His predecessor in the governor's mansion, John Hickenlooper, is now on the presidential campaign trail, hoping to win the Democratic nomination. Some wonder whether Mr Polis may also have higher aspirations, perhaps to be the country's first openly gay president. That would be a Mount Elbert-sized peak to climb. Mr Polis has the credentials of a computer geek and the charisma of one, too. To think beyond Colorado is to rush ahead in the story. The state's political transformation is still relatively new. Whether it lasts will depend in part on the success of Mr Polis's reign. ■



Hanging with the anti-vaxxers Sharp exchanges

EVANSTON, ILLINOIS

Scientists and public-health officials could learn something from them

E VANSTON, A SUBURB of handsome homes north of Chicago, is prime territory for anti-vaxxers. The wealthy and welleducated drop into the Blind Faith Café for vegan meals. Nearby a paediatrician, Toni Bark, offers alternative medicine. She promotes homeopathy and the merits of icecold dips in Lake Michigan. She also rails against vaccines.

Dr Bark, a forceful speaker, has made a vocation out of opposing vaccines. She testifies in courts and at summits of the likeminded, and is busy on social media. She helps produce anti-vaxxer films and books. Such emotionally manipulative tales of childhood maladies can race up Amazon bestseller lists, while spreading mistrust of medical science.

She scoffs at the suggestion that vaccines are beneficial, denying that they wiped out smallpox or help battle tetanus and Ebola. The doctor sees little threat from measles (though the disease used to kill some 500 Americans a year). Instead she dwells on cases of childhood illness which she blames on vaccines. "I hear of one or two deaths every week," she claims. Autism, she alleges (wrongly), is "absolutely" linked to vaccines.

Such folk believe a conspiracy grips America: that jabs are promoted as a plot to dupe and impoverish a supposedly eversicker American public. Drugs firms actually run the Centres for Disease Control, claims Brian Hooker, who has long alleged cover-ups and fraudulent science in the federal agency. Dr Bark and Karen Kain, a campaigner in California, say vaccinemakers silence academics, doctors and journalists for merely meeting anti-vaxxers. Dr Bark thinks Big Pharma sponsors "70% of the news media". *The Economist* is "paid for by pharmaceutical companies," reckons Ms Kain, adding that they would somehow stop this article being printed.

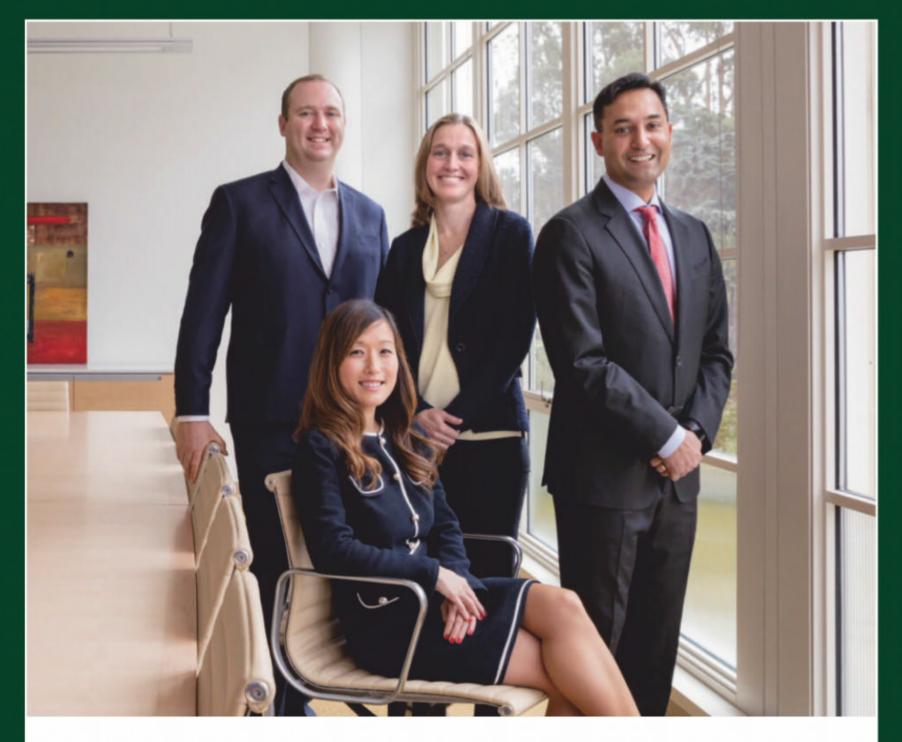
Anti-vaxxers are "more vociferous than ever," says Saad Omer of Emory University in Atlanta. He sees a movement of two parts. More numerous are the vaccine-hesitant, including parents (often mothers) who are insufficiently educated, anxious about child health, perhaps worried by autism and swayed by a deluge of misleading claims online. Around 13% of Americans said in 2016 that they did not fully trust vaccines as safe. A smaller core of activists plus minor celebrities, such as Robert F. Kennedy junior, stokes their fears.

They have an effect. Immunisation remains high overall, but the rate plunges where clusters of parents suddenly worry. After determined anti-vax activists visited Somalis in Minnesota to spread the idea that jabs caused autism, vaccine coverage fell and measles promptly infected 79 people. Measles was eradicated in America in 2000, but outbreaks are again appearing. Rockland County, in New York state, has banned unvaccinated children from public spaces for 30 days after a spate of cases.

Anti-vaxxers' views do not come out of the blue. Mr Omer says underlying values lead people in different ways to scepticism about science. Some aspire to live a more natural life, or may be religious, and fret over (untrue) rumours that tissue from aborted fetuses goes into vaccine doses. Some, like Dr Bark, say they are not antiscience, only anti-Big Pharma—she believes in climate change; "I'm not crazy," she says. Others cherish liberty above all, objecting that government has no right to insist on vaccinations for schoolchildren.

Robert Krakow, a lawyer in New York and prominent anti-vaxxer, agrees that the movement is diverse: "It cuts across all political ideologies, all demographics, you can't pin it down." But all share a deep mistrust of public-health bodies. Nor is it associated with one party. Although President Donald Trump and some other Republican politicians have been sympathetic, others, like Mr Kennedy, lean left.

Meghan Moran, at Johns Hopkins University, says the biggest battle may prove to be online. Studying 263 avowedly anti-vaccine websites, she tracked how many made powerful use of anecdotes—a tragic story to stir fear and sympathy in a parent can be a more effective spur to action than any number of statistics. Many sites strive to spread mistrust in government or other authorities, she says.



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Tracking who funds online activity, or promotes sometimes shrill debate on social media, is harder. A few family foundations donate to anti-vaxxers, under the guise of promoting "vaccine choice" nonprofit groups. The Children's Medical Safety Research Institute has funded research into vaccines. The institute is backed by the Dwoskin Family Foundation, the charitable arm of a property developer and a regular donor to Democratic causes. The Dwoskins have paid for meetings and films on vaccines. Claire Dwoskin's personal stance is clear: she once called vaccines "a holocaust of poison on our children's brains."

Responding effectively to all this requires the pro-vaccine camp to learn to communicate with more warmth and fewer statistics. Peter Hotez, a renowned vaccine expert in Houston, says a feeble public response is partly to blame for anti-vaxxers

The cost of California Homing in

SACRAMENTO

Can a lawsuit compel upscale cities to build more housing?

"How MANY governors start their administrations suing one of the most beautiful and iconic cities in the state?" asks Gavin Newsom, California's new governor, sitting in his office in the state Capitol. Not many. However in January, soon after Mr Newsom was sworn in, the state attorney-general's office, at the governor's behest, sued Huntington Beach, a coastal city in Orange County, for failing to comply with the state's housing-supply law. "I love Huntington Beach," Mr Newsom insists. "Now I'm going to have a hard time walking the streets down there."

A warm welcome to "Surf City", as Huntington Beach is known, may not be in Mr Newsom's future, but that is not what he was hoping for anyway. California has a severe shortage of affordable housing, and he wants to bring a sense of urgency to the problem. The state has the highest poverty rate in America when adjusted for the cost of living. One-third of renters pay more than half of their income towards rent, and homeownership rates in the state are at their lowest level since the 1940s. The state saw around 80,000 new homes built annually over the past 10 years, about 40% of what is needed. Local governments' restrictions, slow approval and permitting processes, opposition from residents and high development costs are to blame.

The lawsuit against Huntington Beach is meant to be a warning shot to cities that they cannot stonewall development. Fifty d more housing? years ago the state passed a "housing element" law requiring communities to plan for new housing for all income groups, based on forecasts for population growth. In 2017 the state legislature passed several bills to speed up housing development and approvals. Until recently many cities have not met their housing numbers but faced little consequence. They routinely put in place restrictions that make development harder, such as erecting height restrictions

creeping "from fringe to mainstream" in

recent years. Adopting the anecdotal ap-

proach, he has published a moving book

telling of his own daughter's autism and

ed effort to break into party politics, for ex-

ample in Texas, where a newish "vaccine-

choice" political action committee backed

candidates for state elections last year.

Similar PACs have been formed in Oklaho-

ma and Michigan. Despite that, it seems

likelier that more states will tighten re-

quirements that schoolchildren get their

jabs. Mr Omer says the strongest lesson to

take from anti-vaxxers is to stop being pas-

sive. "Most of us are pro-vaccine, but we are often silent bystanders." Speaking up early

for vaccines—say, by offering emotional

stories of lives saved to parents-to-be-

might be one way ahead.

He sees anti-vaxxers making a concert-

how vaccines did not cause it.

and lowering caps on new housing developments. This is what happened in Huntington Beach's case, according to the state's lawsuit, which declares, "the time for empty promises has come to an end. The city should not be allowed to avoid its statutory obligations any longer."

Huntington Beach is fighting back. It claims that the statute of limitations has already passed and is asking a court to toss out the lawsuit; a hearing to decide this will take place on April 3rd. The city has itself sued the state on several occasions. In February it filed two lawsuits taking aim at the state's housing laws. Last year the city sued California in a separate instance over its "sanctuary state" policy, arguing that the state cannot require the city to comply with imposed limitations on police collaboration with immigration authorities (the case is now on appeal). Perhaps this immigration spat is part of why Huntington Beach is being "singled out" now, muses Michael Gates, the city attorney.

Huntington Beach is the only city that has been sued so far, but in his state of the state address in February, Mr Newsom called out 47 cities for not doing enough to build housing. Such public shaming, coupled with the Huntington Beach lawsuit, has brought dozens of local representatives to agree to meet with the governor about housing policy, and several cities are working to come into compliance swiftly. Mr Newsom has also threatened to withhold funds from the gas tax, which is used for local roads and infrastructure, from cities that do not meet housing goals. "Everybody is upset about that, and it's exactly why I did it. There's got to be consequences," he says. For years local governments have been able to slow-walk development with no fear of repercussion. Not on Mr Newsom's watch.



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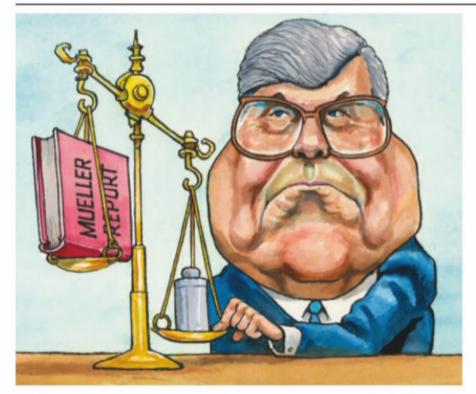
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Lexington | William Barr, executive assistant

Donald Trump sees the benefit of an attorney-general with a capacious view of presidential authority



MANY DEMOCRATS are dismayed by Robert Mueller's failure to take down the president. Yet they have a consolatory new hate figure in the form of William Barr, who began his second spell as attorney-general last month. A grandfatherly 68-year-old, who first presided over the Justice Department for George H.W. Bush, Mr Barr has been castigated for his handling of Mr Mueller's report, which remains under wraps at his discretion. Jerrold Nadler, Democratic chairman of the House Judiciary Committee, called his summary of the report "a hasty, partisan interpretation of the facts." Several Democrats running for president, including Kamala Harris and Elizabeth Warren, derided Mr Barr as Donald Trump's "hand-picked attorney-general" (as if there were any other kind).

This is partly a case of shooting the messenger. Many on the left were convinced Mr Trump was up to his neck in the Russian plot that helped get him elected. They also had an almost cultlike faith in Mr Mueller (the ash-dry prosecutor would be amazed to see how many T-shirts bear his name on campus—as in "Mueller Time— Justice Served Cold!"). The instant Mr Barr relayed the crushing news that the special counsel had found no collusion with Russia by Mr Trump, he was suspected of skulduggery, which seems hysterical. A close friend of the special counsel, Mr Barr is possibly too principled and certainly too canny to have misrepresented his conclusions. If he had done so, they would leak. Yet the attorneygeneral's treatment of the second prong of Mr Mueller's investigation, concerning Mr Trump's alleged effort to obstruct the various Russia investigations, is more troubling.

It is not clear why Mr Mueller refrained from ruling on the evidence against Mr Trump on this issue. It is also unclear whether he expected Mr Barr to rule for him. Perhaps Mr Mueller felt the decision was above his paygrade, given the Justice Department's policy of not indicting a sitting president. Perhaps Mr Barr—and his deputy Rod Rosenstein, who supported his view that Mr Mueller had not made a convincing obstruction case—made a straightforward decision. Yet that would make the emphasis Mr Mueller laid upon the possibility of Mr Trump's guilt—in stressing that his report did "not exonerate" the president—even odder than it already seems. The result, absent further disclosure to provide explanation and reassurance, is just the sort of heaving political mess of intrigue and innuendo Mr Mueller was appointed to clear up.

Whatever they intended, he and Mr Barr have combined to damage Mr Trump while clearing him. Theirs is a jumbled, twohanded version of James Comey's fateful decision to criticise Hillary Clinton's email arrangements even as he announced that she would not faces charges. No wonder it has elicited the same partisan response. Republicans consider Mr Trump exonerated, Democrats—almost as understandably—think he hasn't been.

That is not to imply Mr Mueller considered Mr Trump guilty of obstruction. It will take a fuller disclosure of his report to grasp how "difficult" he considered the factual and legal impediments to that conclusion to be. But it at least seems likely that he wanted his starkly worded equivocation on this issue (which Mr Barr had little option but to relay), to be heard by Congress, which is the only body empowered to hold Mr Trump to account, given that the Justice Department will not. That makes Mr Barr's final ruling appear unnecessary. Indeed Paul Rosenzweig and others on the Lawfareblog can find no legal or departmental explanation for it.

That alone risks Mr Barr's intervention seeming partial—at least to the half of America aching to see Mr Trump in irons. And the impression is reinforced by the fact that Mr Barr prejudged the Mueller investigation, in the president's favour, before he took charge of it. In an unsolicited 19-page memo to Mr Rosenstein last year, Mr Barr argued that the special counsel's obstruction probe was "fatally misconceived" and "premised on a novel and legally insupportable reading of the law." Barr boosters argue that one of his strengths as a member of Mr Trump's cabinet is that he is too old, successful and phlegmatic to be pushed around. His memo, which was distributed to the White House, suggests he was a bit more eager to get back in the game than that portrayal has it.

This is a salutary lesson, especially for those who look to the law to settle political disputes. Democrats—and many Republicans, too—were not wrong to contrast Mr Mueller's integrity with the president's lack of it. Yet the special counsel was never likely to be the antidote they craved, because the power of the ballot trumps the law, and because the law is slippery. Mr Trump employs alternative facts; on the question of obstruction, Mr Mueller's report appears to offer alternative realities.

Obstruction no Barr

The episode also underscores concerns about Mr Barr's expansive view of executive power. In his memo he argued that the president could not obstruct justice, however malign his motives for a given action, in the lawful performance of his office. In summarising the Mueller report he offered a less radical argument, that Mr Trump could not have obstructed justice because he did not collude with Russia. Yet this seemed so obviously threadbare, given the many Russia-related things Mr Trump had to hide short of a grand conspiracy, that it suggested the extent to which he remains fundamentally guided by extreme deference to presidential authority.

It is a view formed in the 1980s, when conservatives considered the presidency the best means to undo the government expansion of recent years. Almost four decades later, the power of the executive has soared and the ability of lawmakers to hold it to account is at rock-bottom—to the extent that Mr Trump has conducted a twoyear war on the Justice Department which most Republican congressmen dare not acknowledge. And yet Mr Barr's legal and political priorities are unchanged—which is of course why Mr Trump picked him for his job. If dogged consistency is the great virtue of elder statesmen, in changing times it is also their weakness.

The Americas



Guatemala Time for Thelma?

GUATEMALA CITY

An anti-corruption prosecutor brings her cause to the presidential race

HELMA ALDANA'S elevation to the status I of heroine was sudden. The International Commission Against Impunity in Guatemala (CICIG), a UN-backed body that helps prosecutors with corruption cases, described as "unsuitable" her appointment to the supreme court in 2009. When she became attorney-general in 2014, many Guatemalans worried that she was too close to the government. Those doubts dissolved in 2015, when she worked with CICIG to uncover a scandal that led to the resignation of the president, Otto Pérez Molina. Ms Aldana jailed some 250 people before leaving office in 2018. She launched an investigation of the current president, Jimmy Morales, for campaign-finance violations in 2015, and of members of his family on other charges. (They deny wrongdoing.)

That record has made Ms Aldana the de facto leader of a movement composed of activists, judges and friendly foreigners, which seeks to establish the rule of law in a country whose leading lights often have criminal connections. It has grown in confidence. Ms Aldana is a candidate in the presidential election, whose first round is scheduled for June 16th. Although she is second in the polls, she could win a run-off in August. She "would be the first president that [Guatemala's oligarchs] can't control," says Edgar Ortíz Romero, a professor at Francisco Marroquín University.

They may be trying to stop her. On March 19th a judge issued a warrant for her arrest on charges of embezzlement and tax fraud. Her supporters claim the charge is politically motivated. An electoral official told CNN that "a large majority" of political parties pressed him to keep Ms Aldana and her party, Semilla (Seed), off the ballot.

Ms Aldana, who denies wrongdoing,

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fled to El Salvador. She is expected to return if the electoral court reaffirms her immunity, to which she is entitled as a candidate.

The charges against her raise the stakes in an election that was already bound to be momentous. It pits her promise to renew Guatemala's democracy against efforts by a worried ruling class to entrench its power. Much depends on whether Ms Aldana stays on the ballot.

The roots of Guatemala's dysfunction are in its 36-year civil war, one of Latin America's bloodiest, which ended in the 1990s. Some 200,000 people died. Unlike in El Salvador, where a stalemate led to the creation of two post-war parties that have held each other (imperfectly) accountable, in Guatemala the left-wing guerrillas were beaten decisively. The parties that emerged from the war are numerous and weak, producing gridlock in congress. No party has won more than 5% of the vote in all of the past three presidential elections.

In this jumble, corruption flourishes. During the war (but after the end of military rule) black-ops groups infiltrated the state. After the war they focused on profit. Congressmen and mayors team up to put in their pockets some of the money meant for local infrastructure projects. A corrupt network of officers, businessmen and politicians became the main nexus of power. Half of campaign donations come from firms with state contracts; 25% is **>>**

▶ from organised crime.

In 2006 the government invited CICIG to Guatemala to break up the cabal. At first it just investigated drug-trafficking and atrocities committed during the civil war. Iván Velásquez, a Colombian who became its chief in 2013, took the "important leap" of taking on corruption cases, says Eduardo Stein, Guatemala's vice-president from 2004 to 2008. The cause became popular. Mr Pérez was pushed out of the presidency with the help of 100,000 protesters.

The establishment views CICIG as an unelected foreign agency that is taking over the state, and Ms Aldana as its tool. Mr Morales, a former comedian who has surrounded himself with ex-army officers, refused to renew its mandate, which expires in September. The Trump administration did not object loudly. In January Mr Morales tried to force CICIG out of the country. When judges from the constitutional court blocked that effort, congress tried to strip them of their immunity. Some observers fault Mr Velásquez and Ms Aldana for going after members of Mr Morales's family for what is not clearly a serious crime.

Some members of Guatemala's elite regard the anti-graft campaign as part of a broader attack on peace and prosperity. Business complains that the state's aggressive recent efforts to collect the taxes it is owed endanger growth and that courts are issuing rulings that damage enterprise.

Guatemala's reckoning with its past has also become part of the conflict between reformers and the right. Conservatives back a proposal in congress to give an amnesty to 30 former army officers jailed for human-rights abuses. That will encourage national reconciliation, they claim. Human-rights activists see it as part of a backlash by the establishment, intensified by Ms Aldana's political rise. "We are in this crisis because we touched the heart of the deep state," says Martín Rodríguez Pellecer, editor of Nómada, a news website.

The charges against Ms Aldana concern a payment early in her tenure as attorneygeneral to a university dean for staff training that allegedly never took place. The 20,000-quetzal (\$2,600) fee looks abnormally high for such work. Few people deny that the case raises questions. One local journalist suggests that the payment is "a remnant of her time on the dark side of the moon", before she became an anti-corruption crusader.

Both of Ms Aldana's main rivals for the presidency have legal problems. Zury Ríos, the daughter of Efrain Ríos Montt, a dictator during the civil war, may be barred from running. The constitution bans relatives of putschists from seeking the presidency (never mind that Ms Ríos ran in 2015, and that Ríos Montt himself ran in 2003). Sandra Torres, a former first lady who is leading in the polls, frightens the elite less than does Ms Aldana. She faces questions over financing of her unsuccessful run in 2015, although she, too, has immunity for now.

Ms Aldana no doubt hopes to emulate recently elected left-of-centre presidents in Mexico and El Salvador, who railed against corruption during their campaigns. She has described herself as "of the right, but with advanced thoughts" (ie, an advocate of human rights). Her problem is that just half of Guatemalans live in cities, where worry about corruption is strongest. Anti-graft hashtags do not go viral in villages, where other needs are more pressing. Ms Aldana may have to broaden her message for rural voters.

Even if she wins, her corruption fight will face obstacles. She would not take office until January, four months after CICIG's mandate expires. She may need to find a way to re-establish it.

This would be the first of many battles. Congress still needs fixing. Child malnutrition and water shortages persist. But more Guatemalans are coming to believe that the state will not solve such problems until it deals with corruption. They just might pick Ms Aldana to do the job.

Argentina The Mendoza model

MENDOZA

A wine-growing province offers lessons in how to reform

WHEN GRAPES are ready for harvest, Mendoza, capital of the Argentine province that shares its name, throws a party. For three days this month revellers on vine-themed floats tossed grapes and melons into crowds. Gauchos paraded. Argentina's "harvest queen" took her crown at an open-air show.

The bacchanal was a contrast to national gloom. Argentina's GDP contracted by 6.2% in the year to the fourth quarter of 2018 (see Finance section). The urban unemployment rate is 9% and inflation this year is expected to be 40%. Mendoza appears to be doing better. Income data for 2018 are not yet in but the provincial unemployment rate is only 5.9%. A devaluation of the peso has helped boost wine sales, tourism and trade with next-door Chile.



Celebrating a surplus

Another reason for Mendoza's prosperity, claims the province's governor, Alfredo Cornejo, is that it is well governed. "Argentina has been a sick economy for so long," he says. "We want to be an example."

Mr Cornejo has carried out in the province the sort of policies that Argentina's president, Mauricio Macri, a political ally, has been trying to enact at the national level. But the governor, who, unlike Mr Macri, can count on a majority in the legislature, has had more success. Mr Cornejo inherited a big budget deficit when he took office in 2015. Unlike the president, he dealt with it swiftly. Mendoza balanced its budget by 2017 and had a surplus last year. It plans for another one in 2019.

The process was painful. Mr Cornejo's government cut 8,000 out of 103,000 state jobs. He slimmed down the number of ministries from 14 to eight. Senior officials, including the governor, cut their own salaries by 20%, which helped damp down opposition. "We've been confronting a culture—for example, politicians giving people jobs to guarantee votes—and that's tough," Mr Cornejo says.

Instead, he has tried to win voters over by providing better public services. The government repaved a third of the province's 17,000km (11,000 miles) of roads, expanded sewerage and improved access to clean drinking water, which still does not reach all households. Mr Cornejo tied teachers' pay rises to their showing up to work. That enraged them. The government ignored "all the rules of bargaining with its workers", fumed Sebastián Henríquez, a union leader. But absenteeism fell sharply. Unlike in many other provinces, where schools were shut down by strikes, Mendoza's opened on time last month.

The Economist March 30th 2019

Mr Cornejo, who leads Argentina's centrist Radical Civic Union, says the roots of his unradical politics lie in his childhood. Growing up in the Uco valley, a rural part of Mendoza, he saw how privately owned vineyards brought prosperity.

He is encouraging enterprise in other sectors. In 2018 Mendoza passed a law allowing Uber to offer its taxi service. In Buenos Aires, the country's capital, taxi-drivers have staged violent protests against Uber. The Cornejo administration introduced a legal framework for public-private partnerships to build infrastructure, chiefly roads, though Argentina's high interest rates have kept them on hold.

Last year Mr Cornejo allowed fracking in Malargüe, Mendoza's portion of the Vaca Muerta energy reserve, which is thought to have the world's second-largest deposits of shale gas. That provoked resistance elsewhere in the province.

Argentina's mess puts limits on Mendoza's prosperity. Economic uncertainty makes investors wary. "Mendoza may be the hopeful exception, but it's almost impossible to separate it from a country still facing so many issues," says Marc Ricart, of Exagon Partners, a startup investment firm that focuses on South America's southern cone. Mr Macri, who was forced to seek a \$57bn loan from the IMF, is battling both to enact austerity and to win re-election in a contest due on October 27th.

Mr Cornejo's legacy looks more secure. Mendoza's constitution bars him from serving consecutive terms as governor. But his political heir, Rodolfo Suarez, the mayor of the provincial capital, is expected to win the gubernatorial election scheduled for September. With luck, Mendoza will continue to lead by example.

Bello The apprentice president of Brazil

Unless Jair Bolsonaro stops provoking and learns to govern, his tenure could be short

NE OF THE main reasons why Jair O Bolsonaro won last year's presidential election in Brazil is that he promised to get the economy moving again after four years of slump. By naming Paulo Guedes, a free-marketeer, as his economic super-minister, he won the backing of big business and finance. Many assumed that the arrival of Mr Bolsonaro's government in itself would breathe life into the economy. But three months in, it remains as moribund as ever. Investors are starting to realise that Mr Guedes faces an uphill task to get congress to approve a pension reform that is crucial for Brazil's fiscal health. And Mr Bolsonaro himself is not helping.

A fiscal deficit of 7% of GDP weighs heavily on the economy, meaning that interest rates for private borrowers are higher than they would otherwise be. Pensions account for a third of total public spending, and are one reason why the state spends little on Brazil's skeletal infrastructure. The government's reform bill, sent to congress last month, imposes a minimum retirement age, raises contributions and closes loopholes. It is supposed to yield savings of 1.2trn reais (\$310bn) over ten years. Last year's pension deficit was 241bn reais. On its own, pension reform is not enough to return Brazil to robust economic growth. That requires tax reforms and other measures to boost competitiveness. But it has become a totem.

Mr Bolsonaro is fortunate that after two years of political and public debate, pension reform is less unpopular than it was. But it is not exactly a vote-winner. Mr Bolsonaro didn't campaign on it. "The whole discussion on pension reform is something Brazilians would rather not have," says Monica de Bolle, a Brazilian economist at the Peterson Institute for



International Economics, a think-tank.

Approval thus requires leadership from the top. That is absent. In his campaign Mr Bolsonaro denounced the corrupt "old politics" of pork-barrel bargaining in congress. Yet he has no alternative strategy to command the legislature. He has needlessly antagonised some allies, including Rodrigo Maia, the powerful speaker of the lower house. His father-in-law, Wellington Moreira Franco, a former minister, was briefly arrested on March 21st along with Michel Temer, the president in 2016-18, on suspicion of bribery, which they deny. That prompted comments from one of Mr Bolsonaro's sons, who are his closest aides, which Mr Maia took as a personal attack. His riposte was that he would not round up votes on pension reform for a government he called "a desert of ideas". Officials this week tried to mollify Mr Maia. But pension reform seems certain to suffer both delays and dilution.

The bigger problem is that Mr Bolsonaro has yet to show that he understands his new job. He has dissipated political capital on his prejudices, for example by calling for the armed forces to commemorate the anniversary on March 31st of a military coup in 1964. His is a government of "monumental confusion", says Claudio Couto of Fundação Getulio Vargas, a university. Apart from the economic team, it is a warring assortment of retired generals, mid-ranking politicians, evangelical Protestants and far-right ideologues named by Olavo de Carvalho, a previously obscure philosopher. "Nobody knows where he's going, what's the course he's setting," says Fernando Henrique Cardoso, a former president, of Mr Bolsonaro. "He goes forward then back, all the time."

If the government has a linchpin, it is General Hamilton Mourão, the vicepresident, who has attempted to impose some political discipline. Yet he is often at odds with the Bolsonaro family. Mr de Carvalho has called General Mourão an "idiot", and said that if things continue as they are for the next six months "it's all over." Though they apportion the blame differently, others are starting to think the same. To cap it all, evidence is emerging that the Bolsonaro family was acquainted with members of a criminal group of former police in Rio de Janeiro accused of murdering Marielle Franco, an activist (and no relation of Wellington). They deny any link.

Two of Brazil's four previous elected presidents have been impeached because, as Mr Cardoso (who wasn't) says, "they stopped being able to govern." However much they abhor Mr Bolsonaro, democrats should not want him to fail to complete his term. It is still early days. But already his presidency faces a crucial test. "We have two alternatives," his spokesman said this week. "Approve pension reform or sink into a bottomless pit." If only his boss were as clear.



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The spoiler, victory

BANGKOK

The election was incompetently rigged, but the junta will probably stay in charge

TE HAVE RECEIVED a mandate from the people," declared Sudarat Keyuraphan, a leader of the Pheu Thai party. She was introducing a slate of seven parties that she said had won a narrow majority in the lower house of parliament in the election held on March 24th. Parties linked to Thaksin Shinawatra, a former prime minister ousted in a military coup, have won every election in the past 20 years. Pheu Thai, his current vehicle, seems to have won more seats than any other this time, too. But the results also mark a victory for the military junta running the country, which rigged the process to reduce Pheu Thai's showing and will probably deny it the chance to form a government.

Initial results suggest Pheu Thai won 137 of the 500 seats in the lower house. That is more than any other party, but a far lower share than in previous elections. The system of proportional representation the generals used hurt Pheu Thai. So did official harassment of its activists, the banning of an allied party and rules that made it difficult to campaign via social media and barred all but the tiniest political gatherings until December. These same distortions helped Palang Pracharat, a party founded last year to support the generals, win perhaps 116 seats overall. But Future Forward, another party opposed to the generals, is set to become the third-biggest. Meanwhile, the Democrats, the country's oldest party and Pheu Thai's fiercest foe, performed abysmally. They lost their stronghold of Bangkok. Their leader, a former prime minister, resigned. The net result is a chamber that is fairly evenly divided, for the moment, between friends and foes of the junta.

The junta's position, however, is stronger than it looks. For one thing, the Election Commission has until May 9th to certify the final results. Its boss already raised eyebrows on election night by saying that he would have to halt the count just hours after it had started because he did not "have a calculator with me now". Mr Thaksin scoffed that turnout in one district exceeded 200%. Elsewhere the number of ballots appeared greater than that of voters. The Thai for "election commission busted" has been trending on Twitter. The suspicions of manipulation matter since the Election Commission has released only provisional voting data from the country's 350 constituencies, on which the allocation of a further 150 party-list seats depends. The parties have made their own projections of the result, but the commission could yet declare a different outcome.

It also has the power to investigate violations of campaign rules. If it considers them grave enough, it can order candidates disqualified (a red card) or the election to be re-conducted in certain constituencies (a yellow card). That provides an easy way to erode Pheu Thai's alliance. "From now on we'll see so-called red and yellow cards," predicts Ms Sudarat. Pheu Thai will not be the only target. The commission recently threatened to bring proceedings against Future Forward for being subject to "outside influence"—a usefully vague no-no. Its leader, Thanathorn Juangroongruangkit, faces personal legal troubles, too. He is on trial for comments he made in footage streamed on Facebook, in which he suggested that the junta was trying to win defections from hostile political parties.

Bangkok will bubble with intrigue until the seat numbers held by each side seem more secure. Rumours abound that the six MPS of one of MS Sudarat's allies, the New Economy Party, will defect, wiping out her claimed majority of five at a stroke. There are lots of smaller, biddable parties, who could help shore up either side. Pheu Thai is said to have offered the post of prime minister to Anutin Charnvirakul, the leader of the Bhumjaithai party, with a pro-

Asia

jected 51 seats, if he were to join its block.

But securing the post of prime minister involves overcoming the junta's biggest advantage. The constitution the generals pushed through in 2016 awards the job of picking the prime minister to a joint sitting of the lower house and the 250-member Senate. All the senators are appointed by the junta. That means that the incumbent prime minister and junta leader, Prayuth Chan-ocha, would only need 126 votes in the lower house to keep his job. A rival candidate, meanwhile, would need 376 votes in the lower house—a daunting target. But if the parliamentary arithmetic all but assures Mr Prayuth's return to office, it also makes his job extremely difficult. The sweeping powers that the junta has enjoyed since seizing power in 2014 will lapse once a new cabinet is installed. Mr Prayuth will then need to persuade a majority of the lower house to back whatever plans his government may have. Even if Pheu Thai's claimed majority evaporates, it is clear that the lower house will be difficult to manage. Mr Prayuth's career in the army and as a coup leader has not given him a lot of experience of horse-trading with politicians. Even with unfettered authority, the generals have not done a good job of running the country. True to form, their preparations for the election appear to have been half-baked. Finding excuses to lock up or disqualify lots of the new MPS would be to dismantle the democratic façade currently under construction. But if the democratic front still holds a majority of the seats in the lower house when the Election Commission releases the final results on May 9th, instability looms. Thailand's junta, it seems, cannot organise a rigged election in a dictatorship.

Banyan Unclean

The huge challenge of purifying the world's most sacred river

R^{OUND AND round the baggage carousel at London's Heathrow airport goes a battered cardboard box waiting to be claimed by its owner, a passenger from Delhi: "PLEASE KEEP THIS SIDE UP! GANGA JAL—HOLLY WATER." For many Hindus the world over, nothing is more holy or pure than *Ganga jal*, or water from the Ganges.}

The whole river-from Himalayan glaciers across the vast North Indian plain to the filigree delta on the Bay of Bengal-is worshipped as a life-affirming goddess. The spiritual potency comes not from the Ganges's 2,500km length, which falls short of the world's longest rivers. Rather, its basin supports half of India's population of 1.3bn (plus nearly the entire population of Nepal and much of Bangladesh's). For its water and fertile sediment. no river is more important to humanity. And so for centuries Ganga jal has marked births, weddings and deaths. Scores of cremations take place daily on the riverside ghats in the city of Varanasi alone. Between January and early March, a temporary city sprang up on the banks of the river near Allahabad (recently renamed Prayagraj) for the Kumbh Mela festival, in which a staggering 240m devotees took to the river to wash away sins and human ailments.

Yet the Ganges is likelier to add to the ailments than cure them. For decades, declining water volumes have been a growing worry, as hydropower dams have proliferated, wanton irrigation and industrial schemes have drawn water away and the annual monsoon has become more fickle. Three months before this summer's monsoon, the Ganges is a thin meander, much of its bed exposed, as it passes through Kanpur, the biggest city along its course.

Low flows not only harm the liveli-

hoods of fishermen and farmers downstream. They also degrade water quality. Sewage is pumped raw into the stream. Levels of fecal coliform bacteria are off the chart. Tests from the Yamuna, a tributary which flows through Delhi, have found 1.1bn such bacteria per 100 millilitres nearly half a million times the officially recommended limit for bathing. No wonder "Delhi belly" is so prevalent. Victor Mallet describes in "River of Life, River of Death" how the Ganges system appears to be a conduit for bacteria increasingly resistant to antibiotics.

Alarmed at the state of the Ganges, some holy men have spoken out. In October G.D. Agrawal, an environmental engineer turned guru, fasted to death as a protest. Despite such dramatic gestures, too few Hindus accept that the Ganges's holy waters are sullied. Civic pressure to clean up the river remains slight.

To his credit, Narendra Modi, the prime minister, declared a clean Ganges a priority when he came to power in 2014. It was a nod to his Hindu-nationalist following. He promised \$3bn and new plants to treat





sewage and industrial waste. Five years on, progress is disappointing. In Varanasi, the focus is on razing a rambling old quarter to provide vistas for visiting VIPs, rather than on cleaning up the river.

As for Kanpur, a city of Dickensian leather factories, the picture is dystopian. The river stinks. It is not just sewage that goes untreated into the Ganges, among whose pools children play. So, too, do effluents from the 300-plus tanneries, most notably chromium, a toxic heavy metal. When Banyan visited, the tanneries were supposedly closed to spare bathers at the Kumbh Mela 200km downstream. Yet in one ancient factory, huge wooden vats were still turning, and workers were carrying slopping buckets of chemicals around. Meanwhile tens of thousands of Kanpur's poorest live in slums drawing groundwater laced with chromium, which is known to cause cancer. liver failure and early dementia. Kanpur has facilities to recycle industrial wastewater and extract the chromium. The process is said to add no more than nine rupees (13 cents) to the cost of a pair of shoes. Yet a blind eye is turned to environmental breaches.

Too often, says Shashi Shekhar, a former senior water official, state governments and their business cronies are more interested in constructing treatment plants than ensuring their longterm use. New forms of public-private partnership may start to bear fruit in a few years' time, Mr Shekhar predicts, and water quality at last improve. Yet deeper change is needed. The Ganges is abused in search of short-term gain. Meanwhile, neither politicians nor the press lay out the scale of the environmental problem. As Mr Shekhar puts it, if a river in which millions of devotees bathe "is full of shit, then people are required to be told".

K-pop Sex, drugs and spy-cams

SEOUL

A spreading scandal engulfs South Korea's music industry

LL THAT'S left of the "Burning Sun" Anightclub in Seoul are the faint outlines of the letters that used to spell its name, which have been hastily removed from above the former entrance. The club was run by Lee Seung-hyun, better known as Seungri, a member of Bigbang, a к-рор group. It was closed last month after police began investigating Seungri and his business associates for offences involving drugs, tax evasion and the provision of sexual services to potential investors (prostitution is illegal in South Korea). Though Seungri denies the allegations, he nevertheless made a grovelling public apology. Some called Mr Lee "Seungsby" (after the Great Gatsby, a high-living fictional antihero); the analogy has become even more apt since things all started to unravel spectacularly for Mr Lee. His music label has terminated his contract.

K-pop offers fans a polished and sanitised version of sex and glamour. Recording contracts often ban stars from having girlfriends or boyfriends to ensure that fans can project their desires onto them unimpeded. This makes the revelations that have emerged about the industry since Mr Lee's downfall all the more damaging.

The part of the scandal that has sparked the most outrage is the revelation that male к-pop stars and their associates apparently used group chats to exchange pornographic videos of women who had been filmed without their consent, along with lewd banter. Jung Joon-young, a singer, songwriter and former television host, has been arrested on charges of filming and distributing illegal spy-cam footage. In a video a friend shared with him, a woman appears unconscious. In extracts of web chats published by a Korean broadcaster, the men joke about drugging and raping women. They also seem to implicate the police in their schemes, alluding to a senior officer who "has our back".

Spy-cams are common in South Korea, where pornography is banned and internet porn is harder to access than elsewhere. Protests against them form the basis of an energetic women's movement that began last year and has garnered fresh attention after two men were arrested for installing illegal spy-cams in motel rooms across the country, filming some 1,600 guests without their knowledge. For feminists, the latest κ -pop scandal is yet another sign of pervasive misogyny. Jin Sun-mee, the minister



Seungsby in his prime

for gender equality and family, called on men last week to "please stop" objectifying women, adding that: "Women are humans with souls."

Fans are disappointed and angered by the revelation that their favourite stars may be truly awful people. "I hate myself for liking him so much," one woman says of Seungri. vG Entertainment, his former label, has seen its valuation plunge since the scandal broke. Whatever else the investigation reveals, it has already shown that, in the κ-pop business at least, not all publicity is good publicity. ■

Pakistan Quacks like a doc

RAWALPINDI

Too many medics in Pakistan are fake

OHAMMAD ZAHID sat sullenly in the Moffice where minutes earlier he had been doling out advice, pills and injections to a long line of patients. His customers had melted away at the sudden arrival of Saeed Asghar and his police escort. Dr Asghar, deputy director of the Anti-Quackery Department of the Pakistani province of Punjab, spends his days hunting for people practising medicine without the proper qualifications. Mr Zahid briefly tried to claim he was a proper doctor, before admitting he was not when his paperwork was checked. In fact, he had been trained only to help a pharmacist dispense medicine. His set of rooms in the backstreets of Rawalpindi were full of medicines he was not qualified to prescribe and syringes he was not trained to use, said Dr Asghar. "I haven't been doing this for long," Mr Zahid said, by way of an excuse. Beneath his desk was a plastic tub stuffed with banknotes.

A health-care census earlier this decade found Punjab, Pakistan's most populous province with 110m inhabitants, had between 70,000 and 80,000 totally unqualified practitioners. Many more, like Mr Zahid, had a medical qualification of some sort, but were doing work that far exceeded their training. Pharmacists, homeopaths and herbalists often pose as GPs.

The fraudulent doctors and dentists are not only charging handsomely for ineffective and often dangerous treatment. They are also threatening public health, according to Punjab's health-care commission, which enforces health-care standards. Reuse of unsterilised syringes and other implements is spreading blood-borne diseases such as hepatitis C. This scourge is especially alarming because many backstreet clinics specialise in pick-me-up steroid injections for almost any ailment. Lax prescription of antibiotics is helping to breed bacterial resistance to them. Quacks do not keep records and are not able to spot, much less report, outbreaks of infectious diseases.

Yet when Dr Asghar and his team catch charlatans and seal their premises, the crowds that gather to watch are not grateful for their deliverance. "Local people say: 'He's our only doctor, please bring us another one before sealing this," Dr Asghar says. Quacks thrive because public health care is so poor and private health care so poorly regulated. Government spending per person on health is barely three-fifths that of neighbouring India, in part because so much of the budget goes on defence, squeezing out other items. As a result, Pakistanis end up paying for two-thirds of their health care themselves. The poor naturally resort to the cheapest option, even if they know the care is substandard.

The quacks are also canny. Within minutes of a raid, other sham clinics in the same neighbourhood will abruptly shut, having received tip-offs via WhatsApp. The fake doctors often operate with the connivance of real ones, who lend them authentic credentials in exchange for a share of the profits. Professional bodies rarely take action against members caught doing that sort of thing.

The health-care commission acknowledges that unless decent treatment becomes more readily available, the quacks will continue to thrive, no matter how much energy is put into enforcement. As Dr Asghar bursts into a clinic lined with vials of veterinary steroids ready to be injected into human patients, it becomes clear his team has visited before. The Anti-Quackery division had sealed the shop next door, but an enterprising fraudster has simply rented the adjacent premises and knocked a hole through the wall.

India's space weapons The sky's no limit

DELHI

Narendra Modi takes his re-election campaign into outer space

A T NOON ON March 27th Narendra Modi, India's prime minister, appeared on television to deliver a triumphal message to the nation. An Indian missile had hurtled 300km into space and blown up a satellite, putting India in the small club of countries that had developed and tested anti-satellite (ASAT) weapons. "India stands tall as a space power!" he exulted.

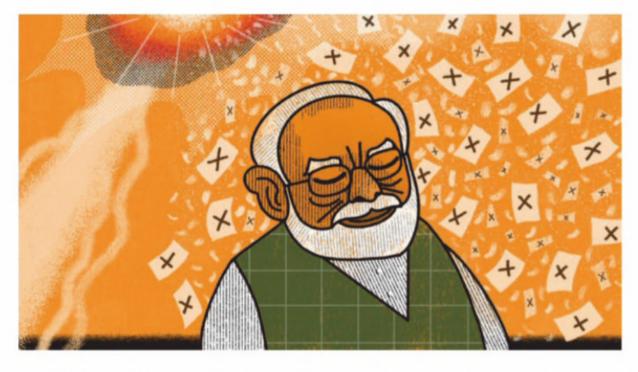
Mr Modi's address was unusual. Voting in a seven-stage national election begins on April 11th. Prime ministerial broadcasts during election season—when a "model code of conduct" applies, barring the ruling party from abusing its position—have occurred only twice before: after the assassination of the prime minister in 1984 and of the leader of the opposition in 1991. Mamata Banerjee, the leader of a regional opposition party, demanded that the Election Commission investigate Mr Modi's speech for breaching its code.

An ASAT test would hardly qualify as a national-security emergency. Indeed, India might have carried it out at any time in the past eight years. In 2012 V.K. Saraswat, then the head of the Defence Research and Development Organisation, the government agency that develops new military gear, noted that the "building blocks" of an ASAT capability were in place and required only electronic fine-tuning. It is hard to avoid the conclusion that Mr Modi's space spectacular was timed for the polls. It comes a month after India sent warplanes to bomb Pakistan for the first time since 1971—another move seen by many as grandstanding for the voters.

Electioneering aside, the test had two aims. One was to lay down a marker at a time of growing military competition in space. China, India's regional rival, operates around 30 satellites, many of which would be used by its armed forces in any conflict. It has also developed an array of ASAT weapons, including missiles and lasers, of its own.

India is keen to show it can hit back. But in flaunting its ability to shoot small, fastmoving objects at enormous heights, India was also signalling its interest in swatting other, harder-to-hit things—Pakistani nuclear missiles, say—out of the sky.

Yet that muscle-flexing may come at some diplomatic cost. It is the first avowed ASAT test since China blew up one of its own satellites in 2007, provoking international condemnation. The debris from that



explosion generated a quarter of all catalogued objects in low-earth orbit a few years later, putting other countries' satellites at risk. In 2012 Mr Saraswat had promised that India would not follow suit for just that reason.

Indian officials point out that this week's test took place far lower in orbit, so debris is more likely to fall towards Earth and burn up harmlessly. Brian Weeden of the Secure World Foundation, an NGO, agrees. But he warns that some pieces may be thrown into higher orbit, as occurred after America destroyed a wayward satellite at about the same altitude in 2008. Mr Modi will at least be glad that, unlike after his airstrikes against Pakistan, no one is questioning whether he hit the target.

Australian politics

Immigrants strike back

SYDNEY

Another election, another backlash against anti-immigrant rhetoric

N ATIONALLY, IT HAS been behind in the polls for years. Several of its MPS have defected from the party. Many others have said they will not contest the next election, due in May. The bickering about what has gone wrong and who is to blame has become deafening. So how did the ruling Liberal party win a state election in New South Wales this week?

Gladys Berejiklian, the Liberals' leader in the state, expressed pride at having won despite being both a woman and "someone with a long surname". But that may have worked in her favour. During the campaign, the opposition Labor party tried to stir indignation about immigration. Days before the vote, a video surfaced in which Michael Daley, the local Labor leader, complained about an influx of PhD-wielding Asians. "Our kids are moving out and foreigners are moving in and taking their jobs," he protested. He apologised (and has since resigned), but Sydney's huge immigrant population turned against him.

Meanwhile Ms Berejiklian, the daughter of Armenian immigrants, eschewed "the culture wars bullshit", as a member of her government put it, focusing instead on the strength of the local economy under the Liberals, who have been in office for eight years. New South Wales has the strongest economy in Australia: its budget is in surplus and unemployment, at 3.9%, is at a record low.

At the national level, however, the pattern is the reverse. It is the Liberals who have been trying to stoke fear of immigration. Scott Morrison, the prime minister, has fiercely resisted a law allowing sick asylum-seekers detained in camps abroad to be treated in Australia, on the grounds that hordes of boat people would set sail in the hope of making use of this loophole. He has also lowered the annual cap on immigrants, from 190,000 to 160,000. At another recent state election, in Victoria in November, the Liberals were trounced after they attempted to whip up fear about non-existent African gangs.

Ms Berejiklian distanced herself from her colleagues' more noxious policies, and all but banned Mr Morrison from the campaign trail. She even admitted that climate change was a problem—a notion that is controversial within the national party. She has also laid out a winning electoral strategy, which her more senior colleagues seem determined to ignore.

Democracy in Indonesia Dildo for president

YOGYAKARTA

Voters get a genuine choice, but an increasingly narrow one

I N A METAL pavilion down a backstreet in Yogyakarta, a mid-sized Indonesian city, Tutiek Widyo is making her pitch to the crowd. She is a candidate for the local legislature from the National Mandate Party (PAN), a small Islamic outfit, in the general election on April 17th. Dressed in a bejewelled headscarf, Ms Tutiek patiently spells out her credentials to the audience, who are mostly elderly. They nod and smile politely, but appear more interested in the free tea and *gudeg*, a local speciality made from stewed jackfruit.

Yogyakarta is a stronghold of PAN, partly because it is also the headquarters of Muhammadiyah, an affiliated Muslim organisation. Even so, Ms Tutiek needs to whip up as much support as possible. A recent change to electoral laws means that parties need at least 4% of the popular vote to gain seats in the national parliament, up from 2% in 2004. Polls show PAN hovering dangerously near this threshold. Abduljalie, a retired tailor wearing a chequered sarong, says he has voted for PAN at every election since it was founded in 1999. It is crucial that PAN be represented in parliament, he continues; he would never vote for anyone else.

Other parties are also at risk. Of the ten in parliament, four will not meet the 4% threshold and two others are hovering just above it, according to current polling. The threshold is one of a series of recent rules which are making Indonesia's elections less competitive.

Indonesia is still a young democracy. Following independence from the Netherlands in 1945, it experimented briefly with competitive elections before slipping into four decades of authoritarian rule under first Sukarno and then Suharto. The latter allowed parliamentary elections, but with only two cowed opposition parties. Pliant parliamentarians then selected the president from a shortlist of one. It was only after Suharto resigned in the face of mass protests in 1998 that the country reverted to free elections.

On the face of things, democracy has thrived since then. The subsequent presidential elections have all been genuinely competitive. Democracy pervades every level of government. Voters get to choose a chief executive and a parliament not just for the country as a whole, but also for provinces and the next layer of administration, cities and districts. The press is free and public protests are common.

But Indonesia's political parties are not as keen on competition as its voters appear to be. The biggest ones are developing something of a cartel. They have been drawing up rules that not only make it harder for old parties to survive; creating new ones is becoming trickier too. In 1999, when new election laws were approved, the government was battling separatists in Aceh, East Timor and Papua. To stymie the splittists, the new rules required national parties to have officers not only in half of the country's provinces, but also in half of the districts within those provinces. Even though the threat of secession has faded. the barriers to new parties have continued to rise. Now parties must have chapters in all provinces, three-quarters of districts and half of sub-districts.

Dwindling choices

Options for voters are narrowing in the presidential race, too. In the first direct presidential election of the democratic era, in 2004, there were five candidates on the ballot. This year it is a two-horse race. As in the previous contest, in 2014, Joko Widodo or Jokowi, the incumbent, faces Prabowo Subianto, a former three-star general. Jokowi has worked hard to limit the number of contenders. In 2017 his coalition government refused to scrap a law requiring presidential candidates to have the support of at

least 20% of MPS. Since the coalition controls more than 60% of seats, the rule in effect meant that Jokowi could have only one opponent. Opposition parties and one of Jokowi's then coalition partners stormed out in a vain protest.

The contest could have been even less competitive. A year ago Jokowi and Mr Prabowo toyed with the possibility of running on a joint ticket, despite having battled one another fiercely in the previous election. That would have ended any semblance of a meaningful contest. Talks fell apart, but observers saw the possible partnership as a sign of the increasingly collusive nature of Indonesia's democracy.

Voters' frustration is borne out at the polls: turnout for presidential elections has fallen at every vote since 2004, albeit from a high starting point. The angst is also apparent online. In January campaign materials for Nurhadi and Aldo, a fake but plausible presidential ticket, spread across social media. The invention of internet wags, the mustachioed men posed piously in photos and championed vague social programmes. The fiction was accurate down to a portmanteau nickname: Nurhadi and Aldo became "Dildo".

Perhaps the most egregious erosion of voters' choice is happening at the regional level. At these votes last year 9% of ballots only had one candidate, up from 1% in 2015. The practice was permitted by the constitutional court in 2014. It is the result of sweeping coalitions, sometimes including virtually all the parties. The political spoils get shared out and there is no need to waste money competing. Yet even unopposed candidates are not always shoo-ins. Last year one lost the mayoral vote in Makassar, a big eastern city, to blank ballots. Indonesians are still finding a way, it seems, to express their discontent.



Lots of voters, not so many parties

China



Social management Keeping tabs

SUQIAN, JIANGSU

China's "social credit" scheme uses cajolery and sanctions to make people behave

JUST OVER a year ago, the eastern city of Suqian announced a plan to score the "trustworthiness" of every adult resident. Everyone would start with 1,000 points. They could get more for performing good deeds, such as voluntary work, giving blood, donating bone-marrow or being a model worker. Points would be deducted for bad behaviour such as defaulting on loans, late payment of utility bills, breaking the rules of the road or being convicted of a crime. Scores would be recalculated monthly and allow residents to be sorted into eight categories, from AAA (model citizen) to D (untrustworthy).

Suqian calls the system "Xichu Points", after the ancient kingdom of Western Chu to which the area once belonged. It appears to be up and running. A government office in the city offers leaflets explaining how it works. Residents can look up their rating by entering their identity-card number into a mini-app running on WeChat, a popular instant-messaging programme. Their score is indicated by a virtual pointer on a dial that is coloured green at one extreme and red at the other. Scorers at the green end can receive rewards, such as a discount of up to 80 yuan (\$12) a month on localtransport passes and admission to hospital without having to pay a deposit.

Such citizen-scoring schemes are still uncommon. But in recent years a growing number of towns and cities have been experimenting with them. Officials often describe them in ways that suggest a relationship with the central government's efforts in recent years to set up a "social credit" scheme. Last October America's vice-president, Mike Pence, called this "an Orwellian system premised on controlling virtually every facet of human life". Those who see it this way often point to the scoring of citizens by cities, as well as a separate national project that involves putting people on government "blacklists", as evidence. So far neither has proved as dystopian as Mr Pence suggests. In Suqian, it is hard to find anyone who has heard of Xichu Points, and harder still to find someone who says it has made any difference to them. But they have worrying dimensions.

The central government began mulling

→ Also in this section
 48 A factory inferno

plans for a social-credit system early this century, says Rogier Creemers of Leiden University in a paper on the topic. It was responding to rising public anger over officials' failure to curb the dishonesty that had become rampant in many walks of life: everything from fraud and academic plagiarism to shoddy construction and the selling of dangerous fake goods. In a blueprint published in 2014 the government said the project would involve centralising data that it holds on citizens and businesses (the document set out broad plans for the years until 2020, but did not specify exactly what would be in place by that date). The authorities are issuing every company and organisation a social-credit registration number. For firms, this will replace the panoply of numbers they use to identify themselves to various agencies, such as the tax bureau and industry regulators. There is no known plan to create a system such as Xichu Points at the national level by giving all citizens a score based on their day-today behaviour.

For now the data being collated nationally are being put to use in two main ways. The first is to aid the development of a financial credit-rating industry. This will probably result in a financial scoring-system similar to those widely used in other countries. The second is to tighten the enforcement of existing laws. China's police can respond rapidly to perceived threats to the party's grip. But in other domains the state's power is more limited. People commonly fail to pay workers, defy court orders or default on debts by decamping to other provinces or starting new businesses in **>>**

• different industries.

The blacklists are supposed to remedy this. Since 2013 the judiciary has been compiling the names of people who have defied a court order, for example by failing to pay debts or fines, or to issue an apology to an injured party. In 2016 other departments agreed to help penalise these people by preventing them from buying plane or bullet-train tickets or staying in luxury hotels, as well as joining the civil service, taking senior jobs in state-owned firms or starting companies in the food or drugs industries. More than 12m people are on this blacklist; they have been denied more than 17m plane tickets and 5m for bullet trains. They will remain on the list until courts are satisfied they have complied with orders.

The government has since encouraged ministries and regulators to draw up their own blacklists of people and businesses who have broken rules (such as ones relating to health, safety or the environment). Those named will not all suffer sanctions as harsh and wide-ranging as those imposed on people blacklisted by courts. But they will be subject to greater scrutiny, and in some cases outright restrictions, when dealing with other arms of government.

In 2015 and 2016 the central government encouraged 43 cities to carry out their own experiments with social credit. Most of them have done this mainly by ensuring better co-ordination between departments in order to help national schemes, such as the blacklists, work efficiently. But in a few places such as Suqian officials have devised other projects under the banner of social credit. These are aimed at nudging individuals and businesses to behave in a more civic-minded way. They use rewards, not punishments, to achieve this.

In Suqian a person's score is supposed to rise and fall according to published criteria—20 points for a blood donation, 20 points (at least) deducted for failing to pay a power bill, and so on. A city employee selling bus passes needs a moment to recall the details. She says very few people have enough "credit" to claim a discount on public transport (only 3,000 have, according to state media, in a city of nearly 5m people). When asked about how Xichu Points works, a nurse staffing a blood-donation bus also scratches her head.

Scoring systems in other places have also proved unremarkable. In 2017 Hangzhou, a coastal city, released an app which claims to combine five categories of government-held data in order to produce a single number for each user. It is called Qianjiang Score, after a local river. Highscorers find it slightly easier to book municipal sports facilities, among other uninspiring gifts. Since late 2018 residents of Xiamen, a coastal city further south, have been encouraged to look up their "Egret Score". High-achievers benefit from slightly cheaper parking and the right to borrow more library books.

Officials in Sugian had begun trying to improve public behaviour long before the party leapt on the social-credit bandwagon. Their aim was to get Sugian recognised as a "civilised city" by the central government-an award that many local administrations yearn for. Billboards across the city advertise a list of 20 rules of etiquette. They include not wearing pyjamas in public, not staring at one's phone while in company and not encouraging others to drink to excess. There are video screens at many road junctions displaying the names and images of jaywalkers caught by cameras that appear to recognise faces. On a recent weekday they were all being used to shame two people, a Mr Dai and a Mr Wang (their full names were masked).

Shops being shopped

On one of Suqian's main streets two citymanagement officers sit inside a booth identifying itself as a "Trustworthy Neighbourhood Service Centre". One of their jobs—unconnected with the Xichu Points scheme—is to assess the integrity of shop owners along two central roads. Points are docked or added depending on how far proprietors succeed in keeping displays neat and surrounding pavements clear. Inspectors' photos flash up on a big screen next to the booth. Offending items, such as unsightly sale signs, are circled in red. The screen also lists the shops in ranking order. The officers say that well-behaved ones can enjoy free advertising space on digital displays. A shopkeeper says that owners of low-scoring establishments risk being summoned for a lecture by officials.

There is no sign that such schemes have

strayed beyond the creepy paternalism that is often exhibited by local governments and that is just as often shrugged off by local residents. They look like little more than propaganda exercises aimed at emphasising the importance of "trustworthiness", says Jeremy Daum, a Beijing-based fellow of Yale Law School. As for the national blacklists, the only way to land on them is by breaking the law, not by accumulating "bad credit", he notes.

But the way China is setting up systems relating to social credit appears open to abuse. In some places government offices that manage petitions submitted by citizens seeking redress of injustices say they will put people on blacklists if they "cause disturbances" while doing so. That seems open to arbitrary interpretation (local officials often treat small peaceful gatherings as disturbances). Appeals systems are supposed to be in place, but challenging government rulings is very rarely successful in China. The Xichu system does not seem fair, at least as it appears on paper: among rewards for the best-behaving citizens is "priority service" in emergency wards. One employee at a government office says that "of course" people with low Xichu scores can expect to suffer consequences. The Xichu system's published rules do not specify what these might be.

At the national level, too, the socialcredit scheme has several disturbing aspects. China has a poor record of data security. Centralised databases could become honeypots for hackers. The blacklists raise questions about the proportionality of punishments. The government's project may help curb some social ills about which the public grumbles, but it could also infringe on people's rights.



The worst industrial disaster since 2015

An explosion on March 21st at a pesticide factory in Xiangshui county, Jiangsu province, killed at least 78 people and injured more than 600 others. It was China's deadliest industrial accident since 2015. The government blamed local officials and the company, Tianjiayi Chemical, for failing to learn lessons from safety violations at the plant.

Property



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Middle East & Africa



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Mozambique First the floods, then the pestilence

BEIRA

The rush to avert a second disaster after Tropical Cyclone Idai

JULIETA MUSSACA and her two children survived on coconuts knocked from trees by the storm and a bag of rice left soggy from the floods. After Tropical Cyclone Idai hurtled into Mozambique's coast on March 14th, and a deluge of floodwaters followed, little was left of her village in Buzi district. "Even the trees are gone," said Ms Mussaca, who is 29. "We lost everything." After nearly two weeks of growing desperation, cut off from the outside world, she travelled by boat to the nearby city of Beira. "No one came to help us," she said. "No one."

The cyclone, which the UN has called the worst weather-related disaster to hit the southern hemisphere, has directly claimed nearly 900 lives in Mozambique, Zimbabwe and Malawi, according to official estimates. Aid workers reckon the figure is very much higher. An exact count may never be known: many bodies have been washed out to sea. Yet the aftermath of the storm may prove even more deadly, in part because of the slow response of governments in the region.

South Africa, which aspires to be the regional power, could spare just three helicopters to help. That is in stark contrast to its response to floods in Mozambique in 2000, when it immediately sent ten aircraft which rescued almost 15,000 people, plucking many from trees.

Mozambique's government, too, has been slow off the mark. Filipe Nyusi, the president, merrily went ahead with a state visit to the Kingdom of Eswatini (formerly Swaziland) the day after the storm hit. As it happens he was there to sign agreements on how the two countries could co-operate on car insurance and search-and-rescue operations. He cut the visit short a day later but has continued his missteps. On March 27th Mozambicans turned on their televisions for a live address, expecting their president to talk about the disaster. Instead he gave them the cheery news that the Pope would visit in September.

Speed it up

Help is finally arriving. A main road to Beira, a port city of 500,000 people at the centre of the disaster, has been repaired, allowing lorries to deliver goods. Other supplies are coming by ship. Still, the pace is slow. Some 1.8m Mozambicans are thought to have been affected by the storm. Emergency workers fear a second disaster from the spread of waterborne disease. Cases of cholera and malaria have been reported.

Even as rescuers try to deal with the effects of the storm, some are looking at the lessons it offers. Although Mozambique suffered large-scale flooding in 2000 that killed nearly 700 people, tropical storms in the region are typically less intense than they are further north. But this pattern appears to be changing as the climate warms. António Guterres, the UN's secretary-general, warned that such "turbo-charged storms" are "becoming more frequent, more severe and more widespread".

Mozambique, with a long, low-lying coastal plain that is home to more than half its population, is particularly vulnerable. This storm flooded 2,515 square km (971 square miles), an area larger than Greater London and New York City combined.

Protecting people in these areas will require a better early-warning system—although storm alerts went out, most people ignored them because they did not realise how much danger they were in—and better infrastructure, such as roads and bridges that will not wash away and buildings that do not get knocked down by strong winds.

One question is who should pay to strengthen these defences. Mozambique has produced few of the greenhouse gases that may be fuelling the storms it faces. And it is so poor—annual per person income in 2017 was just \$426—that there is not much it can do. "We put stones on the roof to weigh it down," says 19-year-old Aunencia Pedro. His home was destroyed.

50

Rwanda's genocide, 25 years on

We're just one happy family now, aren't we?

KIGALI

It is hard to tell how well the wounds have healed in Rwanda

T Rwanda is still an enigma. Its recovery in economic, social and psychological terms is hotly debated. Almost every aspect of the past and present is still argued over. What exactly caused the genocide (which started after a plane carrying Rwanda's president, Juvénal Habyarimana, was shot down by unknown assassins)? How many people died? Could outsiders, in particular the UN, have halted it?

More recently, has President Paul Kagame, the Tutsi rebel commander who stopped the genocide at gunpoint and has ruled ever since, genuinely sought to heal the wounds? Or does he cynically exploit the horror to legitimise his ruthlessly authoritarian and predominantly Tutsi regime? Are the Hutus, still a large majority, quietly determined to take over again one day? Could democracy ever take root in Rwanda—or is a firm grip on government the least bad option?

What is undisputed is that the killing that began on April 7th 1994 was genocide. Probably three-quarters of all Tutsis in Rwanda—men, women, children and babies—were murdered. The true number is unknown. The UN guesses 800,000: mostly Tutsis, but also 30,000 or so moderate Hutus. Mr Kagame prefers a round figure of a million. The meticulous Alison Des Forges of Human Rights Watch was able to substantiate 500,000 deaths. She was later barred from Rwanda for criticising Mr Kagame's regime.

The slaughter was shockingly swift, lasting only 100 days. Probably most adult Hutus took part or witnessed the killing without objection. Hutus were then 84% of Rwandans, so their Tutsi neighbours had nowhere to run. As Philip Gourevitch, a journalist, put it: "The entire Hutu population was called upon to kill the entire Tutsi population."

Hutus with babies on their backs hacked down Tutsi women similarly encumbered. Hutu priests oversaw massacres of Tutsis in their congregations. Hutu husbands killed Tutsi wives. Hutus were told that if they failed to kill, they would themselves be killed. Though the Rwandan army often lobbed grenades into churches and schools and fired on Tutsis cowering there, most murders were carried out by civilians wielding machetes and clubs.

The issue of justice still reverberates and rankles. A year after the genocide

about 120,000 suspected perpetrators were put in prisons built for 45,000. Another 300,000 were eventually incarcerated in appalling conditions. Some 46,000 Rwandans, most of them *génocidaires*, are still behind bars.

Such was the scale of the genocide that from 2002 until 2012 a huge web of community courts known as gacaca (pronounced "gatchatcha") was set up, under trees and in village courtyards, to dispense justice in a more traditional fashion, by asking witnesses to tell their stories before amateur judges. "No one claims that gacaca justice was perfect but very few here doubt that it saved Rwanda," says Nick Johnson, a British law professor. With justice has come a measure of reconciliation. "No other country today has so many perpetrators of mass atrocities living in such proximity to their victims' families," writes Phil Clark of the School of Oriental and African Studies in London.

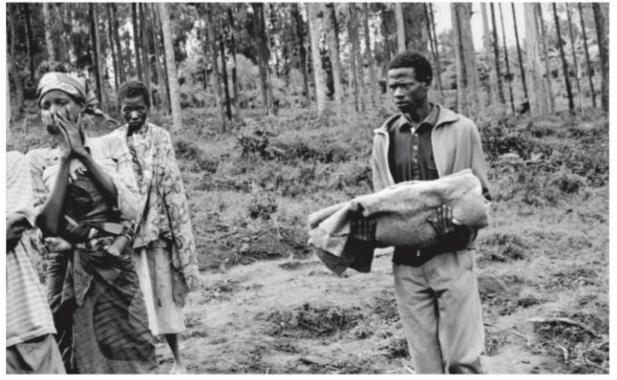
Mr Kagame's great claim is that there has been no large-scale violence inside Rwanda for the past 24 years. Mr Clark, who has conducted more than 1,000 interviews with Rwandans on both sides of the Hutu-Tutsi gap in the past 16 years, says his respondents nowadays describe "peaceful but uneasy community relations".

In part this has been achieved through a widely understood, if unspoken, contract whereby people have traded political freedom for peace and economic development. The economy has recovered rapidly. Infant mortality has halved since 2000, a feat UN-ICEF rates as "one of the most significant in human history". In 1995, when the country lay in ruins, GDP per person was \$125. Today it is around \$800, though some economists question Rwanda's rosy statistics.

Few Rwandans have the nerve to dissent. A Rwandan journalist warns that "no one will ever tell you truly what they think." A Western diplomat concurs. "People just won't talk freely." Mr Kagame may have slightly loosened his elaborate system of spies and social controls of late, yet there is precious little space for political competition. He won 99% of the vote in 2017. A compliant Green Party was allowed seats in parliament last year, but its members recall how, in 2010, unknown killers cut off its vice-president's head. Last year two opposition leaders who had sought to run for president were freed from prison, including Victoire Ingabire, a Hutu who had been sentenced to 15 years on trumped-up charges of inciting "divisionist" (ie, Hutu v Tutsi) rebellion. Her spokesman was murdered this month.

Mr Kagame has scaled back his military adventures abroad. Initially these were intended to hunt down *génocidaires* lurking mainly in the forests of neighbouring Congo, but they expanded into calamitous regional wars during which Congo's minerals were looted and multitudes died. Recently, Mr Kagame has fallen out badly with Uganda's president, Yoweri Museveni, once a close ally, whom he now accuses of harbouring Rwandan "traitors". He particularly detests the Rwandan National Congress, a group of fellow Tutsis who were once his closest comrades. It has supporters across a wide diaspora, including in Belgium, South Africa, Uganda and America. Several have been assassinated on foreign soil.

Twenty-five years after taking power, >>



The horrible past

Mr Kagame faces two tests. The first is whether he will be able to hand over smoothly to a successor. The second is whether, when he does go, Rwanda's terrible wounds will reopen.

Mr Kagame's boosters argue that only he has the authority to hold together so fragile a country. That argument loses force with each passing year. Under a fifth of the population is old enough to have been adults during the genocide. Most children have grown up with the idea of "Rwandaness", inculcated into them in education camps, known as *ingando*, that try to minimise ethnic differences. More will begin to demand freedoms enjoyed elsewhere. Without the safety valve of democracy, protests and anger could again take on an ethnic tinge, awakening the demons that Mr Kagame claims to have banished.

Ethnic labels in Rwanda

Don't ask, do tell

KIGALI Almost everyone knows who's who

"I's THE nose, they always look at your nose," says Peter (not his real name), an ebullient Tutsi former soldier mulling over how the majority Hutus still eye up, and in the old days would comment on, the supposedly sharper and longer noses of the stereotypically taller and thinner Tutsis.

These days it is rude—and can even be deemed criminally "divisionist"—to use the labels Hutu and Tutsi in public. "We are all Rwandans now" is the strictly enforced official mantra. Yet virtually everyone is conscious of whether someone hails from a family of "victims" or "perpetrators".

One must be careful not to ask, or spell it out. "We know, we always know," says Peter. "We can tell easily in the village; maybe it's not always so easy in Kigali," the capital, which is a melting pot. "But you always find it out, maybe in a roundabout way."

Hutus and Tutsis are not tribes but a complex mosaic of clan, caste and lineage, sharing language, religion and customs, with much social mixing and intermarriage. Some Hutus are tall and lean. Some Tutsis are short and stocky with flat noses. Many Rwandans are in-between.

After a drink, Peter breezily flouts the official edict against ethnic labelling. "The Hutus still make excuses," he complains. "They say, 'We were told to kill or we would be killed ourselves'... But how can you kill children and babies? The trouble with Hutus is that they obey, that's their mentality."

Government bloat Twilight of the bureaucrats

CAIRO

Millions of retiring Arab civil servants need not be replaced

A TAMUNICIPAL parking garage in Cairo, a row of freshly painted machines wait to dispense tickets to drivers. But the machines are turned off. Attendants stand next to them and hand out tickets manually. It is one of many useless government jobs in the Egyptian capital. Stamping passports at the airport can be a three-person affair. Offices are full of functionaries who make photocopies or brew tea (few do both). More than 5m Egyptians work in the civil service. Each serves fewer than 20 citizens, if "serves" is the right word. Other developing countries get by with a far less populous public sector.

The president, Abdel-Fattah al-Sisi, thinks little of his workforce. At a conference in May he suggested that 1m employees could do the work now accomplished by 5m. (Anyone who has dealt with Egyptian bureaucracy would probably agree.) He worries that firing them would cause unrest, however. Instead, his government has a better solution: do nothing and let the bureaucracy shrink itself. About 2.2m of Egypt's civil servants are in the top two pay brackets, which usually require decades of service to reach. The prime minister, Mustafa Madbouly, wagers that at least 35% of the workforce will retire within a decade.

That would reduce a wage bill that consumes 27% of government revenue, freeing billions for badly needed investment.



Many of these jobs plainly do not need to be filled. Egypt is dragging itself into the digital age. Citizens can renew their national ID cards online, and other documents will be available later this year. The state is installing new electricity meters that can be recharged via smart cards. Even the notoriously archaic courts are buying computers. All of this will reduce the need for cadres to collect bills and scribble notes in ledgers.

Many Arab countries are in a similar situation. Cushy state sinecures were once seen as a birthright. Anwar Sadat and Hosni Mubarak bloated Egypt's public sector to keep the middle class loyal. Gulf governments started a long hiring spree during the oil boom of the 1970s. For a generation, though, public-sector hiring has not kept pace with population growth. Though Egypt's workforce has swollen by 7.7m since 2005, the bureaucracy registered a net increase of just 190,000.

Hiring has slowed in Saudi Arabia too, but a whopping 45% of citizens still work for the state (in the OECD, a club of mostly rich countries, the average is 18%). As in Egypt they skew old, with 31% aged 45 and over versus just 7% under 30. The crown prince wants to steer young Saudis into the private sector, but few firms want to hire them on the cushy terms they demand. Over 30% of under-30s are jobless.

Unemployed young people scare autocrats: they start protests. If economies stay sluggish, governments will be loth to cut their payroll, despite the cost. For every young Arab keen to start a tech firm or a small business, another is happy to accept a make-work job. A poll in 2016 by Asda'a Burson-Marsteller, a PR firm, found that half of Arab youth want government gigs. In the Gulf the figure rises to 70%. State jobs are seen as more secure, more lucrative and less demanding than private ones. Public-sector pay is 39% higher in Saudi Arabia and 60% higher in Egypt.

In Egypt the wave of retirements may also create a different problem. The publicpension law stipulates a maximum payout of 30% of a worker's final salary. With average wages of 5,000 pounds (\$289) per month, a typical pension would appear to be a paltry 1,500 pounds. Even that figure is misleading, because base salaries make up a small fraction of public-sector pay; the bulk of it comes from regular bonuses.

Millions of workers may soon head into their sunset years with only the minimum pension of 750 pounds per month, 38% below the public-sector minimum wage. Pensions are not linked to inflation. Though parliament raised them by 15% last summer, subsidy cuts and high inflation immediately gobbled up the increase. Civil servants have long been a loyal constituency. That may soon change. Mr Sisi will have to hope they approach protesting with as much zeal as they did their jobs.

Europe



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Germany's Social Democrats Left behind

BERLIN

Germany's oldest political party is still struggling to pull itself from the mire

F^{EW} POLITICAL PARTIES have a history like that of Germany's Social Democrats (SPD). Founded in the late 19th century, the SPD heroically if briefly resisted Hitler's rise. After the war it reinvented itself as a big-tent *Volkspartei* (people's party). In office it modernised West Germany, soothed cold-war tensions and inspired similar movements abroad. In 1998 it still commanded over 40% of the vote.

It has had a rough time since. After a losing to Angela Merkel's centre-right Christian Democrats (CDU) in 2005, a string of poor results reached a nadir in 2017, when the SPD took barely 20% of the vote, its worst result since the war. After an agonised internal debate, the party agreed to rejoin the coalition in which it had served with the CDU (and its sister party, the Christian Social Union) since 2013. That failed to arrest the slide. Today the party languishes behind the Greens and has vied for third place with the hard-right Alternative for Germany (AfD). In parts of Germany it has shrivelled to almost nothing.

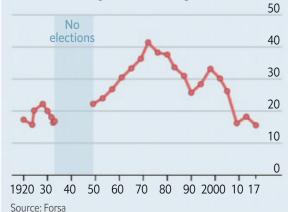
The decline of social democracy across Europe is well documented. The institutions, especially organised labour, that in West Germany's case funnelled millions of votes to the SPD in the glory years of the late 1960s and 1970s (see chart) have withered. In a fragmented society it is harder to build the blue- and white-collar coalitions that delivered the party's most recent victories, to Gerhard Schröder, Mrs Merkel's predecessor. Outside Iberia and Britain, socialdemocratic parties are struggling almost everywhere in Europe. Yet the SPD's history and influence mean its distress stands out.

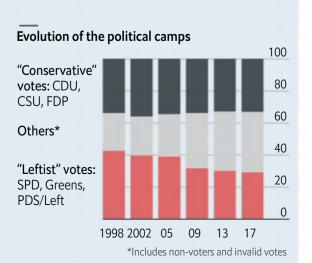
During the long Merkel years the SPD

The squeeze

Germany, vote share as % of total electorate

SPD in Reichstag and Bundestag elections





has found it hard to establish an identity. It chalked up victories in government, such as the introduction of a national minimum wage in 2015, but failed to get much credit for them. Today just 16% of German voters say the SPD has the strongest imprint on the coalition, next to 62% for the CDU/CSU. "It's a deep-rooted rejection of the present government," says Kevin Kühnert, head of the SPD's youth wing, who led a campaign against rejoining the coalition last year.

People are another problem. Andrea Nahles (pictured), the SPD's leader, is a canny strategist but unpopular with colleagues and voters. Olaf Scholz, the vicechancellor and finance minister, exudes competence and ambition but struggles to shake off his robotic "Scholz-omat" reputation. In matchups, both lose to Annegret Kramp-Karrenbauer, who took over from Mrs Merkel as CDU boss in December. The **>>** > SPD got through eight leaders during Mrs Merkel's 18 years at the top of the CDU.

Yet its problems run deeper than people. Most trace them to Mr Schröder's labour-market reforms, especially "Hartz IV", which toughened rules on unemployment benefits. The policy is often credited with helping create a jobs miracle, but it infuriated the party's base in areas such as the post-industrial Ruhr. The SPD lost over 10m voters between 1998 and 2009, and arguments festered among those who stayed.

To heal the wounds, last month Ms Nahles proposed replacing Hartz IV with a "citizens' payment", extending the period in which a portion of previous salaries is paid to claimants, and raising the minimum wage. This has lifted the party's spirits, as has a (more realistic) push for bigger state pensions. "Our profile in government is now sharper, and I appreciate it," says Malu Dreyer, the SPD premier of Rhineland-Palatinate. The polling bump earned by this moderate leftward tilt quickly vanished. Yet party leaders think they have found a sweet spot in which they can pick fights with the CDU on selected issues, brandishing their social-justice credentials without angering voters by paralysing the government. Papers on a jobs-friendly climate policy, elderly care and social cohesion are promised later this year.

The leadership hopes to bolster morale before a review of the coalition at the end of the year, which could offer party hacks who never wanted to rejoin the government a chance to pull out. For the moment Ms Nahles's efforts have calmed people's nerves. But the mood could turn jittery again should the SPD do badly in elections this year. Losing power in Bremen (which votes in May) and Brandenburg (September) would be especially painful.

The strategy may see off the internal critics for a while. But the appeal of softening welfare rules is limited when unemployment is below 4%; boosting pensions does little for younger voters, just 9% of whom believe the SPD best serves their interests. "I was born in 1985, where's the social system for me?" asks Laura-Kristine Krause, a party member and political activist. On other issues the SPD can resemble a think-tank more than a power-hungry party. There are good ideas floating around the party's brains trusts on matters like automation and the future of work, but little apparent appetite to translate them into a coherent set of vote-winning policies.

The picture is yet dimmer on foreign policy. As Germany comes under pressure from allies, above all America, to meet its NATO responsibilities, the SPD spies an opportunity to market itself as the "party of peace", opposing big rises in defence spending and a relaxation of arms-export rules. The SPD's slogan for the European elections, "Europe is the answer", sits awkwardly with the irritation its foreign policy stirs in its EU partners, especially France. No matter; the party is in line with voters' instincts. "You need something for the heart as well as the brain," says an insider.

Immigration and identity politics, however, present trickier terrain. Leaders hope that as the dust settles from the refugee crisis of 2015-16 they can steer the national conversation on to social and labour issues. But immigration remains German voters' top priority. This speaks to perhaps the SPD's broadest problem. More than any other party it has literally shed votes left (The Left), right (AfD) and centre (Greens, CDU and the liberal Free Democrats). That makes it hard to alight on a single strategy to win people back: trying to seduce AfD voters with a tougher line on migration, for example, alienates defectors to the Greens.

Party bigwigs accept that the days of 40% support are gone for good. But with 25% of the vote (not completely impossible), it might lead a leftist coalition with the Greens and The Left, although their collective support has shrunk considerably (see chart). Others want to hug the FDP closer. Yet all this is for the future. For now the SPD is stuck in a grim present, torn between constituencies, lacking leadership and bereft of election-winning ideas.

Ukraine's presidential election Unscripted

The country heads for the polls, with a comedian in the lead

THE MOST encouraging thing about Ukraine's presidential election is that nobody knows who is going to win. In that sense, democracy in Ukraine is healthycertainly more so than in its post-Soviet neighbours Russia and Belarus. The latest polls show Volodymyr Zelensky, a comedian-cum-candidate, leading, with the support of some 30% of the voters who have made up their minds. Petro Poroshenko, the incumbent president, and Yulia Tymoshenko, a former prime minister, are running neck-and-neck for second place. Yury Boyko, a former energy minister, and Anatoly Hrytsenko, a former defence minister, trail a distant fourth and fifth. A guarter of voters remain undecided. With none of the nearly 40 candidates likely to garner the majority needed for a victory in the first round on March 31st, the two front-runners will face off on April 21st.

Yet the campaign's competitiveness masks other ailments. Accusations of votebuying are flying; Ukraine's oligarchs continue to exert outsize influence through



The comic contender

their media empires. The result's uncertainty also reflects deep frustration among the people. The Maidan revolution, which overthrew President Viktor Yanukovych five years ago, offered the chance of straightening out Ukraine's crooked politics. Some reforms have indeed been implemented and a course towards integration with the West has been set. Unlike past elections, this one is not a contest between those favouring closer ties with the West and Russia respectively, thanks largely to Vladimir Putin's seizure of Crimea, a Ukrainian peninsula, and incursion into the east of the country in 2014.

Nonetheless, corruption and special interests remain entrenched. Ukraine's citizens now have less faith in their government than those of any other country, according to Gallup, a polling firm: just 9% have confidence in it and 91% believe it is thoroughly corrupt.

That distrust of the establishment explains Mr Zelensky's appeal. One of the country's most popular actors, he is best known for "Servant of the People", a TV series in which he plays a schoolteacher who vaults to the presidency after a video of his rant about corruption goes viral. Mr Zelensky has borrowed the show's title for the name of his political party, and has styled his candidacy after his character, often blurring the lines between make-believe and reality. His vague policy positions, lack of experience and murky ties to the oligarch Ihor Kolomoisky, whose television channel airs Mr Zelensky's shows and has promoted his candidacy, have not turned off voters desperate for a new face. As a Western diplomat says: "Even if a chair ran, people would vote for it."

It would be hard to find two faces in Ukrainian politics older than Mr Poroshenko and Ms Tymoshenko. A confectionery mo-

The Netherlands

Taking flight

AMSTERDAM A new right-wing party appears on the scene

" THE OWL of Minerva spreads its wings at dusk," announced Thierry Baudet, leader of the Netherlands' new Forum for Democracy (FVD) party, after the country's provincial elections on March 20th. The two-year-old FVD had just shocked the establishment, winning the most votes of any party nation-wide and becoming the largest in several provincial legislatures. Dutch voters whose Hegel was shaky turned to Google to work out what the Eurosceptic, climate-change-sceptic foe of immigration was on about, and concluded that he was proclaiming the election a dialectical shift in Dutch history.

Combined with fashion-model looks. such stunts have made Mr Baudet the hottest political news in the Netherlands. In his first appearance as an MP in 2017, he violated parliamentary rules by trying to make a speech in Latin. Many compare his rise to that of Pim Fortuyn, the similarly debonair anti-Muslim professor and politician who was assassinated in 2002. Unlike Geert Wilders, the Netherlands' other anti-immigrant populist, Mr Baudet campaigns among younger and better-educated voters, staging open forums on right-wing philosophy. But of the major parties, only Mr Wilders's had a lower education level. Almost all had switched from other right-wing parties. Rather than leading a revolution, Mr Baudet may simply be replacing Mr Wilders as the Netherlands' main right-wing populist.

"The real story of the elections is 'Dutch disease', the complete levelling and splintering of the party landscape," says Tom van der Meer of the University of Amsterdam. The FvD came first, but won just 15% of the vote, compared with 14% for the Liberals and 11% for the GreenLeft party. The country now has 13 parties represented in parliament.

The FvD's new delegates in provincial legislatures will vote in May to choose the country's Senate, parliament's less

• gul and former minister who came to office in 2014 promising to root out corruption, Mr Poroshenko has been dogged by allegations of graft against his entourage since then. His campaign has focused on nationbuilding and security issues. Ms Tymoshenko, who earned the moniker "the gas princess" while running a lucrative gasimporting business in the 1990s, has run on the unconvincing slogan of a "New powerful arm. The FVD will probably get 13 of the 75 senators, depriving the ruling coalition of a majority.

Paradoxically, this could force the government to move left, co-operating with GreenLeft or the Labour party. It is trying to pass energy legislation to meet the country's commitments under the Paris climate-change treaty. Mr Baudet has claimed the measures would cost a trillion euros over several decades; independent experts put the figure at €3bn-4bn (\$3.4bn-4.5bn) per year by 2030.

Yet even if the FVD has little effect on policy, it is changing the ideological landscape. The party supports leaving the EU ("Nexit"), though it has put that demand on the back burner. It is making climate-change scepticism acceptable on the right. Mr Baudet has warned of the "homeopathic dilution" of the Dutch people, and his apocalyptic speeches accuse an elite "cartel" of all the other parties of bringing Dutch civilisation to its knees. Such populist talk may not appeal to most Dutch. Surveys show that 63% trust their government, the highest rate in Europe. But Mr Baudet is doing his best to change that.



An owl of protest

Course". Her most potent rallying cry has been opposition to recent gas-price hikes. Both hope that demography will work in their favour: Mr Zelensky's support is strongest among younger voters, the least likely to turn out. Mr Poroshenko and Ms Tymoshenko rely upon older, more active voters. They are also counting on the large bloc of undecideds to put fear of the unknown ahead of anger at the status quo.

Turkey

Elections and Erdoganomics

ISTANBUL

As Turks head to the polls, the economy takes centre stage

TURKEY'S PRESIDENT, Recep Tayyip Erdogan, once spoke of terrorist acts committed with a pen. Ahead of local elections, he has turned his attention to those committed with vegetables. "They've made aubergine, tomato, potato and cucumber prices increase," he told a rally last month, referring to wholesalers suspected of hoarding. "They are spreading terror."

Despite the government's attempts to distract voters, the economy will weigh heavily on the minds of most Turks when they elect mayors and councillors on March 31st. Overall, Mr Erdogan's ruling Iustice and Development (AK) party has done well in this area. Since 2002, when AK first came to power, the economy has expanded by an annual average of 5%. Millions of Turks have propelled themselves out of poverty. But the wave of credit that companies and consumers have been riding over the past decade, often with reckless abandon, has come crashing down. In one year the Turkish lira has plunged in value by about 30%, stoking the worst inflation since AK came to power. Interestrate hikes have stymied growth. It is now officially in recession.

Fears of turbulence resurfaced last week, when news that the central bank had burned through \$6bn in foreign reserves in a couple of weeks caused the biggest oneday fall in the lira since last summer. Mr Erdogan responded by threatening currency speculators. The banking authority opened an investigation into JP Morgan after the bank advised clients to dump the lira. Local banks were reportedly instructed to stop lending the currency on offshore markets to prevent more short-selling. The lira recovered, but foreign investors responded by dumping Turkish stocks and bonds.

AK will prevail in the elections, but there may be hiccups. Most eyes are on Ankara, the capital, where an opposition candidate, Mansur Yavas, has been polling ahead of AK's nominee, Mehmet Ozhaseki. Taking a break from his campaign, Mr Yavas says a vote for him is a vote against economic mismanagement and corruption.

Mr Erdogan and his allies want to teach Mr Yavas a lesson. Earlier this month, the pro-government press dug up old allegations linking the mayoral hopeful to a counterfeit cheque. Days later, prosecutors launched an investigation. Mr Erdogan has since threatened that Mr Yavas will pay "a heavy price" after the elections, suggesting **>>** ▶ he may be removed from office.

Mr Erdogan has indeed used every weapon in his arsenal to galvanise his religious base. At rallies, he has falsely accused the West of playing a role in the recent mosque attack in New Zealand, the opposition of taking orders from terrorists, and feminist protesters of booing the call to prayer. (They were actually booing police who doused them with tear gas.) A week before the election, the president proposed converting Hagia Sophia, the Byzantine cathedral turned into a mosque by the Ottomans and into a museum by Ataturk, back into a mosque again.

Turkey's president has campaigned as if his future depended on the local elections. It does not. Barring a truly calamitous showing and calls for an early general election, Mr Erdogan will not face another vote for up to four years. But he will have to face millions of Turks who care less about the conspiracies their leader conjures up than they do about the economy.

France

Among the yellow jackets

BEAUCAIRE

The gilets jaunes are fewer in number, but just as determined

T^{HE ROUNDABOUT on a ridge outside the Provençal town of Beaucaire is a pleasant enough spot. The sky is clear, the air is warm, and the view over the Rhône valley would be picturesque, were it not dominated by a giant cement works. On the roadside, a festive group of 30 or so *gilets jaunes* (yellow jackets) protesters has set up camp outside a yellow-painted shed. On the grassy bank, 11 yellow crosses have been planted in the earth—one for each of those who have died in accidents linked to the protests countrywide.}

"We have occupied this place every day, even over Christmas and New Year," says Bernard, a pensioner, "and we're not going to stop now." As the working day draws to a close, more cars pull up, disgorging provisions and small children. Parasols are opened to shade a picnic table, and toys lie on the ground. If the *gilets jaunes* elsewhere have mostly left the roundabouts, or been forcibly moved from them, pockets such as this corner of southern France and nearby Avignon are holding out.

Four months after the *gilets jaunes* protesters first emerged, what was originally a revolt against the rising tax on motor fuel has turned into a longer-running protest movement than the May 1968 student uprising. To be sure, the number of weekend demonstrators has dropped, from 280,000 last November to just 40,000 last weekend. And recent rioting in Paris, particularly violent on March 16th, has eroded public sympathy. Support for the *gilets jaunes* fell from 72% in December to 46% in March. Internal quarrels over whether to set up a political party, and insurrectional posturing by the movement's more unhinged organisers, have also discredited the movement. So have the efforts of President Emmanuel Macron to meet some of the protesters' demands.

Yet the anger in parts of la France profonde has not been quelled. On the Beaucaire roundabout, the mood is defiant. The gilets jaunes know that, over in the 17thcentury town hall, they have the implicit backing of the town's mayor, Julien Sanchez, who is from Marine Le Pen's populist National Rally (formerly National Front). He took part in the first gilets jaunes protest last year, and does not disguise his sympathy for them. Naturally, Mr Sanchez blames the violence, which has also marked protests in nearby Nîmes, not on the far right but on extreme-left "anti-fascists", whose objective is "to sow chaos". Moreover, he claims, however absurdly, that this suits Mr Macron. "If the government had wanted to stop the movement, it would have," he says. "But this allows them to demonise it."

In reality, the failure to control the vandalism and arson attacks has undermined Mr Macron's authority, and that of his interior minister, Christophe Castaner. And it has raised fresh questions about policing methods. The use of non-lethal police weapons during earlier protests-leading to at least 22 serious eye injuries—was denounced as excessive by the United Nations high commissioner for human rights. Yet Edouard Philippe, the prime minister, who last week fired the head of the Paris police, has now urged the police to clamp down more firmly on rioters. A tough "anti-hooligan" bill, contested by 50 deputies from Mr Macron's own party, has been passed by parliament.

Indeed, if Mr Macron's poll numbers have recovered, it is despite the violence, and largely because of his marathon "great national debate", designed to show that a leader seen as aloof and out of touch can in fact listen. The president has rolled up his shirt sleeves, taken notes, and spent over 50 hours listening to grievances. Nearly 2m contributions to the debate have been posted online, and thousands of local townhall meetings organised.

In Beaucaire, 55% of the town's voters backed Ms Le Pen for president in the second round. When asked what he thinks of Mr Macron, one *gilet jaune* pulls his forefinger across his throat. Nonetheless the town hall held an evening debate, attended by many local *gilets jaunes*, who see Mr Sanchez as "one of us". Complaints ranged from the perks given to former presidents, and a proposal to abolish the "useless" Senate, to the "advantages" Mr Macron hands out to "immigrants" rescued in the Mediterranean over "the French".

Indeed, if there is a recurring theme in this Mediterranean hinterland, where the National Front put down early roots, it is immigration-even though it was not one of Mr Macron's original debate topics. Local gilets jaunes approve of Mr Sanchez's decision to abolish "substitute meals" in Beaucaire's schools, thus keeping pork on the menu, a tactic one commentator denounces as an "alibi for xenophobia". Their local Facebook groups are filled with alarmist stories about uncontrolled immigration. Which is why, whatever emerges from Mr Macron's great debate, the politician standing to gain the most from the gilets jaunes there is Ms Le Pen—so long as a new party does not split her vote. "Macron is letting in thousands of immigrants," claims Eric, up on the roundabout. "And they get better benefits. We're not interested in any gilets jaunes party, because it will just help him."



Not going anywhere

The Economist March 30th 2019

Charlemagne | The spectre of Airstrip One

Britain's neighbours fret that it could drift into the arms of non-European powers

I MAGINE BRITAIN in a few months' time, having left the EU without a deal. Markets and sterling are plummeting. The country has left the EU's foreign-policy structures without any framework for future relations. Its government falls. A new prime minister scans the world for friends and picks up the phone to the White House, Zhongnanhai in Beijing or even Vladimir Putin's Kremlin.

Such an outcome is very unlikely: for a start, Theresa May could even now just squeeze her deal through. Yet European leaders and officials are spooked as they contemplate a no-deal Brexit, or even a hard one as Mrs May intends. This shapes their posture and reveals something of their wider state of mind. They reckon that an acrimonious divorce could make Britain desperate for trade deals with giant partners like America, China and others. And they fear, says Mark Leonard of the European Council on Foreign Relations, that over time those actors could exploit its weaknesses, imposing conditions that peel Britain away from Europe's foreign-policy caravanserai and leave it in a position similar to that of Turkey: a semi-European player with unpredictable foreign entanglements.

Donald Trump's White House may want revisions to Britain's policies on the Middle East, suggests one EU official; perhaps its withdrawal from the Iran nuclear deal. Rem Korteweg of the Clingendael Institute reports Dutch worries that American pressure in trade talks could also split Britain away from European sanctions and weapons-export policies. China's designs on Britain cause even more apprehension. China has a record of using its weight in bilateral talks with European countries (particularly those in economic or diplomatic strife, like Italy and Hungary) for foreignpolicy ends. "The Chinese will be ready. They have a clear feeling of the power ratio," notes a senior EU diplomat. He suggests that the price of a trade deal could be British acquiescence to Beijing's ambitions in the South China Sea. Others speculate that London could sign up to the "belt and road" infrastructure programme or further open its critical infrastructure to Chinese money.

No-one expects an overnight transformation. The concern is more that Britain's need for new trading partners and inward investment, and its absence from common EU forums, will over time pull it away from the European fold. Among the more lurid predictions are those by Marc Roche, *Le Monde*'s correspondent in London, who imagines Britain ending up as a "tax haven at Europe's gates" and "China's Trojan horse in Europe".

Britain has done little to dispel such anxieties. Its shambolic Brexit negotiations give EU panjandrums nightmares about British ministers with no experience but abundant neo-imperial fantasies parading into negotiating rooms with the Chinese and losing their shirts. Guff about "global Britain" and Theresa May's earlier hints that she might use the country's European defence commitments as bargaining chips, though long since abandoned, have heightened doubts. Some observers spy signs that London is softening certain foreign-policy positions ahead of post-Brexit talks: for instance by supporting Donald Trump's withdrawal from the Intermediate-Range Nuclear Forces treaty.

The continentals should not worry so much. Britain has always been a mercantile, semi-detached sort of European foreign-policy power. Brexit could accentuate the country's relative openness to foreign cash but is not its cause. Beijing first declared a new Anglo-Chinese "golden age" in 2015 and seems to have since lost interest in the country as a backdoor to Europe. And even if a charlatan like Boris Johnson or an anti-Western leftist like Jeremy Corbyn ends up in Downing Street, Britain's prime minister is constrained by Parliament, public opinion and the wider institutional establishment. All of these remain committed to the pre-Trump transatlantic order and close foreign-policy co-operation with continental Europe, as recent debates in the House of Commons on softening Brexit, or curbing its deleterious effects, have illustrated. The strength of Britain's institutions, the size of its economy and its crucial role in NATO all make comparisons with Italy and Hungary unhelpful. Britain may be opportunistic, even cynical, in the aftermath of a rough Brexit. But it will remain an integral part of the Western alliance. And it is a bit rich to worry about the British when Germany remains in hock to Russian energy interests and Italy, not Britain, has just signed up to China's belt and road plan.

Something to worry about

Still, European concerns to the contrary, no matter how overdone, are significant on two levels. First, they help shape the attitudes of the remaining 27 members of the EU to a no-deal Brexit. All are fed up with the talks. None is convinced that maintaining good commercial relations with Britain is worth pursuing talks indefinitely, or allowing it to cherry-pick the benefits of membership. But more than is realised in London, angst about a no-deal or otherwise fraught Brexit splitting the West and isolating Britain continues to stay the hand of even the most negotiation-weary European leaders. It motivated Angela Merkel's successful insistence at the EU summit on March 21st that Britain be granted more time to pass its negotiated Brexit deal or to request an extension. It is a weak Britain's strongest card.

Second, Europe's anxieties are symptomatic of the times. After years of complacency, it is slowly taking its own geopolitical situation more seriously. There is talk, though little action, about seeking "strategic autonomy" from America. The EU is increasing efforts to curb Russian-backed political interference and has introduced a screening mechanism for Chinese investments. At their summit on March 26th Mr Macron and Mrs Merkel chided Xi Jinping for trying to exploit Europe's divisions. "They perceive a ring of countries on the EU's fringes that are vulnerable to outside powers," explains Jan Weidenfeld of MERICS, a think-tank in Berlin. The fear that Britain could join this ring says at least as much about the EU as it does about Britain itself.



Britain

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Parliament and Brexit The ultimate price

Theresa May's promise to quit if MPs pass her Brexit deal marks the culmination of her steady loss of control over the process

The Referendum in June 2016 was supposedly about taking back control. This made the news on March 27 that Theresa May had offered to resign to get her Brexit deal through more poignant. That her announcement took place as MPs were, for the first time in living memory, taking back control of their agenda from the government to hold indicative votes on Brexit emphasised her lost authority.

The prime minister's offer to resign if MPS pass her deal gives it another chance, despite its having been rejected twice. But the odds still seem stacked against it. So her departure is better seen as the final stage in a process of losing control that began on June 8 2017, when she squandered her parliamentary majority in a snap election. Her government has since depended on the Northern Irish Democratic Unionist Party (DUP). The election also made her more vulnerable to internal ambushes, notably by hardline Tory Brexiteers in the European Research Group (ERG).

Along the way, Mrs May has shown a remarkable propensity to lose ministers. No fewer than 28 have resigned since she became prime minister 32 months ago, an attrition rate far worse than any post-war predecessor. Fully 18 have quit over Brexit, most of them in the nine months since the prime minister unveiled a detailed outline of her plan at Chequers, her official country retreat. Three stood down this week. Mrs May survived a no-confidence vote by her own MPs in December only by promising not to contest the next election. And her loss of control led to two shattering defeats of her Brexit deal by MPs, the first being the largest on record.

These domestic setbacks were matched by Mrs May's lost grip of the process in Brussels. She began by drawing red lines and promising glorious Thatcherite battles with the EU. But she failed to grasp the mismatch in bargaining power. It has in fact been the EU that has set the agenda, determined the sequencing of negotiations and done most of the drafting. This reached a climax on March 21 when EU leaders met at a European Council summit in Brussels to consider Mrs May's request for an extension of the March 29 deadline for Brexit. The leaders promptly dismissed her pro→ Also in this section

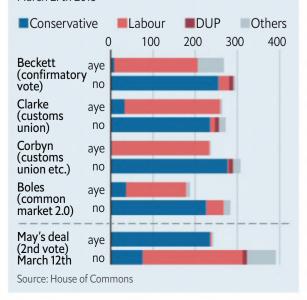
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posed new deadline of June 30 and spent hours without her debating alternatives. Towards midnight, the European Council president, Donald Tusk, curtly informed Mrs May that the new deadlines would be May 22 if MPS passed the Brexit deal this week, or April 12th if not.

What next? The political focus will doubtless now switch to the succession, with Boris Johnson or Michael Gove being champions for the Brexiteers, and Jeremy Hunt or Sajid Javid their most likely opponents. Yet the prior question is whether Mrs May's deal passes. Although she was already winning a few opponents round, and more will now follow, the obstacles remain **>>**

The art of noes

Brexit, selected indicative votes by party March 27th 2019



Iarge. Even the Speaker, John Bercow, is exploiting his powers to make it harder for her to put the deal to another vote.

Nobody has learnt to stop worrying and love her deal, yet the prime minister is making the best case she can. She was clear this week that MPS would block a no-deal Brexit. Deprived of their favoured no-deal option, more hardliners have swung behind her deal purely to stop a softer option or, worse, no Brexit at all. Jacob Rees-Mogg, leader of the ERG, said that, faced with such a choice, he now prefers Mrs May's deal. Some in the DUP were also reportedly softening. But late on March 27 the party insisted that it would not fall into line. Despite Mrs May's dramatic resignation promise, the numbers do not yet seem there for her deal to pass.

Whether or not it gets through, the indicative votes by MPS matter, because they will influence the more difficult second stage of the Brexit negotiations on future relations, which could now take place under a new prime minister. Predictably, none of those cast this week produced a clear majority. Yet it was telling that two secured more than the 242 votes for Mrs May's deal on March 12th (see chart, previous page). These were an amendment sponsored by Kenneth Clarke, a Tory veteran, to add a permanent customs union to her deal; and a motion from Margaret Beckett, a former Labour foreign secretary, to put any deal approved by MPS to a confirmatory referendum. An official Labour amendment got 237 votes, while a plan by Nick Boles, another Tory, in favour of "Common Market 2.0", a Norwegian-style soft Brexit, took 188.

When MPS tried a series of indicative votes on House of Lords reform in 2003, they ended up unable to agree to make any changes at all. Yet for Brexit the status quo is not an option. To avoid a no-deal Brexit at some point in future, which is their declared intent, MPS must agree upon some alternative. They are likely to try to narrow down their options in another ballot on April 1st. Judging by this week's votes, the most likely choice if Mrs May's deal fails is a permanent customs union.

The other difference with Lords reform is that any Brexit deal needs EU agreement, which cannot be taken for granted. The EU will insist on acceptance of the current withdrawal agreement as it stands. Mr Boles says his Common Market 2.0 plan could be adopted quickly by tweaking the non-binding political declaration. But the permanent customs union may be trickier, as the Labour Party wants a say in future trade deals which the EU will not allow.

What all options other than Mrs May's have in common is a need for more time, implying yet another extension of the deadline. This could be quite problematic. Mujtaba Rahman of the Eurasia Group, a

Public opinion and Brexit

The elusive will

Voters agree on one thing: the government has made a mess of it

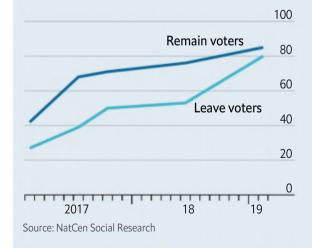
POLITICIANS ON BOTH sides of the Brexit divide talk sanctimoniously of the "will of the people". Leavers cite the 17.4m who voted to leave in June 2016, insisting too that most of them want a hard Brexit. Remainers claim opinion is changing, pointing to a march for a "people's vote" in London on March 23rd that drew a purported 1m people, and a petition to revoke Article 50 which has attracted 6m signatories.

In truth, the will of the people is decidedly muddy, declares Sir John Curtice in his latest report for NatCen Social Research, based on survey data collected in early February. Since the autumn of 2016 NatCen has polled the same panel of voters, who like the country as a whole were divided in the referendum by 52% to 48% in favour of Leave.

The most striking finding is how gloomy both sides have become. Among both Leavers and Remainers, only 6% now think that Britain will get a good Brexit deal. Especially among Leavers, they put some of the blame on the EU. But far more goes to Theresa May's government, which is deemed by four-fifths of voters from both sides to have done a bad job (see chart). Six out of ten now expect to be economically worse off after Brexit.

Consensus at last

How has the government handled Brexit? Britain, % responding "badly"



consultancy, says Brussels will insist that Britain participate in the European Parliament elections in late May. He adds that some countries now think a long extension could be worse even than a no-deal Brexit. Nicolai von Ondarza of the Berlin-based swp think-tank says some German officials are claiming to prefer an end with horrors to horrors without end.

With Westminster consumed by inter-



Wisdom of crowds?

Might voters warm to a different deal from the one negotiated by Mrs May? NatCen finds almost 60% of voters ready to accept free movement of people from the EU in exchange for free access to its single market. That seems to point to support for a Norway-style soft Brexit, one of the choices for MPS in the indicative votes they have begun holding.

Yet Sir John is cautious about the chimera of a unifying soft Brexit. Threefifths of Leavers are hostile to free movement; they are simply outnumbered by the three-quarters of Remainers who are keen on the single market. In a separate study for the British Social Attitudes survey, Sir John finds that the two sides identify more strongly with their Brexit preferences than their political parties. There is little sign of compromise.

What if there were another referendum? NatCen suggests that a re-run would produce a 55-45% Remain majority. Given the chaos in Parliament, that margin may even have risen since February. But Sir John warns against being too certain of the result. After all, most polls in 2016 suggested Remain would win.

nal debates and leadership speculation, the EU is quietly preparing for another summit on April 9 or 10th. It is likely to find some way to give Britain more time, if only to stop a no-deal Brexit causing havoc before the European elections. Many EU leaders will be pleased to see the back of Mrs May, whom they find ever more irritating. They should be careful what they wish for: her successor could be worse.

Bagehot | The end of May

The prime minister promises MPs that she won't be around for much longer

E UROPE HAS taken the head of a fourth Tory prime minister in a row. At a meeting of the 1922 committee of Conservative MPS on March 27th Theresa May promised that she would not preside over the next stage of the Brexit negotiations and that she would resign if she got her deal through Parliament. She did not go so far as to name a date for her departure, but she might as well have done, given the reaction of the political nation. Those who had been demanding that she quit for months whooped with joy, while those who had been plotting to succeed her intensified their plotting.

Mrs May is trying to make the best of her miserable situation by using her promise to resign as a lever to get MPS to back her deal. Several leading Brexiteers had hinted that they might offer their votes in return for her departure (their great fear was that Mrs May would treat a victory for her deal as vindication and an excuse to stay in power). Boris Johnson, for one, has announced that he has decided to vote for her deal. John Bercow, the Speaker of the Commons, is refusing to allow Mrs May to put her deal back to MPS for another vote unless it is significantly changed. Now she may try to claim that her deal comes with her head on a platter.

In reality she is bowing to the inevitable. Over the past few weeks Mrs May has been confronted with one disaster after another. On March 20th she infuriated MPs from all political parties by accusing them, in effect, of being enemies of the people. On March 24th the papers were full of rumours about cabinet ministers discussing appointing a caretaker prime minister. And on March 25th the House of Commons voted for the first time since 1906 to seize control of parliamentary business from the government and hold a series of indicative votes on where they thought Brexit should go.

Parliament's seizure of the initiative was the culmination of a long process of disempowerment of the prime minister. Mrs May arguably lost control of her party with the general election of June 2017. The European Research Group of hardline Brexiteers increasingly acted like a party within a party—and a bullying, swaggering, bloviating party at that—while more moderate MPS, such as Nick Boles, chomped at the bit. Then she lost control of her cabinet. The past month has seen ministers voting against a three-line whip without losing their jobs and various factions threatening mass resignations in return for concessions. How did Mrs May end up in such a terrible mess? A little perspective is necessary. Even Winston Churchill would have struggled with the complex forces unleashed by David Cameron's catastrophic decision to hold a referendum on Europe. Both Labour and the Tories are deeply divided on the matter. Remain-Leave loyalties are beginning to trump party ones as the vectors of political identity. Joining the EU typically takes five to seven years. There is no reason to imagine that leaving the EU—something no country has tried before—should take any less time. But even given all this, Mrs May bears a good deal of responsibility for the mess.

Some of her problems are down to the fact that she is an introvert trying to operate in a world of extroverts. Wilfredo Pareto, a great Italian polymath, argued that effective leaders fall into two categories: lions, who rely on strength, and foxes, who rely on cunning. Mrs May represents a third type, the tortoise. Tortoises can achieve remarkable things in the right circumstances, thanks to their thick shells and plodding determination, as Mrs May's six years as home secretary showed. But Brexit demanded different qualities—the cunning of the fox and the occasional raw power of the lion. And tortoises suffer from one big weakness: flip them on their backs and they are extremely vulnerable.

Mrs May also made two fundamental errors of judgment. She treated Brexit as an issue of party management rather than statecraft. She focused on securing the support of hardline Brexiteers, who were suspicious because she had backed Remain, by drawing hard negotiating red lines and indulging in fiery rhetoric about "citizens of nowhere". She continued with this policy of appeasing the ultras even after she lost her majority in 2017. She refused to explain to voters that Brexit would involve trade-offs, even as it became clear that everybody would have to sacrifice something to bring a divided country back together, and to reconcile conflicting claims of trade and sovereignty.

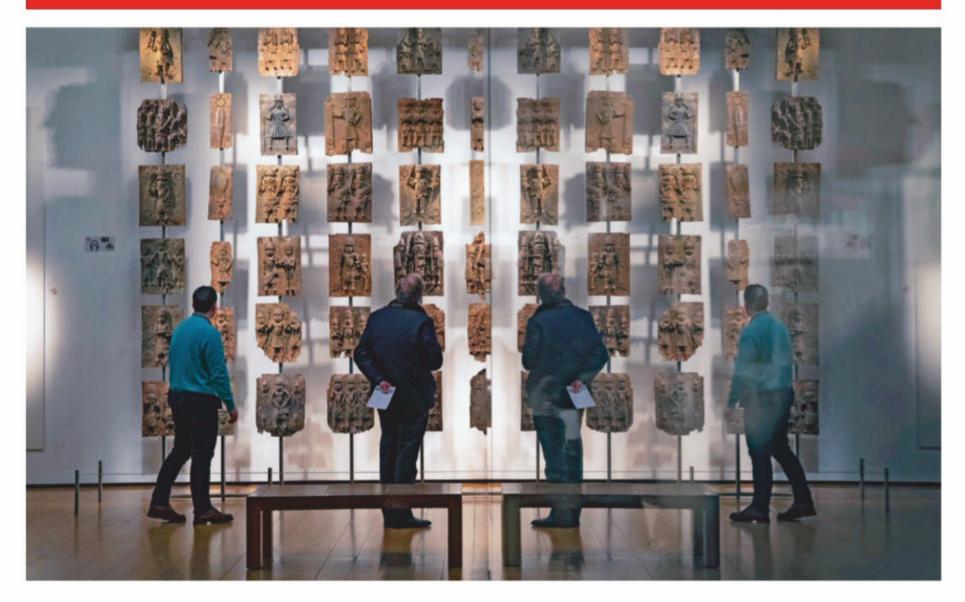
To add to this debacle, Mrs May mishandled the levers of power that go with being prime minister. She squandered her patronage by handing knighthoods to the unbiddable (like Sir John Redwood) while failing to promote talented younger Tories. She sidelined MPs rather than trying to co-opt them. She gave up the only form of soft power at her disposal, given her inability to make people feel at ease, which was trust that she would do the right thing. Sir Oliver Letwin felt compelled to lead this week's rebellion to take control of the Commons agenda, despite never having voted against the party whip and repeatedly promising to vote for her deal "to infinity". Thirty Tories defied the government to support Sir Oliver's proposal despite the fact that Mrs May had already promised to make government time available for indicative votes. MPs, including many in her own party, no longer trust the vicar's daughter to stick to her word.

Back to the future leadership

The Tory party is now gearing up to do what it likes best: engaging in a leadership struggle. Campaign teams are already in place. Manifestos are written. Attack lines are being honed, and dark rumours being circulated. But this contest will be particularly intense, not only because it is taking place in the middle of the Brexit negotiations, but also because the Tories are more divided over the future than at any time since the early 20th century. These divisions include the relative claims of nationalist populism and cosmopolitan liberalism, for example, or one-nation Toryism versus high-tech Thatcherism. Britain's frenetic politics are about to get even more frenzied.



International



Cultural objects Reflecting on past sins

BAMAKO, DAKAR AND KINSHASA

This week we report on the challenges facing Western museums. Our first article is about the clamour to return cultural treasures taken by colonialists

N THE NEW Museum of Black Civilisa-Ltions in Dakar, two vitrines display a French-made sword, a Koran and a pair of scruffy leather sandals. They were taken from Hadj Omar Tall, a Sufi military commander who briefly formed an empire that stretched across Guinea, Mali and Senegal. Hadj Omar gained a heroic reputation fighting the French in west Africa until he was killed in 1864. His personal effects were seized as war booty and eventually bequeathed to various French museums. They have been returned, temporarily, for the Dakar museum's opening. "It's the third time they've lent us what is ours," sniffs the director, Hamady Bocoum.

In November 2017 President Emmanuel Macron of France electrified an audience of students and faculty at the University of Ouagadougou in Burkina Faso. Claiming to speak in the name of youth, he said: "I cannot accept that a large share of several African countries' cultural heritage be kept in France...Within five years I want the conditions to exist for temporary or permanent returns of African heritage to Africa." In minutes the first French president born after the colonial period had smashed the conventional justification for refusing to return artworks. Public collections in France and elsewhere in Europe are generally held to be "inalienable". They belong to the state or, in the case of the British Museum, are held by its trustees on behalf of Parliament. They cannot be given back.

Around the time of his speech, Mr Macron commissioned two academics—Felwine Sarr, a radical Senegalese scholar and essayist, and Bénédicte Savoy, a French art historian specialising in the restitution of art looted by Napoleon—to advise the government on how to share the art in its possession more widely. If French museum directors were shocked at not having been consulted before Mr Macron made his

Also in this section

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speech, they were even more surprised when the report came out last November. The authors concluded that 95% of Africa's cultural heritage is held outside the continent. Most of it was looted, stolen, bought under duress or borrowed and never returned, they said. They argued that objects should go back, starting with those that were carried off as booty during raids.

Western museums were appalled. Jean-Jacques Aillagon, a former French culture minister, complained to *Le Figaro*: "Their recommendations would have the effect of emptying French museums of their African collections, placing in their stead physical or virtual copies!" Hartwig Fischer, director of the British Museum, which faces restitution claims from Nigeria for the Benin Bronzes (see picture) as well as from Turkey and Greece, made no public comment. But over the winter he has repeatedly said to friends: "The report is not helpful. Not helpful at all."

It is not the first time that Western museums have been asked to hand over treasures. One of the oldest disputes is between Britain and Greece over the marble statuary that was removed from the Parthenon in Athens by Lord Elgin and sold to the British government in 1816 to become the centrepiece of the British Museum. During the second world war, when Britain needed Greece's help, the Foreign Office drafted a scheme for their return. The plan was shelved when the danger passed. Ger- **>>** many's government has asked Russian museums to return some of the vast haul stolen at the end of the second world war; the Russians have declined.

Some restitution has taken place. The Smithsonian museums in America have repatriated thousands of funerary and sacred objects to Native American tribes. Human remains have been returned to Australia, New Zealand and Polynesia. Yet, with the exception of Sara "Saartjie" Baartman, who was brought from South Africa to Europe in the early 19th century and exhibited in a freak show as the "Hottentot Venus" and whose remains were returned for burial in 2002, few objects have been given back to African countries.

But artists have not let the issue rest. Restitution was the theme of the latest *documenta*, a contemporary art show held every five years, most recently in Kassel and Athens. "Le Silence du Totem", a novel of 2018 by the Senegalese writer Fatoumata Sissi Ngom, is about the discovery of a sculpture in a Paris museum. In the stupendously popular film "Black Panther", an artefact looted from the fictional kingdom of Wakanda is stolen back from the "Museum of Great Britain". And two developments—one originating in Europe, the other in Africa—are making demands for restitution harder to resist.

In 1998 representatives of 44 countries gathered in Washington, DC, to discuss how the heirs of Jewish collectors could lay claim to the artworks that had been stolen by the Nazis and their agents—often known as *Raubkunst*. Gradually the debate spread to what Nicholas Thomas, director of the Cambridge Museum of Archaeology and Anthropology, calls "colonial *Raubkunst*". That refers to the untrammelled accumulation of ethnographic collections from Germany's colonial empire: Togo, Cameroon, mainland Tanzania and former South-West Africa (now Namibia and part of Botswana).

A German museum due to open this year, the Humboldt Forum, has turned an academic row into a public one. A throwback to an old Prussian museum project, the Humboldt Forum will house, among others, objects from the Ethnological Museum of Berlin, Germany's biggest ethnographic collection. Ms Savoy, one of the coauthors of the Macron report, has lived in Berlin for nearly 25 years. In July 2017 she resigned from the Humboldt Forum's advisory board in protest at what she regarded as the less than rigorous research being done on its ethnographic collections. "I want to know how much blood is dripping from each artwork," she wrote. "Without this research, no Humboldt Forum and no ethnological museum should open."

Ms Savoy and Mr Sarr's report for the French government has a German flavour. Long-term museum-to-museum loans, as Mr Macron had suggested, were not the solution, the authors argued. Nor was it sufficient to assume that a gap in the provenance of an object might mean that the object had been acquired in good faith. Just as has happened with artworks whose ownership could not be accounted for during the Nazi period, the report insists that unless an African object can conclusively be proven to have been purchased in good faith on both sides, it should be returned.

New homes for art

In 1973 Mobutu Sese Seko, the president of Zaire (now the Democratic Republic of Congo), made one of the earliest public demands for the restitution of African artworks. He pleaded before the UN General Assembly in New York for the return of stolen objects, "so that we can teach our children and our grandchildren the history of their countries." The Africa Museum at Tervuren, in Belgium, duly sent back 144 pieces. Almost all of these quickly found their way back on to the market in Europe, having been stolen, says the director, Guido Gryseels.

For decades European curators have cited that episode as one of the prime reasons why their treasures should not be returned to Africa. Corruption is not the only danger: Islamist terrorism poses a threat to art across the Sahel as it did in Iraq. Resources are a problem, too. In Ouagadougou, the city where Mr Macron gave his speech in 2017, the national museum is made up of half a dozen small buildings set across 28 acres of grassland. It has only enough of a collection to fill one room. There are more cattle outside than historical artefacts inside.

Tanzania has so far refused to engage with the idea, promoted by Germany's Green Party, that the museums in Berlin should return 20,000 ethnographic artefacts seized when Tanganyika was a German colony before the first world war, saying it has nowhere to store them. Joseph Kabila, who has just stepped down as Congo's president, said last December that the government would formally request the return of all its treasures from Belgium once a new national museum, paid for by South Korea, opens later this year. Until then, "Where would we put all those objects? We don't have space here," says Paul Bakua-Lufu, the director-general of museums.

But other countries are doing better. Ivory Coast is asking for the return of 100 objects from France, and says it has the galleries to display them. A new museum has been opened with UNESCO'S help in Gao in Mali; another will open soon in Timbuktu, says Salia Malé, director of Mali'S National Museum. Benin, which is requesting the return of works looted from the royal palaces of Abomey by French soldiers in 1892, is building three new museums.

The greatest steps forward have been in Senegal and Nigeria. In Mr Bocoum's Museum of Black Civilisations in Dakar, which China built as a gift to Senegal for €35m (\$40m), four floors of exhibitions cover everything from palaeontology to contemporary West African fashion. A gallery on the Abrahamic religions is there to show that Christianity and Islam can co-exist peacefully. "Non à la Charia à Tombouctou", a contemporary textile-and-embroidery work by Abdoulaye Konaté, a Cubantrained artist from Mali, shows the skyline of Timbuktu with a sword hovering above. Mr Bocoum believes art can be a unifying force. He would like artists and young people to come to the museum, not just to see art made in West Africa but to have the experience, as visitors in Europe do, of seeing the connections between artworks from different continents and civilisations-to prove that "what unites us is stronger than what divides us," he says.

In Nigeria the Edo state government and royal court plan to build a museum in Benin City to house the treasures that were looted during a punitive expedition in 1897. More than 1,000 of the Benin Bronzes found their way into museums in Europe and America; the largest portion is in the British Museum. The state government will soon begin a feasibility study for the new building, which will include galleries and a research institute. "These works are our ambassadors," says the executive governor of Edo State, Godwin Obaseki. "They represent who we are."



Getting back to where it once belonged

Foreign internship: We are seeking an intern to write about foreign affairs for *The Economist*. The internship will be London-based and will pay £2,000 per month. Anyone is welcome to apply. Applicants should send an original unpublished article of up to 600 words suitable for publication in our foreign pages and a cv along with a covering letter to foreignintern@economist.com. The deadline for applications is April 15th. For more details, please visit www.economist.com/foreignintern

Museum funding Give, get or get off

How austerity and outreach efforts made museums into a target for protesters

VISITORS TO THE Solomon R. Guggenheim Museum in New York witnessed an unexpected performance on February 9th. Dozens of activists who had been summoned by social media unfolded four red banners from the Guggenheim's corkscrew balconies. In big black letters they read: "400,000 dead", "200 dead each day", "Shame on Sackler" and "Take down their name". A cloud of white confetti was hurled from the top of the rotunda, each piece of paper a medical prescription.

The drug named in the prescription blizzard, OxyContin, is implicated in America's terrible opioid crisis. Many states have filed lawsuits against its maker, Purdue Pharma, arguing that it bears some responsibility for thousands of deaths. On March 26th the firm settled a case brought by Oklahoma for \$270m.

Purdue Pharma's conduct is a problem for the Guggenheim and other museums because the firm is owned by members of the Sackler family, who are among the world's biggest cultural philanthropists. Activists led by Nan Goldin, an art photographer who became addicted to OxyContin following an injury to her wrist, are trying to shame museums into turning their backs on the Sacklers' money. She argues that the family ought to be paying for the treatment of addicts instead.

A few days after the Guggenheim protest, the campaign came to London. Ms Goldin told the National Portrait Gallery that she would boycott a prestigious retrospective of her work if the museum accepted an offer of £1m (\$1.3m) from the Sacklers. By March 25th the Museum of South London had returned a gift from the family. The Tate galleries and the Guggenheim announced that they would no longer accept Sackler money. Ms Goldin threatened that another London gallery, widely believed to be the Victoria & Albert Museum (v&A), would be the target of her next protest. Dame Theresa Sackler, whose late husband was one of the owners of Purdue Pharma. has been a trustee of the v&A since 2011. Her family trust paid for the museum's new £2m Sackler Courtyard.

The speed at which the campaign has moved is a tribute to Ms Goldin's group, PAIN ("Prescription Addiction Intervention Now"). It also says something about museums in America and—especially— Britain. Because of changes to their funding, and because their mission has changed, museums have become far more vulnerable to campaigners.

Politicians have long smiled on museums. They have encouraged new ones to open, often hoping that they will revitalise neglected towns, as the Guggenheim Museum Bilbao did in the 1990s. Since the financial crisis, however, state funding has become stingier. In the decade to 2017 (the latest year for which figures are available) public spending on museums and galleries in Britain fell by 30% in real terms. British museums are in a particular fix because the government has been committed to the idea that visitors should be allowed free entry to permanent collections. Even tourists from other countries get in for nothing. By contrast, when the Metropolitan Museum of Art in New York faced a funding shortfall a year ago, it began charging visitors from outside New York State \$25 each.

Small provincial museums have often dealt with the financial squeeze by cutting costs. But national ones have moved towards the American model, by soliciting donations from private and corporate donors—"a way for the rich to launder their souls", as one director cynically puts it.

Museums trusteeships in America are a route to social advancement as well as a civic duty. It costs at least \$10m to join the board of the Metropolitan Museum of Art, and trustees are urged to give more. The Met's 75 trustees have a combined worth of more than \$50bn. "Give, get or get off" is the unofficial mantra of most American museum boards ("get" means persuading a company or rich friend to stump up).

America's large museum boards reflect that country's tax breaks for charity and its tradition of giving to local institutions. In Britain, by contrast, the circle of major donors is tiny. One chair of a museum in London counts no more than eight big donors. The most important is Len Blavatnik, an industrialist born in Ukraine, who responded in 2017 when Tate Modern found that its new Switch House extension had left it with a £30m funding shortfall. Soon after it opened, the Switch House was renamed the Blavatnik Building.

At the same time, museums have tried to make themselves more relevant and edgy. Benjamin Ives Gilman, for 30 years secretary of the Boston Museum of Fine Arts, used to describe the museum as "in essence a temple". Now, says Sir Nicholas Serota, a former director of the Tate galleries, they are "a forum for debate as much as a treasure box".

Attracting young visitors is a priority for all museums. Most have a director of "public engagement" whose job it is to bring them in. The Tate, one of the leaders, has created Tate Forum, a "peer-led" youth project that combines museum talks with open debates. Many museums have stopped disapproving of mobile phones; the Brooklyn Museum even encourages visitors to text questions to curators. Teenagers flock to sleepovers in the British Museum's Egyptian galleries.

Young people are quick to signal what they like—and what they don't. Having worked so hard to engage with them and solicit their views, the museums should perhaps not be too surprised when their customers turn on their donors.



Nan Goldin, a fully engaged museum-goer

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Business



The future of media Streamlined

NEW YORK

A wave of consolidation pits Disney, AT&T and Comcast against Netflix, Amazon and Apple. Billions are being torched. Someone will get hurt

Who MIGHT buy Netflix? Speculation on the matter has risen in line with the streaming giant's own ascent in the past decade. Apple, with its cash hoard, was a frequently rumoured suitor. Or perhaps Amazon, or big distributors like AT&T or Comcast. At one point, industry sources say, Bob Iger of Disney directly asked Reed Hastings, the boss of Netflix, if he would welcome an offer (Mr Hastings said no).

Instead all six companies embarked on a series of massive investments that will reshape the landscape of media: who makes entertainment and how people consume it. Since June AT&T, Comcast and Disney have spent \$215bn in total on acquisitions of, respectively, Time Warner (\$104bn), Sky, a European broadcaster (\$40bn), and much of 21st Century Fox (\$71bn). Each is preparing new streaming services that will launch by early 2020.

Apple, meanwhile, has poured perhaps \$2bn into original shows with some of Hollywood's most famous directors and stars. On March 25th the company unveiled its new streaming-video service, Apple TV+, that will be available in more than 100 countries later this year. Amazon is thought to be spending more than \$5bn a year on content. And Netflix is expected to burn about \$15bn this year on original and licensed content in a bid to add to its 139m global subscribers before most of its would-be rivals get fully up and running.

The firms are chasing the same prize: recurring revenue from video subscriptions by tens of millions of Americans and, potentially, hundreds of millions of international viewers. It is unclear how many of

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them can thrive at the same time. More than two, analysts reckon, but not all six. There are only so many \$10 monthly subscriptions people will pay for. They may opt once again for those bundled with something else, like a mobile service—a business model of which consumers had grown weary in America, where a single distributor sells lots of channels at one price. What forms these reimagined bundles take, and who gets to sell them, will depend on who wins the streaming battles.

In this fight, the contenders have adopted different strategies to win over subscribers. AT&T will bundle entertainment with its mobile service, which could help the company overtake Verizon as the largest wireless carrier in America. Comcast will offer an ad-supported streaming service from NBCUniversal, which it owns, to its 52m broadband and pay-TV customers (including Sky's) in America, Britain and elsewhere in Europe (it will also sell subscriptions, but its ambitions seem more modest than the others'). Disney will use its enviable collection of film franchises, including Star Wars and Marvel superheroes, to draw families to Disney+, then steer them to its consumer products and theme parks.

For the tech giants, video is a way to lure customers into their online emporiums. Amazon, with 100m Prime households, is ahead of Apple for now. But Apple TV can push its glitzy new shows to the world's 1.4bn iDevices. Apple and Amazon have deeper pockets than AT&T, Comcast or Disney, so can afford to pour billions annually into streaming-video for years to come. Their platforms are perfect for selling online services including video.

Then there is Netflix. Its head start puts it in a strong position. Its algorithms work out what viewers want and it has the infrastructure to deliver it to ever more people. A recession or rising interest rates could hurt its ability to borrow—Netflix has more than \$10bn in debt and burns through \$3bn of cash a year. But its lead is such that it could curtail spending on content and still stay ahead of competitors.

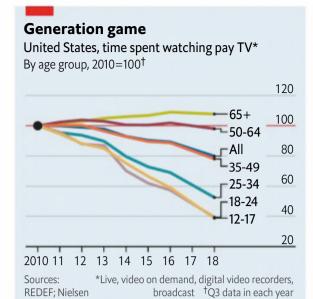
AT&T and Disney face a more complicated challenge. To prosper in streaming, they must undermine lucrative existing businesses. In AT&T's business unit that houses Directly, a satellite provider acquired in 2015 at a cost of \$63bn, operating income has fallen by 20% since 2016—in part owing to aggressive marketing of Directv Now, a cheaper, loss-making streaming bundle of pay-tv networks. The new streaming service from AT&T (marketed under the WarnerMedia brand) will exacerbate the decline. Disney, for its part, will forgo profits of about \$1bn this year-and \$2bn annually from 2020—as it stops licensing films to Netflix and invests in original shows for its streaming platform, Disney+. New investments in Hulu, a general-interest streaming service with 25m subscribers that Disney controls, will also be costly.

Profitless motives

Disney and AT&T are willing to sacrifice near-term profits for two reasons: the vulnerability of their underlying businesses, and hoped-for returns from streaming. With the rise of Netflix, YouTube and other internet distractions, Americans are watching less pay-tv (see chart) and dropping pricey packages which AT&T sells, and which carry Disney's TV networks. And they go to the cinema less often. That is why Rupert Murdoch wanted to sell much of his Fox empire, and Jeff Bewkes was keen to offload Time Warner. Networks bereft of "must-have" content will face demands from distributors to lower prices. Disney and AT&T viewed Fox and Time Warner studios and entertainment networks, with their libraries of hits, as valuable assets.

For Disney, which oozed popular content even before the Fox deal, the economics of streaming stack up. ESPN, Disney's sports network, generates more than \$2bn annually, according to Kagan, a research group. But its reach is declining. In 2018 the company launched ESPN+, a sportsstreaming service. It has picked up 2m subscribers in less than a year (though it is expected to lose money for years).

The real opportunity should be in Disney+. Disney's dominance of the box office will count for less as fewer people frequent cinemas. Matthew Ball, a media analyst, ar-



gues that even before the acquisition of Fox's big franchises, such as "Avatar", Disney's spectaculars were beginning to crowd each other out. Streaming provides a neat solution. Disney will release films directly online, as with the upcoming liveaction version of "Lady and the Tramp", in addition to TV series from Lucasfilm, Marvel Studios and Pixar Animation. Once licences expire, it will control access to its complete library of hits. Bullish analysts at JPMorgan Chase, a bank, believe Disney+ can break even by 2022 and eventually attract 45m subscribers in America and 115m abroad. At \$8-10 per month that would equate to \$15bn-19bn in recurring sales; Disney's revenues last fiscal year totalled \$59bn. Disney would also have something new and valuable: direct relationships with its biggest fans.

AT&T and Comcast look more precarious. WarnerMedia (as Time Warner has been renamed) owns some famous superheroes, like Batman and Wonder Woman, but they are not quite so formidable as Disney's. AT&T's early handling of WarnerMedia, where several highly respected executives have resigned, most notably at HBO, its most important asset, has raised concerns about its ability to manage a giant media conglomerate. Comcast, meanwhile, lacks enough popular shows to grab subscribers' attention.

It is not clear that owners of infrastructure need to enter the battle to produce content. Craig Moffett of MoffettNathanson, a research firm, argues that the streaming boom should benefit owners of distribution pipes. They can offset falling revenue from pay-TV with broadband, which offers higher margins with less capital spending. The cost of programming has ballooned-well above \$10m an hour for "Game of Thrones"—as viewers increasingly expect blockbuster quality from their shows. One day, a Hollywood executive predicts, the spending binge will come to a halt. The streaming market, too, will consolidate. It will be "the biggest hangover that Hollywood has ever seen".

Hyundai Motor

In need of a tune-up

ASAN

A superstar of South Korean industry struggles to reinvent itself

THE OFFICES of the Asan car suppliers' union resemble a bygone era. Walls are decorated with fading photographs of past protests. Cigarette smoke wafts from the foyer, where workers in overalls lounge on battered sofas enjoying a break between shifts. Most are well into middle age. Do Sung-dae, the union's boss—shock of grey hair, horn-rimmed glasses, waistcoat heavy with pins supporting various causes—is locked in a struggle with Yoosung Enterprise, a parts-maker that employs its members in Asan, an industrial city south of the capital, Seoul.

Korean parts-producers are being squeezed. More have filed for bankruptcy protection since last autumn than at any time since the financial crisis in 2008. Plenty, including Yoosung, claim they are fighting for survival. Their troubles are a symptom of a deepening crisis in the industry. At the industry's centre is a single giant firm: Hyundai Motor.

In 20 years Hyundai Motor (which also controls Kia) went from being barely known to the world's fifth-biggest carmaker by churning out decent if unexciting cars that were cheaper than similar ones produced by Japanese or Western competitors. Like Asan's union offices, however, it has failed to keep up with the times.

Hyundai's global sales were stagnant at 96.8trn won (\$85bn) last year. Net profit declined in 2018 for the sixth year in a row. Since 2014 its shares have underperformed major peers such as Toyota, General Motors and Ford, measured in dollars. Some reasons for this lie beyond Hyundai's control. A weak yen boosted Japanese producers. The trade dispute between America and China, as well as separate threats by President Donald Trump to impose additional tariffs on Korean cars, did not help. Its business in China was hit by a year-long Chinese boycott of South Korean products that followed a dispute over South Korea's new missile-defence system in 2017.

Many problems, though, are homegrown. Hyundai's move upmarket in the past few years exposed it to fiercer competition. It missed the shift towards suvs in Europe, America, and most recently China. Its Genesis brand has lagged behind in the highest-margin premium segment. Half of its production capacity in China currently sits idle—aggressive expansion may have more to do with this than the boycott, thinks James Lim of Dalton Investments, **>>** an asset manager. Rising labour costs at home, where it produces 40% of output, have crimped Hyundai's ability to compete on price. "Customers still expect our cars to be cheaper than, say, a Volkswagen," sighs Cho Won-hong, the firm's chief strategist.

Mr Cho wants to convince them to pay more, by betting on future technologies such as hydrogen fuel cells and loosely defined "integrated mobility" (car-sharing, autonomous vehicles and the like). Yet Hyundai channels 3% of sales to research and development, compared with 6% at Volkswagen or Toyota's 4%, according to Bloomberg. Mr Cho will not say if Hyundai plans to ramp up spending, only that it will be "investing in the new value chain".

Some analysts blame the R&D shortfall on high labour costs. Others point to the old habits of the *chaebol*, the South Korean conglomerates of which Hyundai's parent company is one of the biggest. In good times it ploughed spare cash from its carmaking arm on speculative property investments in Seoul's glitzy Gangnam district and bought back a struggling construction company.

Hidebound corporate governance at the

firm and its parent have recently come under fire from activist investors. Last year Elliott, an American hedge fund, thwarted a restructuring plan that would have handed more power to Chung Eui-sun, son and heir apparent of Hyundai's founder. But Elliott's demands for higher dividends would have left even less for investment in the sort of technologies Mr Cho envisages. Last week Hyundai's shareholders rejected Elliott's proposal (and its candidates for board seats). If the group invests the savings in automotive innovation instead, Hyundai's prospects may brighten again.

Bartleby The grinch that sold charisma

Competence and the ability to empathise are the most important leadership skills

LEADERSHIP IS A quality that is hard to define, but as a Supreme Court justice said of obscenity, you know it when you see it. Everyone can think of inspiring leaders from history but managers who think they can base their style on Nelson Mandela or Elizabeth I are suffering from delusions of grandeur.

The biggest mistake is to equate leadership entirely with charisma. Billy McFarland was just 25 when he set up the Fyre festival which promised attendees a luxury experience on a deserted island in the Bahamas. As shown by the Netflix documentary, "Fyre: The Greatest Party That Never Happened", Mr McFarland was a preternatural salesman. He convinced investors that he was a visionary entrepreneur and persuaded talented young people to work for him.

But he lacked the skills to put his vision into practice. Festival guests arrived to find their food consisted of cheese sandwiches, rather than gourmet cuisine. They were housed not in luxury villas, but in tents left over from a hurricane-relief scheme. The saga ended with Mr McFarland being sentenced to six years in prison.

His example could have been a case study for the book by Tomas Chamorro-Premuzic—"Why Do So Many Incompetent Men Become Leaders? (and how to fix it)". As an organisational psychologist, he points out that people tend to assume that confident individuals are competent, when there is no actual relationship between the two qualities. Those confident people are then promoted. Overconfidence afflicts both sexes, but men more so; one study found that they overestimated their abilities by 30% and women by 15% on average.

A related trait is narcissism. Research suggests that the rate of clinical narcis-

sism is 40% higher in men than in women. Around 5% of chief executives (a maledominated profession) are deemed to be narcissistic, compared with just 1% of the general population. If the Fyre documentary is a guide, Mr McFarland belongs to that group, and then some.

Neither narcissism nor charisma is purely a male phenomenon. Elizabeth Holmes, the founder of Theranos, the failed blood-testing group, convinced shrewd investors and powerful men like Henry Kissinger with her messianic vision of supplying affordable health care. But the Theranos technology did not work. Charisma plus egomania minus competence is a dangerous formula.

None of which is to say that charisma does not matter at all. Theresa May, the British prime minister, got the job on the basis of her perceived competence. She has had a difficult task in pushing through Brexit. But her lack of persuasive skills has mattered at crucial moments, and she now looks set to resign. She has demonstrably failed to unite the country, paying little attention to the views of opposition par-



ties, or to those of business or the trade unions. In an address to the nation on March 20th she managed to alienate the very MPs she needed to vote for her plan. "A leader who claims to invite views but then ignores them is no leader," warns Stefan Stern in his new book, "How to Be a Better Leader".

Competence is more important than charisma. Managers need enough presence to persuade their teams to follow the business plan, but they should think in terms of coaching rather than inspiration. Gallup surveys have found that employees are more likely to be engaged with their work if they get frequent feedback from their bosses, and if they are involved in setting their own goals.

Team leadership requires having sufficient empathy to understand the concerns of others. When things go wrong, as they inevitably will, a good leader also needs the flexibility to adjust their strategy. Stubborn introverts like Mrs May lack the required flexibility; narcissists like Mr McFarland lack the necessary empathy.

Finally, Mr Stern argues that a large part of leadership success stems from the ability to set a good example. Subordinates notice what behaviour gets rewarded and which standards are set by the person at the top. Mr McFarland showed a great enthusiasm for partying, and a blithe indifference to logistics. Subordinates who doubted his vision, or questioned the detail, were told to get with the programme or get out.

Similarly, Mrs May appointed men to the top Brexit posts on the basis of their ideological positions instead of expertise. In both cases, their leadership styles got the results they deserved.

Economist.com/blogs/bartleby

Naspers Going Dutch

PARIS

Europe gets a tech giant, not of its own making

¬ UROPEANS ARE keen users of the inter- ${f L}$ net, but you would not know it looking at a list of the world's biggest companies peddling stuff and services online. The continent's failure to spawn an Amazon or Alibaba—the top 20 most valuable internet firms are either American or Chinese-has long been a blemish on Europe's collective self-esteem. That will soon change. On March 25th Naspers, a South African media group, announced it would spin off a company made up of its investments in tech firms and list it in Amsterdam. Europe, at last, will have a tech giant of its own.

Sort of. The new firm will certainly be big: analysts expect NewCo, as the outfit is being dubbed until branding consultants come up with an even less inspiring name, will boast a market value of around \$100bn. But what would be Europe's second-biggest technology firm (see chart) will have little to do with Europe or its consumers. Most of its value will be down to the purchase in 2001 by Naspers of one-third of Tencent, a Chinese group best known for its ubiquitous WeChat app, for \$32m. The 31% stake it still owns is now worth \$133bn.

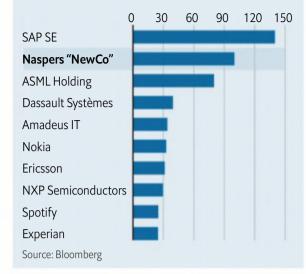
Naspers, which started out as an Afrikaans newspaper group a century ago, has since gone on to invest in a host of startups, mostly in emerging markets. The runaway success of Tencent has created an enviable headache: Naspers has become too big for the Johannesburg stock exchange, where it now makes up a quarter of the local index. Such scale requires foreign investors, not all of whom are keen on South Africa's currency and political risk. Amsterdam, where Naspers already has staff, has similar listing requirements to Johannesburg.

Splitting the group and relocating part of it to Europe should help close the gap between the value of the stakes in businesses Naspers owns, such as Tencent, and its market capitalisation, which is lower. By the company's own reckoning, the discount has widened from around 25% four years ago to over 40%. Some of this is inevitable: Naspers couldn't sell its stake in Tencent without paying taxes, for example. But it looks embarrassing for executives when investors ascribe little value to anything other than its star equity holding.

Others know the feeling. SoftBank, a Japanese conglomerate, owns just under a third of Alibaba but gets (in its view) insufficient recognition from investors for its other businesses, like Sprint, an American

Big fish, small pond

Europe, largest technology companies Market capitalisation, March 26th 2019, \$bn



telecoms firm, or a holding in a \$100bn venture-capital fund that has rained money onto fashionable startups. Yahoo, an internet pioneer, has been renamed Altaba, a portmanteau of "alternative Alibaba". By the time Yahoo's bosses sold its operations to Verizon in 2017, keeping mainly its Alibaba stake, investors treated the stock as a back door to the Chinese firm.

Naspers has no plans to go that far. It will retain 75% of NewCo when it lists it later this year, and has not given up trying to replicate its Tencent jackpot. An investment in Flipkart, an Indian online retailer, made handsome returns when that firm was sold to Walmart last year, for example. The next wager on Europe, anyone?

A unicorn stampede

Unicorns are horned mythical creatures that do not exist. In the world of technology they have multiplied in recent years, at least if you define them as privately held startups valued at more than \$1bn. Some 330 such firms exist globally, according to cBInsights, a data provider. All told, venture capitalists value them above \$1trn. Ride-hailing apps, which allow passengers to summon cars driven by their owners, form a particularly fertile subspecies. As The Economist went to press on March 29th one of these "taxicorns", Lyft, was about to float its shares on the Nasdaq exchange in New York at a price which would value the firm at more than \$23bn. Should the listing succeed, as analysts expect, other unicorns will rush to the stockmarket. Uber, the world's biggest ride-hailing firm, is likely to do so in a few weeks (on March 26th it bought Careem, a Middle Eastern rival, for \$3.1bn). Other candidates include Pinterest, which lets users create digital pin-boards, and Slack, a corporate messaging service. Once they list, of course, companies cease to be unicorns. Will the magic disappear, too?

Chinese trains The red-train blues

SPRINGFIELD, MASSACHUSETTS A giant Chinese trainmaker's push abroad is running out of steam

IKE MANY towns with an industrial heritage, the transformation of a factory that had stood derelict for decades into a shiny modern manufacturing site might seem a welcome development. But in Springfield, Massachusetts, famous for the rifles produced at its National Armoury, the arrival of a Chinese trainmaker has hit the buffers.

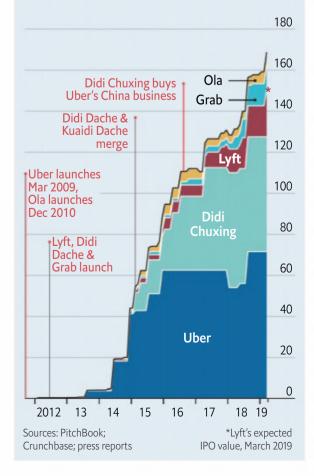
It is not that Springfield has no history of trainmaking; two centuries ago it built some of the first American-made railway carriages to replace British imports. The need for a local manufacturing base is what led CRRC, the world's biggest producer of locomotives and rolling stock, to set up shop there in 2017. Since then it has been attacked by the press as a threat to American jobs and national security. The firm was subsequently clobbered with tariffs on imported parts, and recently denied an exemption. Lawmakers in Washington, DC, are now trying to prevent federal funds from being spent on its trains.

Some of the hostility is down to CRRC's sheer size. Founded in 2015 from the merger of China's two biggest train manufacturers, CRRC controls over 90% of the Chinese **>>**



What a ride Valuations of ride-hailing apps

Based on reports of private funding rounds, \$bn



The Economist March 30th 2019

railway market—which also happens to be the world's biggest. With its domestic business cornered, the company set its sights on expansion abroad. Liu Hualong, CRRC's chairman, went about this by setting up overseas subsidiaries to handle some of the support and assembly operations. First he took aim at Asia and Africa, then Europe and America.

CRRC now employs 180,000 people worldwide and posts annual revenues of \$30.6bn, around a tenth of which comes from outside China. Between 2013 and 2017 CRRC made 44% of the world's electric trains and a whopping 71% of its highspeed ones, estimates Maria Leenen of SCI Verkehr, a railways consultancy in Hamburg. Its earnings from railway equipment alone are far bigger than the railway earnings of its big European competitors, Siemens of Germany, Alstom of France and Bombardier of Canada.

America is an especially attractive market, owing to its preference for customised trains, which fetch a premium over the offthe-yard variety favoured elsewhere in the world. Thanks to a renewed interest in rail travel, particularly among America's carless young, it is also fast-growing, says Jia Bo, president of CRRC's Springfield subsidiary. Since 2014 the company has won four big contracts in America for subway carriages. It delivered its first Americanbuilt train in December.

CRRC's manoeuvres have spooked its Western rivals. Siemens and Alstom have cited the threat posed by the Chinese firm's overseas expansion in defence of the attempted merger of their rail divisions, which the European Commission last month vetoed because it feared it would hurt competition. Erik Olson of the Rail Security Alliance, a campaign group made up of American freight-wagon builders and their suppliers, claims that CRRC threatens to wipe out his members' businesses through predatory pricing, just as he reckons the company did in Australia after it set up shop there. Add labour shortages and protectionist "Buy America" rules, which will soon force trainmakers to source 70% of their components from American suppliers, and the market suddenly looks far less appealing. Kawasaki, CRRC's Japanese rival, has said it is considering leaving America altogether.

CRRC's provenance is making things worse. The trade war with China simmers on. Controversy surrounding Huawei, a huge Chinese maker of telecoms gear which has been accused (without any evidence being made public) of being a vehicle for Chinese spying, has infected other Chinese companies, CRRC among them. Mr Olson believes that carriages made by the firm and fitted with cCTV could be combined with facial-recognition technology to help the Chinese government track indi-



Not on the fast track

viduals. A fantasy, perhaps, but a real enough fear for CRRC to insist that it complies with all of America's rules about cyber-security.

All of this means that CRRC's overseas expansion is nowhere near on track. It recently lost a contract in New York and has made virtually no headway in Europe. In Africa CRRC has done better, although rail firms there would prefer to buy Western trains if only they could obtain financing on the same generous terms as that provided by the Chinese, says Howard Rosen of the Rail Working Group, an international trade body. But Western firms cannot do this owing to rules imposed by the OECD, a club of rich countries that excludes China.

This rough ride is causing CRRC to turn its attentions back to China. It says it may soon quit the American market for freight cars. To help manage the integration of the vast merger and deal with limits placed by the Chinese government on how much money it can invest abroad, CRRC has started to temper its overseas expansion, says Karen Li of JPMorgan Chase, a bank. The firm has quietly dropped a target to double its share of orders from abroad to 20% by 2021, she says. Better, it seems, to concentrate on winning orders for a coming glut of new high-speed lines in China.

Correction: Last week we reported that SoftBank bought a \$5.9bn stake in Didi in 2017. In fact, it accumulated the stake in several transactions between 2015 and 2017. We also said that transfers of assets between SoftBank and the Vision Fund are disclosed to SoftBank's board and approved by the Vision Fund's three-person investment committee. Such transfers also require the consent of the fund's limited partners. We apologise for the error and the omission.

Telecom Italia

Wall Street comes to Milan

MILAN

What an almighty shareholder feud says about Italy's corporate scene

¬ELECOM ITALIA is no stranger to shareholder feuds. Two years after it was privatised in 1997 Italy's national operator, also known as TIM, was the subject of a hostile takeover which left it saddled with so much debt that it never fully recovered. It has gone through four chief executives in four years. Ownership of the company, which has a market value of €11bn (\$12bn), is fragmented and unstable. On March 29th instability was expected to be on display once again at a general meeting. Shareholders were due to vote on a proposal by Vivendi, a French media conglomerate which owns 23.9% of TIM, to replace five directors put forward last May by Elliott, an American activist-investor fund with a 9.5% stake. The spat shows how corporate Italy is changing.

One novelty is the nature of the antagonists. Both are newish shareholders; neither is Italian. Vincent Bolloré, who controls Vivendi, began building a stake in TIM in 2015, as part of a strategy to create a southern European media giant. Fellow billionaire Paul Singer of Elliott started amassing his fund's stake last year (his fund also has a stake in Hyundai—see article earlier in this section). Rules enacted in the past decade to strengthen minority shareholders' rights, for instance by allowing them to appoint board members, have made Italy "an ideal battleground" for activist investors, says Luca Enriques, professor of corporate law at Oxford University.

This has helped bring altercations out from behind closed doors and into the open. François Goddard of Enders Analysis, a research firm, says they are "Wall Street style" encounters. Elliott has labelled Vivendi "a profoundly negative and harmful nuisance for the company". Vivendi called Elliott an "unethical activist fund", accusing it of "deceiving investors in many ways". Three proxy advisers, firms which counsel shareholders on how to vote in general meetings (another import from across the Atlantic), recommended rejecting Vivendi's proposal. Amid the rancour, TIM's share price has fallen by 30% in the past year.

It is not all change. Domestic investors with deep pockets remain scarce. And the Italian government resists making itself so. To blunt Vivendi's clout, in 2017 it invoked Italy's "golden power", a law entitling it to intervene in strategically important sectors, including telecoms. Cassa >> Depositi e Prestiti, Italy's state-controlled investment vehicle, this year doubled its stake in TIM to 9.8%.

Governments and activist hedge funds make for strange bedfellows. Yet Cassa backs Elliott, partly because the fund wants to spin off TIM's network infrastructure. That fits with the government's hope to merge it with another network, Open Fiber, in which it has invested heavily. Luigi Gubitosi, TIM's Elliott-backed boss, says he is open to a deal with Open Fiber, and has announced a network-sharing agreement with Vodafone, its biggest domestic competitor, to speed up the deployment of "fifth-generation" mobile-phone services across Italy.

Mr Gubitosi wants TIM to become a "normal company", by which he means one that sticks to a plan. Shareholders clashing over visions of future returns may herald a new normal. Wall Street would be proud.

Renewable energy

Power struggle

NEW YORK

More corporations want clean electricity. Getting it can be tricky

MERICA'S PRESIDENT has little interest ${f A}$ in fighting climate change. Not so its companies. Last year businesses tapped more than 8.5 gigawatts of clean energy in America, nearly triple the level of 2017, according to BloombergNEF, an energyresearch firm. Although more than 150 big corporations around the world have set targets to buy all their power from renewable sources, America accounts for 63% of corporate purchases of clean gigawatts. On March 28th green-minded companies there transformed the Renewable Energy Buyers Alliance (REBA), a non-profit organisation, into a fully fledged lobby group to further the cause.

REBA now wants corporate purchases of green electricity to ramp up dramatically. In a sign of how broad the clean-power movement has become, its members include big names in technology (Google), carmaking (General Motors), banking (Citigroup), media (Disney) and more. But REBA's creation also hints that, as firms race to go green, they are running into a number of problems. In the process of collectively solving them, they could reshape power markets.

For companies, clean power often looks like a no-brainer. The costs of electricity from wind and solar farms have plunged by about 70% and 90%, respectively, since 2009. Going green lets companies burnish their environmental credentials with investors, workers and customers.

The reality is more complex. The simplest way for a company to source clean electricity is to blanket its property with solar panels. Walmart has been doing this since 2007, harvesting the sun's rays from the vast roofs of its megastores. Such schemes generate only so much energy, however. Google's electricity demand, chiefly from its ravenous data centres, is nearly that of Estonia. Companies must therefore buy their renewable power from third parties.

In a normal procurement process, companies would seek bids from a variety of suppliers. Electricity is different, particularly in places with a regulated, monopolistic supplier-which is true of many American states. Two-thirds of corporate purchases of renewable electricity in America are therefore virtual, in what amounts to a swap. A company buys energy for its operations as usual from a local utility. It also signs a virtual power purchase agreement (VPPA) for electricity with a renewables provider in a deregulated market, which could be in another state, typically paying a fixed rate. The company then resells this clean electricity, at variable wholesale prices, into that faraway grid, thereby helping to offset its overall carbon footprint.

You would expect plunging prices for renewables to benefit those who buy it. In a VPPA, they could lose. That is because, in a market flooded with cheap renewables, wholesale prices at which a company resells clean kilowatt-hours could drop below the fixed rate set in the VPPA. "A lot of companies have buyers' remorse when signing these contracts," says Kyle Harrison of BloombergNEF.

An alternative is to buy clean electricity directly, either from a renewable project or

from a utility. This can work well. America is dotted with wind turbines that twirl exclusively for Google. General Motors has signed deals to buy renewable power from utilities in Michigan and Ohio. Even if a utility offers such options, they may only be available to large users or be capped, says Michael Terrell, who leads energymarket development at Google.

If a company balks at a utility's terms, abandoning the provider can be difficult if not impossible in a market with few alternatives. If a utility does lose a big corporate buyer, it may need to shift costs to its remaining customers. This is something regulators are understandably keen to avoid. MGM Resorts, a giant casino company, used to buy electricity from Nevada's utility, NV Energy, but reckoned it could both lower costs and obtain more clean power if it purchased electricity elsewhere. MGM left NV Energy in 2016, but only after paying the utility \$87m to do so. The utility, owned by Berkshire Hathaway, spent \$63m to help defeat a ballot initiative last year that would have created a more competitive power market.

REBA'S prime objective is to expand companies' ability to choose clean electricity, says Miranda Ballentine, its chief executive. That may mean seeking better contracts, disseminating best practices (like ways to mitigate the risks of VPPAS) and, critically, opening electricity markets to more competition. Take Walmart, which wants to stop buying power from utilities in Virginia, both to lower costs and boost its renewable portfolio. In February the state's utility commission denied the retailer's request, arguing that its departure could pass nearly \$70m of costs onto the utilities' remaining consumers. The company has asked the commission to reconsider. Walmart. too, is a member of REBA.



Virtually there

Schumpeter | Ninja activists

Japan toys with shareholder capitalism just as the West gets cold feet



A VA MURAKAMI hardly looks like a corporate raider. Dressed in black, the slight 31-year-old is, if anything, more like a *kunoichi*, or female ninja. In her office above a 7-Eleven store in Tokyo, she is disarmingly frank. She tells how, as a youngster, her father Yoshiaki Murakami, a well-known bureaucrat turned activist investor, taught her the value of money by making her bet on the cost of dinner. As a teenager, she once caught a glimpse of him on television on a flight home from boarding school in Switzerland. Shortly afterwards, in 2007, he was convicted of insider trading. At university in Japan, her fellow students pointed fingers at her.

Though her father was spared jail, the experience would have scared most offspring away from a career in finance. Not Ms Murakami. She now runs c&I Holdings, a family fund that enables her to influence how Japanese executives—"99% men"—run their companies. Her approach is uncompromising. "Whether I am female or young, I still hold the same number of shares and I can exercise them." Last week the Murakamis launched a hostile bid for Kosaido, whose activities range from printing to funeral homes. They are in a race against Bain Capital, a \$105bn buy-out firm.

For anyone familiar with Japan, the story of a young woman taking on the business establishment is remarkable—even with her father behind her. But as remarkable is what it says about Japan's efforts to shake up its corporate culture. As Ms Murakami points out, the country considers money dirty; cash is handed over in envelopes and on trays, rarely from hand to hand. It is squeamish about profit. Business in Japan has long been an old boys' club defended by yes-men (or "patient shareholders", as they style themselves). Up to half of listed firms' shares are in the hands of friendly shareholders—mostly other companies with cross shareholdings and banks and insurance firms who tend to support managers. This stymies attempts to hold them to account. As a result firms hoard earnings, and do not put them to more productive use.

Yet under the prime minister, Shinzo Abe, new laws enacted as part of the "third arrow" of his economic-growth strategy have challenged hoary boardroom practices, with the aim of promoting American-style shareholder capitalism. Ironically, as Steven Vogel of the University of California, Berkeley, points out, this is occurring just as Western politicians such as Elizabeth Warren, a Democratic presidential contender in America, argue for a model of stakeholder capitalism that looks decidedly Japanese.

Mr Abe's government seems undeterred. From the outset it cast corporate-governance reform as industrial policy—a way of boosting economic growth without further inflating Japan's public debt. That went down well. The impact is tangible. The corporate-governance code, introduced in 2015 and strengthened three years later, has raised the share of big listed firms with two or more outside directors to 92% in 2018 from 30.5% in 2014. A stewardship code pressing institutional investors to engage with the firms in which they hold stakes has been backed by the huge government pension fund (though corporate pension funds have dragged their feet). The share of Japanese investors voting against directors has jumped. It is now higher than among foreigners.

Bad governance has become a hot topic. On March 27th a special committee issued a damning report on Carlos Ghosn's "deified" role as boss of Nissan, alleging that he set his own pay, kept board meetings, on average, to no longer than 20 minutes, and discouraged debate. It recommended changing Nissan's board structure and introducing a majority of outside directors. Mr Ghosn is on bail, facing charges of financial misconduct that he denies.

Even institutional shareholders, once models of patience, are flashing the knives. On March 25th Lixil, a conglomerate bestknown for its toilets, bowed to a demand from some long-standing investors to hold an extraordinary general meeting to flush the chief executive, who has lost their confidence, down the pan. That used to be almost unheard of in Japan. In January Olympus, a medical-device maker rocked by scandal in 2011, named a member of ValueAct, an activist American hedge fund, to its board.

It is too early fully to gauge the impact on performance. Aggregate returns on equity and assets have risen sharply, though they still lag behind those in America. Corporate scandals persist, even among firms with good governance, such as Toshiba. Nicholas Benes, a corporate-governance crusader in Japan, says directors lack training to do their jobs effectively. There is also a risk that governance will be sidelined in favour of the two trendier initials in ESG investing—environmental and social. Buy-backs, executive pay and hostile takeovers are far below American levels. There is no chance Japan will adopt cut-throat capitalism overnight.

One of the main motivations for companies to change is ageing. Faced with a shrinking domestic market, companies must get fitter and adapt. Activist investors such as Ms Murakami help accelerate the change. By one estimate, the number of such funds in Japan, domestic and foreign, almost doubled between 2016 and 2018 to 23. Ms Murakami says firms she targets are now quicker to accept the need to improve returns on equity than when she started, as activism has become more common.

Free money, anyone?

But activist investors still need nerves of steel. Ms Murakami knows this from tragic experience. In 2015 she suffered a miscarriage after she was questioned by financial regulators over suspected misconduct. She was not charged. They also need patience. The Murakami family has recently offered to deposit in a brokerage the equivalent of \$1,000 for any Japanese child who wants to invest in the stockmarket, to encourage them to view money more positively. The children cannot lose; whatever they earn, they keep (and they only have to return the principal if they profit). So far only 2,500 have applied. But slowly, in business and in society, attitudes are changing.



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*statista.com/statistics/471264/iot-number-of-connected-devices-worldwide/

The Economist



Finance & economics



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Cryptocurrencies The madness of crowds

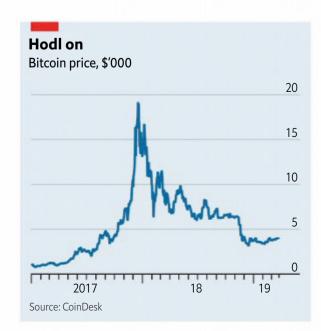
The flaws revealed by the cryptocurrency bust make a lasting revival unlikely

"B^E MORE BRENDA," said the ads for CoinCorner, a cryptocurrency exchange. They appeared on London's Underground last summer, featuring a cheery pensioner who had, apparently, bought Bitcoins in just ten minutes. It was bad advice. Six months earlier a single Bitcoin cost just under \$20,000. By the time the ads appeared, its value had fallen to \$7,000. These days, it is just \$4,025 (see chart).

While the price was soaring, big financial institutions such as Barclays and Goldman Sachs flirted with opening cryptocurrency-trading desks. Brokerages sent excited emails to their clients. The Chicago Board Options Exchange (CBOE), one of the world's leading derivatives exchanges, launched a Bitcoin futures contract. Hundreds of copycat cryptocurrencies also soared, some far outperforming Bitcoin itself. Ripple rose by 36,000% during 2017.

The bust has been correspondingly brutal. Those who bought near the top were left with one of the world's worst-performing assets. Cryptocurrency startups fired employees; banks shelved their products. On March 14th the CBOE said it would soon stop offering Bitcoin futures. Bitmain, a cryptocurrency miner, appears to have pulled a planned IPO. (Miners maintain a cryptocurrency's blockchain—a distributed transaction database—using huge numbers of specialised computers, and are paid in newly minted coins).

The speed with which the bubble inflated and then popped invites comparisons



with past financial manias, such as the Dutch tulip craze in 1636-37 and the rise and collapse of the South Sea Company in London in 1720. Cryptocurrency enthusiasts like to claim a more flattering comparison—with the 1990s dotcom bubble. They point out that, despite the froth, viable businesses emerged from that episode. But the cryptocurrency fiasco has exposed three deep and related problems: the extent of genuine activity is hugely exaggerated; the technology does not scale well; and fraud may be endemic.

Consider the overstatement of activity, first. Ten years after their invention, using cryptocurrencies to pay for goods and services remains a niche pastime. Bitcoin is the original cryptocurrency and still the most popular. In January Satoshi Capital Research, a cryptocurrency firm, declared that Bitcoin transactions in 2018 added up to \$3.3trn, more than six times the volume handled by PayPal. But such figures include an awful lot of double-counting, mostly related to the way Bitcoin handles change, says Kim Grauer at Chainalysis, a firm that analyses Bitcoin's blockchain. Strip that out, and Chainalysis reckons that Bitcoin accounted for around \$812bn of genuine transfers of value.

Of that, Ms Grauer reckons, only a fraction was used to buy things. Around \$2.4bn went to merchant-service providers, which handle payments for businesses—a piffling sum compared with the \$15trn of transactions in 2017 on Alipay and WeChat Pay, two Chinese payment apps. Darknet markets, which sell stolen credit-card details, recreational drugs, cheap medicines and the like, made up \$605m, and gambling sites \$857m. Most of the rest was related to speculation.

Even for speculators, business is less brisk than it seems. "Wash trading", in which traders buy and sell to each other (or themselves) to create the illusion of volume, is widespread. Bitwise Asset Management, a cryptocurrency-fund manager, analysed 81 cryptocurrency exchanges for a presentation on March 20th to the Securities and Exchange Commission, an American financial regulator. The firm estimated that 95% of trading volume could be artificial. The Justice Department is investigating claims of price manipulation.

The second problem is that the technology is too clunky to operate at scale. Cryptocurrencies are unlikely ever to achieve mass adoption, says Nicholas Weaver, a computer scientist at the University of California, Berkeley. Unlike Alipay or WeChat Pay, cryptocurrencies are intended as new financial systems rather than extensions to the current one. But they have serious design flaws. Bitcoin's pseudonymous creator, Satoshi Nakamoto, wanted it to be resistant to control by tyrannical governments and banks. Payment records are therefore not held centrally, but broadcast to all users. A new batch of Bitcoin is issued every ten minutes on average. That limits the network to processing about seven transactions per second (Visa, by contrast, can handle tens of thousands per second). In 2017, as the crypto-bubble was inflating, the system became clogged. To ensure that transactions went through, users had to pay miners—at one point, as much as \$50 **>>**

Buttonwood A world of difference

How emerging-market local-currency bonds might find a place in your portfolio

I N THE FIRST episode of "Cheers", a 1980s television comedy, Diane Chambers, a graduate student, intends to elope with Sumner Sloan, a literature professor. In stark contrast to the genial barflies at Cheers, a Boston watering-hole, Sloan is well-educated and middle-class—but also, it turns out, vain and deceitful. He's goofy, says Sam Malone, the bartender whose on-off romance with Diane is the show's dramatic axis. "He's everything you're not," she retorts.

And so is Diane. That she and Sam are dissimilar in personality and social background is one reason why "Cheers" is so funny. The yoking of opposites is a dependable ploy in situation comedies. It is also a useful trick in investing. The injunction not to put all your eggs in one basket can be found in any finance textbook. But there is more to diversification than that. The ideal diversifier is not just something other than what you own, but something that contrasts with it.

Suppose your investments are tilted heavily towards the s&P 500 index of America's leading shares, a principal character in global capital markets. Where can you find a Diane Chambers to balance your Sam Malone? Emergingmarket government bonds in the issuer's own currency may be the contrast you are seeking. They are not stocks, they are not denominated in dollars and they are not widely owned by foreigners. They are everything your existing portfolio is not.

Investing in emerging markets opens up a broader set of opportunities. GDP growth is generally faster, as there is greater scope to benefit from existing know-how than in rich economies. The business cycle is different, too. There is a spectrum of risk assets to choose from. The cautious prefer hard-currency bonds, which pay in dollars and are | issued by governments and firms.

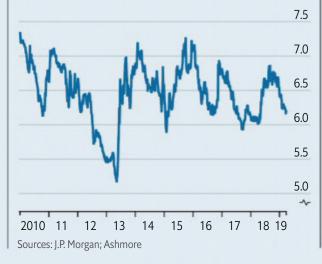
Further along the spectrum are racier bets. Shares carry the same hazards in emerging markets as anywhere else. Stockholders are behind bondholders in the queue to be paid, should earnings falter. But there is an additional exchange-rate risk: a fall in local currencies would be a money-loser for rich-world investors.

For those willing to take on foreignexchange risk, government bonds issued in local currency might have more appeal. Government bonds are in general a hedge against equity risk. And while indices of emerging-market stocks lean heavily towards Asia, and thus to China's supplychain, bond indices have broader regional balance, says Yacov Arnopolin of PIMCO, a big bond firm. Expected returns are decent. For instance, the yield on the J.P. Morgan GBI-EM index of biggish issuers is 6.2% (see chart). That is considerably higher than the yield on Treasury bonds.

This yield spread is a buffer against currency risk. A bet on local-currency bonds is in essence a bet against the dollar. Ideally you would gain on both the bonds

At sixes and sevens I.P. Morgan GBI-EM local-curre

J.P. Morgan GBI-EM local-currency yield, %





and the currency. But at the very least, you hope the "carry" (extra yield) will make up for any exchange-rate losses. An important consideration is whether the currencies you are buying into are overvalued. It is not obvious that they are. Real exchange rates in most big emerging markets are either close to their ten-year averages or below them.

A burst of inflation would alter the calculation. Currencies would then need to fall to keep the real exchange rate steady and exports competitive. Yet there has been a notable drop in inflation in emerging markets. Partly this is down to the adoption of inflation targets by central banks; partly it is more disciplined fiscal policy, says Jan Dehn of Ashmore, a fund manager. Of the 25 emerging markets listed on the indicators page of *The Economist*, only three (Argentina, Egypt and Turkey) have inflation in double digits. For most, it is below 3%.

Of course, the fate of the dollar is also a key consideration. Shifts in risk appetite will make the dollar jumpy. It tends go up against most currencies when traders fret about the world economy. But the Federal Reserve has indicated that it is not inclined to raise interest rates in America for a while. That militates against further dollar strength.

To buy local-currency bonds is to bet on a falling dollar. That might seem reckless. In fact, such bonds are a counterweight to the typical equity portfolio, which is groaning with American stocks and thus heavily exposed to dollar risk. They tend to have a low weight in richworld bond portfolios, says Mr Dehn. Local-currency bonds sit as awkwardly among "safe" Treasuries or Bunds as Sumner Sloan in a blue-collar Boston bar. In short, they are quite unlike everything you already own.

per transaction.

Moreover, Bitcoin is designed such that only 21m Bitcoins will ever be created, making it inherently deflationary. Mining, essentially a self-adjusting lottery in which participants compete to buy tickets, is energy-hungry. At the height of the boom it was thought to consume as much electricity as Ireland (these days, it merely consumes as much as Romania).

The final problem is fraud. Transactions are irreversible—a boon for con-artists. Ponzi schemes are common, as is incompetence. Cryptocurrency exchanges often collapse or are hacked. In February QuadrigaCx, a Canadian exchange, filed for bankruptcy, saying it had lost \$165m in deposits when its founder, Gerard Cotton, died, since only he had known the encryption keys protecting QuadrigaCX's deposits. But on March 1st Ernst & Young, which was appointed to handle the bankruptcy, said that the deposit addresses seem to have been empty for at least eight months before the date Mr Cotton is said to have died.

When Lambos?

Attempts are under way to get round some of these limitations. Some Bitcoin enthusiasts are testing an add-on called the Lightning Network, which tries to speed things up by moving many transactions off the blockchain. Stablecoins, whose value is supposedly pegged to something else, are touted as a way to rein in speculation. Once again, promise often falls short of reality. On March 14th Tether, the most popular stablecoin, with \$2bn-worth in circulation, said that it might not be fully backed with dollars after all. None has achieved even Bitcoin's limited take-up.

Most fans simply want cryptocurrency prices to start rising again. In 2017 John McAfee, a cryptocurrency enthusiast who made his money in antivirus software, said that if Bitcoin was not worth \$1m in 2020 he would eat an intimate part of his anatomy on television. On March 20th he tweeted that losing that bet was "not mathematically possible". Last year Jack Dorsey, Twitter's boss, said he thinks Bitcoin will be the world's "single currency" within a decade. Facebook is working on some kind of cryptocurrency project. Market analysts and pundits provide cheery reassurance that the currency will soon soar again.

Mr Weaver is sceptical, at least in the short term. The very visible boom and bust, and more attention from regulators, have probably cut the number of willing new punters, he says. But boosters are trying their best. They have taken to referring to the post-bust period as a "crypto winter". The intended analogy is with artificial intelligence: the "AI winters" were funding crunches in the 1970s and 1980s after hype outstripped reality. The implication is that, one day, summer will return.

Italy's labour market A perilous choice

MESSINA Italy's unemployment problem

O^{N A CLEAR} day, from Messina in northern Sicily you can see Calabria on mainland Italy's southern tip. The strait between them is the supposed location of Scylla and Charybdis, the mythical sea monster and whirlpool between which Homer's Odysseus had to choose on his voyage home. Italians on either side of the strait face another hazard today—unemployment. In 2017 about a fifth of the workforce in the south, and over half of young people, were out of work.

Giovanni, a 25-year-old resident of Messina, has been jobless for seven months. None of his internships, including in nursing and shipbuilding, has yet led to a permanent job. Part of the problem is too few openings in the region, says Aldo Cammara of Education InProgress, an NGO that helps youngsters learn computer skills.

An economic downturn is making matters worse: Italy fell into recession in the second half of 2018. But longer-standing structural factors help explain why jobs are scarce in the south even as bosses up north complain of labour shortages. A recent paper blames centralised wage-bargaining, and computes the gains from switching to a Germany-style localised model.

Both Italy and Germany have big regional inequalities. Economic divergence during the cold war means that the average west German district is still 23% more productive than the average eastern one. That is a slightly wider gap than that between northern and southern Italy, point out Andrea Ichino and Johanna Posch of the European University Institute, Tito Boeri of Bocconi University and Enrico Moretti of the University of California, Berkeley. But Italian unemployment also varies widely across regions.

Nearly 350 national industrial agreements cover the vast majority of firms and formal employees in Italy. They take little account of regional differences in the cost of living and productivity. Employees can take their bosses to court (and win) if they are not paid the nationally agreed minimum. Workers in the south who are lucky enough to be in the formal sector are very well paid. But fewer are hired than would be if wages were lower.

Wage bargaining in Germany, by contrast, was decentralised soon after unification. The authors find that earnings there are nearly four times as responsive to changes in regional productivity as those in Italy. Wages in the east are much lower than in the west, reflecting lower productivity and lower living costs.

The authors reckon a similar system in Italy could bring 2.5m more people into work, amounting to an increase of 13 percentage points in the employment rate in the south. Average earnings would be up to €114 (\$129) higher a month. But southerners already in jobs would need to take a pay cut of 6%. That is no vote-winner. Greece, Portugal and Spain introduced similar reforms—but only after sovereign-debt crises. Instead Italy is launching a "citizen's income" in the hope of reducing poverty and unemployment in the south.

That scheme offers the unemployed a generous monthly payment and help with finding work. But it does not make it more affordable to employ workers in the south, says Mr Boeri, who until February was the head of Italy's social-security administration. For Italy's government, the choice between helping the unemployed and keeping the votes of the employed must seem reminiscent of Scylla and Charybdis.



Strait and narrow

Monetary policy Keep it up

washington, dc Inflation in America continues to be surprisingly low

A LMOST TEN years into the recovery from the financial crisis, American monetary-policymakers are still finding that inflation is strangely quiescent. Every time price pressures seem to build, they then dissipate. The latest peak was in July 2018. Inflation as measured by the personal consumption expenditure (PCE) index, which the Federal Reserve tries to pin at 2%, was at 2.4%, and, in a rare heated moment—by the standards of the past decade—consumer-price inflation hit 2.9%. But since then, even as unemployment has stayed low, both measures have sagged to below 2% once again.

The absence of stronger inflationary pressure has been a little bruising for the Fed. It has long predicted that upward price pressures would result from the economy—and in particular, the labour market—pushing against its natural limits. In preparation for that event, it has raised interest rates nine times since December 2015. Along the way it has explained dips in inflation as temporary. But self-doubt has grown all the while. Weakness in inflation is one reason that rate rises are on hold today, with Jerome Powell, the Fed's chair, emphasising the need for patience.

Inflation is notoriously noisy, and therefore tricky to forecast. Energy prices, which are volatile, are responsible for much of the fall since last July. Core PCE inflation, which strips out food and energy, also rose in mid-2018—to 2%, exactly where the Fed wants it. But its subsequent fall has been small: a tenth of a percentage point between July and December.

The risk is that this trend, though gentle, proves to be persistent. Figures for Jan-



uary were due to be released on March 29th, after *The Economist* went to press. The Cleveland Fed estimates that they will show another slight fall.

Falling core inflation can suggest a weakening economy. But only some components of inflation are procyclical. Restaurant meals, furniture and housing all seem to get pricier more quickly in booms. Other prices-like those of health care, financial services, clothes and transportseem to follow their own tune. The increase in core PCE inflation in the first half of 2018 was mainly driven by such "acyclical" prices, according to an analysis by Adam Shapiro of the San Francisco Fed. Around half of the rise was caused by changes in prices of mobile-phone contracts and heftier charges and fees for financial services, a category that includes levies on credit-cards and cash machines.

What goes up can come down. A similar exercise by Gregory Daco of Oxford Eco-

nomics, a consultancy, finds that the fall in core inflation since mid-2018 also reflects the acyclical part of the inflation mix. The cyclical component of inflation, meanwhile, has not much changed. It remains 0.7 percentage points below the average for 2004-07 (see chart). Amid signs of a slowdown in economic growth, there are even some indications that this component could be weakening. Rental costs for housing (including imputed rents) have shown some signs of moderating, for example, having previously been galloping upwards.

In combination, these pieces of research suggest that underlying inflationary pressure did not subside in the second half of 2018, because it was never there in the first place. But that poses a bigger puzzle: why has the cyclical component of inflation been so muted, given the apparent strength of America's labour market? That is the question for economists to tackle ideally before it becomes moot.

Chengdu then don't

HONG KONG

The Inter-American Development Bank cancels its big bash in China

FAMOUS FOR its hotpot and pandas, Chengdu, in China's inland Sichuan province, is not an obvious venue for a conference about Latin America. But it was looking forward to hosting this year's meeting of the Inter-American Development Bank (IDB), which provides aid, advice and cheap loans to 26 developing countries in Latin America.

The meeting was intended to mark ten years since China joined the bank in 2009, acquiring 0.004% of its shares. South Korea had similarly played host in 2005 to mark its tenth anniversary. At last year's gathering in Argentina, the bank's choice of Chengdu was celebrated by a Chinese dance troupe—and someone in a panda suit.

Now the suit must go back in the closet. The bank has said it will hold its meeting elsewhere, because China has refused a visa to Ricardo Hausmann, an economist at Harvard University who was recently approved as Venezuela's representative at the bank. Mr Hausmann was nominated by Juan Guaidó, the leader of Venezuela's legislature, who has been recognised as the country's president by many of the IDB's members (a notable exception is Mexico).

China, however, still recognises the presidency of Nicolás Maduro, the political heir to Hugo Chávez, who began a second term in January after rigging last year's election. China was happy to hold the meeting without anyone from his odious regime taking part. But it said it did not want to "politicise" the event by accepting Mr Guaidó's appointee.

Some members were already unhappy with the choice of venue. The Americans in particular are wary of China's newly ambitious chequebook diplomacy, which they think is winning geopolitical friends and indebting people around the world. David Malpass, who handles international affairs for America's Treasury. has criticised the IDB's willingness to co-finance projects with China, fearful that such ventures give China unwelcome influence through the bank, rather than giving the bank a chance to influence China's lending practices for the better. This suspicion of China is a little awkward, since Mr Malpass is set to become the next boss of the World Bank, where China holds rather more than 0.004% of the shares.

Besides, keeping the IDB out of China will hardly keep China out of Latin America. Through institutions like the China Development Bank and the Export-Import Bank of China, it has lent more than either the IDB or the World Bank to Latin America since 2010. In a region that typically seeks to invest more than it saves, few countries are willing to spurn such a deep source of capital. With luck, Mr Maduro will not last much longer, and Mr Hausmann can invite the IDB, and its Chinese representatives, to a meeting in Caracas.

Argentina v Japan Exceptions and rules

How the two countries continue to confound macroeconomists

MANY PEOPLE make fun of macroeconomics. But any theory that must explain both Argentina and Japan deserves sympathy. Why, in particular, is inflation so stubbornly high in one and low in the other? In Argentina, consumer prices were 50% higher in February than a year earlier, the fastest increase since 1991. In Japan over the same period, inflation was less than 0.2%, equalling the lowest rate since 2016.

The inertia in both countries is puzzling. Inflation has stayed low in Japan despite a drum-tight labour market (unemployment has remained at 2.5% or below for over a year) and high in Argentina despite a fast-shrinking economy: its GDP contracted by more than 6% year-on-year in the fourth quarter of 2018.

The two countries, of course, have long mystified economists. In 1950 Argentina's GDP per person was three times that of Japan, according to the Maddison Project database. The Eva Perón charitable foundation, run by the president's wife, shipped 100 tonnes of relief supplies to the war-battered Japanese. Thousands of Japanese migrated in the opposite direction, creating a population of 23,000 Nipo-Argentinos by the end of the 1960s.

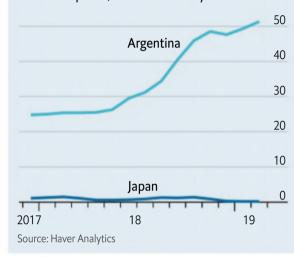
But the two countries' economic paths went on to cross decisively. Japan's GDP per person eclipsed Argentina's around 1970 and is now about twice as high, measured at purchasing-power parity. Its success and Argentina's failure defied predictions. Simon Kuznets, who won the Nobel prize in economics in 1971 for his work on growth, put it best: there are four types of countries in the world—developed, undeveloped, Japan and Argentina.

Policymakers in both countries have tried hard to make them macroeconomically "normal". After Shinzo Abe became Japan's prime minister in 2012, the central bank promised to raise inflation to 2% in about two years by expanding its asset purchases. And after Mauricio Macri won Argentina's presidency at the end of 2015, the central bank promised to raise interest rates enough to bring inflation down below 17% in 2017 and 12% in 2018, paving the way for an inflation target of 5% thereafter.

In both cases, these bold new policy frameworks seemed to offer a decisive break with a sorry past. In Japan, previous central-bank officials had resigned themselves to mild deflation or even welcomed it, redefining failure as success. In Argenti-

Worlds apart

Consumer prices, % increase on a year earlier



na, the previous government had responded to high inflation by simply fiddling the figures, misreporting failure as success.

But the early optimism has faltered. Both governments have been forced to revisit their targets and their instruments for achieving them. When price pressures proved more stubborn than Argentina expected in 2017, the government relaxed its unachievable inflation targets to bring them closer in line with reality. But that tweak led investors to lose faith in the authorities' resolve to tackle rising prices. In Japan, many commentators think the central bank should lower its seemingly unreachable 2% inflation target to something more achievable. But just as investors overinterpret evidence of slackening in Argentina, they pounce on any sign of tightening in Japan. Any tweak in the central bank's target will probably be misinterpreted as a change in its policy, rather than an acknowledgment of reality. Given their track records, neither central bank enjoys the benefit of the doubt.

Indeed, memories of the past create self-fulfilling prophecies. The holders of Argentine currency bear many scars, including hyperinflation, devaluation, redenomination, and the *corralito* that froze their deposits in 2001. The yen, by contrast, is seen as a safe haven. When trouble strikes, investors are quick to flee from Argentina's currency, whereas the Japanese are quick to flee into theirs. Recent drops in the peso, which has fallen by over 10% so far this year after plunging by 50% last year, are one cause of inflation's recent resurgence. Periodic appreciations of the yen have had the opposite effect in Japan. The sorry track records of each central bank also diminish their influence over wage negotiations. In both countries, workers demand that their pay keeps pace with the price pressures they feel, not the inflation the central bank promises. During the spring *shunto* (or wage offensive), Japan's big companies and unions thrash out wage deals that set a benchmark for other parts of the economy. Companies like Panasonic, Hitachi and Toshiba have this year offered increases in base pay of only 0.3%, according to Capital Economics, a research firm.

Argentina has a similar set of negotiations known as *paritarias*. Some economists expect them to yield wage increases of 30-35% this year, which will help keep inflation uncomfortably high. In parts of Argentina the school year, which begins in March, was delayed by striking teachers demanding salary increases to offset last year's inflation and this year's, whatever it turns out to be.

Argentina's inflationary tendencies reflect its long struggle to live within its means. Japan's deflationary bent reflects a struggle to live up to them. Argentina's national saving rate has averaged only 17% of GDP over the past 30 years, too low to meet its ambitions for investment. As a consequence, it has recorded a deficit in its current account with the rest of the world in 30 of the past 40 years. Japan, on the other hand, has run a surplus since 1981 and is now the world's biggest net international creditor. Despite some signs of change (see Schumpeter), Japan's corporations still hoard cash and other financial assets, rather than splashing out on the higher wages or dividends a rich economy can afford.

There are four types of countries in the world: developed, undeveloped—and economies in each of those two categories who think they are in the other.



The other two types

Free exchange | Ageing is a drag

But slower growth in older economies is more a choice than an inevitability



 ${f F}_{age}$ of 65 than under the age of five. In another two decades the ratio will be two-to-one, according to a recent analysis by Torsten Sløk of Deutsche Bank. The trend has economists worried about everything from soaring pension costs to "secular stagnation"— the chronically weak growth that comes from having too few investment opportunities to absorb available savings. The world's greying is inevitable. But its negative effects on growth are not. If older societies grow more slowly, that may be because they prefer familiarity to dynamism.

Ageing slows growth in several ways. One is that there are fewer new workers to boost output. Workforces in some 40 countries are already shrinking because of demographic change. As the number of elderly people increases, governments may neglect growthboosting public investment in education and infrastructure in favour of spending on pensions and health care. People in work, required to support ever more pensioners, must pay higher taxes. But the biggest hit to growth comes from weakening productivity. A study published in 2016, for example, examined economic performance across American states. It found that a rise of 10% in the share of a state's population that is over 60 cuts the growth rate of output per person by roughly half a percentage point, with twothirds of that decline due to weaker growth in productivity.

Why are older economies less productive? The answer is not, as one might suppose, that older workers are. Though some capabilities, notably physical ones, deteriorate with age, the overall effect is not dramatic. A study of Germany's manufacturing sector published in 2016 failed to detect a drop-off in productivity in workers up to the age of 60. Companies can tweak employees' roles as they get older in order to make best use of the advantages of age, such as extensive experience and professional connections.

Furthermore, if weak productivity growth was caused by older workers producing less, pay patterns should reflect that. Wages would tend to rise at the beginning of a career and fall towards its end. But that is not what usually happens. Rather, according to a recent paper by economists at Moody's Analytics, a consultancy, wages are lower for everyone in companies with lots of older workers. It is not older workers' falling productivity that seems to hold back the economy, but their influence on those around them. That influence is potent: the authors reckon that as much as a percentage point of America's recent decline in annual productivity growth could be associated with ageing.

How this influence makes itself felt is unclear. But the authors suggest that companies with more older workers might be less eager to embrace new technologies. That might be because they are reluctant to make investments that would require employees to be retrained, given the shorter period over which they could hope to make a return on that training for those near the end of their careers. Or older bosses might be to blame. Research indicates that younger managers are more likely to adopt new technologies than are older ones. This may seem obvious: older people's greater aversion to new technology is a cliché. And at least anecdotally, greying industries do seem more averse to change.

If the evidence suggested that ageing economies struggled primarily because of slow-growing labour forces and fast-growing pension costs, it would make sense to focus policy efforts on keeping people in work longer—by raising retirement ages, for example. But if, as seems to be the case, reticence to embrace new technologies is a bigger issue, other goals should take priority—in particular, boosting competition. In America, increasing industrial concentration and persistently high profits are spurring renewed interest in antitrust rules. The benefits of breaking up powerful firms and increasing competition might be even bigger than thought, if conservative old firms are thereby spurred to make better use of newer technologies.

There are other measures that could help. Removing barriers to job-switching, for example by making benefits more portable, could shorten average tenures and help stop companies' cultures becoming ossified. Best of all would be more immigration. An influx of young foreign workers would address nearly all the ways in which population ageing depresses growth. It would not only expand the labour force and create new taxpayers, but would mean more and younger companies, and greater openness to new technologies. And there would be plenty of willing takers in poorer countries with younger populations.

No men for old country

Societies with lots of older workers are also societies with lots of older voters, however. Those voters are, on average, more politically conservative than younger people, and less likely to support increased immigration. People of all ages would gain from policies that boosted growth and productivity. But given the choice between a dynamic but unfamiliar society and a static but familiar one, older countries tend to opt for the second. In hindsight, the demographic boom that coincided with industrialisation in rich countries may have had an underappreciated benefit: it created a big constituency in favour of embracing new technologies and the opportunities they provided.

Technology may at some point overcome the stifling effect of ageing. In a new paper Daron Acemoglu of the Massachusetts Institute of Technology and Pascual Restrepo of Boston University find that when young workers are sufficiently scarce, manufacturers invest in more automation, and experience faster productivity growth as a result. Robots have yet to make a big impact in the service sector and beyond, but as their capabilities improve and jobs for younger people go begging that may change. The world could use more flexibility and productivity now. But stagnation may end eventually, once the robots are promoted to management.

Science & technology



Skyfalls

Networks of cameras are making it easier to track meteors, and find the bits that actually reach the ground

E of rock hurtles into Earth's atmosphere. The reason so little of this bombardment makes it to the planet's surface is that much of it is burnt up by atmospheric friction, which creates the fireball that is the visible sign of a meteor's arrival. As for the bits that do get through, once landed, they are known as meteorites.

Roughly 60,000 objects of meteoritic origin have been picked up and catalogued. Most are fragments from a much smaller number of individual falls. Of these falls, only 36 were observed as they arrived with enough fidelity to calculate the orbit of the original meteor before it entered the atmosphere. If more such data were available it could, by showing where the rocks came from, cast more light on the composition of the solar system. It might also help in moving orbiting spacecraft out of danger.

The tracking of meteors is carried out by arrays of cameras on Earth. The oldest of these is the European Fireball Network (EFN), which dates back to 1951 and is operated by the Astronomical Institute of the Czech Academy of Sciences. When it launched its equipment was primitivetwo groups of eight cameras capturing images on glass photographic plates using allnight-long exposures. Each camera group covered half the sky. Now, the network deploys 24 state-of-the-art digital cameras equipped with fish-eye lenses in 18 stations scattered across Austria, the Czech Republic and Slovakia. Two more stations, in Germany, are planned for later this year.

The digital cameras take back-to-back photographs, with 35 second exposures, from dusk to dawn. Fish-eye lenses allow a

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single exposure to cover the whole sky immediately above each camera. If more than one camera sees the same fireball—which is usually the case—that meteor's course can be triangulated, with a precision of about ten metres, by comparing the images. This yields two valuable pieces of information. Plotting the path backwards reveals the rock's orbit before it slammed into Earth's atmosphere. Projecting it forward suggests a potential landing site.

The EFN's cameras also contain radiometers that measure changes in a fireball's luminosity 5,000 times a second. This reveals the rock's entry speed, its probable mineral make-up, the amount of fragmentation and deceleration rate. If the data indicate anything is likely to have reached the ground, an alert is automatically emailed to the network's operators.

Dark flight

To calculate an impact's location, researchers take into account how wind affects the trajectory during 20km or so of "dark flight", after a fireball has burned out. A decade ago, half of meteorites found as a result of the EFN's data were within 500 metres of the predicted spot. That figure has now shrunk to 100 metres. Pavel Spurný, >>

the network's co-ordinator, usually keeps the impact zone secret until his team, or trusted helpers, can search for it. Meteorites have commercial as well as scientific value. Giving the game away too early risks losing finds to professional collectors.

The EFN's hardware was not hugely expensive. The network's cameras cost about \$30,000 a piece. Operating the system adds \$114,000 a year, according to Dr Spurný. But it has improved the success rate enormously. Between 1951 and 2014, when the new cameras started to be rolled out, rocks from five falls were recovered. Since then, that total has doubled. Even so, cloudy skies can foil the instruments. And meteorites, many of which are small and dark, are not always easy to find in the vegetation and darkish soils of central Europe.

For all these reasons, Phil Bland, a British meteorite expert, reckoned the pickings are better on the flat, brushless, lightly coloured deserts of Western Australia—a place where, as a bonus, the skies are mostly clear. Dr Bland, who works at Curtin University, in Perth, has therefore set up what he calls the Desert Fireball Network (DFN). This now sports 52 camera observatories, though the cameras themselves are, at \$10,000 a pop, cheaper and less snazzy than the EFN's. These cameras keep a persistent eye on the western third of Australia's night sky.

The DFN has been a success. It has produced, Dr Bland says, a big data set "of gorgeous orbits" for incoming rocks. The number of meteorites believed to have landed has overwhelmed the team's resources. They have recovered stones from four falls, but are in need of adventuresome volunteers to mount expeditions into the outback to gather the remains of more than 30 others.

In America, meanwhile, the NASA Allsky Fireball Network, run by America's space agency, operates 18 cameras across the United States. Its goal is not to find meteorites, but to protect spacecraft from collisions. By studying fireballs, the agency's Meteoroid Environment Office in Huntsville, Alabama, which operates this particular network, improves estimates of the number, size, speed and trajectory of space rocks in areas where satellites operate. The forecasts of Earth's periodic peak bombardment by objects from a cloud of cometary debris called the Draconids, for example, has improved from an accuracy of about two hours in 2012 to just 30 minutes today, says Bill Cooke, who runs the project.

Dr Cooke's team use the data the network collects to calculate the risks faced by individual spacecraft. NASA publishes these numbers so that insurance underwriters can take them into account, as can mission operators. In areas with higher collision risks, controllers may temporarily shut down high-voltage subsystems that, if struck, might fry the spacecraft they are part of, or reorient a craft so that the narrow edges of its solar panels face any onrushing space rocks, minimising the risk of impact.

Protective measures

Spacecraft engineers also use Dr Cooke's data to design better "bumper shields". These consist of layers of Kevlar and other materials spaced so that they gradually break apart an incoming meteor, depriving it of energy. To keep launch weights down, not all sides of a spacecraft are shielded equally, usually the rear is the most heavily armoured part.

To gauge a projectile's destructive power, one must know its speed. A team at the University of Western Ontario, in Canada, clocks meteors smaller than grains of sand. Using high-frequency radar, the team fires pulses into the sky 500 times a second, day and night. These detect not meteors themselves, but rather the trails of ions, generated by friction within the air, that they leave behind. The radar sees this as a "giant wire in the sky", says Peter Brown, the team leader. An array of microphones sensitive enough to measure shock waves from meteors a centimetre or more across provides additional data. Dr Brown puts the average speed of such shooting stars at about 20km a second—significantly faster than many had thought.

That is bad news for satellites. But if the various meteor-monitoring networks around the world can help improve the forecasting of peak meteoric activity, then the number of spacecraft suddenly found to be in peril will be reduced.

Biochemistry Sniffing out Parkinson's

Chemicals that give sufferers a unique smell have been identified

HIPPOCRATES, GALEN, Avicenna and other ancient physicians frequently used odour as a diagnostic tool. Although scent is not used nearly as often in modern medicine, it still has its place. Paramedics are routinely taught to spot the fruity smell on the breath of diabetics who have become hyperglycaemic and gastroenterologists are trained to detect the odour of digested blood. But there has been scant evidence of a smell associated with neurodegenerative disorders. Now one has been found for Parkinson's disease.

Frequently causing tremors, rigidity and dementia, Parkinson's is both debilitating and substantially shortens life expectancy. The rate at which these symptoms appear and worsen cannot be stopped or slowed yet but its most harmful effects can be staved off with drugs. As with many diseases, the earlier the intervention, the better. Yet herein lies one of the greatest **>>**



Mrs Milne's extraordinary nose at work

The Economist March 30th 2019

challenges—there are no tests that diagnose whether Parkinson's is actually present. The best that neurologists can do is study the symptoms and theorise about whether someone actually has the disease. Hence the search is on for a better form of diagnosis. Unexpectedly, scientists are now literally following someone's nose.

Joy Milne, a retired nurse from Perth, Scotland has an extraordinary sense of smell. Known as hyperosmia, Mrs Milne's condition allows her to detect odours that are imperceptible to most people. In 1974 Mrs Milne noticed an odd musky smell around her house that had not been present before. In 1986, her husband, Les Milne, was diagnosed with Parkinson's. He lived with the disease for a number of years and while the symptoms were initially manageable with medication, this became harder over time. Eventually, he was forced to retire and, while attending Parkinson's support groups, Mrs Milne noted something extraordinary. Everyone with the disease had the same distinctive odour that her husband had developed in 1974. It was shortly after that realisation that she started collaborating with researchers.

Musky odour

By providing Mrs Milne with shirts worn by Parkinson's patients, researchers found she was able to identify that the smell was concentrated along the upper back, and not in armpits as previously assumed. Most remarkably, of the control subjects without the disease, Mrs Milne found one to have the musky odour. Nine months later that person was diagnosed with the disease.

All this led Perdita Barran of the University of Manchester, in Britain, to set out to discover what was producing the telltale odour that Mrs Milne could detect.

Previous work found that patients with Parkinson's had a tendency to overproduce a waxy compound on the skin of their upper backs. Known as sebum, Dr Barran speculated that something trapped within this compound was producing the odour. Keen to find out, Dr Barran and her colleagues set up an experiment.

The team analysed sebum samples from 43 people suffering from Parkinson's and 21 who were not. The sebum samples were collected on gauze and warmed to release any volatile compounds that might be found within them. Mass spectrometry and gas chromatography were then used to identify whether there were volatiles present and what they were. For a subset of the patient samples, Mrs Milne smelled the compounds before they entered the mass spectrometer and pressed a button when the distinctive odour was present.

As Dr Barran reports in *Acs Central Science*, the mass spectrometer identified four compounds, perillic aldehyde, hippuric acid, eicosane and octadecanal, in the va-

The ultimate coffee machine

Inhumanly good service coming soon to a café near you

Gavin PATHROSS likes his Americano at a particular strength, with exactly 2.8 shots of espresso, an order that human baristas struggle to get right. But the baristas at Ratio, his new coffee shop in Shanghai, are anything but human. Customers specify, order and pay for their coffee via their smartphones. A robot arm then grinds the beans, pumps shots of espresso and carries out the rest of the work. The robot can supply water and coffee in any ratio desired—hence the shop's name. Once it has prepared the beverage, it passes the finished product to a human waiter for serving.

Ratio's robot baristas are part of a trend. Hamburger joints and other fastfood outlets are starting to be robotised in some places. Now it is the turn of cafés. Mr Pathross's Shanghai shop is, at the moment, a one-off. But Coffee Haus is a commercial system intended for deployment in airports, offices and other high-volume locations. It is the brainchild of Chas Studor, founder of Briggo, a firm in Austin, Texas. Under his guidance Briggo's engineers have developed a device that is a couple of metres tall, four metres across, and can turn out 100 cups an hour.

Briggo has cut human beings out of the loop completely. A Coffee Haus machine lets you order and pay for your coffee via an app-and, if you have done so remotely, keeps your drink in a locked area, accessible via a code which it texts to you. For those present, the Coffee Haus robot provides a certain amount of theatrical appeal (a window lets you watch the coffee being made). But Mr Studor says the real aim is not theatre but to carry out the same processes as a standard coffee bar does, with robotic precision. For example, a big challenge for human baristas is that different types of coffee have different ideal "extraction parameters"—how many beans to how much water, brewed at what temperature and for how long. During busy spells,

porised sebum of the Parkinson's disease patients that were at entirely different levels to those in the healthy group. To test whether these different levels of compounds were generating the smell that Mrs Milne was detecting, Dr Barran presented them to her and confirmed that they were, indeed, responsible for the musky odour.

While relatively small in size, Dr Barran's experiment is the first to reveal the



One lump or two?

humans sometimes struggle to get all of these things right every time. The robot is inhumanly perfect.

Café X in San Francisco takes advantage of the showy appeal of robots. Its computer arm, which is described as having "a quirky personality," even waves to customers. Café X sells mostly from kiosks in streets and shopping malls. Orders can be made from an app or via touch screen at the kiosk itself. But it has not dispensed with human attendants and has someone on hand to talk to customers and provide a human touch.

All developers of robot baristas stress the speed, reliability and consistency of their systems. They give the convenience of vending-machine coffee without the horror of it. And coffee is only the start. Soon, such devices will be making tea and other drinks at the tap of an app. Human servers, meanwhile, will be freed from the drudgery of preparing endless lattes, to concentrate on customer service. Whether the outcome is viewed as people and machines each playing to their strengths in a harmonious team, or a corporate techno-dystopia with a Starbucks twist, is perhaps—like preferences in coffee—a matter of taste.

specific compounds that generate the unique smell of Parkinson's. Assuming larger follow-up experiments replicate her findings, the work paves the way for the development of a device, a sort of electronic nose, that could sniff the upper backs of patients to quickly determine who has the disease and who does not. That would allow drugs to help mitigate the symptoms to be administered all the sooner.

Pest control

A bug in the system

How whiteflies hack the way plants communicate

WHEN SOME plants are attacked by herbivores they fight back by producing irritants and toxins as their leaves get chewed up. Certain insects, however, can resist these defences. Among the best at doing this, and hence one of the most troublesome crop pests, is the whitefly. Remarkably, as new research shows, whiteflies enhance their dastardly deeds by hacking a biological early-warning communications system used by plants.

When whiteflies launch an attack. plants respond by producing jasmonic acid as a defence mechanism. This hormone triggers the production of compounds that interfere with an insect's digestive enzymes, making it difficult for them to feed. But plants can produce a different substance, salicylic acid, to help ward off pathogens, such as a virus. Whiteflies trick the plant into behaving as if it was threatened with a disease rather than an insect infestation. This is possible because whiteflies have compounds in their saliva that dupe plants into producing more salicylic acid and less insect-repelling jasmonic acid. This ruse makes it much easier for them to infest the plant.

Raising the alarm

Peng-Jun Zhang and Xiao-Ping Yu of Jiliang University in China, and their colleagues, wondered whether there might be more to it than that. In particular they decided to investigate what happened to the rallying cry plants make when they are under attack by insects or disease.

That idea might appear to have been lifted from the film "Avatar", set on a fictional moon where plants communicate. But in recent years researchers have found that plants do have the ability to raise an alarm when they are threatened. Sometimes this is sent in biochemical messages via root and symbiotic fungal connections in the soil, and sometimes through chemicals released into the air.

The alarm signals give warning to nearby plants of an imminent threat so that they can prepare to defend themselves. When a pathogen is causing harm, the signals drive a population-wide production of salicylic acid. If insects are the problem, the plants make jasmonic acid as well as special compounds that summon predators to eat the insects.

As they report in *Proceedings of the National Academy of Sciences* this week, Drs Zhang and Yu found that whiteflies not only deceive individual plants, making them respond as they would to a disease not an insect, but also spoof their alarm system making them spread the erroneous message. This makes neighbouring plants more vulnerable.

To show this, the researchers set up an experiment growing tomato plants in glass chambers. Some plants were infested with whiteflies and some left alone. After several days, the air from each chamber was passed into similar chambers containing a healthy tomato plant and left for 24 hours. These new plants were then infested with whiteflies. Although the number of eggs laid on all the plants was much the same, on those exposed to the air of infested plants the new generation of whitefly nymphs developed much more quickly.

The researchers ran the experiment again but this time looked closely at the compounds produced by plants exposed to the different air samples. They found that while jasmonic acid was produced at the expected high levels during a whitefly attack by plants contained in healthy air, plants exposed to air from infested plants only produced half those levels. Salicylicacid production showed the reverse trend, with plants exposed to healthy air samples before a whitefly attack producing very little of it and those exposed to air samples from infested plants producing a lot.

Given these findings, Drs Zhang and Yu argue that if the biochemical mechanism driving plants to send out incorrect warning signals can be found, it might be possible to come up with more effective agricultural countermeasures. That could help farmers protect their crops from a sneaky pest that worldwide costs hundreds of millions of dollars annually.



Let's pretend we're viruses

Gathering the rays

Getting more power from a solar panel

E VEN THOUGH solar panels have still not very efficient at doing their job. Standard panels using silicon-based solar cells typically convert 17-19% of the sun's energy into electricity. It is possible to use more exotic solar cells to make panels that are some 40% efficient, but these can cost around \$300 a watt compared to just under \$1 for some silicon versions. Hence the better panels are used in specialist roles, such as powering spacecraft.

Now, a middle way seems to have been found. Insolight, a startup from the Swiss Institute of Technology in Lausanne, has developed a panel that uses expensive high-efficiency solar cells, but does so in such a fashion that should make its panels competitive with the standard silicon variety. The new panel has been confirmed in independent tests to be 29% efficient.

Insolight employs so-called multijunction solar cells, which are similar to those on spacecraft. These capture energy from a much broader spectrum of sunlight by using a stack of different materials, such as gallium arsenide and gallium indium phosphide. Fabricating such cells is complex and costly.

Insolight, though, is extremely parsimonious in their use. Instead of spreading them across an entire panel, they are spaced well apart in a grid that covers just 0.5% of the surface. The panel is then covered with a protective glass layer that contains optical lenses above each cell. This way sunlight falling on the panel is concentrated onto the cells below. To ensure maximum exposure, a mechanism moves the position of the panel by a few millimetres horizontally, enough to follow the trajectory of the sun.

Such panels would still cost a bit more than standard silicon ones, but as Laurent Coulet, Insolight's chief executive, points out, what matters is the final cost of the electricity they produce. He reckons that in mass production his panels will work out cheaper, going well below silicon's \$1 a watt to 30-40 cents a watt. Moreover, a hybrid panel could be made using the Insolight system and silicon cells covering the remaining 99.5% of the panel's surface. Such a panel would help harvest diffuse light in places where conditions are often cloudy.

Books & arts



Mao Zedong The chairman will see you now

The myth and thinking of Mao Zedong still influence his country and the world

THE NAMES OF the 20th century's bloodiest dictators are synonymous with evil. Hitler, Pol Pot, Stalin: even to joke about them is in poor taste. Yet one tyrant's name has a milder impact. Indeed, many still revere him. His face is on almost every banknote in circulation in the world's secondlargest economy. Thousands of people queue up daily to see his embalmed body lying in state in a glass sarcophagus. When Barack Obama was president, a designer in China produced an image blending the despot's garb with the American's face and put it on T-shirts. Many people-including Western tourists—bought them for their kitsch appeal. It probably did not occur to them that they were, in effect, equating America's leader with a figure who caused tens of millions of deaths.

Mao Zedong was always thus: a despot whose global image was moulded and adapted without regard to the man he really was. It floated free of the horrors he set off—the killings of landlords, the persecutions of intellectuals and the mass starva**Maoism: A Global History.** By Julia Lovell. Bodley Head; 624 pages; £30. To be published in America by Knopf in September; \$37.50

tion that swept the country in the early 1960s. His Little Red Book was as eagerly read by rebellious students on Western campuses as it was by insurgents in the developing world. There was no fashion shame in wearing a Mao suit. No child has been reproached for asking who is the most powerful cat in China. (Chairman Miaow.)

As Julia Lovell of Birkbeck, University of London, describes in "Maoism: A Global History", the abstract chairman inspired revolutionaries around the world, from the highlands of Peru to the jungles of Cambodia, from the cafés of Paris to inner-city America. Mao's ideology, distilled into a few pithy epigrams ("to rebel is justified", "serve the people" and "bombard the headquarters" is all you need to know), helped foster suffering and mayhem not only in

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his own country, but around the world. His was the thinking behind Pol Pot and his Cambodian killing fields. It was his personality cult that encouraged an envious Kim Il Sung to push his own to similar heights of absurdity; North Koreans remain in its terrifying thrall today.

The cult of Mao did not end with the anarchy of the Cultural Revolution in the 1960s and 1970s. It has enjoyed a tenacious afterlife that has not received the attention it deserves. As Ms Lovell argues, the paucity of study of Maoism's global impact is not only the result of inattention. "It is also a consequence of post-Mao China's success in communicating a particular narrative of its past," she writes. Mao's image continues to be manipulated. It still has a powerful allure in China and elsewhere.

The origins of the legend owe a surprising amount to an American. Ms Lovell explores the startling role played by Edgar Snow in creating the Mao myth more than a decade before Mao seized power in 1949. Snow was a journalist who managed to enter the remote north-western area where Mao and his followers ended up after their epic Long March to escape the forces of Chiang Kai-shek. The book he wrote about the guerrilla base and his meetings with Mao, "Red Star Over China", published in 1937, became an international bestseller.

No other journalist had enjoyed such access. Snow's description of Mao, then in his early 40s, as an idealist who wanted to **>>**

save China from Chiang's corrupt autocracy and build a democratic country mesmerised the world. As Snow put it, Mao's aim was to awaken the Chinese "to a belief in human rights" and to persuade them "to fight for a life of justice, equality, freedom and human dignity." What could be objectionable about that?

Snow's work, says Ms Lovell, "created Mao as a national and global political personality before there was such a thing in the Chinese Communist Party as Maoism." A Chinese translation attracted young, well-educated urban Chinese to Mao's cause. Abroad it became a handbook for anti-Nazi partisans in Russia, for Huk guerrillas in the Philippines and for anti-British revolutionaries in India. It was, says Ms Lovell, a "core text" for thousands of Indians who joined a Maoist insurgency there that still simmers.

Ms Lovell's descriptions of these (and other) global strands of Maoism are wellresearched and colourful. She concludes her book by examining Mao's afterlife in China itself. This is where the creed's importance is most starkly evident.

Chaos under heaven

After many years during which Mao had become increasingly marginalised in Chinese political culture, China's current leader, Xi Jinping, is trying to re-establish the late chairman's authority. He has ordered party members to brush up on Maoist ideology. China's successes during the recent era of "reform and opening" should not be used to cast aspersions on the preceding one under Mao, he insists. In this way Mr Xi has become a darling of Mao-loving thinkers in China who have long been chafing at the party's drift towards freemarket capitalism. They admire his fondness of a more state-led kind of economy.

This becomes all the more significant when considering Mr Xi's foreign policy. Ms Lovell's book offers a valuable reminder that, under Mao, China wanted to be the leader of a global revolution. Subsequent Chinese leaders tried to downplay that aspect of Maoism—fearful, perhaps, of fuelling Western suspicions of Chinese communism. Mr Xi, however, has made it clear that he wants to make China a central player on the world stage. He says Chinesestyle socialism has been "blazing a new trail" for other countries. There are echoes of the past in his words.

For all that, the analogy is difficult to sustain. Mr Xi is not on a revolutionary mission. He wants to ensure a global safe space for Chinese communism, not convert the world to it. He is no supporter of insurgencies. He is happy to forge friendly relations with non-communist powers if they do not challenge his right to rule.

At home Mr Xi uses Maoism as a way of enforcing party discipline: mouthing the

chairman's words shows loyalty to the party he helped create. Mr Xi would not wish its members to take Maoist ideology too literally; after all, as Ms Lovell notes, Mao "possessed a genius" for theories that justified inconsistency and contradiction. When "there is great chaos under Heaven, the situation is excellent," he said.

Mr Xi does not want Red Guard-type anarchy of the kind unleashed by Mao because he fears the party would not survive it. In many ways he is the antithesis of Mao. He wants stability at any cost. Yet as Ms Lovell's book advises: "Like a dormant virus, Maoism has demonstrated a tenacious, global talent for latency."



Sexism and espionage The limping lady

A Woman of No Importance. By Sonia Purnell. *Viking; 368 pages; \$28. Virago; £20*

As TALES OF wartime derring-do go, it would be hard to beat that of Virginia Hall, a young, one-legged American woman who, in the Gestapo's view, became the Allies' most dangerous spy. She did more than anyone else to forge the disparate, rivalrous groups of the French Resistance into effective military units that by 1944 could play a part in liberating their country. As Sonia Purnell shows in her new biography, Hall's bravery was of the cool, calculating, unflagging kind that is peculiarly required of the special agent operating for years in enemy-occupied territory, in constant danger of betrayal or of making the one wrong false step that would result in exposure, capture, torture and death.

From the outset, she seemed to have known she was different. Born in Baltimore in 1906 to conventional, upper-middle class parents, she insisted on going to university (Radcliffe College, the bluestocking offshoot from Harvard) and completing her studies in French, German and Italian in Europe. Her ambition to join the State Department was thwarted first by bureaucratic misogyny and then by a hunting accident in Turkey when she was 27, which led to the amputation of her leg and the fitting of a prosthesis she named "Cuthbert".

Unbowed and determined to relay the horrors of fascism to readers at home, she became a stringer in Europe for several American newspapers. By the summer of 1940, as German Panzers rolled through France, she had found new work driving wounded soldiers from the collapsing French army to hospitals in Paris. It was then that she had an idea. As the citizen of a neutral country, she could exploit her relative freedom to move around by becoming an undercover agent for Britain's nascent Special Operations Executive (SOE), which sent her back to France in 1941.

Although continually patronised and underestimated, Hall quickly adapted to the secret life, basing herself in Lyon, deep in collaborationist Vichy France, and exploiting her cover as a journalist. Her bosses in London soon saw that she had talents they could use. She was an able recruiter of intelligence assets, including a courageous brothel madam, several prostitutes and a VD doctor. At a time when the Resistance barely existed, she found and trained saboteurs and developed escape routes for downed British pilots and brave but bungling agents sent from London. She even organised spectacular jail breaks when colleagues were captured by the Germans or the French police. When other agents were slapdash and guilty of lethal security breaches, she somehow kept the show on the road, even as the personal risks to her intensified. Klaus Barbie, the psychopathic "Butcher of Lyon", became obsessed with killing the "limping lady".

Eventually Hall's luck ran out. Betrayed by a clever and vile double agent, Abbé Alesch, her network shattered (many of her associates were tortured and sent to death camps), her own cover blown, she escaped from France by crossing the Pyrenees in midwinter on foot, her stump oozing blood as Cuthbert fell apart. Once back in London, Hall resolved to return to France to help prepare the ground for D-Day. When soE refused to send her back, deeming the risks too high, she persuaded the British outfit's fledgling American counterpart, the Organisation of Strategic Services (oss), to take her on. Operating in the Haute-Loire **>>** region in the guise of a milkmaid—the Madonna of the Mountains, as Hall was dubbed by her Resistance recruits—she shaped her men into an insurgent force capable of liberating the region with little need of external help. Intelligence provided by Hall on the disposition of the German Seventh Army led the Americans to trap and destroy it in the Falaise Gap, resulting in the decisive breakthrough in the Battle of Normandy.

After the war, Hall joined the successor of the oss, the CIA. But despite her unparalleled record of service, she was once again

African-American music The blues had a baby

NEW YORK

The opening festival at the Shed, New York's newest performance space, is a hymn to the influence of black American music

FOR YEARS it was said that "Kumbaya", a well-known American folk song, was written by a white man. In 1939 Marvin Frey, a young Pentecostal evangelist and songwriter—and one of 12 children born to German immigrants who settled in Oregon—registered the copyright on a chorus to a song he called "Come By Here". These lyrics were taken by American missionaries to the Belgian Congo and Angola, where Christian choirs sang them in a local dialect as "Kum Ba Ya".

Or so the story went. The discovery of an old wax recording in the Library of Congress tells a different tale. In 1926, years before Frey's copyright, an unemployed professor of English and folklore enthusiast named Robert Winslow Gordon took a hand-operated cylinder recorder on a journey along the Georgia coast in search of songs sung by local African-Americans. One recording he made, of a man known as H. Wylie, calls on God to help people in distress. "Kum Ba Ya, Lord", Wylie seems to be singing in his reedy voice.

"Ya" means "here" in Gullah, the Creole language spoken on the islands and coasts of Georgia and South Carolina by the descendants of slaves from West and central Africa. Far from being the work of a white man, the campfire song that was made so popular in the 1950s and 1960s, by Joan Baez in America and the Seekers in Australia, was an African-American spiritual.

It was such casual (and not so casual) obfuscation of the roots and influence of African-American music that inspired Steve McQueen, a British film director and prize-winning artist, to begin work on Soundtrack of America, a five-night festival of historical and contemporary music that will open the Shed, New York's newest performance space, on April 5th. "I wanted to celebrate [black America] rather than commiserate," Mr McQueen says.

the victim of prejudice and frequently

passed over for promotion. Only after her

death in 1982, her health almost certainly

damaged by the overuse of "uppers" and

"downers" in wartime, did she gain the offi-

cial recognition she deserved. Gina Haspel.

the CIA's first female director, may have

been thinking of Hall when she said she

stood "on the shoulders of heroines who

never sought public acclaim". There have

been other books about Hall, but with her

thriller-writer's style and copious new re-

search, Ms Purnell has written a fitting and

moving tribute to an amazing woman.

African-American performers and composers, often from a relatively small patch of the south-eastern United States, have shaped many of the greatest musical traditions of the past century: jazz, blues, gospel, soul, R&B, hip-hop, house, trap and rock 'n' roll. (As Muddy Waters put it: "the blues had a baby, and they named it rock 'n' roll.") Yet, as Mr McQueen realised when he was filming "12 Years a Slave" in New Orleans in 2012, although discrete museums of blues and jazz have been built in America, there is no museum of African-American music to compare with the Rock & Roll Hall of Fame in Cleveland, Ohio. That thought returned to him when he and Alex Poots, a British impresario with whom Mr McQueen had first worked in 2003 on a project for Tate Modern with the opera singer Jessye Norman, began discussing proposals for the Shed—then a yet-to-be-built performance venue in New York's Hudson Yards, on the High Line walkway, of which Mr Poots is artistic director.

The vision for the Shed chimed with Mr McQueen's ideas. In a city already rich in stand-alone cultural institutions, it had to be both flexible and innovative to make a mark. "What New York needed", says Elizabeth Diller of Diller Scofidio + Renfro, the lead architects, "is an entity that could bring all the arts under one roof." It had "to be a place that can constantly be reinvented by what's inside it," adds David Rockwell, another architect involved in the development. Part of the plan is that the Shed will only stage new commissions.

For his part, Mr McQueen had two priorities for Soundtrack of America: historical rigour and a wish to involve young contemporary musicians who were just beginning to make their names. He approached Maureen Mahon, a cultural anthropologist at New York University, and three other historians to build a family tree of African-American music, beginning with the field songs of the American South, with their **>>**



Satchmo and friends

call-and-response rhythms, and the spirituals of the earliest slaves. None of this was written down, still less recorded; but, as Mr McQueen says, "We know about what comes first in the family tree because of what came later. We know about Buddy Bolden [a cornetist born in 1877 who became a key figure in the development of ragtime music in New Orleans] because he was the greatest single influence on Louis Armstrong [pictured on previous page]. So really we're looking back to the future."

To turn this rich history into stage performances, Mr McQueen enlisted Quincy Jones, an 86-year-old American recordproducer who worked with Aretha Franklin and Michael Jackson, to shape and showcase a new cohort of African-American musicians. They were keen on artists who were conscious of the musical forms they had inherited, whether that was Jon Batiste, a Louisiana bandleader who is now creative director of the National Jazz Museum in Harlem, or Rapsody, a groundbreaking hip-hop artist—who will both help open Soundtrack of America—or Tamarkali, who will perform on the final evening.

"My cultural identity, my heritage, my

land is very important to me," says Tamarkali, a Brooklyn-based rock musician whose melodic Afropunk has its roots in the coastal islands of South Carolina. "When so much of our history is up for debate, proper context is very important." Each of the five nights of music can be seen individually; together they will trace the arc of an overarching narrative that shows the connections between lineages and genres going back four centuries. "Music is something we nourish ourselves with," says Mr McQueen. "I want people to leave feeling high as a kite."

Johnson Rules to live by

Real language analysis should replace disembodied grammar instruction in schools

"Underline a relative clause." This challenge would give a lot of adults the sweats. It would even—whisper it—flummox many professional writers and editors. Yet in England's national curriculum, it is asked of tenand 11-year-olds. The results of such tests are used to evaluate schools, and sometimes to force reforms on them.

So it is surely proven that this sort of teaching helps young people learn to write. Right? Wrong. Remarkably, nobody knows whether lessons of the "underline the relative clause" type do anything to improve pupils' prose. Two trials-in which students were randomly assigned to groups that either received this kind of teaching or were spared it-pointed in different directions, one showing improvement, the other none. Policymakers seem to have cherrypicked the positive study. But, notes Dominic Wyse of University College London, both the studies involved only secondary students. It is something else entirely to give such rebarbative instructions to ten-year-olds.

Children use nouns (usually their first words) long before they have ever heard the word "noun". They even produce relative clauses when they are about two and a half, a long time before they have heard the word "clause". No wonder that adults—and those writers and editors—can use them too, even skilfully, without having a clue as to how to identify one. After all, people can do all kinds of complex things without being able to explain how. An elite golfer does not need to know the laws of physics, or a star basketball player the kinesiology behind a slam-dunk.

Still, grammar is more than just a means to an end. It can be thought of as valuable cultural heritage (like history), as a mode of analytical thinking (like philosophy) or as a science (like biology), and can help in learning a second language. In fact there is a science of language—linguistics—that touches on all of these elements. But it has hardly any influence in classrooms. Done right, explaining how language works might not only improve writing but bring life to what is otherwise a widely loathed subject.

The improvement would first need to reach the teachers. Sadly, grammar instruction for teachers in many Anglophone countries is almost non-existent. (In other places such as Germany, grammar teaching has remained robust.) In England and America, most English teachers have focused on literature, not language or linguistics, at university. Many literature programmes require some study of language itself, but this might be on poetics or Anglo-Saxon rather than the nuts and bolts of a sentence.

Teachers in England typically do a one-year postgraduate course to qualify to work in state schools. But in these programmes, they may get as little as a single



day of grammar instruction—far too little to make up for what they were not taught earlier. So they often approach the task of teaching formal grammar to their charges with trepidation.

One answer is to make language analysis a requirement in university English courses. It has the virtue of being fascinating. Language is a system, with moving, variable parts. The study of that system includes not only the grammar of standard English, but how it differs from other languages and from non-standard varieties such as minority dialects.

Armed with such knowledge, teachers could impart grammar not as an onslaught of desiccated definitions or things to underline, but puzzles to solve. Why does "She destroyed" not feel like a full sentence? (That allows the introduction of concepts such as "direct object".) How does Shakespeare use "do" differently from modern writers? (Here you can sneak in historical linguistics.) Where might you hear "we was" instead of "we were"? (This can introduce class, dialect and situational appropriateness.) One study found that adding this kind of analysis-albeit in foreign-language classes, not English—made almost 60% of the pupils want to learn more linguistics, particularly language history. Meanwhile the "Linguistics Olympiad" is a popular extra-curricular contest that instils linguistic thinking; perhaps everyone should take part.

Getting real language analysis into classrooms would take work. And it may not pay off in better writing—that would have to be tested, too. But that is not the only measure that matters. The dry naming of the parts in vogue today in England is neither enjoyable nor obviously useful. A new approach would be more interesting—and more fun.

Courses



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⁸⁸ Economic & financial indicators

Economic data

	Gross domestic product % change on year ago				mer prices		Unemployment	Current-account	Budget balance	Interest rates 10-yr gov't bonds change on		Currency units	
	-	i year ago quarter*		latest	ge on year ago 2019			balance % of GDP, 2019 [†]	% of GDP,	 0-yr go atest,%	-	per \$ Mar 27th (% change on year ago
United States	3.1 Q4	2.6	2.3	1.5	Feb 2.2	3.8	Feb	-2.5	-4.9	 2.4	-41.0	-	
China	6.4 Q4	6.1	6.3	1.5	Feb 2.6	3.8	Q4§	0.2	-4.4	3.0	§§ -69.0	6.71	-6.3
Japan	0.3 Q4	1.9	1.0	0.2	Feb 1.5	2.5	Jan	3.6	-3.4	-0.1	-8.0	111	-4.9
Britain	1.3 Q4	0.7	1.1	1.9	Feb 2.0	3.9	Dec ^{††}	-4.0	-1.6	1.0	-47.0	0.76	-7.9
Canada	1.6 Q4	0.4	1.6	1.5	Feb 1.7	5.8	Feb	-2.8	-1.4	1.5	-61.0	1.34	-3.7
Euro area	1.1 Q4	0.9	1.4	1.5	Feb 1.4	7.8	Jan	3.3	-1.1	-0.1	-57.0	0.89	-10.1
Austria	2.4 Q4	5.1	1.3	1.5	Feb 1.8	4.8	Jan	2.0	-0.1	0.2	-49.0	0.89	-10.1
Belgium	1.2 Q4	1.4	1.3	2.2	Feb 2.2	5.6	Jan	0.4	-0.9	0.4	-37.0	0.89	-10.1
France	1.0 Q4	1.3	1.3	1.3	Feb 1.3	8.8	Jan	-1.2	-3.4	0.4	-40.0	0.89	-10.1
Germany	0.6 Q4	0.1	1.0	1.5	Feb 1.6	3.2	Jan‡	6.7	0.8	-0.1	-57.0	0.89	-10.1
Greece	1.6 Q4	-0.4	1.8		Feb 0.8	18.0	Dec	-1.9	-0.4	3.8	-57.0	0.89	-10.1
Italy	nil Q4	-0.4	0.1	1.0	Feb 0.9	10.5	Jan	2.3	-2.9	2.5	58.0	0.89	-10.1
Netherlands	2.2 Q4	2.2	1.4		Feb 2.3		Feb	9.8	0.7	0.1	-49.0	0.89	-10.1
Spain	2.4 Q4	2.8	2.2	1.1	Feb 1.2		Jan	0.8	-2.4	1.0	-20.0	0.89	-10.1
Czech Republic		3.8	2.8	2.7	Feb 2.2		Jan‡	0.4	0.7	1.8	-9.0	22.8	-10.4
Denmark	2.1 Q4	2.9	1.9	1.1	Feb 1.1		Jan	6.3	0.2	nil	-55.0	6.62	-9.5
Norway	1.7 Q4	1.9	1.9		Feb 2.0		Jan ^{‡‡}	7.9	6.4	1.6	-34.0	8.54	-9.9
Poland	4.5 Q4	2.0	3.8		Feb 1.7		Feb§	-0.5	-2.4	2.8	-40.0	3.80	-10.8
Russia	1.5 Q3	na	1.5		Feb 4.9	4.9	Feb§	6.4	2.4	8.3	115	64.4	-11.0
Sweden	2.4 Q4	4.7	1.6		Feb 1.8		Feb§	3.5	0.4	0.2	-51.0	9.23	-11.3
Switzerland	1.4 Q4	0.7	1.8		Feb 0.7			9.8	0.5	-0.4	-45.0	0.99	-5.0
Turkey	-3.0 Q4	na	1.1		Feb 15.5		Dec§	-3.8	-2.3	18.4	547	5.48	-27.4
Australia	2.3 Q4	0.7	2.6	1.8	Q4 2.0	4.9	Feb	-2.2	-0.2	1.8	-87.0	1.40	-7.1
Hong Kong	1.3 Q4	-1.4	2.2		Feb 2.3	2.8	Feb ^{‡‡}	3.9	0.6	1.5	-56.0	7.85	nil
India	6.6 Q4	5.1	7.4		Feb 3.3	7.2		-1.8	-3.4	7.3	nil	68.8	-5.8
Indonesia	5.2 Q4	na	5.2	2.6	Feb 3.1	5.3	Q3§	-2.8	-2.2	7.6	81.0	14,170	-3.0
Malaysia	4.7 Q4	na	4.5	-0.4	Feb 0.9	3.3	Jan§	2.4	-3.4	3.8	-13.0	4.07	-4.2
Pakistan	5.4 2018	** na	4.0	8.2	Feb 7.4		2018	-4.4	-4.7	13.3	ttt 453	140	-17.7
Philippines	6.1 Q4	6.6	5.9		Feb 4.6	5.2	Q1§	-2.2	-2.5	5.8	-19.0	52.5	-0.4
Singapore	1.9 Q4	1.4	2.4	0.5	Feb 0.5		Q4	16.5	-0.6	2.0	-33.0	1.35	-3.0
South Korea	3.2 Q4	3.9	2.4	0.5	Feb 1.6	4.7	Feb§	4.6	0.5	1.9	-83.0	1,134	-4.6
Taiwan	1.8 Q4	1.5	1.8	0.2	Feb 0.1		Feb	14.0	-1.2	0.8	-25.0	30.8	-5.5
Thailand	3.7 Q4	3.3	3.5	0.7	Feb 0.9	1.0	Jan§	8.8	-2.5	2.0	-38.0	31.7	-1.6
Argentina	-6.2 Q4	-4.7	-0.9	50.7	Feb 46.1	9.1	Q4§	-2.2	-3.4	11.3	562	42.5	-52.5
Brazil	1.1 Q4	0.5	2.5	3.9	Feb 3.8	12.0		-1.1	-5.7	7.3	-58.0	3.88	-14.7
Chile	3.6 Q4	5.3	3.2	1.7			Jan ^{§‡‡}	-2.8	-1.4	4.0	-53.0	681	-11.1
Colombia	2.9 Q4	2.4	3.1	3.0				-3.5	-2.0	6.4	2.0	3,155	-10.6
Mexico	1.7 Q4	1.0	1.9	3.9			Feb	-1.9	-2.4	8.0	63.0	19.1	-3.9
Peru	4.8 Q4	11.4	3.7	2.0			Feb§	-1.6	-2.0	5.6	64.0	3.31	-2.7
Egypt	5.5 Q4	na	5.1	14.3			Q4§	-0.1	-7.3	na	nil	17.3	2.0
Israel	2.8 Q4	3.0	3.1	1.2				2.7	-3.7	1.8	14.0	3.62	-3.3
Saudi Arabia	2.2 2018		1.8	-2.2				3.6	-7.2	na	nil	3.75	nil
South Africa	1.1 Q4	1.4	2.2	4.1				-3.0	-4.1	8.7	83.0	14.4	-19.2

Source: Haver Analytics. *% change on previous quarter, annual rate. [†]The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. [‡]New series. **Year ending June. ^{††}Latest 3 months. ^{‡‡}3-month moving average. §§5-year yield. ^{††}Dollar-denominated bonds.

Markets

		0/0	% change on:		
	te dev.		0		
In local currency	Index Mar 27th	one week	Dec 31st 2018		
United States S&P 500	2,805.4	-0.7	11.9		
United States NAScomp	7,643.4	-1.1	15.2		
China Shanghai Comp	3,022.7	-2.2	21.2		
China Shenzhen Comp	1,654.7	-1.8	30.5		
Japan Nikkei 225	21,378.7	-1.1	6.8		
Japan Topix	1,609.5	-0.3	7.7		
Britain FTSE 100	7,194.2	-1.3	6.9		
Canada S&P TSX	16,132.5	-0.2	12.6		
Euro area EURO STOXX 50	3,322.0	-1.5	10.7		
France CAC 40	5,301.2	-1.5	12.1		
Germany DAX*	11,419.0	-1.6	8.1		
Italy FTSE/MIB	21,194.2	-0.6	15.7		
Netherlands AEX	545.1	-0.4	11.7		
Spain IBEX 35	9,229.9	-1.9	8.1		
Poland WIG	59,848.8	-1.5	3.7		
Russia RTS, \$ terms	1,207.2	-1.6	13.2		
Switzerland SMI	9,390.6	-0.8	11.4		
Turkey BIST	91,855.1	-11.1	0.6		
Australia All Ord.	6,217.6	-0.5	8.9		
Hong Kong Hang Seng	28,728.3	-2.0	11.2		
India BSE	38,132.9	-0.7	5.7		
Indonesia IDX	6,444.7	-0.6	4.0		
Malaysia KLSE	1,642.7	-2.5	-2.8		

	%	change on:
index Mar 27th	one week	Dec 31st 2018
38,965.0	1.1	5.1
3,198.4	-0.3	4.2
2,145.6	-1.4	5.1
10,542.7	-0.1	8.4
1,629.4	0.1	4.2
32,174.7	-7.4	6.2
91,903.4	-6.3	4.6
42,947.6	-0.5	3.1
14,554.7	-1.2	11.7
1,415.3	-0.3	6.2
8,766.3	1.5	12.0
56,149.3	nil	6.5
2,094.0	-0.9	11.2
1,044.1	-2.3	8.1
	Mar 27th 38,965.0 3,198.4 2,145.6 10,542.7 1,629.4 32,174.7 91,903.4 42,947.6 14,554.7 1,415.3 8,766.3 56,149.3 2,094.0	index Mar 27th one week 38,965.0 1.1 3,198.4 -0.3 2,145.6 -1.4 10,542.7 -0.1 1,629.4 0.1 32,174.7 -7.4 91,903.4 -6.3 42,947.6 -0.5 14,554.7 -1.2 1,415.3 -0.3 8,766.3 1.5 56,149.3 nil 2,094.0 -0.9

reasuries
1

		Dec 31st
Basis points	latest	2018
Investment grade	168	190
High-yield	483	571

Sources: Datastream from Refinitiv; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

The Economist commodity-price index % change on							
2005=100	Mar 19th	Mar 26th*	month	year			
Dollar Index							
All Items	140.1	139.4	nil	-7.8			
Food	143.5	143.8	0.2	-8.2			
Industrials							
All	136.4	134.8	-0.3	-7.4			
Non-food agricultural	s 125.5	125.8	0.8	-9.4			
Metals	141.1	138.7	-0.7	-6.6			
Sterling Index							
All items	192.1	191.9	0.2	-1.3			
Euro Index							
All items	153.5	153.7	0.7	1.3			
Gold							
\$ per oz	1,307.3	1,314.1	-1.1	-2.1			
West Texas Intermediate							
\$ per barrel	59.0	59.9	8.0	-8.1			

Sources: CME Group; Cotlook; Darmenn & Curl; Datastream from Refinitiv; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit **Economist.com/indicators**

Graphic detail Brexit and the markets

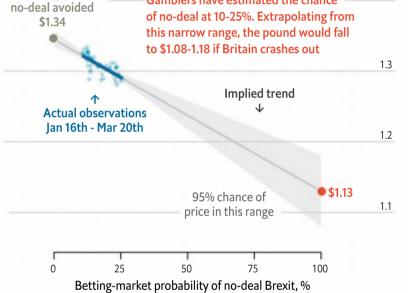
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+10.8

+3.2



-43.1





Sterling exchange rate against \$

Irish ten-year government bond price[†]

-13.0

⁺Assuming no change in German sovereign bond yields Sources: Betfair Exchange; Bloomberg

The price of no-deal

Crashing out would probably send sterling to its lowest level since 1985

REGARDLESS OF WHAT they tell you, traders struggle to explain short-term fluctuations in the value of currencies. Recently, however, the pound has become an exception. Every time it seems more likely that Britain will leave the EU without a deal, sterling falls against the dollar.

The strength of this link can be measured statistically, thanks to a helpful proxy for the odds of no-deal. On January 16th a market opened on Betfair Exchange, a betting website, on whether Britain will crash out by March 29th, the original Brexit deadline. Punters have bet $\pounds_{3.9m}$ ($\$_{5.1m}$).

On March 21st the EU extended this deadline, causing the chances of no-deal by the end of March to fall to near zero. But for

the 64 days between the opening of the market and the granting of the extension, the odds seemed to mirror the exchange rate. For each ten-percentage-point rise in the probability of no-deal, the pound lost \$0.02, and vice versa. As sterling moved between \$1.28 and \$1.33, it was possible to predict the exchange rate from Betfair's odds with an average error of just one cent.

This correlation is robust enough to allow for educated guesses about where the pound might land if Britain crashes out. If the same relationship were to hold, there would be a 95% chance sterling would fall from its current price of \$1.32 to between \$1.08 (last reached in 1985) and \$1.18. The most likely value would be \$1.13.

The same method can be applied to other markets with strong links to no-deal odds. Among the assets we tested, the biggest winner from no-deal would be gold, with an expected gain of 9%. The worst losers would be domestic British banks, which are heavily exposed to the housing market. For each rise of ten percentage points in Betfair's no-deal price, the average share price of Lloyds and RBS has fallen by 5.4% of their current value. This implies that no-deal would cut them nearly in half.

Surprisingly, the method finds that nodeal would set British and Irish bonds on opposite paths. A crash-out would hit Ireland's debt hard, causing the gap between its interest rate and Germany's to rise from 0.6 percentage points to 1.4. In contrast, British yields would fall from 1.0% to 0.6%.

One cause of this divergence is that Britain, unlike Ireland, sets its own monetary policy. Facing an adverse shock, the Bank of England can cut interest rates and use quantitative easing, boosting bond prices. The European Central Bank, however, sets policy for the entire euro zone, not just for countries such as Ireland that would be particularly badly harmed by no-deal.

Our figures are uncertain. Correlations that look robust within a small range of nodeal prices could fail outside it. But unless no-deal becomes more likely, forecasts of its impact require tenuous assumptions. As George Box, a statistician, said, all models are wrong, but some are useful.

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Obituary Mary Warnock



Seeing things clear

Baroness Warnock, philosopher and deviser of Britain's rules on embryo experiments, died on March 20th, aged 94

A QUESTION Mary Warnock often asked herself was why she had become a philosopher at all. She was not much good at it. Her many books, written mostly for money, contained no original thinking. For a while, when she was first up at Oxford reading Mods and Greats, she thought she would be a historian of ancient Greece. But she was not scholarly in that way. In the end she embraced philosophy because she fell in love with a philosopher, Geoffrey Warnock, and it seemed a practical arrangement. They could share books, and swap learned aphorisms as they washed the dishes. And so they did. A drunken young man who climbed into their lodgings once, when Geoffrey was principal of Hertford, reported that he had found them in bed discussing Kant. That was fantasy, but whenever she took on yet another project Geoffrey would quote Hobbes at her, about the reckless pursuit of power.

The second question that confronted her was what philosophy was for. The 1950s and 1960s were something of a golden age for it, not only at Oxbridge but on the BBC Third Programme, where she was the token goofy woman in a quartet of thinkers for regular radio debates. ("But surely there must be something deeper?" she would ask, only to be put down.) Philosophers were public figures, and their opinions sought. The one she most admired, J.L.Austin, had specialised in what people intended to do when they spoke words, an exercise often dismissed as logic-chopping. But it seemed extremely useful to her as a general exercise, because it unblocked things. It was an excellent way of digging down to what people really meant to say, and hence, she realised, fine training for chairing committees and public enquiries.

So this was what she did, on top of all her writing and teaching and fellowships at Lady Margaret Hall and St Hugh's; on top, too, of bringing up five children with properly cooked meals and improving books at suppertime. She became famous for enquiries into environmental pollution, withholding of evidence, animal testing and the running of the Royal Opera House. Two reports in particular, on the teaching of children with special needs in 1978 and on human fertility and embryology in 1984, changed British law in dramatic and lasting ways. Her education report recommended that children with disabilities should be taught for the first time in mainstream schools and given special support. The embryology report allowed human embryos to be used for scientific experiments, but under statutory authority and for a maximum lifespan of 14 days, the point at which the bundle of cells began to differentiate into an individual. (She was particularly pleased with that clear cut-off rule: everyone could count to 14.) It also paved the way for IVF, an advance she keenly wanted to see.

Some said she was abrasive as a chairman. She thought she was generally fair. Her upbringing, in the care of a nanny in a fatherless house, had been heavy on good manners, and her loathing of Margaret Thatcher (who had appointed her to both her most important committees) stemmed from what she saw as the prime minister's bullying behaviour, as well as her lower-middle-class philistinism and "odious suburban gentility". In committee, in her slightly dishevelled philosopher's clothes, she simply tried to induce public servants to think rationally. Private and public morality had to be disentangled. If anyone said they were "not happy" with some proposal, she would urge them to say what they meant. If she herself had incoherent thoughts, as she did about surrogacy, mixing up abhorrence of it with her own bliss at giving birth, she turned the same fierceness inwards. Evidence was required.

She also could not help dominating debate because of the very questions raised. When did human life begin? When did that life become so intrinsically valuable that it must not be destroyed? When did it become so valueless that it ought to be ended? (Euthanasia was a passionate cause, even before morphine gently killed Geoffrey off.) In the case of special-needs children, what was the point of giving them something from which they could hardly benefit? Once these questions were seen in terms of right and wrong, conflict raged. A clear head like hers had to sort it out.

Yet moral philosophy was not her field. At Oxford, where it was in poor shape and seen as a soft option, it hardly impinged on her at all. As a schoolgirl at the exceptionally holy St Swithun's, in Winchester, she had desperately wanted to be good in thought, word and deed; at university she threw out moral absolutes, becoming an "atheist Anglican", as she remained. Nonetheless, just as she still loved Winchester Cathedral and the language of the Book of Common Prayer, she was still inherently interested in the way human beings attached value, and moral weight, to what they did.

In so far as she was linked to any "ism" it was the existentialism of Jean-Paul Sartre, the subject of three of her books. She found much that he wrote sheer gobbledygook and some of his beliefs ridiculous, but agreed with his premise that humans gave meaning to an essentially meaningless world. By the time of the embryology report she had also moved to consequentialism: it was the likely outcome of an action that made it right or wrong. The usual outcome of medical research was that disease was cured. Therefore it was good. To ban carefully restricted experiments in the name of mere hidebound metaphysics, as many of her critics tried, was outrageous. She could not bear those bigots, and was glad to be made a dame in spite of them.

Consequentialism relied on trust that human beings mostly wanted to do good, not harm, and this was sometimes too optimistic. She was sorry that her recommendations for special-needs education made some children unhappy, and wanted to keep the rules on bioethics very tight. By and large, though, she was delighted to apply her brain in the public sphere. As the years passed, governments seemed increasingly to distrust and ignore intellectual elites, precisely because the great universities fostered freedom of thought which could not be controlled. She fiercely attacked that prejudice. A philosopher let loose was what democracy needed. *Ergo*, she was delighted she had become one.







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