

The Economist

After Mueller, what next?

Behind the attacks in Sri Lanka

Huawei: Britain's artful compromise

Oil's threat to global growth

APRIL 27TH–MAY 3RD 2019

South Africa's best bet

How Cyril Ramaphosa can clean up the rainbow nation



DOWNLOAD

CSS Notes, Books, MCQs, Magazines



THE CSS POINT
Yes We Can Do It!

WWW.THECSSPOINT.COM

- **Download CSS Notes**
- **Download CSS Books**
- **Download CSS Magazines**
- **Download CSS MCQs**
- **Download CSS Past Papers**

*The CSS Point, Pakistan's The Best
Online FREE Web source for All CSS
Aspirants.*

Email: info@thecsspoint.com



BUY CSS / PMS / NTS & GENERAL KNOWLEDGE BOOKS
ONLINE **CASH ON DELIVERY** ALL OVER PAKISTAN

Visit Now:

WWW.CSSBOOKS.NET

For Oder & Inquiry
Call/SMS/WhatsApp

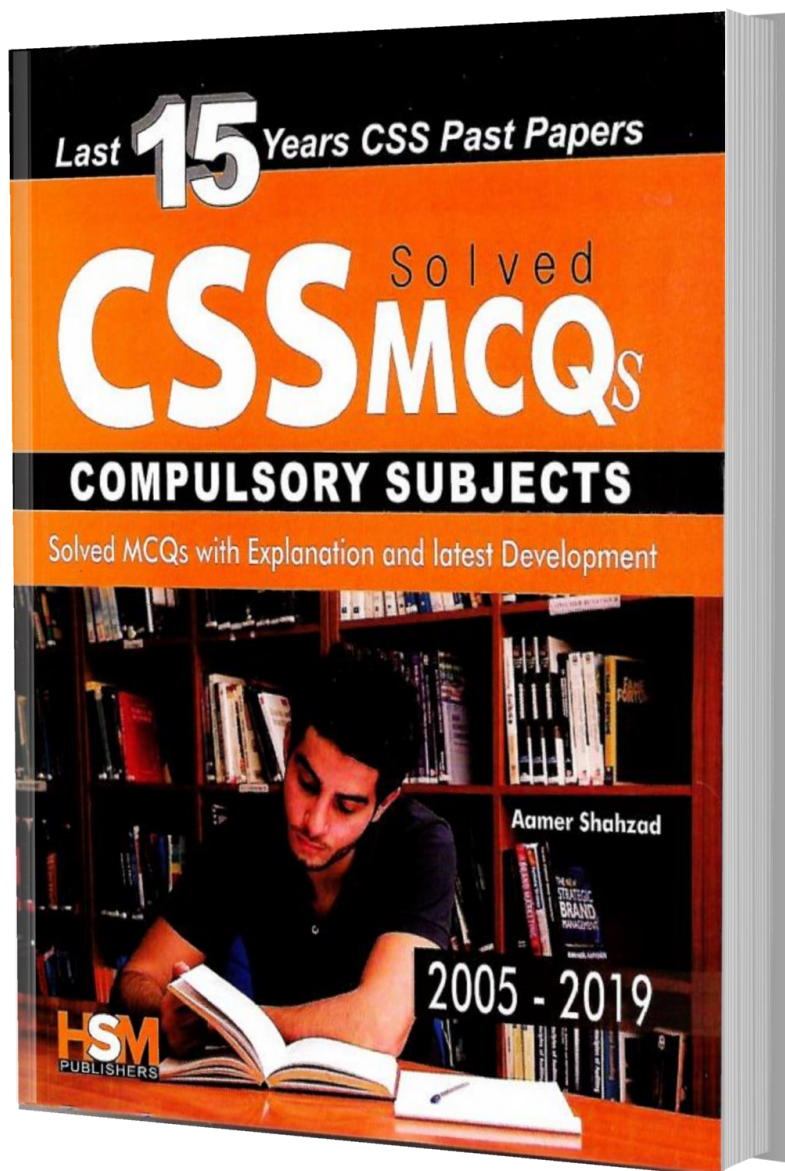
0333 6042057 – 0726 540316

CSS Solved Compulsory MCQs from 2005 to 2019

By HSM Publishers

Latest and Updated Edition

Order Now

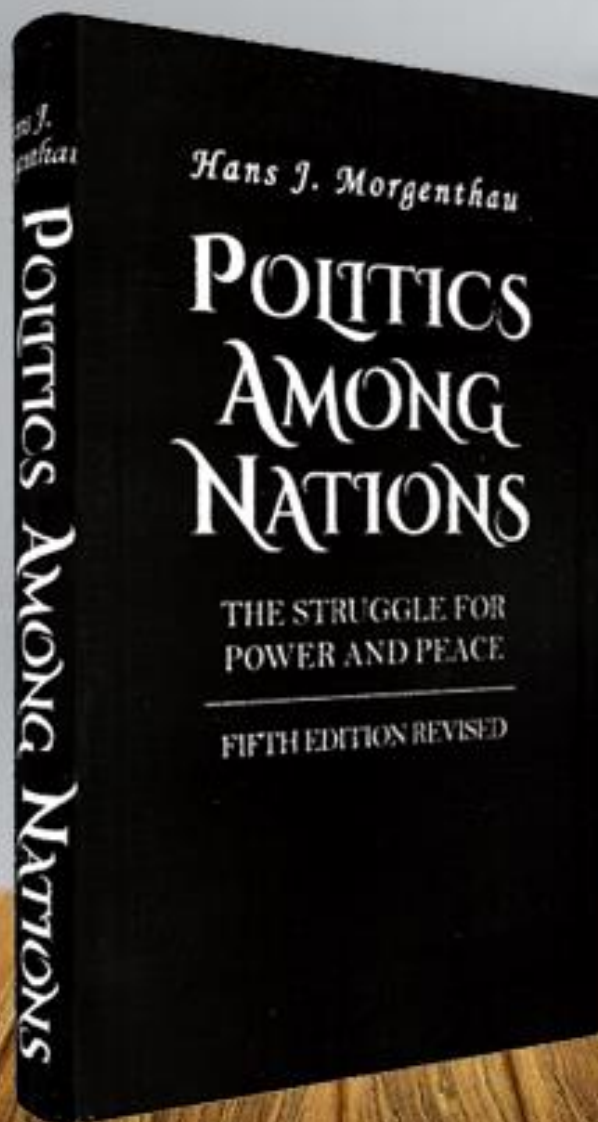


Call/SMS 03336042057

Politics Among Nations: The Struggle for Power & Peace

By Hans Morgenthau

Order Now



30% OFF

CALL OR SMS
03336042057



For Order Call/SMS 03336042057 ~ 0726540141

THE PROMISE OF A SMARTER HOME, DELIVERED BY USPS.

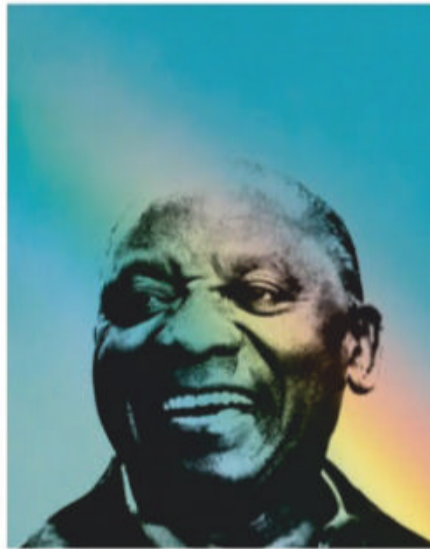
Every day, visionaries are creating the devices of the future, but they need people who really know how to deliver them. The USPS delivers more online purchases to homes than anyone else in the country.

We deliver for you.® See how at [USPS.com/visionary](https://usps.com/visionary)



PRIORITY:YOU





On the cover

The most plausible way to clean up the rainbow nation is to back Cyril Ramaphosa: leader, page 9. He has brought South Africa back from the brink. But even if his party wins the general election in May, he faces a daunting task. See our special report, after page 40

- **After Mueller, what next?** Now that the special counsel's report is public, here is what Congress should do with it: leader, page 10. For the time being, the president is above the law, page 19
- **Behind the attacks in Sri Lanka** The bombers wanted to provoke a clash of civilisations. Don't fall into their trap: leader, page 11. Islamist suicide-bombers kill more than 350 people, page 33
- **Huawei: Britain's artful compromise** Its calibrated approach to dealing with the Chinese telecoms giant is a model for other countries, page 10. How Huawei became mired in political controversy: briefing, page 16. Growing foreign suspicion is hemming in China Inc's rising global stars, page 55
- **Oil's threat to global growth** Rising oil prices could yet prevent a rebound in the world economy, page 12. America is seeking to reshape oil markets, page 61

The world this week

- 6 A round-up of political and business news

Leaders

- 9 **Cyril Ramaphosa** South Africa's best bet
- 10 **Technology and security** The right call on Huawei
- 10 **Donald Trump** After Mueller, what next?
- 11 **Sri Lanka** Easter evil
- 12 **Oil prices** Spoiling the mood

Letters

- 14 On synthetic biology, Spain, workers, climate change, economics, Indonesia, Yiddish

Briefing

- 16 **Huawei** Communication breakdown

Special report: South Africa

- Saving the nation** After page 40



Schumpeter A ride back through history offers sobering lessons, page 60



United States

- 19 Robert Mueller's report
- 21 War powers
- 21 Minimum wages
- 24 Churchgoing
- 24 Judicial elections
- 25 Census and sensibility
- 26 **Lexington** Joe Biden



The Americas

- 27 Trump v the troika of tyranny
- 28 Miffed, moderate Panama
- 30 **Bello** A Peruvian ex-president's suicide



Asia

- 33 Atrocities in Sri Lanka
- 34 Indonesia's election
- 35 Medical marijuana in Thailand
- 35 Identity politics in India
- 36 Opposing North Korea
- 37 **Banyan** Taiwan's tycoon-turned-politician



China

- 38 Belt-and-road blues
- 39 Locking up activists in Hong Kong
- 40 **Chaguan** Naval dreams



Middle East & Africa

- 41 Painful progress in Egypt
- 42 Egypt's deadly delicacy
- 43 Sudan's fragile revolution



Europe

- 44 Ukraine's comedian president
- 45 Bosnia on the edge
- 46 Vietnamese in the Visegrad
- 46 Syrians in Turkey
- 47 Europe's shifting centre
- 48 **Charlemagne** The rise of pan-European politics

**Britain**

- 49 The Downton Abbey economy
- 50 A death in Derry
- 51 **Bagehot** Ignore the European election

**International**

- 52 How monarchies survive

**Business**

- 55 China Inc's hostile reception abroad
- 56 **Bartleby** An office with a view
- 57 Kraft Heinz's new boss
- 58 Online vocational training
- 58 Smart-ish phones
- 59 European airlines
- 59 Troubled tour operators
- 60 **Schumpeter** Can Uber make money?

**Finance & economics**

- 61 The rising price of oil
- 62 Price controls in Argentina
- 63 Nigeria's banks bulk up
- 63 Germany's bank-merger fiasco
- 64 **Buttonwood** The art of selling
- 65 Evaluating NAFTA's successor
- 65 Efficient markets and the law
- 66 **Free exchange** The risks of geoengineering

**Science & technology**

- 67 Screening for lung cancer
- 68 Testing new materials
- 69 Lemur colour-blindness
- 70 Voice for the speechless
- 70 The psychology of golf

**Books & arts**

- 71 Crisis and history
- 72 African-American history
- 72 A novel of London
- 73 **Johnson** Polyglot politicians
- 74 The mystery of music
- 74 Guinea-Bissau's writers' club

**Economic & financial indicators**

- 76 Statistics on 42 economies

Graphic detail

- 77 Tariffs on American goods target Donald Trump's voters

Obituary

- 78 Charles Van Doren, saint and sinner of the TV quiz show

The Economist

Volume 431 Number 9140

Published since September 1843 to take part in "a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."

Editorial offices in London and also:

Amsterdam, Beijing, Berlin, Brussels, Cairo, Chicago, Johannesburg, Madrid, Mexico City, Moscow, Mumbai, New Delhi, New York, Paris, San Francisco, São Paulo, Seoul, Shanghai, Singapore, Tokyo, Washington DC

Subscription service

For our full range of subscription offers, including digital only or print and digital combined, visit: Economist.com/offers

You can also subscribe by mail, telephone or email:

North America

The Economist Subscription Center,
P.O. Box 46978, St. Louis, MO 63146-6978
Telephone: +1 800 456 6086
Email: customerhelp@economist.com

Latin America & Mexico

The Economist Subscription Center,
P.O. Box 46979, St. Louis, MO 63146-6979
Telephone: +1 636 449 5702
Email: customerhelp@economist.com

One-year print-only subscription (51 issues):

United States.....US \$189 (plus tax)
Canada.....CA \$199 (plus tax)
Latin America.....US \$325 (plus tax)

Please recycle



PEFC certified
This copy of *The Economist* is printed on paper sourced from sustainably managed forests certified to PEFC
www.pefc.org

RULES OF MODERN INVESTING®

#62

IT'S HARD TO BEAT AWARD-WINNING SERVICE, LOW COSTS AND A SATISFACTION GUARANTEE.

#63

RULE #62 MIGHT BE WHY SCHWAB WAS RANKED #1 OVERALL BY INVESTOR'S BUSINESS DAILY.



Charles Schwab is the only firm to earn a #1 rating in customer service four times in five years.

Learn about our modern approach to wealth management.
Stop by a branch or visit [Schwab.com/CompareUs](https://www.schwab.com/CompareUs)

Wealth Management at Charles Schwab
PLANNING | PORTFOLIO MANAGEMENT | INCOME STRATEGIES | BANKING

charles
SCHWAB

Own your tomorrow.

If you are not completely satisfied for any reason, at your request Charles Schwab & Co., Inc. ("Schwab") or Charles Schwab Bank ("Schwab Bank") will refund any eligible fee related to your concern within the required timeframes. Schwab reserves the right to change or terminate the guarantee at any time. Go to [Schwab.com/satisfaction](https://www.schwab.com/satisfaction) to learn what's included and how it works.

Wealth Management refers to a number of different products and services offered through various subsidiaries of The Charles Schwab Corporation. See [Schwab.com/wealth](https://www.schwab.com/wealth).

The Charles Schwab Corporation provides a full range of brokerage, banking and financial advisory services through its operating subsidiaries. Its broker-dealer subsidiary, Charles Schwab & Co., Inc. (Schwab), Member SIPC, offers investment services and products, including Schwab brokerage accounts. Its banking subsidiary, Charles Schwab Bank (member FDIC and an Equal Housing Lender), provides deposit and lending services and products.

Charles Schwab has ranked #1 in customer service by Investor's Business Daily for the following years: 2015, 2016, 2017, and 2019.

From Investor's Business Daily, January 28, 2019, ©2019 Investor's Business Daily, Inc. All rights reserved. Used by permission and protected by the Copyright Laws of the United States. The printing, copying, redistribution or retransmission of this Content without express written permission is prohibited. Results based on an Investor's Business Daily ("IBD") and Technometrica survey of 2,762 visitors to the IBD website between November and December 2018. Those individuals were asked to name and rate their primary online broker. Limiting data analysis to only those firms that were cited by 200 or more participants, six online brokers were ranked based on Customer Experience Index scores for fourteen separate attributes. For further information on how the ratings were calculated, see IBD's Criteria and Methodology.

©2019 Charles Schwab & Co., Inc. All rights reserved. Member SIPC. (0319-9JTH) ADP106539-00



Jihadists in **Sri Lanka** suicide-bombed three churches and three hotels on Easter Sunday, killing more than 350 people. Islamic State claimed responsibility. The Sri Lankan authorities blamed a little-known local group, which they say may have had external help. The government received several detailed warnings, but does not seem to have acted on them. The president asked his chief of staff and the head of the police to resign. It emerged that the president had been excluding the prime minister and his allies from national security meetings.

Joko Widodo won re-election as president of **Indonesia**, beating Prabowo Subianto, a former general who also ran against him in 2014. Now as then, Mr Prabowo has refused to concede defeat, saying the election was rigged.

Kazakhstan's ruling party named the acting president, Kassym-Zhomart Tokayev, as its candidate for a snap presidential election in June. That all but guarantees Mr Tokayev's election to a full term. He has been acting president since Nursultan Nazarbayev, the incumbent of 30 years, resigned abruptly in March.

A court in **Hong Kong** sentenced eight activists for their role in the pro-democracy "Umbrella Movement" of 2014. The harshest punishments, of 16 months in jail, were imposed on two academics. A Baptist minister also received a 16-month prison term, but it was suspended.

China's president, Xi Jinping, attended a naval display in celebration of the 70th anniversary of the Chinese fleet. Ships from 13 other countries joined the ceremonies. America did not send a vessel. Senior Americans were also absent from a gathering in Beijing of about 40 leaders and representatives from dozens of countries to discuss China's Belt and Road Initiative.

Myanmar's highest court upheld the conviction of two journalists from Reuters for breaking the law on state secrets. The journalists say they were framed by the security services for revealing a massacre of civilians by the army.

A stronger strongman
Egyptians voted to approve constitutional amendments that increase the powers of President Abdel-Fattah al-Sisi and allow him to stay in office until 2030. Turnout was low,

despite bribes of food parcels for many who cast a ballot.

Jared Kushner, Donald Trump's son-in-law and adviser, said a long-delayed peace plan for **Israelis** and **Palestinians** will be unveiled in June.

Saudi Arabia executed 37 people on charges of terrorism, including one who was crucified. Most of those killed were from the Shia minority. Human-rights groups accused the government of holding sham trials and using the death penalty to stamp out dissent.

Two weeks after large demonstrations drove Omar al-Bashir from power in **Sudan**, talks between protesters and the military continued. The army said it would share power with a technocratic government as a presidential election is prepared. But it seems reluctant to give up control. Big protests were held in the capital, Khartoum. ▶▶



The world demands more energy.

The world demands less carbon.

▶ The world's largest **drone-delivery network** was launched in Ghana. Zipline, an American startup, will distribute vaccines and other medical supplies by operating 600 drone flights a day.

Upping the pressure

The Trump administration announced new sanctions on **Cuba, Nicaragua and Venezuela**, which it calls the "troika of tyranny". Americans can now sue people or companies that do business involving property expropriated after Cuba's revolution in 1959. John Bolton, the American national security adviser, announced that America would further restrict travel to Cuba by people who do not have relatives there.

Alan García, a former president of **Peru**, killed himself after police arrived at his home to arrest him. Prosecutors were investigating allegations that

he received bribes from Odebrecht, a Brazilian construction company.

Argentina's pro-business president, Mauricio Macri, froze prices of 64 consumer items, from milk to jam, for six months. Mr Macri hopes that inflation, which was 54.1% in the year to March, will fall before the presidential election, due to be held in October. Cristina Fernández de Kirchner, his populist predecessor, is leading in the polls.

The power of fame

Volodymyr Zelensky was elected president of **Ukraine**, trouncing the incumbent, Petro Poroshenko, with an astonishing 73% of the vote. A comedian whose political experience consisted of playing a president on TV, Mr Zelensky now has to deal with a war in the east of the country, corrupt oligarchs and a disenchanted electorate. It was a rare

democratic transfer of power in the former Soviet Union.

Vladimir Putin played host to **Kim Jong Un**, the leader of North Korea, in his first visit to Russia. After the apparent failure of his negotiations with Donald Trump, the North Korean dictator may be looking for a new friend.



Lyra McKee, a 29-year-old journalist, was killed in **Northern Ireland** by gunfire aimed at the police during rioting in Londonderry. Local residents, known for their distrust of the authorities, were quick to contact police with infor-

mation about the killing. The "Free Derry" mural, a symbol of the Troubles, had "Not In Our Name" added to it and red handprints were daubed on the office of a political party supported by the New IRA, which apologised for the murder.

Always with us

Democrats in America's House of Representatives debated **the Mueller report**. Nancy Pelosi, the Speaker, cautioned against trying to impeach President Donald Trump, since he is sure to be acquitted in the Senate. Democratic presidential candidates seemed much keener.

The queen invited **Donald Trump to Britain** ahead of the 75th anniversary of the D-Day landings in June. Mr Trump will hope for a better reception than last year, when he slipped in to sip tea with the queen at Windsor Castle. Protesters then floated a baby-Trump blimp over London.

Can the world have both?

We see possibilities everywhere.

From renewable energy and cleaner-burning natural gas to advanced fuels and new low carbon businesses, BP is working to make energy cleaner and better.

keep advancing



Natural gas burns 50% cleaner than coal in power generation.

The British government reportedly gave the go ahead for **Huawei** to supply equipment for Britain's 5G networks. The controversial decision comes after America urged its allies not to use telecoms hardware made by Huawei, which Washington believes to be a security threat because of alleged ties to China's army. Huawei will provide antennas and other transmission equipment for Britain's 5G infrastructure, but it is banned from more sensitive parts of the networks that handle customer data.

Kraft Heinz announced that Bernardo Hees would step down in June as chief executive, an abrupt move amid a mountain of problems at the food giant, including a \$15.4bn write-down. The new CEO is Miguel Patricio, who has worked for 20 years in senior jobs at Anheuser-Busch InBev. His appointment is backed by 3G Capital, an investment group that brought about the mergers which created both Kraft Heinz and AB InBev.

Boeing reported a quarterly net profit of \$2.2bn. Revenue from its commercial-aircraft division was \$1bn lower than in the same quarter a year ago, which the aerospace company said reflected a fall in deliveries of the 737 MAX aircraft, which was grounded in March. Boeing ditched its profit forecast for 2019, as it works to sort out problems with the MAX.

Nissan issued its second profit warning this year, in part because of "the impact of recent corporate issues on sales". The Japanese carmaker sacked Carlos Ghosn as its boss last November amid allegations of financial wrongdoing, which he denies. He was indicted on a fourth charge this week, but also granted bail.

Facebook set aside \$3bn to cover a potential fine from America's Federal Trade Commission for violating an agreement that promised it would not collect personal data and share it without permission. The FTC began investigating

the social-media company after last year's Cambridge Analytica scandal. Facebook warned that the penalty could be as high as \$5bn.

Twitter post

Investors were delighted with **Twitter's** earnings. The social-media company reported its sixth successive quarterly profit on the back of a surge in revenues, to \$787m. Its measure of daily users, counting only those who see ads, rose to 134m. Twitter said its improved performance was explained in part by weeding out abusive content, around 40% of which is now detected by machine-learning algorithms.



The S&P 500 index hit a new high. **Stockmarkets** have broadly recovered from their drubbing in 2018. The S&P 500 has registered its best start to a year since 1987. Shares in tech

companies fared particularly badly last year, but the NASDAQ has also reached a new record.

Not everyone has had a good start to the year. **UBS** described the first quarter as "challenging", as earnings at its core wealth-management business and its investment bank declined significantly. Still, the Swiss bank made an overall net profit of \$1.1bn.

Impeded by restructuring costs and extra capital requirements, **Deutsche Bank** and **Commerzbank** abandoned their plan to merge.

America demanded that countries stop buying **Iranian oil** or face sanctions, ending months of waivers for Iran's biggest buyers. The price of oil rose sharply in response, pushing Brent crude to \$75 a barrel.

Occidental offered to buy **Anadarko** for \$55bn, exceeding **Chevron's** recent \$49bn bid, which has been accepted by Anadarko's board. Anadarko is so alluring because of its assets in shale oil.

South Korea's economy unexpectedly shrank in the first quarter, by 0.3% compared with the previous three months, the worst perfor-

mance since the financial crisis. Korean exports have fallen sharply.

Britain's competition regulator blocked the merger of **J. Sainsbury** and **Asda**, a subsidiary of Walmart, which would have created the country's biggest supermarket chain. The regulator found that the deal would have led to higher prices.

Herman Cain withdrew his name for consideration for a seat on the board of the Federal Reserve. Donald Trump's desire to nominate Mr Cain had sparked a backlash, even among Republicans worried that the president was seeking to undermine the independence of the central bank by appointing his supporters.

Wanted: A safe pair of hands

The British government started the formal process for seeking the next **governor of the Bank of England**. Mark Carney has held the job since 2013. Britain's chancellor of the exchequer, Philip Hammond, hopes to sign someone for an eight-year contract, a period which will see Britain mired in the process of withdrawing from the EU. After three years of Brexit, Mr Hammond believes that "Stability has a value".



South Africa's best bet

The most plausible way to clean up the rainbow nation is to back Cyril Ramaphosa

SINCE THE days of Nelson Mandela, one of the most effective slogans of the African National Congress (ANC), South Africa's ruling party, has been "a better life for all". The contrast with the old apartheid regime, which promised a good life only for whites, has never needed spelling out. As the party that helped liberate black South Africans from votelessness and segregation, the ANC has ruled uninterrupted since apartheid ended in 1994, always winning national elections by wide margins. The trouble is, when one party has nearly all the power, the kind of people who seek power in order to abuse it and grow rich flock to join that party. Corruption, always a problem, became so widespread under Jacob Zuma, South Africa's atrocious president from 2009 to 2018, that a more accurate ANC slogan during his rule would have been "a better life for the president and his cronies".

As our special report in this issue describes, in those nine lost years Mr Zuma's chums systematically plundered the state. Honest watchdogs were sacked. Investors fled, economic growth stalled, public debt soared and unemployment (even by a narrow definition) rose from 23% to 27%. Eskom, the bloated, looted national electricity firm, can no longer reliably keep the lights on or factories humming. Corruption has crippled public services. Many South Africans are frightened of their own police, and nearly 80% of nine- and ten-year-olds cannot read or understand a simple sentence.

Yet there is hope. Mr Zuma is gone, narrowly ousted by his own party and now charged with some 700 counts of corruption. His replacement as party boss and president of South Africa, Cyril Ramaphosa, is an honest reformer. He is also a tremendously skilful politician—he was one of the chief negotiators who persuaded the apartheid regime to give up power long before it would have been forced to. At elections on May 8th voters have a choice. Do they back the ANC again, trusting that Mr Ramaphosa will continue to clean up the party and revive the nation? Or do they give the opposition a chance? (They cannot vote directly for the president; he is chosen by parliament, in which seats are allocated by proportional representation.)

The case for dumping the ruling party is strong. It has been in power for 25 years—too long for any party, anywhere. Despite Mr Ramaphosa's efforts, it is still stuffed with crooks, some of them too powerful for the president to sack. Though home to a broad range of ideologies, the ANC has recently seen a worrying resurgence of far-left populism among its cadres. For example, it vows to change the constitution to allow the expropriation of farmland without compensation.

The case for backing the liberal opposition, the Democratic Alliance (DA), is also strong. It is far cleaner than the ANC. Its charismatic young leader, Mmusi Maimane, believes in free markets. The parts of the country that it runs, including Cape Town and Johannesburg, are islands of efficiency in a sea of murk and incompetence. Though the vast majority of municipalities are controlled by the ANC, a recent study by Good Governance Africa, a think-tank, found that 15 of the 20 best-governed were run by the DA, alone or in a coalition. *The Economist* en-

dorsed the DA in 2014. But this time, with deep reservations, we would cast our notional vote, at the national level, for the ANC.

Our reasons are painfully pragmatic. The DA has the right ideas for fixing South Africa, but is in no position to implement them. It is still seen as the party of those who are white, Indian or Coloured (to use the local term for mixed-race). Because black South Africans are 80% of the population and mostly support the ANC, the DA cannot win (except at the provincial level—and here, we would enthusiastically endorse the DA). For the national parliament, the crucial questions are: will the ANC win an outright majority? And will the election strengthen or weaken Mr Ramaphosa's reforming hands?

If the ANC does badly, it will undermine Mr Ramaphosa and embolden the large faction within his party that would like to see him stumble. These are the bigwigs who profited from the Zuma years, and did not mind the race-baiting that the Zuma camp used to distract public attention from its own misdeeds. It also includes some of the party's hard left, who regard Mr Ramaphosa as altogether too friendly to capitalism. Given a chance, Mr Ramaphosa's ANC rivals would love to replace him with someone more pliable—and that would be disastrous.

If the ANC falls short of a governing majority and has to forge an alliance with a smaller party, things could be even worse. It might climb into bed with the Economic Freedom Fighters, a black-nationalist group that outdoes Mr Zuma in its racist demagoguery and disregard for economic reality. (It wants to seize all white-owned land, and nationalise mines, banks and other "strategic sectors" without compensation, for starters.) Such an alliance would foster an even more bloated, corrupt and ineffective state.

The least bad plausible outcome, then, is for voters to give the ANC a solid majority, thus boosting Mr Ramaphosa and allowing him to shun the populists and face down the mafia within his own party. That way, he can continue the tough work of replacing useless Zuma appointees with law-abiding, competent people. Over the next five years he should also allow prosecutors free rein to hunt looters; break up Eskom's power monopoly; enact a moratorium on job-killing regulations; take on the teachers' unions that throttle education reform; and ensure that any land reform extends property rights rather than trampling on them.

The man Madiba wanted

There is a big risk that none of this will happen, that the ANC has grown so rotten that no one can reform it. However, Mr Ramaphosa's record so far suggests that he is more likely than anyone else to accomplish what is necessary. South Africa cannot afford for him to fail; nor can the rest of Africa. Despite the wasted Zuma years, the rainbow nation still has the continent's most sophisticated economy, vibrant civil society and feisty media. Having overcome apartheid without a civil war, it has long been an inspiration to the world. All this is now in jeopardy, but Mr Ramaphosa, the man Mandela originally wanted to succeed him, has a chance to save his legacy. He must not blow it. ■



Technology and security

The right call on Huawei

Britain's measured approach to dealing with the controversial Chinese firm is a model for other countries

ON APRIL 24TH the news broke that Britain's government had decided to permit parts of the country's 5G mobile networks to be built by Huawei, a Chinese firm. Many Americans and other friends of Britain will be appalled by its decision and fear that the country is being naive and toadying up to China. Huawei has, after all, become one of the most controversial firms in the world and sits at the centre of a geopolitical storm. America worries that the telecoms equipment-maker is a Trojan horse for China's spies and autocrats and poses a grave threat to Western interests. It has been urging its allies to ban it.

Britain's decision matters: it is a member of the "Five Eyes" intelligence-sharing alliance led by America, and was one of the first Western economies in which Huawei built a presence. Britain also has experience of electronic spying and knows Huawei well. Far from being a betrayal, Britain's approach, of using the firm's gear on the edges of 5G networks, under close supervision, offers a sensible framework for limited commercial engagement while protecting Britain's security and that of its allies.

Huawei has annual sales of \$105bn from 170 countries. It is a leading supplier of equipment for new 5G networks that will connect a vast array of devices and become deeply embedded in the economy. Rumours have long circulated that Huawei is cosy with China's army, and worries about the firm have intensified in the past two years (see Briefing). In February Mike Pompeo, America's secretary of state, threatened to limit co-operation with countries that used Huawei gear. America is also trying to extradite a Huawei executive (the daughter of its founder) from Canada for sanctions-busting.

The easiest option for Britain would have been to ban Huawei from 5G networks, as Australia has. But that would be wrong-headed. One reason is technical. Refusing to use Huawei hardware does relatively little to eliminate the risk of cyber-attacks by hostile governments. State-backed hackers and saboteurs

usually gain access to networks through flaws in software coding. This is why Russia can cause mayhem abroad, despite having no commercial role in Western telecoms networks.

A ban would also have geopolitical costs. If an open system for global commerce is to be saved, a framework has to be built for countries to engage economically even if they are rivals. No evidence of spying via Huawei gear has been made public. Most emerging economies have no intention of prohibiting it. A ban by a few American allies risks splitting the world into two blocs. And a system without rules could be abused to hobble other Chinese firms engaged in legitimate activity (see Business section).

For a calibrated policy to succeed, Britain and other countries will need to observe three principles. The first is continual monitoring for hidden back doors and bugs. Since 2010 Britain has had a system for vetting Huawei's software and systems. This should continue and be extended to other 5G providers, with the aim of minimising the sloppy coding that creates vulnerabilities.

The second principle is to limit the scope of Huawei's activities. Britain will exclude its gear from the network "core", where the most sensitive processing takes place, and from government networks. Military communications should also be kept isolated. And the use of other equipment vendors means that if a problem emerges, it is easy to switch firms.

The final principle is that a U-turn is always possible. Britain should demand that Huawei continually raises standards in its software and improves its opaque governance—and should have no qualms about chucking it out if it does not. No one should be naive about Huawei. But neither should anyone be complacent about the dangers of a trading system racked by confrontation and ad hoc bans. The right path is to mitigate the risks Huawei presents and avoid an escalating trade war that makes economic engagement between the West and China impossible. ■



Donald Trump

After Mueller, what next?

Now that the special counsel's report is public, here is what Congress should do with it

AMERICAN VOTERS waited almost two years for the Mueller report. Most of its findings turned out to have already been published over the previous 13 months by investigative reporters and in indictments issued by Robert Mueller's office. But that makes it no less extraordinary. While the special counsel found no evidence to sustain a conspiracy charge, he described a campaign eager to co-operate with a foreign adversary and a president who may have obstructed justice. This leaves America's system of checks and balances in an uncomfortable position.

What the report lacks in novelty it makes up for in thoroughness, adding detail and credibility to accounts about the behav-

our of the Trump campaign and administration that might otherwise have been dismissed as thinly sourced or ideologically motivated (see United States section). It shows a campaign, a transition team and then a White House run by a person who will lie about the most serious issues and who tells his staff to break the law in order to obstruct justice—including by sacking Mr Mueller. President Donald Trump's summary of the report ("NO COLLUSION - NO OBSTRUCTION!") and his attorney-general's attempt to spin it as a paean to presidential virtue are further examples of the administration's contempt for facts.

All elections are street fights, but Mr Mueller and his team ►►

► showed that Mr Trump's campaign staff in 2016 placed America at risk from a foreign adversary. The campaign knew about and encouraged Russian efforts to help his election; the Russian government concluded that a Trump victory would be in its interests and so worked towards that end. What saved the president was the absence of a formal agreement to co-ordinate their efforts.

What, if anything, should Congress do with Mr Mueller's findings? The special counsel explained he had not charged the president with obstruction of justice, in part because of a guideline drawn up by the Justice Department in 1973, amid Watergate, which says that the federal bureaucracy cannot indict its own boss. The authors of the constitution made it clear that Congress has the task of dealing with a rogue president.

Should it therefore start impeachment hearings? The best argument for this is that failure to sanction Mr Trump would establish a precedent, signalling to some future president that the lying, the footsie with Russia and attempts at obstruction are just fine. Yet rushing into an impeachment would still be a mistake.

Impeachment is a hybrid. It is part legal, because it involves a trial; but the framers intended it to be political, too, because the trial is conducted by elected representatives who, inevitably, think as politicians. Were Mr Trump to be impeached now by the Democrat-controlled House he would be acquitted in the Republican-controlled Senate. This would not be much of a rebuke. When someone is found not guilty in court, that is usually taken as an exoneration. If Democrats dismissed an acquittal as partisan nonsense, Republicans would likewise ridicule the decision to impeach. There is a risk that a failed effort to remove Mr Trump would boost him as he is seeking re-election, as it boosted Bill Clinton. Democratic leaders in the House calculate, probably correctly, that impeachment is not in their interest either.

That leaves America's constitution in a quandary. One of the guiding principles of the experiment undertaken in 1776 was that no man should be above the law. Having just got rid of one unaccountable tyrant, the founders were keen to prevent the emergence of a homegrown version. Set against this, they did not want the president tied down by petty legal squabbles. The founders therefore meant removing a president by impeachment to be hard, to become possible only once a significant number of the president's own faction had deserted him.

Yet the founders did not foresee the rise of a rigid two-party system that mirrors the rural-urban divide. That makes it very hard in practice for either faction in the Senate to assemble the two-thirds majority required to convict the president in an impeachment trial, unless the rank and file of their party move against the president, too. Lined up the right way, senators who represent 25m citizens could acquit a president, against the wishes of senators who represent 300m. Getting rid of a rule-breaking president was not supposed to be this difficult.

The result is that one man is, in effect, above the law for all but the most serious and readily understandable crimes, such as murder, which would surely be too much even for the committed partisans of either side. Congress should legislate against such impunity at a later date. Most democracies have independent prosecutors able to indict the chief executive.

Right now, Congress should also take up Mr Mueller's invitation to do its part by using hearings to give his witnesses the chance to tell the American people what happened. The House should impeach only if the case builds over the coming months, leading Republican senators to change their position. An impeachment that fails along party lines is worse than useless. Better to trust the wisdom of voters in 2020. ■

Sri Lanka

Easter evil

The bombers wanted to provoke a clash of civilisations. Don't fall into their trap

A FEW MONTHS ago National Thowheed Jamath (NTJ), an Islamist group from Sri Lanka, was known for little more than defacing statues of the Buddha. On April 21st nine of its members walked into churches and luxury hotels on the island and blew themselves up, killing more than 350 people. Islamic State (IS) claimed responsibility for the deadliest set of terrorist attacks in Asia in modern times (see Asia section).

How could this happen? Start with Sri Lanka's bungling. The world has learned a great deal about how to thwart terrorists since September 11th 2001. A crucial lesson is that it is vital to share information quickly and widely, so that fragmentary intelligence can be pieced together and followed up. This is precisely what Sri Lanka's government failed to do, despite receiving unusually detailed warnings. Part of the reason for that appears to be shameless politicking. The island's president, Maithripala Sirisena, has been at loggerheads with the prime minister, Ranil Wickremesinghe, since the former tried to sack the latter in October. Mr Wickremesinghe has been excluded from meetings of the national security council since then.

A second explanation is that, although Sri Lanka has no his-

tory of jihadist terrorism, nor even of much tension between Muslims and Christians, it sits in an ocean of bubbling extremism. In recent decades in South Asia, intolerant strands of Islam have edged out the broad-minded forms that used to predominate. That has created fertile ground for jihadists. The Maldives, just a short flight from Sri Lanka, sent more recruits to IS in Iraq

and Syria as a proportion of its population than any other country. Bangladesh, across the Bay of Bengal, has suffered a wave of Islamist attacks on secular activists and minorities in the past six years. Sri Lanka's suicide-bombers reportedly contacted IS veterans from both those countries. International jihadists have also cropped up across the Palk Strait in the Indian state of Tamil Nadu, which is bound to northern Sri Lanka

by ethnic kinship. It was an IS suspect arrested there who is said to have yielded some of the intelligence passed to Sri Lanka's government (which was then ignored).

On top of all this, Mr Wickremesinghe says that some of the bombers had been to Syria; they are likely to have been among the three dozen Sri Lankans who have fought with IS. In short, Sri Lanka is not as quarantined from global jihadist networks as one ►



▶ might think. Few countries are. And as IS has been bombed out of its so-called caliphate, thousands of its fighters have dispersed the world over, grafting themselves onto local Islamist groups like Sri Lanka's NTJ and disseminating ideology and expertise. The threat of jihadist attacks is therefore likely to grow.

Last, the form of the atrocity in Sri Lanka—striking not only at hotels full of Westerners, but also at three churches—reflects the changing pattern of jihadist violence. Though al-Qaeda railed against “Jews and Crusaders” in the 1990s, it made its name striking secular targets, such as embassies and warships. Its more radical offshoot, IS, instead came to prominence in Iraq by slaughtering local Muslims who disagreed with its bloodthirsty interpretation of the Koran, often with a degree of violence that even al-Qaeda's leaders thought excessive.

IS has exported its modus operandi. In 2017 al-Qaeda in the Indian Subcontinent (AQIS), al-Qaeda's South Asian branch, pub-

lished a code of conduct that said Hindu, Muslim and Buddhist civilians and places of worship would not be attacked. By contrast, IS proudly claims attacks on religious targets, including churches in Egypt, the Philippines, Indonesia, Pakistan and now Sri Lanka. The aim of such sectarian terrorism is to promote the narrative of a clash of civilisations—an aim the jihadists share with white-nationalist terrorists, such as the one who attacked two mosques in New Zealand last month.

Both groups want to sow discord and force people to choose sides. The jihadists would love to provoke a backlash against Muslims, in the hope of pushing more Muslims into their camp. Neither governments nor citizens should fall into that trap. Instead, they should work harder to catch terrorists, while doing their best to soothe relations between Muslims and their neighbours. It was the Muslim Council of Sri Lanka, remember, that first reported NTJ to the authorities three years ago. ■

Oil prices

Spoiling the mood

Rising oil prices could yet prevent a rebound in the world economy

THE SENSE of pessimism that hung over the world economy early this year has begun to lift in recent weeks. Trade flows are picking up in Asia, America's retail sales have been strong, and even Europe's beleaguered manufacturing industry has shown flickers of life. But it would not take much bad news to reinstate the gloom. One threat is that oil prices continue their upward march—on April 23rd the price of a barrel of Brent crude exceeded \$74, the highest level for nearly six months. Though the dynamics of the oil market have changed over the past decade, dearer oil still acts as a drag on global growth.

The latest jump in oil prices has resulted from anticipation of a shock to supply, rather than surging demand (see Finance section). On April 22nd America said that it would end waivers granted to a number of big economies, including China, India and Turkey, which allowed them to import Iranian oil, bypassing America's sanctions regime. These waivers were put in place after President Donald Trump pulled out of a nuclear deal with Iran in 2018. Their expiry on May 2nd could reduce the global supply of oil by more than 1m barrels per day (about 1% of the total).

That is not the only threat to supply. War threatens production in Libya. Sanctions against Venezuela have taken supply off the market. Although a bottleneck in the Texan Permian basin will be relieved this year, it does not produce the heavy, sour crude found in Venezuela. And, after the American announcement, the head of Iran's navy said that if it is prevented from using the Strait of Hormuz, through which one-fifth of the global oil supply flows, it could try to close the waterway for everyone else, too.

Oil inventories are low, and it is far from clear that other producers will increase output enough to compensate for the supply shock. In the long term Saudi Arabia and other OPEC members have an incentive to avoid sky-high prices, which would lead to a new wave of capital pouring into American shale production. But the last time the Saudis complied with a request from the White House to pump more—after Mr Trump scrapped the Iran

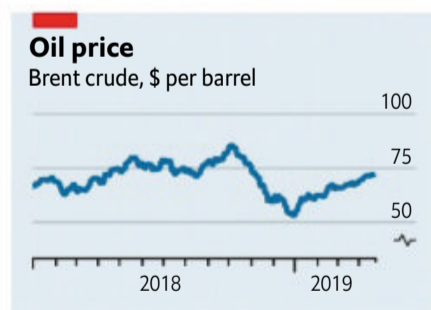
deal—they were then stung by his granting of the waivers. In public they have pledged to keep the market in balance, but they also say there is no need for immediate action.

Working out what pricier oil means for the world economy is more complex than it used to be. In America gas-guzzling consumers will have to pay more to fill up their cars. But ever since the shale revolution, there has been an offsetting benefit to American GDP because higher prices stimulate investment in the Permian and other shale basins. Other producer countries are also more likely to spend any oil windfall than they used to be, supporting global demand. And more expensive oil should bring the benefit of lower carbon emissions (so long as it does not prompt the discovery of vast new oil fields).

Yet right now, pricier oil would be bad news for the global economy. It would hit its weaker spots. Europe, whose economy is in worse shape than America's, has no shale industry to compensate for a hit to its consumers. China, which imports vast quantities of the black stuff, was the source of much of the recent global growth scare. And economic crises in Turkey, Argentina and Pakistan would be made worse by the higher inflation and larger current-account deficits that a rising oil price would bring.

Higher oil prices could also reduce central bankers' leeway to see off any downturn. After oil prices rose in 2018, several central banks in emerging markets subsequently raised rates, fearing inflation. In America and Europe policymakers have this year been able to loosen the stance of monetary policy, providing economies with a much-needed boost to growth, because they can point to muted inflation expectations. Higher oil prices could start to put that trend into reverse. With many labour markets tight, central bankers are more likely to be spooked by oil-driven inflationary pressure.

A serious oil-price shock remains a possibility at this stage rather than a probability. But with the world economy still in a fragile state, it is an uncomfortable risk to run. ■



IS THERE A STORM BREWING IN YOUR CLOUD?

Powered by AI, Darktrace detects and fights back against emerging cyber-threats across your digital infrastructure, including AWS, Microsoft Azure, Office 365, and others.

Learn more at darktrace.com

Reprogramming life

“Liberation biology” indeed. Your otherwise excellent Technology quarterly on bioengineering was marred by its concluding section (April 6th). Small groups using gene splicing and artificial intelligence will not only be able to make catnip-flavoured roses and bring back long-lost species, they also will be able to make more contagious anthrax and plague bacteria and revive smallpox and polio. The technology is so relatively inexpensive that small countries and even wealthy individuals and criminals will be able to afford it. Perhaps you could write a follow-up on why new technologies are invariably greeted with quasi-religious adoration by journalists.

HAYDON ROCHESTER JR
Onancock, Virginia

I’m glad you got around to mentioning Aldous Huxley’s “Brave New World”. I was beginning to worry that you normally reasonable people at *The Economist* had become Utopians. Social engineering already seems to have overwhelmed most of the world. How far from creatures of nature will we become when we engineer all of Earth’s life forms? What an existential nightmare.

DAVID ROSS
Newburyport, Massachusetts

Your leader stated that “When it comes to mass destruction, a disease is a poor substitute for a nuke” (“Redesigning life”, April 6th). Not so. A disease kills people but leaves physical capital—buildings and infrastructure—intact. An invading army, immunised by its scientists against the disease, can take over property and industry for its population. Be afraid. Be very afraid.

AVINASH DIXIT
Department of Economics
Princeton University
Princeton, New Jersey

The weekly highlights that you email to readers was spot-on in taking a break “from the Brexit tragicomedy to ponder

something far more consequential”. I couldn’t believe my eyes. Your coverage of synthetic biology was a rare story of vital importance.

HAGAN BAYLEY
Professor of chemical biology
University of Oxford

Throw out Spain’s Socialists

Your suggestion that a strong Socialist government would be the best outcome in Spain’s election is questionable (“Heading nowhere?”, April 20th). The *Círculo de Empresarios* (Business Circle), which I chair, has recommended a centrist government. The two biggest problems in Spain today are an unemployment rate of 14% and government debt at 98% of GDP. A sensible target would be 5% and 60%, respectively.

Over the past few months the Socialists, with the support of the hard-left Podemos party and the Catalan independence parties, produced a budget with tax increases for businesses, a Tobin tax, a Google tax, a tax on repatriated corporate earnings, a diesel tax and an increase of 22% in the minimum wage. Fortunately, the budget was not passed, forcing this election.

What has become of *The Economist*’s liberal stance supporting minimum government interference in business?

JOHN DE ZULUETA
Chairman
Círculo de Empresarios
Madrid

Embrace older workers

Regarding economic growth and older workers (“Ageing is a drag”, March 30th), there is no evidence that the elderly are less able or willing to embrace new technologies and innovative approaches. That is outdated thinking. In fact, many older workers in Britain say they aren’t being given the training and development that they want.

Age-bias in recruitment, a lack of opportunities to develop in work and the ageism that is common among many people are what really holds us

back from realising the opportunities of our longer working lives. This thinking can’t continue. Between 2018 and 2025, there will be 300,000 fewer British workers under the age of 30 and 1m more over 50.

It is a good thing that we are living longer. Employers must grasp this opportunity. That means eliminating age-bias in recruitment, developing skills in older workers and supporting those who are balancing a job with managing a health condition or caring responsibilities. Rather than only looking overseas or to automation to meet skills shortages, we should also prioritise investing in the huge asset we have in our older generation.

JEMMA MOULAND
Senior innovation manager
Centre for Ageing Better
London

Extinction-scenario rebellion

The doom-and-gloom approach to writing about climate change dramatically paints a vision of the world that we simply cannot bear to imagine (“The tallest story”, April 6th). Take for example David Wallace-Wells’s “The Uninhabitable Earth”, the most engaging piece of climate journalism we’ve seen to date. However, there are some shortcomings in pursuing such an approach. Rather than motivating readers to take action, a doomsday scenario can also paralyse them with a sense of hopelessness.

ARYA HARSONO
Research co-ordinator
New Climate Economy
Washington, DC

New thinking in economics

It was a pleasure to read your column on complexity economics, although somewhat depressing as well (Free exchange, April 6th). The article referred to a meeting in 1987 between prominent physicists and economists to discuss the fundamental assumptions underlying their respective disciplines. In his book “Complexity”, M. Mitchell Waldrop has a chapter

describing this meeting. Its title is a quote from one of the physicists: “You guys really believe that?” Astonishingly, 32 years later, most macroeconomists still do. We urgently need a paradigm change.

The OECD in recent years, together with the Institute for New Economic Thinking and others, has been actively researching how insights from complexity theory can help improve policymaking. Ironically, the embrace of complexity leads to a number of simple but important policy conclusions. Not least, complex systems always break down and failing to be prepared for this is a fundamental policy error. The OECD is doing important work on this topic.

WILLIAM WHITE
Former chair of the Economic and Development Review Committee at the OECD
Basel, Switzerland

A political aid

I was intrigued to learn of a fake presidential ticket known as “Dildo” spreading across Indonesian social media (“Dildo for president”, March 30th). Staying firm whatever the situation? Seeking only to please with nothing expected in return? Can’t see many British politicians earning such a complimentary nickname any time soon. The whole country remains unsatisfied.

DAVID WATKINS
Bournemouth

Reading back to front

In reference to the *Jewish Daily Forward* being published in Yiddish, when asked how he read the *Forvertz*, my grandfather always said, “backvertz” (“Chronicle of a golden land”, April 6th).

ROBERT FLETCHER
Leawood, Kansas

Letters are welcome and should be addressed to the Editor at The Economist, The Adelphi Building, 11 John Adam Street, London WC2N 6HT
Email: letters@economist.com
More letters are available at: Economist.com/letters



EUROPEAN DATA PROTECTION SUPERVISOR

Brussels COM/2019/20036

You will head the independent supervisory authority which monitors and enforces the application of EU legislation relating to the protection of natural persons with regard to the processing and movement of personal data by EU institutions, bodies, offices and agencies. The supervisory authority has a budget of 16.6 million euro and a team of around 100.

Your responsibilities:

- To enforce the application of EU legal provisions and advise EU institutions and bodies on personal data issues;
- To ensure that the rights of natural persons to personal data protection and privacy are upheld, to handle complaints and conduct investigations in this area;
- To promote public awareness and understanding of the risks, rules, safeguards and rights relating to data processing, particularly with regard to children.

Your skills:

- Proven experience in data protection issues, gained as a member of a supervisory authority or large organisation;
- Sound knowledge of EU data protection policies and an extensive track record of ensuring compliance;
- High-level management experience and natural ability to establish and maintain strong relationships with stakeholders at EU, national and international level.

Please consult the Official Journal C 135 A of 11 April 2019 for the detailed vacancy notice as well as the eligibility and selection criteria.

Registration for applicants:

<https://ec.europa.eu/dgs/human-resources/seniormanagementvacancies/>

The closing date for registration is 16 May 2019, 12.00 noon Brussels time.

A MISSION LIKE NO OTHER

The Central Intelligence Agency

The Central Intelligence Agency seeks high-performing, patriotic professionals with a diverse range of backgrounds, skill sets and life experiences to serve the United States by advancing the Agency's mission as the nation's first line of defense. We are interested in candidates available for full-time, part-time and consulting opportunities both at home and overseas.

For the intellectually curious adventurer looking for an unparalleled, high-impact international opportunity, we offer a way of life that challenges the deepest resources of an individual's intellect, resilience and judgment. While no specific work background is required, candidates with experience in business, entrepreneurship, sales, marketing, real estate and project management are highly desirable.

Competitive candidates should possess the following:

- US citizenship, dual US citizenship or US Lawful Permanent Resident (LPR) status
- 3+ years of international experience
- The desire to live, travel and work abroad
- Foreign language skills
- The ability to successfully complete medical and security processing

Individuals must be physically located in the US to apply.

Take the next step. Mail your résumé with a cover letter to:

Recruitment Center
Box 26
Dept. D-45
Washington, DC 20505



THE WORK OF A NATION.
 THE CENTER OF INTELLIGENCE.

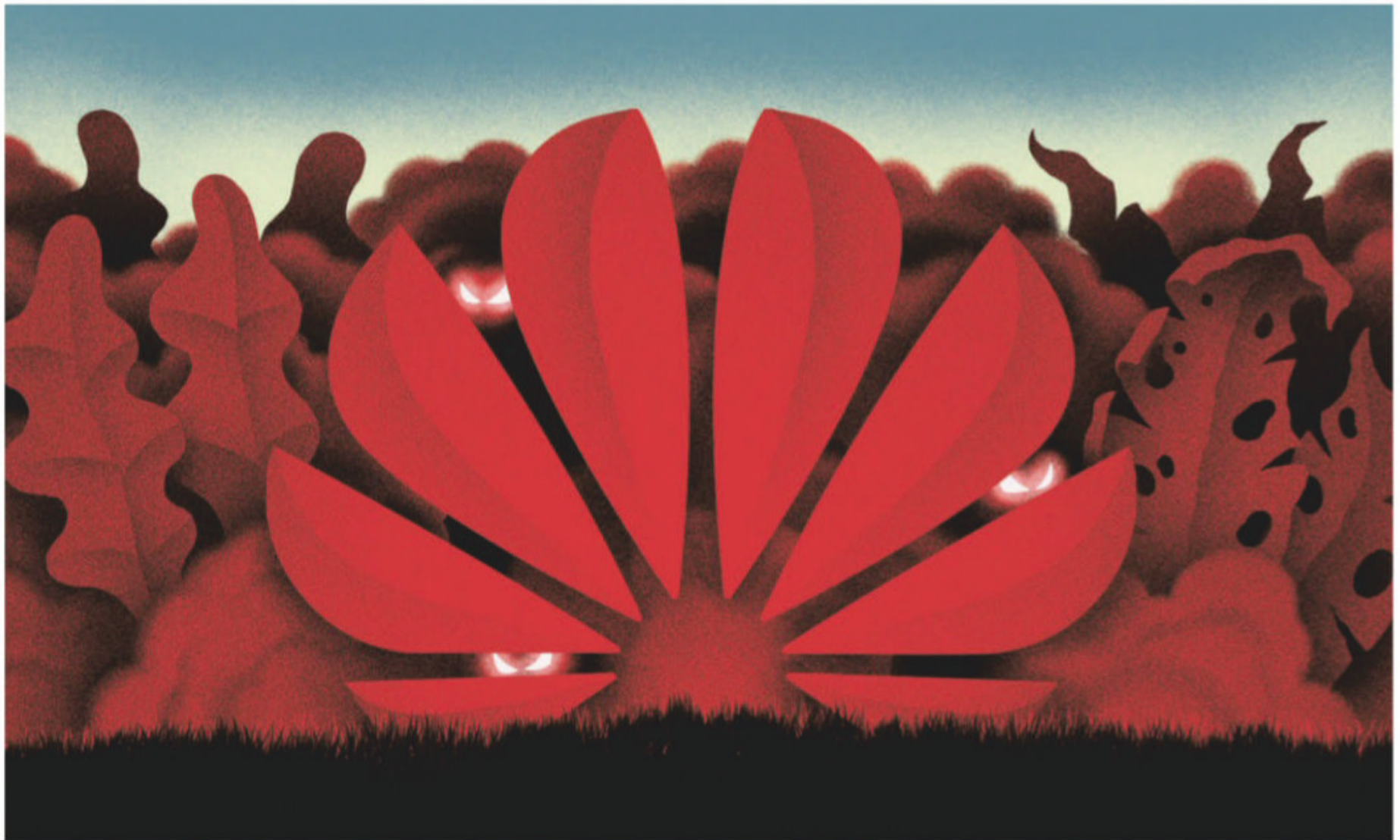
The CIA is an equal opportunity employer and a drug-free workforce.

Jane Leighton
 BEFORE CREATIVE INDUSTRIES
 NOW MATHS TEACHER

ARE YOU READY FOR A CHANGE?

Come back to school
nowteach.org.uk

NOWTEACH



Communication breakdown

How a giant Chinese telecoms firm became mired in political controversy

IT IS HARD to think of a better reflection of the rise of China than the rise of Huawei. Like China, the firm, which was founded in 1987, began at the bottom of the value chain, reselling telephone-switching gear imported from Hong Kong. Also like China, it was not content to stay there. These days its products—from smartphones to solar panels—are sleek, high-tech and competitive with anything its rivals can produce. As a result its revenues have soared, hitting \$105bn in 2018 (see chart 1 on next page). Huawei, and its mother country, have become technological pacesetters in their own right. The firm employs 80,000 people in research and development alone. China filed 53,345 patents in 2018, a hair behind America's 56,142. Of China's, around one in ten came from Huawei alone.

Huawei's ascent, like that of China, has caused a good deal of worry elsewhere in the world. Three decades on, the firm is still in the telecoms-equipment business. Along with Nokia, a Finnish firm, and Ericsson, a Swedish one, Huawei has become

one of the world's biggest suppliers of the high-tech kit used to build mobile-phone networks around the world. Of the three, Huawei has been the most active in setting the technical standards for "fifth-generation" (5G) networks. These promise big increases in speed and capacity that will improve some existing technologies, such as connected cars, and make possible new ones, including the sensor networks that will supposedly enable "smart cities". Huawei and China therefore sit at the heart of technologies which governments worldwide have come to regard as a critical piece of future national infrastructure.

A half-open door

That is the context in which to see a decision by Britain, leaked to the press on April 24th, to grant Huawei a limited role in building its 5G networks. It was taken in the teeth of a determined American campaign to persuade its allies to freeze the company out. Mike Pence, America's vice-president, and other officials have warned publicly

that Huawei's gear could contain "back doors"—malicious code designed to let Chinese spies snoop on communications, or even bring down networks altogether.

Mike Pompeo, America's secretary of state, has threatened to withhold intelligence co-operation from anyone who uses the firm's gear in "critical" networks. Australia, like Britain one of America's allies in the "Five Eyes" electronic-spying pact, has banned the firm explicitly. New Zealand, another member, has rebuffed a request from a local firm to use Huawei's kit. Japan—which is not in the club, but is closely allied to America—has tightened its rules.

America's stance may seem sensible given China's history of electronic espionage. The country is a prodigious hacker. It has purloined everything from the plans for the F-35, an advanced fighter jet, to a database of millions of American civil servants. It has been accused of hacking India's Ministry of Defence. Britain and America say it has conducted a "vast" and "unrelenting" campaign targeting dozens of Western companies and government agencies. Last year CrowdStrike, a cybersecurity firm, put China ahead of Russia as the most prolific sponsor of cyber-attacks against the West.

Yet Britain has long argued that such threats can be managed without banning Huawei outright. Its most recent decision reaffirms that stance. But it is not the only refusenik. Germany, another of America's

close allies, has resisted an outright ban. India is thought to be open to letting the firm in, albeit with limitations. In February Nick Read, the boss of Vodafone, one of the world's biggest telecoms firms, challenged the Americans to provide concrete evidence of foul play. He warned that shutting out Huawei would be "very, very expensive" and could delay the deployment of 5G networks by years. Kester Mann of CCS Insight, a consulting firm, says that the company's gear is up to a year ahead of the products manufactured by its rivals, as well as being cheaper.

Britain's stance matters more than the middling size of its telecoms market suggests. The country's signals-intelligence agency, GCHQ, is the biggest in the Five Eyes after America's National Security Agency (NSA), with which it works hand-in-glove. And few countries know more about how Huawei operates. Britain was one of the firm's first beachheads in the West. In 2005 Huawei was chosen by BT, a formerly state-owned telecoms company, to be part of a £10bn (\$18bn) contract to modernise Britain's phone network. Even then, security types regarded Huawei with suspicion. But civil servants did not tell ministers about the firm's involvement until after the contract had been signed.

In an act later described by MPs as trying to "shut the stable door after the horse has bolted", Britain set up a lab, paid for by Huawei but run by the British, which would go over its kit and software with a fine-tooth comb, looking for anything untoward. The Huawei Cyber Security Evaluation Centre (HCSEC) has been running since 2010. That lab, say British spooks, has provided unparalleled insight into both Huawei's products and its corporate culture. It has proved useful for Huawei, too, enabling it to point out that its equipment has survived repeated and intrusive checks by a country with one of the most capable electronic-intelligence agencies in the West.

Huawei has flatly and repeatedly denied that it inserts back doors. Vincent Pang, a senior manager, said in December that the

firm has strong incentives not to spy on its customers. If a back door were ever discovered, he said, "it would destroy our markets." And in eight years of looking, Britain's spies say they have never found one. That does not placate critics, who argue that, even if there are no back doors now, there might be in future, perhaps provided through the regular patches or updates that will be required for the huge amounts of code that a 5G network relies on. Huawei's commercial self-interest is irrelevant, they say, pointing to a Chinese law that compels private firms to assist the intelligence services when asked.

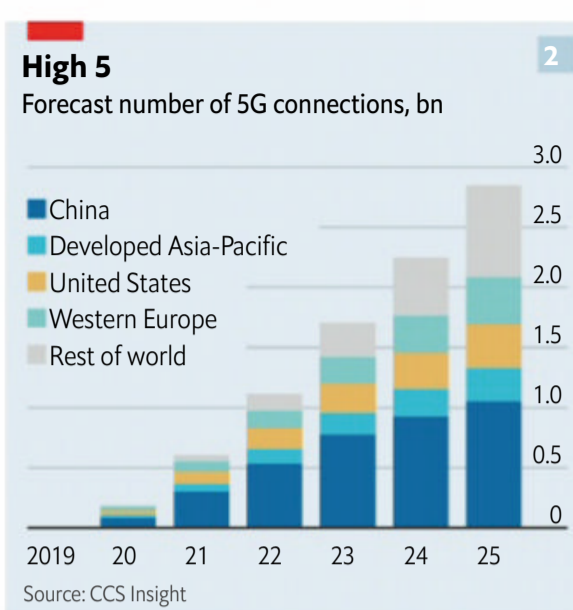
Back doors may be bad for business, but they are not unknown. Leaks from Edward Snowden, a former worker at the NSA, seemed to confirm suspicions that it had tried to put a back door into a cryptographic standard proposed in 2006, which could have given America's spies the ability to read communications that made use of it. Juniper, an American maker of network routers, announced in 2015 that it had found "unauthorised code" in its products that could have led to communications being monitored. Suspicion once again fell on the NSA.

Listening in

Huawei has used such stories to resist American pressure. In February Guo Ping, one of the firm's three rotating chairmen, accused America of attacking it because the spread of its technology was hampering America's spying. Mr Ping did not mention China's efforts at electronic snooping. In 2018, for instance, newspaper reports alleged that China had been siphoning off sensitive data from computer networks at the African Union's headquarters in Addis Ababa. The building had been paid for by China and built by a Chinese firm. (China's foreign ministry denied the reports.)

But there is more to worry about than back doors and here Britain's findings have been less reassuring. In the HCSEC's most recent report, published in March, it suggests that the code in Huawei's products is a buggy, spaghettified mess. That may not sound sinister. But bugs can be as useful to hackers as any back door. "Why bother going to all the trouble of putting in a back door when you can just look for [accidental] vulnerabilities like everyone else?" asks Jon Crowcroft, a computer scientist at the University of Cambridge.

Russia's prowess in cyber-attacks demonstrates the point. It has no big hardware firms to lean on to provide back doors. That has not stopped its hackers from attacking Ukraine's power grids or stealing emails from American politicians. In February Ciaran Martin, head of the National Cyber Security Centre (NCSC), an arm of GCHQ, said that his agency had dealt with about 1,200 "significant cyber-security inci-



dents" since it was set up in 2016. State-sponsored back doors had been a factor in none of them.

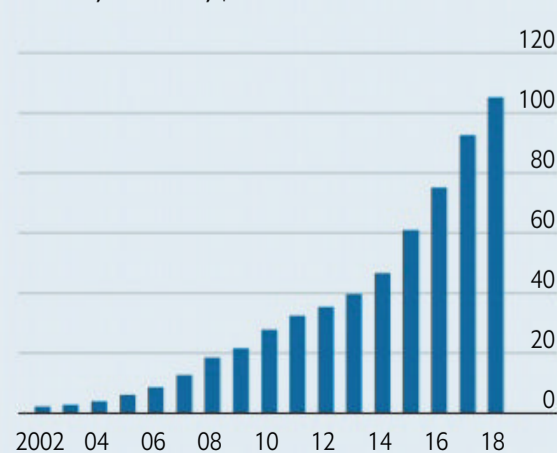
Bugs infest every piece of complex software but seem more common in Huawei's gear than in competitors' products. Evidence of Huawei's lax attitude is everywhere, with thousands of snippets of unsafe code. One piece of kit, says the HCSEC, used in mobile-phone base stations, contained 70 copies of four different versions of OpenSSL, a widely used set of cryptographic protocols designed to secure data travelling over networks. Researchers frequently find security flaws in OpenSSL, meaning that sticking to the newest versions is vital. Huawei's kit, it seems, is at risk from hackers of all kinds, not just Chinese state-sponsored ones. Insiders blame this sloppiness at least partly on the same commercial agility that has made Huawei so popular among its customers for its speedy introduction of new products.

Huawei has promised to do better. In November, in response to criticism from the HCSEC, it announced a \$2bn overhaul of its software-development practices. David Wang, an executive at Huawei, reiterated that pledge after the latest round of brickbats, but said it would take three to five years. The HCSEC takes a less rosy view, saying that "no material progress" had been made in fixing such issues since they were last raised a year ago. Worse, it says it has not seen anything to give it confidence that Huawei could meet the necessary standards, especially since similar promises made in 2012 appear to have led nowhere.

That alone might be enough to persuade countries that Huawei's products are best left on the shelf. But there is one final complicating factor, says Rahim Tafazolli, who runs the 5G Innovation Centre at the University of Surrey. Gear from Huawei's rivals has bugs, too, even if they are less common. Last year, for instance, faulty software in equipment made by Ericsson caused a day-long interruption in phone networks belonging to O2, a British operator, and SoftBank, a Japanese one. Among

Up, up and Huawei

Huawei, revenues, \$bn



► the best ways of limiting the damage that bugs—or hackers—can cause, says Mr Tafazolli, is to build resilient networks. And a way to do that is to use equipment from rival suppliers, so that a problem in one manufacturer's devices does not bring down the entire network. But given the concentration in the market, any network keen on diversity will find it hard to avoid Huawei's products.

British cyber-security officials say it is possible to finesse all these worries. One measure is to exclude Huawei from government networks. Another is to use it for less sensitive equipment at the edge of networks, such as transmission equipment, but not the more sensitive data-processing "core". That is harder to do with 5G networks, in which more data-crunching happens closer to the network's periphery, to boost speed. But monitoring of network activity can help flag anything suspicious, as can healthy scepticism about Huawei's reassurances. Ian Levy, the NCSC's technical director, has said it operates on the assumption that China does indeed attempt cyber-attacks against Britain and that its government can compel any Chinese firm, including Huawei, to do whatever it wants.

Trouble ahead

Britain's experiences, and its willingness to make its conclusions public, are likely to influence other nations' decisions about how to handle Huawei, particularly in the absence of anything similarly concrete from the Americans. But Huawei faces other pressures, too. In December Meng Wanzhou, the firm's chief financial officer and daughter of its founder, Ren Zhengfei, was arrested in Canada at the behest of the Americans. She faces extradition on charges that she—and Huawei—conspired to dodge American sanctions on Iran. The firm is also accused of trying to steal trade secrets from T-Mobile, an American sub-

siary of Deutsche Telekom.

The theft charges are small beer. They centre on a robot called "Tappy", designed to test smartphone screens. The sanctions-busting case, though, could have serious repercussions. ZTE, another Chinese technology firm, was convicted on similar charges in 2017. When it became clear in 2018 that ZTE was trying to dodge its punishments, officials banned American firms from doing business with it. The effects were catastrophic. ZTE relies on technology from American firms such as Qualcomm, a chipmaker, and Google, which develops Android, a smartphone operating system. ZTE was forced to stop production and its shares were suspended. Bankruptcy was averted only when Donald Trump, America's president, agreed to lift the ban as a "favour" to Xi Jinping, his Chinese counterpart. American lawmakers have called for similarly tough sanctions should Huawei be found guilty.

Cyber-security, sanctions-busting and Tappy are, in turn, only parts of an argument that is fundamentally about the relationship between technology and geopolitics, says Janice Stein at the University of Toronto. America, the incumbent superpower, is under no illusions about the relationship between technology and power, of both the hard and soft sort. Neither is China, which aspires to the same status. Huawei is widely seen as a Chinese national champion. It is an important part of "Made in China 2025", a programme designed to boost China's abilities in many different fields of technology.

Seeing the arguments through a geopolitical lens throws up interesting questions, says James Lewis at the Centre for Strategic & International Studies, in Washington, DC. One is the effect of sloppy coding, which cuts both ways. If installing Huawei's buggy gear is a security risk for the West, then it is a security risk for China,

too, which is forecast to lead the world in 5G deployments (see chart 2 on previous page). The West, after all, has hackers of its own, as do China's neighbours, such as India and Russia. "I would guess that the dozen or so countries with strong sigint [electronic espionage] capabilities jump for joy when they hear someone else is installing Huawei's stuff," says Mr Lewis.

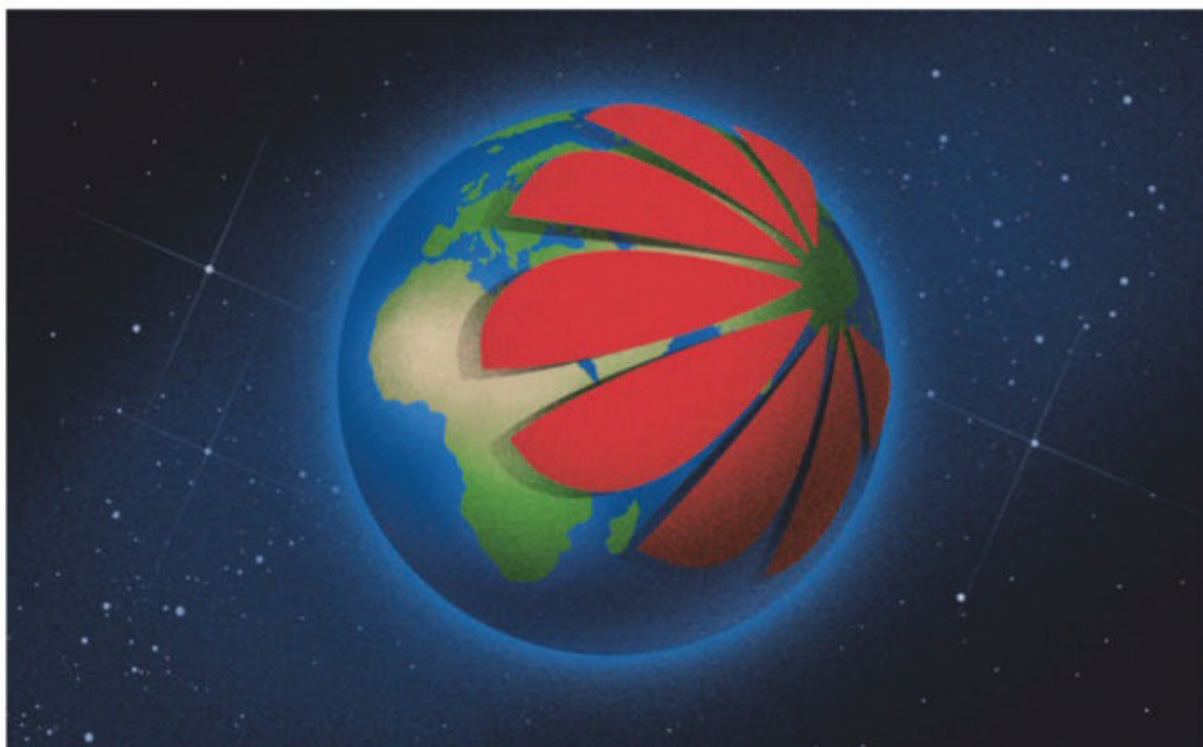
He also thinks Western countries, as a counterbalance to Huawei and other Chinese tech firms, should consider whether domestic firms that provide digital infrastructure should be designated as strategically important, as arms-makers and steel firms often are. America has already blocked deals on grounds of national security, some tenuous. A planned \$117bn takeover of Qualcomm, for instance, was blocked because the buyer, Broadcom, despite a heavy presence in America, was domiciled in Singapore. (It has since moved back to Delaware.)

Huawei or the highway?

These discussions will become more urgent as the world grows increasingly computerised, says Ms Stein. The electronics that power connected cars are assembled in China, as are those that sit inside smart medical devices and energy meters, and in the financial networks over which the world's banks transact. Lawmakers are already beginning to make the connections. American politicians have started agitating about whether Huawei's solar panels pose a risk to the country's electricity grid.

Weighing all these arguments is difficult even for cyber-security experts, says Mr Crowcroft. One reason is that the modern mix of superpower rivalry, globalisation and high-tech societies is unprecedented. In the cold war, trade across the Iron Curtain was minimal. These days America and China square off atop planet-spanning supply chains that blur the distinction between "Western" and "Chinese" companies. Chinese firms rely on Western technology in their products; Western ones rely on Chinese parts and factories to assemble them. Even the risks are hard to evaluate. Nobody is quite sure just how much cyber-havoc could be caused by a determined nation state, says Mr Crowcroft, largely because there has yet to be a full-scale war between high-tech powers.

While this debate rages in the West, Huawei goes from strength to strength. The firm says it has signed 40 different 5G contracts, more than any of its rivals. It already has a big presence in Africa, Asia and South America. Huawei will see Britain's approval, however qualified and half-hearted, as another feather in its cap. For all its flaws, the firm—and, therefore, China—will end up building a great deal of the infrastructure on which the world will increasingly depend. ■





Robert Mueller's report

Executive privileges

WASHINGTON, DC

For the time being, the president is above the law

THE DAY after Robert Mueller's report was made public, Elizabeth Warren, a contender for the Democratic presidential nomination who is polling in the single digits, tried to distinguish herself from the pack by calling for Donald Trump's impeachment. A couple of other candidates, including Kamala Harris, weakly echoed her call. Democratic congressional leaders, by contrast, did not. Nancy Pelosi, the Speaker of the House, has spent the days since April 18th, when Mr Mueller's report came out, tamping down calls from her left flank to start impeachment proceedings. Her second-in-command, Steny Hoyer, believes that "going forward on impeachment is not worthwhile."

Mr Mueller described a level of presidential misbehaviour that would be shocking were it not for the frog-boiling nature of living through the Trump presidency. Yet Republicans overwhelmingly back the president, which makes removing Mr Trump from office a dim prospect. Democrats fear an unsuccessful effort to remove

Mr Trump would help the president. But just moving on as if it were business as usual seems unacceptable too, signalling as it would that the only limit to the power of presidents is what they can get away with politically. How Congress and American political institutions respond in the coming weeks to Mr Mueller's report will set precedents that could last for decades.

Mr Trump insists that he is "not even a little bit" worried about impeachment. "Only high crimes and misdemeanours can lead to impeachment," he tweeted. "There

were no crimes by me (No Collusion, No Obstruction), so you can't impeach." This is an imperfect reading of the evidence against him and of historical precedent.

In 1868 Andrew Johnson was impeached for (among other things) bringing the presidency into "contempt, ridicule and disgrace", which is not a crime. Presidential campaigns often pay fines for violating campaign-finance laws, but no rational person would argue that those peccadillos constitute impeachable offences. Gerald Ford, who became president after Richard Nixon resigned rather than face impeachment, cynically but accurately said that "an impeachable offence is whatever a majority of the House of Representatives considers it to be at a given moment in history."

In 1998 the House decided that lying to a grand jury and tampering with witnesses constituted impeachable offences against Bill Clinton. In 1974 the House felt that obstructing a federal investigation, abusing executive power and ignoring subpoenas constituted impeachable offences committed by Nixon. Neither president was removed (nor was Johnson, who escaped by a single Senate vote).

Where does the behaviour chronicled in the Mueller report stand on the Johnson-Nixon-Clinton scale? Mr Mueller's investigation "did not establish that members of the Trump Campaign conspired or co-ordinated with the Russian government in its election interference activities." Yet the

→ Also in this section

21 War powers

21 Minimum wages

24 Religious affiliation

24 Judicial elections and sentencing

25 The 2020 census

26 Lexington: A blast from the past

▶ two sides were working towards the same goal (Mr Trump's election) and were eager to help each other. Russian outreach began not long after Mr Trump announced his candidacy. By spring 2016 a Russian-linked professor was offering "dirt" on Hillary Clinton's campaign to one of Mr Trump's foreign-policy advisers.

That summer, Donald Trump junior, Jared Kushner, Mr Trump's son-in-law and adviser, and Paul Manafort, his campaign chairman, met a Russian lawyer who promised "official documents and information that would incriminate Hillary." Mr Manafort shared internal campaign data with Konstantin Kilimnik, an employee of his who both American intelligence and Rick Gates, Mr Manafort's right-hand man, believed had links to Russian intelligence.

Meanwhile, Russian military-intelligence officers were hacking into and stealing documents from Democratic Party servers and email accounts of people working for Mrs Clinton's campaign; and employees of the Internet Research Agency, a company based in St Petersburg, were building fake social-media accounts that reached as many as 126m people.

Both spooks and trolls repeatedly helped Mr Trump. The trolls staged pro-Trump rallies in at least three states. Five hours after Mr Trump asked "Russia, if you're listening" to find 30,000 emails that Mrs Clinton supposedly deleted, the spooks began targeting Mrs Clinton's personal office. An hour after a television network released a video of Mr Trump boasting about sexual assault, WikiLeaks released thousands of emails stolen from Mrs Clinton's campaign chairman by the GRU, Russia's military-intelligence agency.

Had Mr Trump not dulled the word "collusion" through overuse, it might seem to describe the relationship between his campaign and the Russian government: mutual aid coupled with persistent dissembling. Two former Trump campaign officials have pleaded guilty to lying to federal investigators about their contacts with Russia. The president's personal lawyer testified that Mr Trump "knew of and directed the Trump-Moscow negotiations [to build a tower there] throughout the campaign and lied about it." Mr Mueller says that his report may not provide a full picture of Trump-Russia links because people they interviewed "sometimes provided information that was false or incomplete," while others "deleted relevant communications."

The second part of Mr Mueller's report concerns obstruction of justice. Before becoming attorney general, William Barr wrote a memo arguing that a president could not obstruct justice through the lawful exercise of his powers. Mr Mueller demolishes that theory. In his summary Mr Barr cited the absence of an underlying crime (conspiring with Russia) and Mr

Trump's habit of carrying out his obstructive acts in public (often via Twitter) as mitigating circumstances; Mr Mueller did not have time for that either. Mr Barr said that the president was "frustrated and angered by a sincere belief that the investigation was undermining his presidency." But there is no exception for hurt feelings in the obstruction statutes.

Mr Barr also said that the White House "fully co-operated" with the probe. In fact Mr Trump refused to be interviewed, submitting only written answers. Mr Mueller sniffed at "the insufficiency of those responses," noting that Mr Trump claimed some form of memory failure more than 30 times. Other answers were "incomplete or imprecise". Mr Barr decided that the evidence failed to establish that Mr Trump obstructed justice. Mr Mueller does not seem so certain: "While this report does not conclude that the president committed a crime, it also does not exonerate him."

Certainly the president engaged in conduct that a layman might consider obstructive. He fired James Comey, the FBI director, after Mr Comey did not accede to Mr Trump's request that he "lift the cloud" of "this Russia business" and publicly state that the president was not under investigation. He tried to get Jeff Sessions, his former attorney general, to curtail Mr Mueller's investigation. He repeatedly tried to compel subordinates to lie about matters under investigation.

He told Don McGahn, the White House counsel, to sack Mr Mueller. Mr McGahn (who comes out rather well) refused, complaining that the president had asked him to "do crazy shit". "The president's efforts to influence the investigation were mostly unsuccessful," Mr Mueller wrote, "but that is largely because the persons who surrounded the president declined to carry

out orders or accede to his requests."

Mr Mueller declined to recommend prosecution because Justice Department guidelines warn against indicting a sitting president. But he left open the prospect of a post-presidential indictment, noting that he gathered evidence now "when memories were fresh and documentary materials were available." And he recognised that "the separation-of-powers doctrine authorises Congress to protect official proceedings...from corrupt, obstructive acts, regardless of their source."

Congressional Democrats do agree on what such protection means in practice. The progressive wing was already keen to impeach; Mr Mueller's report just added some petrol to their fire. But that makes impeachment look partisan rather than evidence-based, which will make joining them harder for the moderates from swing districts that Democrats rely on for their majority. A Politico/Morning Consult poll taken after the Mueller report's release shows Mr Trump's approval rating at 39%, tying an all-time low—but still five points higher than support for impeachment.

That could change if further malfeasance comes to light. Democrats are chasing Mr Trump's tax returns and may start yanking on threads Mr Mueller left dangling. Who destroyed evidence, and why? If Mr Trump really is innocent, why was his reaction, on learning of Mr Mueller's appointment, to slump back in his chair and say, "Oh, my God. This is terrible. This is the end of my presidency. I'm fucked."

The White House is already resisting the Democrats' efforts to subpoena some of those named in Mr Mueller's report, contending that they are politically motivated. Legally that argument is weak, but the political salience of obstruction may wane during a long court fight. Others have tried to minimise Mr Mueller's findings. Mr Kushner said that the investigation harmed America more than Russian election-meddling did. Rudy Giuliani, one of Mr Trump's lawyers, said that he saw nothing wrong in accepting help from Russia.

Impeding a federal investigation and accepting help from a foreign adversary are precisely the sorts of offences that the founders would have considered impeachable. James Madison considered impeachment a remedy for "perfidy", "peculation [self-dealing from public funds]" and "betray[ing]...trust to foreign powers." The Justice Department warns against indicting a president because "the...impeachment process ensures that the immunity [from indictment] would not place the President 'above the law'." But if that process is not applicable to a president whose party controls a chamber of Congress, then in practical terms the president is protected from both indictment and impeachment. He is above the law. ■



War powers

What are they good for?

Congress mounts a failed bid to claw back the right to wage war

WERE THE founding fathers to return, suggested Michael Beschloss, a historian, in “Presidents of War”, they would be “thunderstruck” to discover how the power to kick off major wars could now rest on the whim of a president. Presidents have “regularly told Congress to go to hell” on such matters, as Harry Truman admiringly noted of James Polk, the 11th president. Donald Trump is keeping up that tradition. On April 16th he wielded his veto for only the second time in his presidency to strike down a bill that might have forced him to end America’s support for the Saudi-led war against the Houthi militia in Yemen. The fighting has caused what the UN calls the world’s worst humanitarian crisis.

That the bill got so far, so quickly, is notable in itself. It sped through Congress—passing the Republican-controlled Senate on March 13th and the House on April 4th—because of expedited procedures, never before used, granted by the War Powers Resolution. This act was passed in 1973 in response to Richard Nixon’s secretive expansion of the Vietnam war. In theory, the resolution tied presidents’ hands by requiring them first to consult Congress before sending forces abroad, and then to ask Congress for a declaration of war or a specific mandate to keep them there beyond 60 days. In practice, most presidents have either stretched or ignored the law.

Much of the recent stretching has occurred as a result of the sprawling “war on terror”. Three days after the terrorist attacks of September 11th 2001, Congress passed an Authorisation for Use of Military Force (AUMF) permitting George Bush to go after those who “planned, authorised, committed or aided” the atrocity.

That was clearly a reference to al-Qaeda, then holed up in Afghanistan. But by 2016 the AUMF had been used by Mr Bush and his successor, Barack Obama, 37 times to justify action in 14 countries, “even against groups that did not exist on 9/11”, points out Christopher Anders of the American Civil Liberties Union. Mr Obama, for instance, deployed the AUMF for his war on Islamic State in Iraq and Syria even though the group angrily split from al-Qaeda long ago.

The War Powers Resolution was gutted long before the elastic AUMF created loopholes wide enough to fly F-16s through. Most presidents after Nixon have simply ignored it, declaring its demands to be an unconstitutional infringement on their ex-



Hail to the Chief

ecutive powers. When the Kosovo war crossed the 60-day mark in 1999, Bill Clinton insisted that Congress had expressed approval by ponying up money for it—never mind that the War Powers Resolution explicitly says that does not count, and that lawmakers are loth to cut off funds for troops in the line of fire.

The most inventive approach has been to pretend that, contrary to appearances, there is in fact no war. In 2011 Mr Obama said he was free to bomb Libya because the action was led by NATO, did not involve “sustained fighting or active exchanges of fire” and was unlikely to escalate—and so did not meet the definition of “hostilities” envisaged by the War Powers Resolution. Mr Trump has put forward much the same argument for his own entanglement in Yemen (which started under Mr Obama). Indeed, had he signed the Yemen bill rather than vetoed it, it is likely that his administration would have claimed its provisions did not apply to Yemen anyway.

Lawmakers are right to roll their eyes at such make-believe. After all, American commanders sit in an operations room in Riyadh next to their Saudi counterparts. American engineers service the Saudi warplanes. Until recently American planes refuelled the Saudi bombers mid-flight too. War at arm’s length is still war.

Meanwhile, the fighting has left 10m Yemenis “one step away from famine”, warns the UN’s World Food Programme. Congress, though exasperated, does not have the numbers to override Mr Trump’s veto. But it is likely to continue the fight in other ways, such as by tacking riders onto the annual National Defence Authorisation Act, which is much trickier for the president to quash. At least some of the founding fathers would have approved. ■

Minimum wages

Floored

WASHINGTON, DC

The federal minimum wage is becoming irrelevant

IT IS NORMAL for America’s federal minimum wage to go through periods of declining influence. It is fixed in cash terms, meaning it bites hardest whenever Congress raises it, then declines in relevance as earnings grow. Between 1998 and 2006, for example, the federal minimum stayed constant at \$5.15 per hour, while average wages grew by around 30%. What is unusual about the last decade is that another force is also causing the federal pay floor to be left behind: state and local governments. According to the University of California Berkeley’s Labour Centre, a research hub, 44 cities and counties apply their own minimum wages today, compared to just five before 2012. At the start of 2019, 20 states raised their pay floors.

A new analysis from Ernie Tedeschi of Evercore ISI, a consultancy, quantifies just how much more assertive state and city governments have become. During the early 2000s, with the federal floor flat, they raised their minimum wages, but not by enough to keep up with the broader labour market. As a result the share of hours worked at minimum pay—either federal, state or local, and excluding tipped or salaried workers—fell, from 5% in 1998 to a little over 2%. But since 2009, despite wage growth and a flat federal minimum, the share of hours worked at some minimum wage has stayed constant, at around 5%. The explanation is growing intervention outside Washington. In 2010 state and local minimum wages were binding for around 40% of hours worked at some pay floor. In 2019 that share is fully 91%.

Meanwhile, as rich cities have raised their minimum wages dramatically, their minimum-wage workers have, as a group, been climbing up the nation’s income distribution. The average pay of minimum-wage workers—a group which now varies a lot by place—has risen to 57% of the national median wage, Mr Tedeschi finds. That is up sharply from between 39% and 44% for the entire period between 1994 and 2015.

There are advantages to the emerging patchwork of policies. The risks of raising the minimum wage are lower in rich places. Local governments might fine-tune their wage floors to economic conditions. By contrast the federal minimum wage is a blunt instrument. It cannot take into account geographical differences in productivity, economic conditions, or the bargaining power of workers. ▶



Big thinkers don't work on small canvases.

At BHP, it's our job to supply the iron ore big thinkers need to make bridges stand, buildings rise and planes fly. And the demand keeps growing. So we're always discovering more sustainable ways to extract it. It's a tall order. But you don't get to be one of the world's biggest resources companies by thinking small. For details, visit bhp.com/BigThinkers.



BHP

Religious affiliation

To be young is not quite heaven

On one measure, America is starting to look less exceptional

FOR ANYONE who studies Americans and their beliefs, the most startling phenomenon of recent times has been the rise of the religious “nones”. About a quarter of the total population, and about a third of those who became adults in the new millennium, identify with no creed. Some new figures suggest the flight from organised religion is even quicker than previously thought.

The share of Americans who acknowledge being members of a religious group is falling much faster than the proportion who, perhaps loosely, hew to one faith tradition or another. Comparing 2016-2018 with the last three years of the 20th century, declared participants in organised religion have plunged by nearly 20 points to 52%. And among millennials, signing up to a church is a minority (42%) pursuit, according to Gallup, a venerable pollster.

Membership of any faith is plummeting much faster among Democrats (71% to 48%) than among Republicans (77% to 69%) and it is not hard to imagine why. The closer the embrace between church and the Republican Party, the less appealing faith becomes to those on the left. But religion-watchers see a vast generational change which transcends political loyalty and will eventually embrace politically conservative youngsters too.

A change towards what, exactly? According to Mike Hout, a sociology professor at New York University, what Americans are rejecting is not the transcendent but simply structures and organisation. Younger Americans are more atomised and provisional in everything they do, from work to relationships, and that affects religious behaviour. He finds it telling that some polls suggest a steady to slightly rising belief

in an afterlife, but declining faith in a Christian heaven: people often prefer things to be vague.

Americans in their 20s have long been less devout than their seniors, but in the old days, they eventually married and brought their children to church. Many of today’s young parents were raised without a faith so they have none to go back to, notes Robert Jones of the Public Religion Research Institute, an independent study centre.

On the face of things, the United States is now on a path towards secularism that is already far advanced in western Europe, while other rich democracies like Canada are somewhere in between. Gallup’s numbers suggest Democrats are now about as religious as Britons are. “America is not such an outlier any more,” says Mark Silk, a religion professor at Trinity College in Connecticut.



Minority rapport

▶ Nonetheless, some Democrats want to restore the prominence of the federal minimum wage, by boosting it to \$15. Senator Bernie Sanders introduced a bill earlier this year that would do just that by 2024, but it has yet to gather enough support from Democrats to pass even in the House of Representatives (it would have no hope in the Republican-controlled Senate). A different proposal from Terri Sewell, a Democratic congresswoman, would allow the federal minimum wage to vary regionally with the cost of living. But it has met resistance from those on the left who do not want the lower wage floors for workers in

Southern states and rural counties that regional adjustments would bring.

Republican scepticism of government meddling makes it likely that the federal minimum wage will be left to wither for a few more years. For workers in places that are seeing minimum-wage increases, this may not matter much (so long as their employers do not skip town). The rest will be left to fend for themselves. If they are lucky, the hot labour-market will force their employers to fork out for higher wages anyway. They might then ask what purpose there is for a federal minimum wage that is so low as to be completely irrelevant. ■

Judicial elections

Vote and be hanged

WASHINGTON, DC

New research confirms old suspicions about judicial sentencing

“SOONER OR LATER,” warned Alexis de Tocqueville in 1835, judicial elections “will have dire results”. One day, he continued, “it will be perceived that by so diminishing the independence of the magistrates, not only has judicial power been attacked, but the democratic republic itself”. His warning was not heeded: most states elect judges to at least some courts.

Today’s opponents of judicial elections cite two main fears. The first is that judges may rule more favourably to those who contributed to their campaigns. Cognisant of such concerns, in 2015 Chief Justice John Roberts joined the Supreme Court’s liberals to uphold a state ban on judges personally soliciting campaign donations. “Judges are not politicians,” wrote Mr Roberts, “even when they come to the bench by way of the ballot...A state may assure its people that judges will apply the law without fear or favour—and without having personally asked anyone for money.”

The second worry is that judges will impose harsher sentences to curry favour with voters: “Hang ‘em high!” is a catchier campaign slogan than “Impartially apply the law to each case even when doing so produces unpopular results.” A new working paper by Christian Dippel of UCLA Anderson and Michael Poyker of Columbia Business School measures this. Several studies have shown that judges tend to impose more punitive sentences when facing re-election, but those studies have come from just three states (Kansas, Pennsylvania and Washington). The authors added evidence from eight more. In only one of the eight (North Carolina) did they find that judges become more punitive when they know they will be facing voters shortly.

In four of the 11 states where there is solid evidence, then, judges tend to sentence defendants convicted of serious crimes more harshly shortly before they file for re-election than they do at the beginning of their terms. The authors focused on serious crimes such as murder, rape and assault “because these are more visible to voters”. People tend to prefer judges who protect society from killers to those who protect it from jaywalkers.

The authors hypothesise that the more competitive state judicial elections are, the more likely judges are to impose harsher sentences. In states with uncompetitive judicial elections, by contrast, “judgeships appear to be viewed as positions that ▶▶

▶ should be obtained by appointment, never mind the electoral rules,” and judges apply the law more consistently.

Unfortunately judicial elections are only growing more competitive. In the 2015-16 election cycle, Pennsylvania set a national record for money spent in state supreme-court elections—\$21.4m for three seats, most of which the candidates raised themselves. North Carolina saw more money spent (\$5.4m for a single seat, most of it from outside groups) than any state

other than Pennsylvania. Kansas set a state spending record (\$2.1m for five seats) and Washington also saw \$2.8m spent for three seats. Much of that money came from unknown sources; the Brennan Centre, a think-tank and advocacy group, could trace just 18% of the \$27.8m of outside group spending on state supreme-court races in 2015-16. That cycle set a record for justices elected in \$1m-or-more races (27). That is good news for political consultants and campaign measures, but not for justice. ■

sult in less accurate and less complete citizenship data than other surveys while dampening response rates disproportionately in immigrant and Hispanic households. Together with similar rulings in California and Maryland, Judge Furman in New York found a “veritable smorgasbord” of procedural irregularities surrounding the addition of the citizenship question. Given those deficiencies, he found Mr Ross’s move to be “arbitrary and capricious”, in violation of administrative law.

At the hearing, the five Republican-appointed justices, including Mr Trump’s two, sounded untroubled by Mr Ross’s rationale for amending the census form. Justice Neil Gorsuch noted that “virtually every English-speaking country and a great many others besides ask this question in their censuses.” Justice Kavanaugh added that the “United Nations recommends” asking about citizenship. The census asked the question from the early 19th century until 1950, and a portion of households were asked the question until 2000. Justices Samuel Alito and Gorsuch teamed up to speculate about other reasons immigrants might not fill out the questionnaire. Maybe “socioeconomic status”, “education” or “language ability” contribute to the differential response rates between citizens and non-citizens, Justice Alito mused.

Mr Francisco gratefully received this benefit of the doubt, and tersely parried the liberal justices’ arguments. “It really does boil down”, Mr Francisco said, “to whether the secretary’s judgment here is a reasonable one.” And in weighing whether to sacrifice a decline in response rates for more citizenship data, Mr Ross “reasonably chose to go with the bird in the hand.” The oral argument suggests the five conservatives have a clear—if fraught—path to approving the question. The justices can simply defer to the official, brushing aside evidence about his motives. ■

Counting America

Census and sensibility

NEW YORK

The Supreme Court seems inclined to let the Trump administration add a citizenship query to the census

LAST JUNE, when his vote clinched a 5-4 majority blessing President Donald Trump’s entry ban on travellers from several Muslim countries, Justice Anthony Kennedy subtly wagged his finger in the president’s direction. Even when the judiciary grants executive officials “substantial deference”, Justice Kennedy wrote, it is an “urgent necessity” that they respect “constitutional guarantees and mandates”. A year later, with another controversial Trump administration policy blocked by a trio of federal district courts, the Supreme Court again appears poised to hand the executive branch a victory. But with Justice Brett Kavanaugh in Justice Kennedy’s chair, the conservative majority is more resolute. Mr Trump will probably score a party-line win.

The case, *Department of Commerce v New York*, asks whether Wilbur Ross, the commerce secretary, lawfully added a question about citizenship to the 2020 census despite evidence that the move would scare off millions of people from completing the form. The constitution requires a count of “the whole number of persons in each State” every ten years. The census dictates how the 435 seats in the House of Representatives are allocated, and thus how many electoral-college votes should go to each state. Hundreds of billions of federal dollars are divided up according to state population, too. Areas where people are undercounted will suffer until at least 2030.

Soon after taking office in February 2017 Mr Ross sat down with Steve Bannon, Mr Trump’s erstwhile adviser, known for his hard line against immigration, to discuss adding a citizenship question to the census. Before announcing the decision, the commerce secretary undertook a belated quest to find a legal justification for doing so. At the oral argument, Justice Elena Kagan told the solicitor general, Noel Francis-

co, “you can’t really read this record without sensing” that the need for a citizenship query was “contrived”. Only after floating the concept with the Department of Justice (DOJ) and the Department of Homeland Security and phoning the attorney-general, Justice Kagan recounted, did the attorney-general come through with a letter saying the question was needed to enforce the Voting Rights Act of 1965. The request contradicted the view of experts from the Census Bureau and six of its former directors who served under both Democratic and Republican administrations.

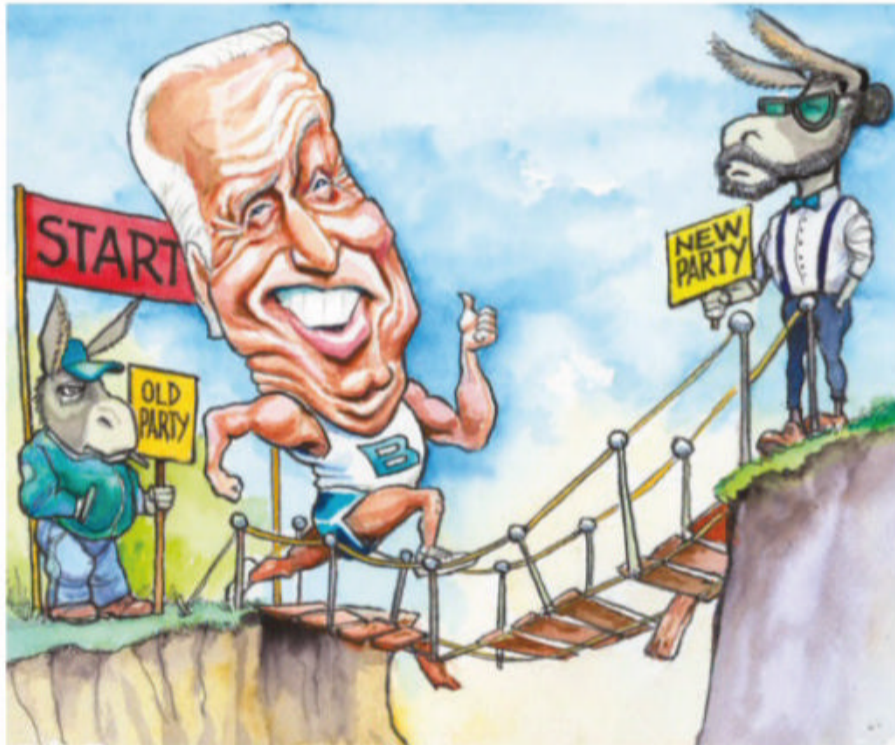
Mr Ross’s stated justification for querying citizenship, the lower courts found, was a just a pretext. The rulings did not mention that in recent years conservatives have not exactly demonstrated a desire to maximise turnout from ethnic minorities at election time. Judge Jesse Furman pointed to evidence that the question would re-



Exercised about box-ticking

Lexington | A blast from the past

Joe Biden provides a fossil record of how the Democratic Party has changed



ENTERING TO Bruce Springsteen's "We Take Care of Our Own", as his friend Barack Obama used to, Joe Biden performed a dress rehearsal for his long-awaited entry to the Democratic primary in Washington, DC, earlier this month. His audience, burly delegates of the International Brotherhood of Electrical Workers, were the sort of working-class voters the 76-year-old former vice-president is counting on to nullify the hard-left. He duly regaled them with familiar lines about Scranton, the Pennsylvania mining-town his family fled almost seven decades ago. He also cracked gags about the recent controversy over his career-long habit of sniffing, kissing and pawing at women. "I just want you to know," he deadpanned to the union men—twinkly old Uncle Joe style—that he "had permission to hug" their leader. If that is how Mr Biden, who enters the primary this week as the front-runner, means to handle his long and spotted history of statements and behaviour anathema to the modern Democratic Party, he might not last long.

As things stand, he owes his lead status to propitious circumstances, including the apparent lack of an outstanding alternative and his association with the revered Mr Obama. There is an obvious risk that he will fizzle as he did during two previous presidential runs, when he was an outsider and much less of a target to his opponents than he is now. Mr Biden is knowledgeable, likeable, right-minded, hugely experienced and polished in the way of an old-style variety show host. The way he glides up and down the emotional register—one moment seething, the next lachrymose—is something to behold. He is also garrulous, gaffe-prone and not obviously au fait with modern America. In other words, he has work to do, assuming he has the energy for it. Meanwhile, the suspicion that his candidacy is an anachronism makes it an extreme test-case for the Democrats' biggest dilemma: how to reconcile the ideological purity demanded by an activist wing increasingly dedicated to racial, gender and sexual equality, with the real world of muddy compromises and more mixed social attitudes.

This tension in the party is in part a product of the erosion of its unionised base, which has left it with a more fractured coalition of hipsters, minorities and immigrants. Such diversity requires constant management, leading to an almost fetishistic attention to liberal unifying principles by Democratic activists, which engen-

ders intolerance. This is at odds with the more nuanced views of most voters. Mr Biden's partnership with Mr Obama—the hip son of an African migrant—bridged the gap. The question is whether the bridge can still stand in the absence of its Obama-sized pier.

Hence the early attention to the many ways Mr Biden—over the course of a career in Democratic politics that began when the party still contained segregationists—has offended against contemporary liberal standards. Early examples include his dismissive treatment, as chairman of the Senate Judiciary Committee, of Anita Hill, a black woman who accused Clarence Thomas of sexual harassment during his Supreme Court confirmation hearing; Mr Biden's disdainful attitude towards busing as a means to racially integrate schools; and his support for Bill Clinton's draconian criminal-justice reforms. More such examples will arise. Mr Biden has a decades-long reputation for stirring controversy and his current main rival, Bernie Sanders, an emerging one for ruthlessness.

Certain kinds of past transgression are now straightforwardly disqualifying among Democrats. In light of #MeToo, Mr Clinton has become an embarrassment. The more interesting thing about Mr Biden's case is that he does not appear guilty of anything that was considered inappropriate at the time. His mistreatment of Ms Hill reflected the usual 1980s male chauvinism. It was also intended to help a black man reach the Supreme Court bench. Similarly, some of his policy positions have come to seem controversial mainly due to ignorance about their circumstances. Criminal-justice reform in the 1990s was fuelled by a fear of violent crime that has been largely forgotten on the left. Busing was in many places counter-productive; it exacerbated racial tension and left schools as segregated but worse-run than they were before. These contradictions represent a challenge to the Democrats' liberal mullahs which is further complicated by Mr Biden's mercurial nature.

American politics has a strong redemption tradition. Yet Mr Biden's career is not merely defined by a relentless and contrite movement towards more liberal positions. Rather, he has always been broadly liberal, but with a propensity to lapse. He started work on the Violence Against Women Act, one of his big achievements, a year before his mishandling of Ms Hill. This makes him, warts and all, as contradictory as most voters, and in that sense a cautionary lesson for the purist left. Whether it can learn from it, however, will depend less on Mr Biden's record than his present skill at explaining, defending and, where necessary, apologising for it. This is also the main reason to worry about his candidacy.

Handsy Uncle Joe

"The past is never past, it is always present", Mr Biden's favourite singer, Mr Springsteen, once said. In the same way, political skeletons tend to do damage only when they highlight some current weakness. Mr Sanders had no trouble brushing off his patchy history on gun control because his progressive bona fides were not in doubt. Hillary Clinton's callousness towards her husband's female accusers was damaging, because it chimed with her reputation for cynicism. Mr Biden, who enters the race much-loved on the left, despite his shortcomings, has an easier opportunity to account for his record. He should defend his support for criminal-justice reform, explain his opposition to busing—and apologise to Ms Hill and to anyone upset by his handsiness. But does he have the contemporary political nous to make such necessary judgments and the discipline to stick by them? If not, he will fail, because those are also the biggest questions about his candidacy. That is why his recent joking about groping was so ominous. ■



Cuba, Venezuela and Nicaragua

Trump v the troika of tyranny

The United States steps up its push for regime changes

JUAN GUAIDÓ, recognised as Venezuela's interim president by the United States and more than 50 other countries, has called for the country's biggest-ever street protests on May 1st. So far, neither mass demonstrations nor economic miseries have been able to dislodge the dictatorship of Nicolás Maduro. Now President Donald Trump is adding an extra weapon: lawsuits directed at Cuba, Mr Maduro's main supporter. From May 2nd the way will be open for a flood of them: Mr Trump has decided to let American citizens seek damages against foreign companies that are using properties seized after the 1959 revolution. The move is part of a raft of measures meant to help topple the "troika of tyranny", as John Bolton, Mr Trump's national security adviser, calls the left-wing regimes of Cuba, Venezuela and Nicaragua.

Previous presidents, heeding the concerns of trading partners, repeatedly suspended the "Title III" provisions of the 1996 Helms-Burton Act. These would allow Americans to pursue claims in the United States against companies "trafficking" in properties expropriated by Cuba. Mr Trump likes to be different. On April 17th

his secretary of state, Mike Pompeo, announced that the suspension would go.

On the same day, in a pugnacious (and alliterative) speech in Miami to veterans of the failed invasion in 1961 of Cuba's Bay of Pigs, Mr Bolton unveiled several actions against the "triangle of terror", whose leaders—Mr Maduro, Daniel Ortega of Nicaragua and Miguel Díaz-Canel in Cuba—he dubs the "three stooges of socialism". There is to be a limit on remittances to Cuba, of \$1,000 per person per quarter. More painful, perhaps, will be further restrictions on non-family travel. Venezuela's central bank, which has tried to offset the effects of tough American sanctions on oil by selling gold, faces new restrictions on transactions with the United States. Mr Bolton also promised extra penalties on Nicaragua's Bancorp, which he described as "the Ortega slush fund".

Removing Mr Maduro and ending communism in Cuba would be triumphs. Mr Bolton paints the prospect of "the first completely free hemisphere in human history". Mr Maduro depends on Cuban spies to warn him of coup plots. Cuba gets cheap Venezuelan oil, which has propped up the

→ Also in this section

28 Miffed, moderate Panama

30 Bello: Making sense of the suicide of Alan García

economy and filled the gap left by the collapse of its previous benefactor, the Soviet Union. The mutual dependence makes sanctions on either a "two-fer", weakening both regimes, says Mr Bolton.

The economies of both countries are already in dire straits. Venezuelans are going hungry and fleeing the country in droves; GDP will shrink by a terrifying 25% this year, forecasts The Economist Intelligence Unit, a sister company of *The Economist*. Cuba has seen oil supplies from Venezuela dwindle (from 90,000 barrels a day in 2015 to around 30,000) and growth all but vanish. Now fear of lawsuits is likely to put a chill on foreign investment.

The hard line is popular with Mr Trump's base, especially in Florida, home to many émigrés from Cuba and Venezuela and a vital swing state. But what goes down a treat in Miami does not necessarily play well in Madrid or Montreal.

First, let's thrill all the lawyers

The European Union and Canada have reacted angrily to the Title III change, calling its extraterritorial reach "contrary to international law" and threatening reprisals. Those could include referring the matter to the World Trade Organisation (though the United States is adept at gumming up its complaints procedures). A more potent riposte could be counterclaims against American companies with assets in the EU, a possibility under EU "blocking legislation". At least the lawyers will be happy.

Many companies are not. Big investors in Cuba include Canadian miners, such as ►►

▶ Sherritt International, Spanish hotel chains like Meliá and French firms, including Pernod Ricard, which sells Havana Club rum. The potential number of claims is large. The United States has certified nearly 6,000 claims for property confiscated in Cuba, with a total value (including interest) of perhaps \$8bn. As many as 200,000 uncertified claims could be considered.

In some ways, the latest sanctions work against the administration's efforts to dislodge Mr Maduro. Mr Trump himself has worked unusually hard to co-ordinate a regional coalition against the Venezuelan regime. Tightening the screws on Cuba is bound to remind some of its members of cold-war days, when the United States threw its weight around in the region. They

will no doubt continue to back Mr Guaidó. But they may distance themselves from American policy, for example by backing European-led efforts to negotiate with Mr Maduro a democratic transition, which the United States views with scepticism.

A spat within the coalition will be worth it if the extra pressure drives Mr Maduro out of office. There is little sign that will happen soon. Life in Caracas is awful, but not much more awful than before the United States toughened oil sanctions. The Red Cross is starting to bring aid to Venezuelans hardest hit by the crisis. Mr Bolton's bet is that Mr Maduro's regime is more brittle than that of Cuba, which has survived six decades of sanctions. He probably expected to be proven right by now. ■

tunity since the return of democracy in 1989 they have chosen a president from a party different from that of the incumbent. They are likely to do it again this time. The approval rating of Juan Carlos Varela, the president, is a dismal 12%. The presidential candidate of his Panameñista Party has little chance (Mr Varela cannot compete).

Yet his successor is unlikely to be much different. The half-dozen leading contenders for the presidency espouse the same sort of centre-right policies that Mr Varela does. The sole left-winger is expected to win 1% of the vote. In part that may be because Panama's role as a gateway of global commerce makes obvious the benefits of business. Panama is thus reassuringly different from Latin American countries such as Mexico and Brazil, where angry voters recently turned to radical populists.

The problem is that Panamanians have little political choice. In presidential debates the candidates agreed on tweaks to pro-market policies. There is little argument about the direction Panama should take, says Roberto Troncoso, a lawyer. It needs big changes. The next president will have to prove that those can happen without a change in the political consensus.

The current front-runner is Laurentino Cortizo, the sensible but bland nominee of the Democratic Revolutionary Party. Founded by Omar Torrijos, Panama's dictator in the 1970s, it has been out of power since 2009. Perhaps for that reason, Mr Cortizo could win nearly half the vote in the one-round election (though polls have been spectacularly wrong before).

He was born to money and ran his family's farming and construction firms. Education reform is "the star that will light up" his government, he says. He would offer free school meals and improve evaluation.

More colourful candidates are available. Rómulo Roux, whom the polls put a distant second, is the heir of Ricardo Martinelli, a former president who is in prison awaiting trial on charges that he spied on political foes. Despite that, many Panamanians remember the supermarket mogul's presidency from 2009 to 2014 as a good time. The economy grew by nearly 8% a year and the capital got a new metro (built partly by Odebrecht).

Mr Roux adds populist flavouring to the centrist porridge. He tells voters to keep their receipts for medicines they buy so he can reimburse them when he becomes president. His pitch appeals to Yasmin de León, a government-office cleaner. Sitting with friends by a roadside in Boca de Caja, a seaside slum, she rails against men in *corbatitas* (little ties) who live in the apartment towers just metres away. She remembers Mr Martinelli's presidency as "spectacular" and hopes Mr Roux will continue his work. (Mr Martinelli is running from his jail cell to be a congressman and ▶▶

Panama's elections

Miffed, but moderate

PANAMA CITY

Voters are angry, but politicians are not offering fundamental change

PANAMA IS AMONG the luckier countries in Latin America. Drug-traffickers mostly bypass the isthmus, preferring to ship cocaine to the United States through northerly neighbours. A forest protected the country from Colombia's long-running insurgencies. Its canal provided \$1.7bn to the treasury last year, an eighth of the government's budget. Panama's citizens are the second-richest in Latin America. Thanks partly to the canal, its economy is the fastest-growing. The social safety-net is generous by regional standards and life expectancy matches that in the United States.

These boons do not exempt Panama from problems that bedevil many Latin American countries. Three dozen families

control the economy. Politics and business are prone to corruption. Odebrecht, a Brazilian construction firm that bribed politicians across Latin America, paid \$100m to suborn Panamanian officials. The "Panama papers", leaked in 2016, revealed that some of the firms housed in Panama City's gleaming office blocks are dedicated to helping people across the globe launder money and dodge taxes. Panama's schools perform poorly in international rankings. It is among the most unequal countries in Latin America, against stiff competition.

The presidential and congressional elections scheduled for May 5th are unlikely to produce radical change. That is not because voters are satisfied. At every oppor-



So many hats to throw in the ring

BISTECCA ALLA FIORENTINA MADE WITH

THE BEST
BEEF FROM

S
O
U
T
H

TECHANDSOUL.COM.BR

CHILE ARGENTINA

ATHENA
FOODS

COLOMBIA PARAGUAY URUGUAY

ABERDEEN
PARAGUAY

Frigomere

Pul

ANA PAULA
BLACK ANGUS

PLATE
ARGENTINA



ATHFOODS.COM

▶ mayor of Panama City.)

Ricardo Lombana, a lawyer who is competing as an independent, is the only leading candidate to criticise the political class. He says that his rivals from established parties cannot cure corruption because “they need to make a pact within the corrupt system to arrive in government”. Polls place him third, but he is rising.

The main candidates have similar ideas for coping with the most urgent problems. These include water scarcity, caused by climate change and leaky pipes, and a public pension fund that could run out of money

within a decade. Less acute but just as worrying is the parlous state of Panama’s institutions. Underpaid judges are swayed by bribes or political influence. The national assembly is widely seen as corrupt, in part because lawmakers are allowed to spend money with little oversight.

The most important task of the next president and congress will be to strengthen such institutions. Among the main ideas are shrinking the national assembly from 71 members, introducing congressional term limits and ending unsupervised spending by legislators. Top judges would

serve for longer terms and more junior ones would get higher pay. Such changes would require amending the constitution.

One of the few areas of dispute among candidates is how to enact such changes. The front-runners favour submitting amendments to two successive congresses and then seeking approval in a referendum. Others, including Mr Lombana, would rather convene an assembly to rewrite the constitution, which might open the door to risky changes. Institutional change of some sort is needed. Without it, voters may ditch moderation. ■

Bello The ultimate political act



What to make of the suicide of Alan García, a former president of Peru

EVERYTHING ABOUT Alan García was big: his bulky frame, his oratory, his political talents, his ambition, his sense of self-importance, his mistakes and moral flaws. In the end he took the biggest, and saddest, decision: to end his life on April 17th after police arrived at his house in Lima to jail him for alleged corruption. A proud man, subject to depression, that was a humiliation he was not prepared to suffer. He was not the first Latin American leader to take that way out. But he may have merely postponed, not averted, condemnation.

When first elected as Peru’s president in 1985, aged just 36, he fancied himself an anti-imperialist lion like Cuba’s Fidel Castro. He declared a partial default on Peru’s foreign debt and spent public money like confetti. It ended badly, in hyperinflation, slump and a failed bid to nationalise the banks. Mr García could not curb either the terrorism of the Shining Path Maoist guerrillas or the abuses of the army in repressing it.

Yet in 2006 he was back, older and wiser. He understood that the world had changed and that Peru had to be part of it. He backed a free-trade deal with the United States. The Pacific Alliance of free-trading Latin American countries was his idea. Helped by the commodity boom, he presided over roaring economic growth and built roads.

There was always a shadow behind the accomplished statesman. Critics claimed he had taken rake-offs on a contract to buy fighter jets and on a deal with Bettino Craxi, a corrupt Italian Socialist, to build an urban railway. Nothing was ever proved. In exile in the 1990s Mr García acquired a flat in an elegant part of Paris. He used his influence over congress, courts and the media to deflect awkward questions.

Then Odebrecht, a Brazilian construction firm, admitted paying bribes totalling \$29m to three Peruvian governments. A new generation of independent prosecutors went after Mr García. He insisted that he was clean. “There weren’t, and won’t be, bank accounts, bribes nor wealth,” he wrote in a final letter to his six children that constitutes his political testament.

He is the latest in a line of Latin American politicians who took their own lives. Others include two Chilean presidents, José Manuel Balmaceda and Salvador Allende; a Bolivian, Germán Busch; and Brazil’s Getúlio Vargas. Though the circumstances and their stature varied, all faced political failure.

Their action was striking, since Latin America has low (though rising) suicide rates, perhaps because the Catholic church is sternly against it. In a study of these cases, James Dunkerley, a British historian, wrote that a political culture permeated by personalism, a degree of violence and notions of heroism might be at work. “Political suicide constitutes a final terrestrial act of vindication of both per-

son and cause,” he concluded. That is how Mr García wanted it, as his letter shows: “I leave...my corpse as a display of my disdain for my adversaries.”

But he may not have the last word. Prosecutors are continuing to interrogate close aides, who did have millions in secret bank accounts. Perhaps because its parties are weaker and politicians more discredited, Peru has gone further than anywhere except Brazil in investigating the corruption spread across Latin America by construction companies. One former president, Ollanta Humala, and his wife spent nine months in “preventive detention”. Two days after Mr García’s death, a judge ordered the preventive jailing of another, Pedro Pablo Kuczynski, aged 80 and in hospital, for 36 months. A third, Alejandro Toledo, who allegedly took \$20m in bribes, is resisting extradition from the United States. (Keiko Fujimori, an opposition leader, has been in jail for six months for obstructing a probe into her party’s financing.) All the suspects deny wrongdoing.

These investigations are an overdue attempt to hold the powerful accountable. Tragic though it is, Mr García’s suicide is not a reason to halt them. But it should prompt a change of methods. Throwing people in jail without charge, trial or sentence is the practice of dictators, not democracies. (The fact that some 35,000 ordinary Peruvians are in pre-trial detention is an outrage, not a justification.) Parading former presidents in handcuffs before the media, which was to have been Mr García’s fate, violates the presumption of innocence—a crucial distinction between the rule of law and the Inquisition. In that respect only, the death of a giant political figure by his own hand should prompt a rethink by Peru’s judiciary.





GOLF RESORT
LA GRUYÈRE

SWISS PROPERTY
DEVELOPMENT

**7/7 REAL ESTATE SALES OFFICE
FROM 10 AM TO 7 PM**

ROUTE DU CHÂTEAU 3
CH 1649 PONT-LA-VILLE
SWITZERLAND

T. + 41 (0)26 413 92 92
golfresort-realestate.ch
marketing@golfresort-realestate.ch

INVEST IN A LUXURY SWISS
PROPERTY DEVELOPMENT

THAT OFFERS APARTMENTS WITH SOUTH-FACING PANORAMIC
VIEWS OVER LAKE LA GRUYÈRE AND THE PREALPS

PRICES FROM CHF 1'400'000.-

SALES TO FOREIGN NATIONALS AUTHORISED AS SECONDARY RESIDENCE



PORTADEILEONI

PIAZZA IPPOLITO NIEVO - ROME
vivi trastevere

**NEW
APARTMENTS**
with spacious
balconies

Discover a new
dimension of *living in Rome.*

+39 06 94.80.78.24 | www.portadeileoni.it

PROPERTY OF:



MANAGED BY:



ADVISOR:



EXCLUSIVE SALES & MARKETING:



A private community of just 63 beautifully designed villas
and apartments with 24-hour concierge and security
situated only moments from the heart of Rome

PHONE 44 (0) 20 7205 4813
EMAIL info@monticelloroma.it
WEB www.monticellorome.com



Live at Television Centre

Invest in a piece of history at the cultural heart of White City, W12.

New apartments, live TV studios, restaurants, hotel, gym and club by Soho House.

2 and 3 bedroom apartments from £990,000*

New show apartments launch Saturday 11 May 2019.

020 8003 1515
televisioncentre.com

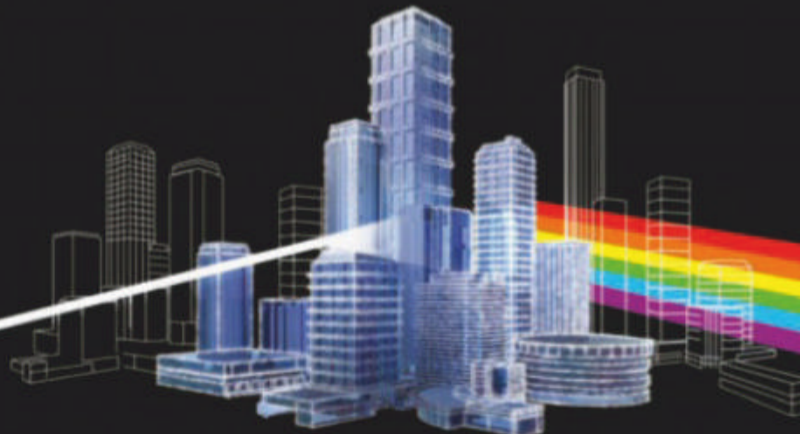


*prices correct at time of going to press

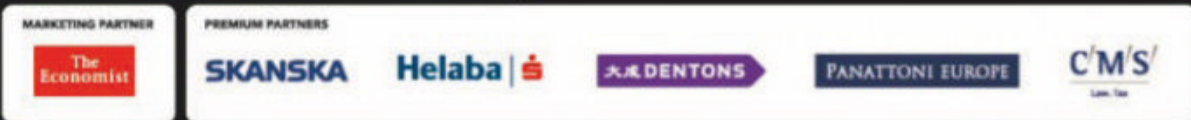


CURATED SPACE
Laura Fulmine
x
The Modern House
3-8 MAY
2019

TELEVISION CENTRE



CEEQA 2019



CEEQA.COM/2019/SHORTLIST
CEEQA Gala 15th May, Warsaw
SPECIAL GUEST: THE BOOMTOWN RATS
Bob Geldof, Garry Roberts, Pete Briquette & Simon Crowe



CEE MARKETS: CZECH REPUBLIC · ESTONIA · HUNGARY · LATVIA · LITHUANIA · POLAND · SLOVAKIA · UKRAINE

SEE MARKETS: ALBANIA · BOSNIA & HERZEGOVINA · BULGARIA · CROATIA · KOSOVO · MACEDONIA · MONTENEGRO · ROMANIA · SERBIA · SLOVENIA

CEEQA.COM



Terrorism in Sri Lanka

Bloody Sunday

COLOMBO

Islamist suicide-bombers kill more than 350 people

THE CLOCK on the bell tower at St Anthony's Shrine in Colombo, the Sri Lankan capital, is stuck at 8:45. It was at that moment on the morning of April 21st, Easter Sunday, that a bearded youth sauntered into the crowded holiday service and detonated a heavy, nail-studded bomb stuffed inside his backpack. Around the same time similar blasts struck two other churches and three luxury hotels across the country. Together the suicide bombs left 359 people dead and hundreds more injured, mostly Sri Lankan Christians but also some 39 foreign tourists. The toll would have been higher except that a seventh bomb, at another posh hotel, failed to explode.

The perpetrators were jihadists from the Tamil-speaking Muslim minority that accounts for about 10% of Sri Lanka's 23m people. Tamil Muslims have no history of animosity with the even smaller Christian minority. Instead, the animus seems to have been imported: on April 23rd Islamic State claimed to have instigated the atrocities, apparently in conjunction with a local extremist group. That would make

them the deadliest incident of international terrorism since the attacks on America on September 11th, 2001. They are also by far the bloodiest event to shake Sri Lanka since the end of a long civil war ten years ago. That conflict, which pitted Tamil-speaking Hindu separatists against the government, which is dominated by Sinhala-speaking Buddhists, left perhaps 70,000 dead.

No one expects the bombings to reignite such strife, though fears of revenge attacks against Muslims have prompted heavy security deployments, curfews and the declaration of a state of emergency. The local group the authorities hold responsi-

ble for the bombings, National Thowheed Jamaath (NTJ), is a violent splinter of a fundamentalist group that itself represents only a slim fraction of Sri Lanka's 2m Muslims. Like extremist groups elsewhere in South Asia, NTJ seems to have attracted well-educated and well-heeled adherents. Its leader, Mohamed Zahran, is among at least nine members killed by the blasts or in subsequent police raids. Police have arrested a further 60 or so suspects, which may, in effect, have extinguished NTJ.

The police, unfortunately, were not as resolute before the attacks. For several years, mainstream Muslims have raised the alarm about the spread of extremist views and jihadist cells. Mr Zahran and his hate-filled group in particular were believed to be in contact with the few dozen Sri Lankan Muslims known to have joined Islamic State. In December last year the arrest of suspected Islamist radicals led police to a coconut plantation where a large cache of detonators and explosives was found. This lead was apparently not pursued, and some of the suspects were released. In early April Indian intelligence agents passed on urgent information gleaned from a Tamil-speaking IS prisoner. This detailed "on a platter" the names of suspects, their leader's location and possible modes of attack, including suicide- or truck-bombs. The note even named the targets as "some important churches" and, possibly, the Indian High Commission.

Yet after the attacks the prime minister, ▶▶

→ Also in this section

34 Indonesia's election results

35 Medical marijuana in Thailand

35 Hounding minorities in India

36 Activism against North Korea

37 Banyan: Terry Gou, Taiwan and China

▶ Ranil Wickremesinghe, said that he had never been informed of such a warning. Moreover, a government spokesman added, the prime minister had for months not even been invited to meetings of the National Security Council (NSC), which is chaired by the president, Maithripala Sirisena. When the prime minister tried to summon the NSC after the attacks, its members refused to convene because Mr Sirisena was abroad. Mr Sirisena, for his part, swears that he was not informed of any imminent threat, either, although he is in charge of the armed forces, police and intelligence services. Privately, officials blame distracting Buddhist and Hindu holidays in mid-April. Even more privately, some whisper that the attacks may have been allowed to go ahead, so as to embarrass political rivals, though their scale may not have been anticipated.

Most insiders, however, see a cock-up rather than a conspiracy. According to one official, the intelligence apparatus was indeed on the trail of jihadist groups, including NTJ, until around 2016. This met with a lack of interest “at the top”. NSC meetings, once weekly, took place only every two or three weeks. And there was a marked focus on now-defunct groups from the civil war, rendering the meetings “pointless” in the official’s view. “Our problem was that we never went into post-conflict surveillance mode,” he says. Mr Sirisena may also mistrust Indian advice: he has accused Indian agents of plotting to kill him.

The dysfunction in government, and outright hostility between the prime minister and president, come as no surprise to Sri Lankans. The two men formed a wobbly team in 2015 with the sole purpose of defeating Mahinda Rajapaksa, the war-winning but authoritarian president, at a snap election. But relations between the blunt-mannered nationalist and the blue-blooded Mr Wickremesinghe soured quickly. Mr Sirisena’s main grouse, ironically, is that he had no idea what his government was doing until he read it in the news. Things came to a head in October when the president abruptly sacked Mr Wickremesinghe and replaced him with Mr Rajapaksa, before dissolving parliament. Mr Wickremesinghe was reinstated in December after the Supreme Court ruled the dissolution unconstitutional.

There are now growing calls for a “strong leader” and Mr Rajapaksa is proffering one—his brother, Gotabaya, who was the minister of defence at the end of the war. In an impassioned speech before parliament on April 23rd, the former president said “the people have no use for a government that cannot assure them of the safety of their lives.” With elections looming, Sri Lankans may prefer a leader who is in charge, whatever his faults, over one who merely pretends to be. ■

Indonesia’s election

Us and them

JAKARTA

The president’s re-election has exposed deepening divisions

DURING THE EVENING of April 17th, only a few hours after polling stations had closed, Prabowo Subianto, one of the two candidates in Indonesia’s presidential election, declared himself the winner. His rival, Joko Widodo, the incumbent president, who is usually known as Jokowi, was more cautious: he told his supporters to wait patiently for the final count. But as both men surely knew, despite Mr Prabowo’s bluster, Jokowi had the election in the bag.

Official results will not be announced until May, but early estimates known as “quick counts”, based on samples of actual returns, are usually accurate to within a percentage point or so. Most show that Jokowi was the clear winner, with about 55% of the vote. Mr Prabowo’s claim that he won 62% is implausible, but he insists he will press his case in the constitutional court.

The same thing happened in the previous presidential race, in 2014, which featured the same candidates. Mr Prabowo claimed to have won, even though the official results showed Jokowi to be the victor, by 53% to 47%. The constitutional court dismissed Mr Prabowo’s objections on that occasion and is likely to do so again.

Voters also elected a national parliament, as well as provincial, city and district assemblies. For now only estimates of the parliamentary results are available. They



Prabowo or bust

show that Jokowi’s party, PDI-P, remains the biggest, but did not make the gains he had hoped. The new legislature will look much like the old one, with Jokowi’s ruling coalition keeping its majority.

Jokowi seems to have improved his showing marginally by picking Ma’ruf Amin, a Muslim cleric, as his running-mate. Mr Ma’ruf is the former head of Nahdlatul Ulama (NU), a largely moderate Muslim organisation which claims 50m members. Exit polls suggest that more NU members voted for Jokowi than when he was first elected. That presumably explains how he extended his lead in East and Central Java, two populous provinces where NU has lots of members.

In most provinces, in fact, the winning candidate extended his lead, suggesting that voters are more polarised than they were in 2014. The ten provinces where Jokowi performed best are all ones he won in 2014. Among them, he increased his margin by ten percentage points on average. Likewise, seven of Mr Prabowo’s top ten provinces this time around were ones he also won in 2014. His lead in those places rose by 14 percentage points, on average.

Worse, in a country with a history of faith-based violence, these divisions appear to fall mainly along religious and ethnic lines. Jokowi gained votes in areas where most people are not Muslim, such as Papua and Bali, and in parts of Java where moderate Islam is practised. By contrast, Mr Prabowo did best in places with more doctrinaire Muslims, such as Aceh and nearby West Sumatra.

Both sides are to blame for the polarisation, says Aaron Connelly of the International Institute for Strategic Studies, a think-tank. Mr Prabowo has pandered to hardline Islamists who make people of other religions or different strains of Islam feel nervous. But even as Jokowi has made a show of piety, he has banned one hardline Islamist group and allowed prosecutors to bring charges against the leader of another, enabling the Islamists to paint themselves as persecuted.

Term-limits mean that Jokowi’s second five years in office will be his last. He has promised to continue working on the main themes of his first term by building more infrastructure and rolling out more anti-poverty measures, with a special focus on training and education. Freed from the need to watch the polls, he might try to push through more controversial reforms or even attempt to promote tolerance and pluralism.

But there are reasons to suspect that the schisms in Indonesian society will deepen. One is that the NU is well placed to demand concessions: its former head is the vice-president; its political arm increased its share of the vote in the legislative election; and the organisation was instrumental in ▶▶

Medical marijuana in Thailand

The green light

BANGKOK

Critics say the cost of the country's first legal plantation is sky high

THAILAND BECAME the first country in South-East Asia to approve the use of medical marijuana last year, and the first facility growing it opened in Pathum Thani province, north of the capital, Bangkok, in February. The Government Pharmaceutical Organisation (GPO), a state enterprise, has burned 100m baht (\$3.1m) on the place. The indoor farm covers 100 square metres and its aeroponic system bathes plants in pinkish light for up to 20 hours a day. Advanced scanners and other gadgets prevent thieves from grabbing them. The first batch of 2,500 bottles of sublingual allergy drops—each containing 5ml of the product—should appear in July.

The plantation is part of an attempt by the military government to create a national industry around medicinal marijuana. Under the new law, only official agencies and their partners can grow it. But the five-star, high-tech facility has caused some amusement and irritation in a country in which weed is available for as little as 10 baht (\$0.30) a gram on the streets. (The same quantity would cost \$10 in America.) Critics on social media have come out swinging. “Such overkill, all for show. Anyone could outgrow these non-smokers with just \$20,000,” wrote one disgruntled Facebook user.

No doubt the quality of the cosseted official product is higher than what is on offer on the streets; and tight regulations around cultivation have pushed up costs. The authorities have to keep the precious plants closely guarded because recreational use of marijuana remains illegal. Possession of 10kg or less can result in a jail sentence of up to five years. Certain kinds of drug-trafficking can incur the death penalty (though Thailand rarely carries out executions).

Many Thais take a dim view of illegal narcotics. Those in poorer parts of the country, where communities have been



The darling buds of Mae Sot

ravaged by meth from Myanmar, fondly remember the anti-drugs campaign of Thaksin Shinawatra, a populist former prime minister. Much like Rodrigo Duterte, president of the Philippines, he encouraged vigilantes to take action against suspected drug dealers. In three months in 2003 more than 2,500 people died in a spate of extra-judicial killings.

A smaller group of people hopes that the government's green light for medical marijuana might eventually lead to the legalisation of the drug for recreational use. The Bhumjaithai Party, which did well in elections in March and is likely to be part of any government formed after the results are certified in May, supports further loosening of the law on marijuana. It thinks farmers could make good cash from hash. But advocates for legalisation doubt any such relaxation of the law will occur soon. The military junta, theoretically on the verge of surrendering power, in practice seems determined to retain it. The rebirth of Thai democracy has already gone to pot.

► securing votes for Jokowi in Java. As well as extracting more money from the budget for their heartland, NU's leaders are likely to lobby Jokowi to make life difficult for more conservative Islamic groups, which largely supported Mr Prabowo and which NU sees as a threat.

Moreover, the opposition has become more willing to take to the streets. In 2016 demonstrations led by hardline Islamist groups helped bring down the governor of

Jakarta, an ally of Jokowi, and have been repeated since. Experts reckon that Mr Prabowo can now bring about 1m people to the streets of the capital with relative ease if he wants to object to a new policy. Some suspect he will try to bolster his claim to have won the election in this way.

The first big demonstrations of this sort prompted Jokowi's crackdown on extreme Islamists. The spiral of recrimination is not yet over, it seems. ■

Identity politics in India

Vote terror

KOTTAYAM

Denigrating minorities is a big part of the ruling party's re-election campaign

NARENDRA MODI, India's prime minister, likes to talk tough on terror. On the campaign trail he tirelessly projects himself as a fear-inspiring avenger. If Pakistan returns a captured fighter pilot, as recently happened following an airstrike India says hit a Pakistan-based terror camp, it is because the neighbouring state is scared of him, he says. Referring to the carnage at Easter in Sri Lanka, he claims that no such attacks have occurred in India during his five years in office. “Under Modi they cannot escape punishment,” boasted the prime minister, who often refers to himself in the third person, at a rally ahead of the third phase this week of India's seven-stage general election. His opponents, he insinuates, are soft on terror.

Yet Mr Modi is not against all terrorism, it seems. Shocking many of his own supporters, earlier this month he picked a woman accused of it as his party's candidate for the parliamentary seat representing the city of Bhopal. Pragya Singh Thakur, who is free on bail, has been charged with helping to orchestrate a bombing that killed six Muslims in 2008. A self-styled holy woman of Hinduism, the faith professed by 80% of Indians, she wears saffron-coloured robes and claims to have been cured of cancer by drinking cow urine. She likes to needle Muslims, as well as those misguided enough to try to protect them. Hemant Karkare, a storied (Hindu) police inspector whose work on the bombing first implicated Hindu extremists, happened to fall victim to a bloody jihadist assault on Mumbai in late 2008. Ms Thakur boasts that she caused his death by putting a hex on him.

It is not unusual for Indian politicians to stand for office while facing charges for serious crimes, including rape and murder. But terrorism is new. It is also the point, according to Mr Modi: the prime minister told a television interviewer that her candidacy is a symbolic rebuke to those in the opposition Congress party who dare insult Hindus by talking about “saffron terrorism”. India's murky justice system seems, in effect, to share Mr Modi's view. Despite copious evidence that Indian Muslims have repeatedly been targeted by radical Hindu groups, the conviction rate for such criminals lags puzzlingly far behind that of alleged Muslim terrorists.

For Mr Modi's core Hindu-nationalist constituency, talking tough on terror is po- ►

▶ lite code for harsh treatment of the relatively poor and scattered 14% of the population who are Muslim. In the effort to rally the Hindu majority other leaders of Mr Modi's Bharatiya Janata Party (BJP) have been more direct. The party's powerful chief strategist, Amit Shah, says India is in deadly danger of being overrun by Muslim infiltrators he has described as "termites". On the campaign trail Yogi Adityanath, the chief minister of the state of Uttar Pradesh, has gleefully proclaimed the election to be a fight between "Ali and Bajrang Bali", the former being a common Muslim name and the latter an epithet for Hanuman, the Hindu monkey god.

Taking identity politics to a higher level, Anant Kumar Hegde, a minister of state in Mr Modi's government who is running for re-election from the state of Karnataka, scoffed that if Rahul Gandhi, Congress's leader, was asking to see evidence that the airstrikes in Pakistan had been as successful as Mr Modi had claimed, then he would like to see evidence of Mr Gandhi's claimed religion and caste. "What is the proof that he is a Hindu?" he sneered. "How did a person born to a Muslim father and Christian mother become a Gandhi? A Brahmin?" (This is nonsense: although Mr Gandhi's mother is Italian, neither his father nor any other close relative is Muslim.)

As Kerala, one of India's most religiously diverse as well as peaceful states, headed to the polls on April 23rd, blasts of sectarian rhetoric reverberated from the rest of the country. The quiet hillside district of Wayanad, which has large numbers of Muslims and Christians, briefly became a focus of national attention after it was chosen as a second constituency for Mr Gandhi to contest. (The other one, in Uttar Pradesh, does not seem like a sure thing.) Mr Modi mocked Mr Gandhi for seeking "shelter where the majority is in a minority". To win the support of Kerala's Hindus, the BJP also seized on a controversy over Sabarimala temple, a hugely popular pilgrimage site, which had barred all women of menstruating age until the Supreme Court threw out the ban earlier this year. The BJP is calling on local Hindus to defy the Supreme Court.

During Easter week in Kottayam, another district where Hindus fall just short of a majority, ancient Muslim and Christian communities rub along well with their neighbours. Parishioners at St Mary's church, which is sandwiched between an 800-year-old mosque and a Shiva temple, break their Good Friday fast by sharing rice porridge and mango chutney with neighbours and strangers. Two days before the attacks in Sri Lanka and four before the election, the atmosphere was one of relief. "Different kinds of people always get along with one another in Kerala, it's how we are," says a local. "It would be good if the rest of India could do the same." ■

Activism against North Korea

Balloons v bullets

SEOUL

Campaigning against the North Korean regime is a thankless task

ONE AFTERNOON in February a man knocked on the door of the North Korean embassy in Madrid and asked to speak to the chargé d'affaires. Having been invited in, he opened the door to his nine accomplices. According to the Spanish judge investigating the incident, the group proceeded to beat, tie up and interrogate those inside. When the police came knocking hours later, alerted by neighbours who had heard the screams of a woman who had managed to escape through a window, a man who looked like a North Korean official opened the door and told them that everything was in order. Shortly afterwards, the assailants fled the scene in two cars belonging to the embassy and an Uber, carrying stolen pen drives, computers and hard drives. They escaped to Portugal, and eventually to America, where they allegedly presented their loot to the FBI.

The raid, which might have been lifted from the pages of a spy thriller, was the first direct assault on a North Korean diplomatic mission in the country's 70-year existence. It failed in what appeared to be its main aim, to convince the diplomats in the embassy to defect. It is unclear whether it did any damage to the North Korean regime. But the incident has cast a rare spotlight on the activities of the opponents of North Korea's despot.

The group which has claimed responsibility for the stunt in Madrid, a relatively

new outfit known as Cheollima Civil Defence, after a mythical winged horse, or Free Joseon, for Korea's last imperial dynasty, professes unusually ambitious plans. On March 1st, the anniversary of a Korean uprising against Japanese colonialism, it declared on its website that it had established a "provisional government," the "sole legitimate representative of the Korean people of the north".

After a Spanish court issued extradition warrants for two of the alleged participants in the raid on the embassy, Cheollima Civil Defence published another statement denying that it had used violence. America subsequently arrested one of the wanted men and raided the apartment of the other. One is a former marine, the other an activist against the North Korean regime for over a decade. Both live in America, and are of Korean descent.

Cheollima Civil Defence has accused the Spanish and American governments of siding with the North Korean regime, suggesting its members had hoped to remain anonymous and have had to go into hiding since their identities were revealed. They are certainly right to be worried. There is no open dissent against the regime within North Korea, where the reward for engaging in any semblance of political protest is the gulag or the firing squad. Even outside the country, dissidents are not necessarily safe from the North's assassins. But some remain undeterred. In the South, escapee activists have for years been engaged in a form of information warfare against the North. They launch balloons carrying anti-regime messages, South Korean soap operas and money across the border. They hope to persuade their fellow citizens to resist or flee the country.

It is a thankless task. The South's government provides some funding and pro-▶



Pamphlets by air against the pampered heir

tection for high-profile dissidents. But it also discourages their activities. Past administrations were concerned about the risk of military escalation along the border (North Korea has on occasion opened fire on balloons). The current one also worries about putting its ongoing rapprochement with the North at risk. Some element of competition with the dissidents may be at work, too. After all, the South Korean government also claims to be the legitimate representative of the North Korean people. A quiet building at the foot of Bukhansan mountain in northern Seoul houses the of-

fices of the South's governors for the five provinces that make up North Korea.

The furore in Madrid has given the dissidents a welcome boost. Park Sang-hak, a defector who represents an association of several dozen such groups, is so much in demand that he insists on being interviewed in his car, while his driver takes on Seoul's traffic at breakneck speed. "Our aim is to overthrow the Kim regime and free the North Korean people," says Mr Park, who fled North Korea nearly 20 years ago. He claims the groups he represents have up to 800 members between them. On April 14th

Mr Park's group launched 20 balloons carrying 500,000 leaflets across the border from a town north of Seoul. Earlier this month, it staged a protest outside the embassy in Madrid in solidarity with the wanted assailants.

Mr Park claims to have associates in the North, and some of his fellow activists say they would join armed resistance against the regime if a rebellion were launched from within. But for now, the most effective resistance against the North's regime may be the existence of the democratic, prosperous country in which he lives. ■

Banyan Cross-strait love and hate

Terry Gou's campaign for president encapsulates Taiwanese voters' dilemma

IF RICH BUSINESSMEN bring both strengths and liabilities to politics, then Terry Gou brings them in spades. He is Taiwan's richest man, with an estimated fortune of \$7bn, so he should have no trouble funding the campaign for president he announced last week. What is more, few people in the world could claim to have created more jobs: starting with a tiny loan from his mother, he built the biggest contract-manufacturing company in the electronics business, Foxconn, which makes iPhones for Apple, among other things. It employs close to 1m people. Given voters' frustration at the wan performance of the economy under the incumbent, Tsai Ing-wen, it is easy to see how Mr Gou might sell himself as the answer to their prayers.

But it is impossible to build such a big business without piling up liabilities, in a political sense, at least. Mr Gou has no shortage. For one thing, the jobs he has created are not in Taiwan, for the most part. And nine years ago Foxconn was hit by a spate of suicides among its workers, prompting many to ask whether it should be treating them better. In fact, Foxconn's model is the opposite of what Taiwan needs, argues Hsiao Bi-khim, an MP for the ruling Democratic Progressive Party or DPP (Mr Gou is seeking the nomination of the biggest opposition party, the Kuomintang or KMT). It has flourished by cold-shouldering Taiwanese workers, and building factories in places with lower wages instead, she points out, especially China. At the heart of Taiwan's economic problems, she contends, are stagnant incomes—a problem for which Foxconn serves more as a cautionary tale than an inspiration.

But questions about Foxconn's qualities as an employer pale next to the worries Mr Gou's candidacy prompts

about conflicts of interest. China considers Taiwan part of its territory, and asserts its right to bring about reunification by force if necessary. How on earth, many Taiwanese ask, could Mr Gou be counted on to stand up to China when so many of Foxconn's factories are on the mainland, leaving his personal fortune dependent on the goodwill of the Chinese Communist Party? "China has him by the neck," the anchor of a popular television chat show observed this week.

Then again, China has the rest of Taiwan by the neck, too. Around 1m Taiwanese, about a tenth of the labour force, work in China. Together with Hong Kong, China hoovers up about 40% of Taiwan's exports. China rewards emollient Taiwanese governments with economic fillips such as a boom in tourism from the mainland, and punishes standoffish ones by taking them away. The KMT has responded to this system by not formally renouncing the goal of reunification and by seeking to strengthen economic ties. The DPP, in contrast, stresses that Taiwan is an independent country like any other, despite the economic retri-

bution such talk brings. Voters have to choose, in essence, between economic benefits that put the country even more at China's mercy, or foreign-policy-induced austerity.

Mr Gou's candidacy simply presents a more acute version of this dilemma. Shortly after he joined the race, Ms Tsai took a swipe at him on social media for saying, in response to anti-China protests a couple of years ago, "You cannot eat democracy." Mr Gou lashed out, saying Ms Tsai had taken the quote out of context because she was either "really stupid and really naive" or "really malicious and really wilful". All he had meant, he insisted, was that democracy should be used to improve people's lives.

Mr Gou's fury at Ms Tsai's gibe suggests that he knows it would be political suicide to be seen as advocating the trade-off that China is so clearly offering, of greater prosperity at the expense of independence. Bruce Jacobs of Monash University in Australia argues that Taiwan has, in effect, a built-in DPP majority, and that KMT candidates have to find ways to broaden their appeal beyond the party's base to get elected.

Mr Gou's answer to this conundrum seems to be to present himself as a sort of ordinary-Joe-made-good. He took a break from bickering with Ms Tsai this week to push his elderly mother around a park in a wheelchair in front of the TV cameras. And he announced his candidacy at a temple dedicated to Matsu, a goddess widely revered in Taiwan and coastal China. Matsu, he said, had come to him in a dream and told him to run to help "those who are struggling". It will be hard, however, for Mr Gou to pass himself off as the salt of the earth. "It is not appropriate to politicise Matsu," an elderly devotee declares tartly.





Global infrastructure

Seeds of suspicion

SHANGHAI

Belt-and-road lending is worrisome, but not because it is malevolent

CHINESE ENGINEERS are drilling their way through the green hills of Laos, clearing a path for a railway that one day may traverse South-East Asia. Each time they complete a tunnel—at least three times in the past month—they hold a brief ceremony, waving Chinese flags for the cameras. They are celebrating not just their engineering success but also the evidence before them that the Belt and Road Initiative (BRI), China's global infrastructure-building scheme, is making progress. The full railway is a long way off. Work has barely begun in Thailand, the next link. But the section in Laos should be in use by 2021.

It will be a test of what many see as a big economic danger of the BRI: that it will saddle poor countries with unmanageable debts. China insists that its tens of billions of dollars in loans and investments are fostering global prosperity—a message that it is sure to repeat to foreign leaders attending the second Belt and Road Forum, which

was getting under way in Beijing as *The Economist* went to press (pictured is a floral display marking the event). But worries about the cost of the BRI, a project closely linked with President Xi Jinping's foreign policy, have become widespread. Malaysia, Pakistan and Sierra Leone are among a growing list of countries that have delayed or scrapped China-led projects.

There are three main concerns about the BRI's financial consequences. The most extreme is that the scheme involves what is pithily described as "debt-trap diplomacy". In this view, China is deliberately overloading weak countries with loans; when they buckle, it seizes their assets and influences their politics. This idea has featured in

→ Also in this section

39 Activists jailed in Hong Kong

40 Chaguan: China's naval dreams

speeches by some American officials, including the vice-president, Mike Pence, who see BRI as an attempt to undermine America's global influence.

Yet the investments funded by Chinese cash are not in China, so China has limited ability to grab assets when governments default. If it pushes too hard it may merely stoke antipathy. Instead, it usually responds by reducing the amount of money that debtors have to repay. Countries with longer records of lending to poor countries often do the same: the Paris Club of creditors was formed in 1956 to devise ways of reducing defaulters' debt loads. The Centre for Global Development, a think-tank in Washington, has counted more than 80 cases between 2000 and 2017 in which China provided relief to its debtors overseas.

An oft-cited example of China's supposedly predatory approach involves Hambantota, a Sri Lankan port which has flopped commercially. In 2017 Sri Lanka handed control of the port to a state-owned Chinese company on a 99-year lease. But Deborah Brautigam of Johns Hopkins University says that of more than 3,000 China-financed projects that she and others have tracked, Hambantota is the only one that is used in support of the debt-trap theory. It is the exception, not the rule.

What it lacks in malevolence, the BRI may make up in clumsiness. This is the ►►

▶ second concern: that China is lending to vulnerable states without sufficient caution. Take a group of 37 poor countries monitored by the IMF. Loans from traditional bilateral lenders, including America and Japan, have declined from 7% of the debtors' GDP to 2% over the past decade. Loans from China, by contrast, have soared from virtually nothing to 4%.

It is welcome that China is supporting hard-up nations. But its enthusiasm generates foolhardiness. David Dollar of the Brookings Institution in Washington has found that Chinese development lending appears indifferent to political and economic risks. The Centre for Global Development has identified eight countries drowning in red ink that could be further swamped by BRI projects (see chart). A report in December released by Peking University ranked 94 BRI countries based on measures such as the quality of their financial regulation and their openness to trade. Pakistan came second to last. That is awkward for China: Pakistan may receive as much as \$60bn in BRI loans, which would make it the biggest recipient of all.

There is truth to claims that BRI credit can be ruinously expensive. Consider China Eximbank's lending to Kenya for the Nairobi-Mombasa railway. Local reports say half the \$3.6bn loan was priced 3.6 percentage points above a floating market interest-rate. That is high for a poor country. It is just one of many such loans by Eximbank, which said this week that its outstanding BRI-related credit was more than 1trn yuan, or nearly \$150bn.

The BRI's success will depend on whether Chinese lenders can tighten their procedures for assessing creditworthiness while making their loans more affordable. There are some promising signs. This week's forum in Beijing is expected to stress the need for BRI debt to be sustainable. In the case of the railway in Laos, caution is already evident. The project involves \$6bn of Chinese lending, which is about one-third of the GDP of Laos. So a joint venture has been created. It draws 70% of its capital from China and 30% from Laos. To fund its portion, Laos took a \$465m loan from Eximbank. The loan was generous, according to local reports: it matures in 35 years at a 2.3% annual interest rate, well below the commercial price of such debt. Laos has five years before it has to begin making repayments. That is the kind of concession that it might have got from the World Bank. China may offer such generous terms more frequently. Last year it set up an agency to oversee its foreign aid, in part to turn the BRI into a more coordinated development programme.

But this points to another concern that will be harder for China to deal with because it relates to the very nature of the BRI: its sheer ambition. Potential benefits look

The wrong road

Belt-and-road countries identified as dangerously indebted by the Centre for Global Development
Debt as % of GDP, 2018 estimates



Sources: Centre for Global Development; World Bank; IMF; Economist Intelligence Unit

impressive. A recent study by the World Bank concluded that BRI transportation projects could lift global GDP by 3%. That is larger than the benefits that are usually shown to be generated by free-trade agreements. It could yet bear out China's notion that Westerners (save Donald Trump) just want to lower tariffs, whereas China is trying to build the roads that let trade happen.

This, though, is where the risks come in. The World Bank's rosy analysis assumes

that BRI projects are completed and work efficiently. The scale of the effort is a huge challenge, and such projects are a magnet for graft. Vast sums are being spent quickly in badly run places. The railway in Laos ought to make the landlocked country more accessible. But for it to prove effective, much more will be needed: better roads to link it to existing transport, new urban centres around the stations and freer trade with other countries.

China cannot achieve this alone, but its often overweening approach to the BRI has alienated potential partners. America, India and Japan want little to do with it. One reason is that China is, in effect, asking others not only to sign up to its infrastructure plans but also to endorse Mr Xi's worldview. It does not help that China reveals so little about its lending and that contracts go mainly to Chinese firms.

Some analysts in China have started to express unease. Economists at the Chinese Academy of Social Sciences, a think-tank, argued in a paper last year that the government must entice other countries to back BRI projects in order to share the risks. Otherwise, it could be China that finds itself trapped. Conservative estimates are that China will spend \$1trn within the next decade on its monumental scheme—about as much as it holds today in American government bonds. Mr Xi would be wise not to let such an outlay turn sour. ■



Punishing protest leaders in Hong Kong

Pro-Communist Party newspapers in Hong Kong call them the "black hands": the activists who inspired the "Umbrella Movement" of 2014 involving 79 days of sit-ins and demonstrations in busy commercial areas in support of democratic reform. On April 24th a court in Hong Kong sentenced eight of them, including four who were sent to jail. Two academics, Benny Tai (pictured) and Chan Kin-man, received the stiffest punishment: 16 months behind bars. A Baptist minister, Chu Yiu-Ming, was given the same sentence, but his term was suspended. Human-rights groups say the jailings will have a chilling effect on free speech. China would like that.

Chaguan | Why China wants a mighty navy

China throws a revealing party for the 70th anniversary of its maritime forces



AS MILITARY PAGEANTS go, multinational parades of warships deliver quite a complex message. Over a dozen countries—ranging from friends to overt rivals—sent naval vessels to the eastern Chinese city of Qingdao on April 23rd. There they steamed past a destroyer carrying China's commander-in-chief, President Xi Jinping, in honour of the 70th anniversary of the founding of the People's Liberation Army Navy.

Paint gleaming and brass fittings buffed to a hospital shine, there were frigates from near-allies such as Russia, and destroyers from almost-foes like India. Their mission was friendship and diplomacy. But these were heavily armed peace envoys, warily visiting a China whose emergence as an ocean-going nation is shaking Asia, and may one day change the world. Visitors involved in territorial disputes with China, including Japan and Vietnam, sent ships bristling with weaponry. America sent no ships at all.

China sent mixed messages, too. As the celebrations began, the visitors were hailed by Mr Xi as a sort of floating United Nations. A peace-loving China yearned to work with foreign navies to secure international sea-lanes and safeguard the ocean's riches, Mr Xi declared. On state television presenters noted that, as a mainstay of anti-piracy patrols in the Gulf of Aden since 2008, the Chinese navy had escorted more than 6,600 ships, from China and other countries, through bandit-infested waters.

Then came the bit which many Chinese viewers probably preferred: shots of their newest warships, dwarfing foreign visitors. Along came a Chinese ballistic-missile submarine—nuclear-powered and designed for destroying enemy cities, not arresting Somali pirates. It glided past the destroyer carrying Mr Xi, who boarded wearing a dark Mao suit befitting his other jobs as the Communist Party's general secretary and chairman of the Central Military Commission. "Comrades, greetings!" barked Mr Xi over a radio. "Chairman, greetings!" came the submariners' shouted reply. On state television, presenters compared China's newest destroyer, the 10,000-tonne Type 055, to the most powerful of America's. Screens filled with archive footage of jets roaring from the deck of the *Liaoning*, China's first aircraft-carrier.

On shore in the handsome, fog-shrouded port city of Qingdao, bilingual posters celebrating the naval anniversary offered varia-

tions on Mr Xi's favourite diplomatic slogans, such as: "The ocean connects us all, a community with a shared future." Others, in Chinese, hailed the navy's role as a political force, under the direct control of Mr Xi as the party's chief. A banner outside Qingdao's naval museum suggested that Mr Xi's peace of mind was the ultimate test of naval modernisation. "Obey Chairman Xi's commands. Answer to Chairman Xi. Let Chairman Xi be reassured," it read.

Cui Junkai, a 19-year-old student, had travelled from the city of Chengdu, hundreds of kilometres inland, for the fleet review. The parade-eve found Mr Cui in Qingdao's naval museum, inspecting a wooden torpedo-boat from the years when China's navy was merely a "brown-water" one, tasked with launching guerrilla attacks in muddy coastal waters. A mighty navy offers China a double benefit, Mr Cui said. "It not only defends the nation, but demonstrates our power to the outside world."

Behind the teenager, rusty patrol boats bobbed at the museum quayside, recalling the decades when China boasted a "green-water navy", capable of intimidating smaller neighbours but powerless when American battle-groups steamed by. That navy was a defensive force that aimed to ward off seaborne threats, not to project power over far horizons. In 1990 China's then-president, Jiang Zemin, urged the navy to be "the motherland's Great Wall at sea". The next Communist leader, Hu Jintao, signalled a change in 2012 when he called for China to become a "great maritime power". The navy saw its budgets soar and its fleet quality transformed. China now has the region's largest navy, with over 300 surface and underwater vessels, the Pentagon reported last year. It will have as many as 78 submarines by 2020, up from 56 in 2018, says the Pentagon.

Chinese scholars have pored over the theories of Alfred Thayer Mahan, an American navy captain and 19th-century writer on "sea power" as a source of global strength resting on three pillars: commerce, naval firepower and access to far-flung bases. Mahan was a prescient man. In a report from China's first naval base abroad, which opened in Djibouti last year, Chinese state television included a revealing on-camera prediction from the base's political commissar: that support for far-flung missions would increasingly depend on such facilities.

Change of PLAN

Such talk alarms military chiefs in America and other countries. Their anxiety in turn worries Hu Bo, a leading maritime strategist at Peking University. For as China's navy rises it has more than one goal, he says. First, to become a blue-water navy capable of providing security worldwide, which may perhaps involve opening a few more bases, for instance around the northern Indian Ocean. China's other goal is "near-sea control", Mr Hu says, meaning the capability to contain any threat in the western Pacific and northern Indian oceans—just as America and Russia currently enjoy comparative advantages close to home. That does not mean that China can or will evict all American ships from the South China Sea or other nearby waters, Mr Hu insists. In a generation's time he can imagine a more restrained America and a more confident China reaching a new balance of power in those near seas, after a period of competition. The dangerous period is the next five or ten years, he says. "China's capability is growing fast, but the United States is not ready to grant China status matching that power."

A balance must be reached, though. After millennia as an agrarian, continental power, China is a maritime nation, bound to the seas by strategic and commercial interests. Few foreigners would recognise the Chinese naval ensign today. That will change. ■

The
Economist

**SPECIAL
REPORT:**
South Africa

→ April 27th 2019

- 3 Country on the brink
- 5 The fight against corruption
- 6 Reforming the ANC
- 7 Mandela, reassessed
- 8 The struggling economy
- 9 Land reform
- 11 Improving education
- 12 An uncertain future

Saving the nation



1843



Stories of an extraordinary world

Eye-opening narratives, including style, design, culture, food and travel
Get 1843 on newsstands, at 1843magazine.com or on *The Economist* app

The
Economist



Saving the nation

Cyril Ramaphosa has brought South Africa back from the brink. But even if the president wins the general election in May, he faces a daunting task, argues John McDermott

ON A SATURDAY evening in Soweto there are few better places than Chaf Pozi. Beers are flowing, meat is grilling and patrons are dancing with a sense of rhythm and abandon that is alien to a journalist from *The Economist*. It is an exhilarating spectacle. It is also a revealing one, for it hints at progress made by South Africa in the 25 years since the end of apartheid, the brutal system of white rule formally established in 1948. At the restaurant in the Johannesburg township, patrons paying upwards of 140 rand (\$10) for a meal are mostly from the black middle class, which has grown since 1994. They mix easily with a smattering of white revellers.

The world pays less attention to South Africa than it did a generation ago. Nelson Mandela's release from prison in 1990, and his victory in the country's first democratic elections four years later, captured the global imagination. Though interest has waned, the country, which goes to the polls on May 8th, still matters. Partly this is for material reasons. South Africa is the most industrialised economy in Africa, the continent's business hub and its most influential actor on the global stage. Yet just as important is its symbolism. If it were to overcome its history of repression and racism, that would offer hope to all countries, in Africa and beyond.

And South Africa is a better place to live than in 1994. A liberal constitution protects the rights of all citizens, no matter their race. The poor have more of their basic needs met. The share of house-

holds without electricity fell from 42% in 1996 to 10% in 2016, while the fraction going hungry has plummeted. Blacks make up 50% of the country's middle class, according to recent research. This is much lower than their overall share of the population (80%) but it is a sign of uneven progress. Black South Africans now account for more sales of suburban homes than whites do.

Most South Africans believe that race relations are better today than they were in 1994. A survey published in 2016 by the Institute of Race Relations (IRR), a think-tank, found that 54% of respondents felt relations were better than a generation ago, with 22% saying they had stayed the same, and 20% believing they had worsened. According to the same study, just 5% of South Africans said "racism" was the biggest issue facing the country.

A changing society

There are other signs of tensions easing. The vast majority of parents say they do not care about the race of their children's teachers. Interracial marriage remains rare, but has risen from 1 in 303 in 1996 to 1 in 95 by 2011. Popular culture reflects some of these shifts. In "The Bachelor", a popular television show, a white South African man chooses a partner from 24 women of all races. He is not put off by the prospect of paying *lobola*, or bride price, if necessary. (What this says about gender relations is less clear.) Though racial ani- ▶

▶ mosity endures, everyday interactions in schools, universities, and the workplace, as well as the passing of generations, is slowly making things better.

That is the good news. The bad news is that most of the progress made since 1994 came before 2009. It was then that Jacob Zuma began his nine-year reign as president, during which time the thuggish kleptocrat and his cronies ransacked state-owned enterprises (SOEs), plundered local and provincial governments, and ravaged the law-enforcement institutions set up to curb such looting. The corruption of the ruling African National Congress (ANC) predated Mr Zuma, and is outlasting him, but it was the former president who took venality to stratospheric levels.

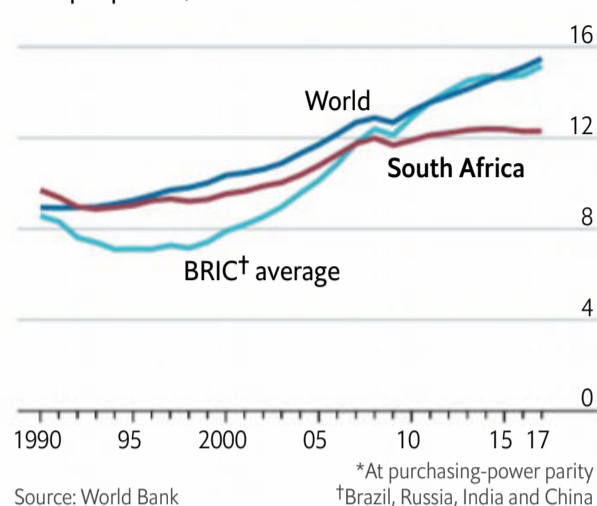
The Zuma administration also ran the economy into the ground while ramping up public spending. The ratio of debt to GDP rose from 26% in 2008-9 to 56% in 2018-19. GDP per person is lower than it was in 2013. Analysis by Standard Bank suggests that, relative to the trajectory the country was on before Mr Zuma became president, his regime lost South Africa 1.1trn rand (\$78bn) in GDP, 300bn rand in taxes, and more than 1m jobs.

The damage of the Zuma years extends beyond the economy. In a deeply unequal society with a violent past, a sense of mutual obligation is especially important. Yet, though South Africa has some of the largest mineral reserves on the planet, the commodity it needs most—trust—is in short supply.

Data seem to support this. In February the Edelman Trust barometer, an annual poll by the eponymous public relations firm,

Stalled

GDP per person, constant 2011 \$'000*



Source: World Bank

*At purchasing-power parity
†Brazil, Russia, India and China

found that just 21% of South Africans trust their government, the lowest share among the 26 countries it surveys. Research by Afrobarometer published last year found low levels of trust in institutions such as the police, which is distrusted by nearly two-thirds of the populace. A separate report in October by the same pan-African research organisation discovered that 62% of South Africans would be willing to trade democracy for an unelected leader “who could impose law and order, and deliver housing and jobs”.

Nearly half of South Africans were born after the end of apartheid—the so-called “born free” generation—and frustration with democracy is often sharpest among the young. At Chaf Pozi restaurant, plenty of that group have gripes. “There were all

these promises made to us, but not enough has been done for black people,” says Lesedi Kgasago. “In 1993 you and I would not be having a beer and discussing politics—that’s a huge change,” says Sechaba Nkitseng. “But I still wake up in a shack in Soweto with two unemployed parents.” Keneiloe Tutu explains that she graduated from college a year ago and has not found work. “There are literally no jobs.”

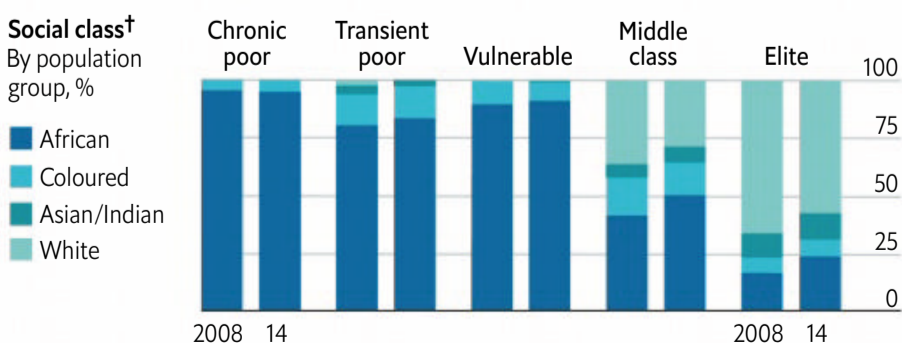
It must feel like that. South Africa has 0.8% of the world’s population and 3.2% of the unemployed. Nearly 40% of those aged 15-34 are not in work, training or education. The inability of so many people to find work exacerbates South Africa’s levels of inequality, which are among the highest in the world. The highest-earning 10% receive 55-60% of all income, while the richest 10% own 90-95% of all wealth, according to Anna Orthofer of Stellenbosch University. Research published in 2018 by Simone Schotte, Rocco Zizzamia and Murray Leibbrandt claims that the decisive factor in being middle class or not is whether someone in your household has a job. Roughly one quarter of the country has a rich world standard of living. The other three-quarters are struggling.

If unaddressed, many South Africans believe that the mix of corruption, an incompetent state, low growth, high unemployment and extreme inequality could threaten the country’s future. “If South Africa does not take the desperation of poor people seriously,” writes Frans Cronje of the IRR, “We will get to a point where a rampaging mob will march down West Street in Sandton [Johannesburg’s main business district] and set fire to the banks and the law firms...a really dangerous cocktail is developing.”

Fortunately Mr Zuma is no longer president. In February 2018, after a bruising battle within the ANC, Cyril Ramaphosa succeeded his rival. The 66-year-old had long sought the top job. As a teenager in Soweto he told his flabbergasted father that he would one day be president. And there is probably no one with as much experience in the main arenas of South African life.

In the 1980s Mr Ramaphosa led the National Union of Mine-workers. Bobby Godsell of Anglo American, a mining conglomerate, called him “the most skilled negotiator I have ever met”. These skills were tested in the 1990s, when Mr Ramaphosa became secretary-general of the ANC and led talks on the transition to democracy. In 2000 Tony Blair asked him to help oversee the disarmament process after the Good Friday agreement in Northern Ireland.

At the end of the 1990s Mandela, against his own instincts, bowed to pressure from within the ANC, and anointed Thabo Mbeki as his successor rather than Mr Ramaphosa, who went into business, one of a small number of well-connected black South Africans to benefit from the policy of “black economic empowerment”. Sold as a mass scheme, it benefited a lucky few, who got ▶▶



Sources: National statistics; “A poverty dynamics approach to social stratification: The South African case”, by Simone Schotte, Rocco Zizzamia, Murray Leibbrandt

*Share of working-age population unable to find work, or idle
†Class based on income and likelihood of remaining in that group over time

► preferential access to equity in large firms.

After making about \$450m in short order, Mr Ramaphosa returned to politics. In 2012 he was elected the ANC's deputy president, and in 2014 became deputy president of the country. Critics ask what he was doing while the country was being looted. Friends argue he was biding his time before moving against Mr Zuma's camp at the ANC's conference in 2017. They say this was typical of the man: persuasive, patient, ruthless when necessary.

Since taking over, Mr Ramaphosa has slowly begun to repair the damage done by Mr Zuma. Pollsters predict he will be returned as president in the election on May 8th. Much of the South African establishment, including many businessmen, are rooting for him. They argue that Mr Ramaphosa is the only person who can reform the country while holding its social fabric together. "He is the last hope for democracy," argues Colin Coleman, the chief executive of Goldman Sachs in sub-Saharan Africa.

Yet it would be naive to put too much hope in one person. This special report will argue that, though Mr Ramaphosa is a marked improvement on his predecessor, he faces huge challenges. If he truly wants to turn things around he needs to restore the battered institutions while embracing radical reforms to the economy and public services. This will require him to take on vested interests in his own party, and quickly. Mr Ramaphosa may be a patient man, but South Africa is running out of time. ■

Corruption

In the dark

A decade of "state capture" has done grave damage to South Africa's institutions

AT A COFFEE shop on the outskirts of Pretoria, South Africa's capital, an official from the Special Investigating Unit (SIU) walks in, checks whether he recognises anyone, sits down, and emits a long sigh. Last year he was appointed by President Ramaphosa to be one of his men inside the key criminal-justice institution, tasked with investigating serious cases of graft. What he found has shocked him. "I'm in the lion's den," he says, insisting on anonymity. "This country will take a long time to fix."

Corruption in South Africa did not suddenly spring up in the Zuma era. Under apartheid there were networks of graft among the armed forces, businessmen and the ruling National Party. After the ANC won the election in 1994 it deployed its cadres throughout national and local government as part of a web of patronage. A corrupt arms deal finalised by South Africa in 1999, for which Mr Zuma still faces more than 700 criminal charges, is only the most high-profile case of dirty business from that era.

But it was Mr Zuma's tenure that gave rise to "state capture". The term, popularised by Thuli Madonsela, the former public protector, or legal ombudsman, refers to the wholesale takeover of public institutions by associates of the former president, often facilitated by shameless international firms. Estimated costs of the plundering amount to hundreds of billions of rand. Among those accused of being the worst offenders were the Gupta brothers, three Indian-born businessmen who were Mr Zuma's patrons, and whose alliance with the former president's allies led to a popular moniker, the "Zuptas". They have denied wrongdoing.

The damage to South Africa's international reputation has been equally grave. In 1996 Transparency International, a watchdog, rated it the least corrupt country of those it investigated in Africa. To-

day it is assessed as more corrupt than poorer states such as Rwanda, Namibia and Senegal. Last year five Western embassies wrote a memorandum warning that, unless Mr Ramaphosa rooted out corruption, his efforts to attract investment would falter.

Fortunately for South Africa some of its institutions remained strong. Dogged investigative journalists from outlets such as *amaBhungane* and the *Daily Maverick* exposed scandals. So, too, did brave whistleblowers and opposition politicians, especially those from the Democratic Alliance (DA). Prosecutors such as Ms Madonsela pursued their cases with bravery and vigour. Without these, South Africa would have been in a far worse state.

Not that it is in great shape now. Few state-owned enterprises (SOEs) or public departments escaped capture. Whether it was Transnet, a state-owned transport company, or South African Airways, the "Zuptas" have been accused of trying to take it over. But the case of Eskom, which provides 95% of the country's electricity, shows how deep the rot went—and how hard it will be for the Ramaphosa government to clean up. "Eskom is our story," says William Gumede of the University of Witwatersrand.

By the time Mr Zuma became president Eskom was already struggling. In 1994 its total capacity was 36,000MW, more than that of South Korea, which had 29,000MW. In that year most black people did not have electricity in their homes, so it would have been logical to expect a surge in demand. But poor planning and mismanagement meant that by 2014, Eskom's capacity had crept up to just 44,000MW, whereas South Koreans had 85,000MW.

Worse was to follow. Of all the SOEs Eskom was particularly "ripe for looting", notes Stephan Hofstatter in his book on the utility published in 2018. It spends 140bn rand (\$10bn) per year on operating expenses, including 50bn rand on coal to fuel its power stations. That is a lot of cash for dodgy deals and kickbacks.

In perhaps the most infamous case of the state-capture era, Eskom's boss allegedly joined with senior political figures to squeeze Glencore, a commodities firm, into selling a coal mine to an investment company owned by one of Mr Zuma's sons and the Gupta brothers. To facilitate the deal Eskom reportedly agreed to buy what turned out to be poor-quality coal from the new owners at an above-market rate—and paid them upfront so that they had the money to buy Glencore's assets in the first place.

Last year Mr Ramaphosa overhauled Eskom's board. He appointed a new boss and brought back Pravin Gordhan, a former finance minister, to run the department in charge of SOEs. He then said the utility would be broken up to improve its performance.

Yet there is little sign of improvement. In the first months of 2019 South Africans have faced regular blackouts as part of a policy of "load-shedding". Eskom is also putting extra pressure on the country's strained public finances. It has roughly 420bn rand in debt, most of which is covered by state guarantees equivalent to 5% of GDP. In February, the treasury announced it would give Eskom a 69bn rand bailout so it could afford the debt payments. "Eskom is the biggest threat to the South African economy," says Anton Eberhard, chair of the president's advisory panel on the utility.

Though South Africa's SOEs remain in trouble, Mr Ramaphosa has made progress repairing the institutions designed to curb wrongdoing. In December he appointed Shamila Batohi, a respected lawyer, to head the National Prosecuting Authority (NPA). That

followed appointments of several new policemen to senior jobs in the South African Police Service. He has replaced Tom Moyane, who as head of the South African Revenue Service (SARS), allegedly tried to stop staff from making well-connected criminals pay tax. And in February the president pledged to reform the intelligence services, which Mr Zuma corrupted, ►

Estimated costs of the plundering amount to hundreds of billions of rand

▶ and announced that the SIU would “fast track” the requisition of stolen assets.

These steps are indicative of Mr Ramaphosa’s way of working. Rather than push for arrests he has adhered to due process, while incrementally trying to place sound people in charge of institutions. That is probably wise, for now. But if elected in May he will come under increasing public pressure to ensure that those guilty of state capture are prosecuted, including those in his own party.

Such pressure is growing because of another tactic of Mr Ramaphosa’s: the reliance on inquiries to expose wrongdoing. These include inquiries into SARS, the Public Investment Corporation and the NPA. But the most wide-ranging is the Judicial Commission of Inquiry into Allegations of State Capture, otherwise known as the Zondo commission, after its presiding judge, Raymond Zondo.

It has offered jaw-dropping testimony. At multiple hearings in January and March, Angelo Agrizzi, the former chief operating officer of Bosasa, a logistics company, detailed how the firm won tenders. He said it would give 75m rand every year in bribes to ANC politicians and affiliated officials. In one alleged case cash was stuffed inside a Louis Vuitton handbag and given to an ally of Mr Zuma’s. Nomvula Mokonyane, the environment minister, was said to have received Christmas hampers, help with the cost of relatives’ funerals, and cars for her daughter. When the daughter kept crashing the cars Mr Agrizzi said he would pay for driving lessons.

The Zondo commission has also helped uncover that Bosasa paid Mr Ramaphosa’s son, Andile, 2m rand for “advisory” work, and its boss gave 500,000 rand to the president’s ANC campaign. Mr Ramaphosa has told allies that there are to be no “holy cows” in dealing with corruption. That commitment may soon be tested.

Ferial Haffajee, one of the many South African journalists to have helped chronicle state capture, describes the Zondo commission as a second Truth and Reconciliation Commission, in reference to the hearings in the 1990s that shed light on abuses committed under apartheid. Today the truth is again slowly coming out. Reconciliation will take longer, not least since so much of the corruption has been the work of the ruling party. ■

The ANC

What would Nelson say?

If Cyril Ramaphosa is serious about overhauling South Africa he must start with his party

“WE ARE THE ones left after the dead,” says Thulani Cele. “We are the lucky ones.” Sitting on a plastic chair in a shelter made from corrugated iron at the Glebelands hostel in the uMlazi township on the outskirts of Durban, Mr Cele (who was too scared to give his real name) describes the past several years living in fear.

The housing estate was built during apartheid, one of many residential complexes where male workers were confined when away from their home villages. Today 15,000-20,000 people live here in squalor, often crammed a half-dozen to a room. Yet the scale of the hostel makes it a juicy source of votes at elections and of corruption the rest of the time, for whoever controls Glebelands has access to an income stream of rent and upkeep contracts.

These prizes seem to be worth killing for. Since 2014 more than 115 Glebelands residents have been murdered. Many were ANC members who objected to the ways of Robert Mzobe, an ANC councillor accused of corruption, and Bongani Hlope, a local warlord who terrorised residents. “Glebelands is a microcosm,” argues



The opposition’s mantra

Mary de Haas, a researcher into local violence. Throughout the country violence is regularly meted out by one faction of the ANC against another. From 2000 to 2017 nearly 300 political assassinations have been recorded, many of them ANC members.

The world may still think of the ANC as the organisation that led the struggle against apartheid, Nelson Mandela’s party. It still has many thoughtful and courageous politicians. But over the past 25 years it has become deeply corrupt. “The thing I hate about the ANC is the normlessness they’ve brought to the country,” says Paulus Zulu of the University of KwaZulu Natal. “The amorality.”

President Ramaphosa faces a huge task in patching up South Africa’s institutions. But the organisation in most need of reform is his own party. Without cleaning up the ANC he will struggle to enact his agenda. For much of the ANC remains opposed to Mr Ramaphosa, whether out of ideology, self-preservation or both.

The origins of the president’s fragile position lie in his victory at the ANC National Conference. Held every five years these meetings decide the leadership of the party. In December 2017 he won the presidency of the party, and so, later, the presidency of the country, by a margin of 179 out of 4,701 votes. The top six officials on the National Executive Committee, the main decision-making body, are finely balanced between the president’s camp and his enemies. At the time Mr Ramaphosa told friends that this victory would have to do—“We settle for the beachhead,” he said. Yet he still has a war on his hands with the allies of Mr Zuma.

There is not a single “Zuma faction”, but a series of overlapping groups. One is the set of hard-left ideologues who do not trust Mr Ramaphosa’s pro-business instincts. Since the ANC still pays lip-service to being a Marxist organisation, with some members addressing each other as “comrade”, it can be hard to distinguish champagne socialists from real ones. But the latter still exist.

Then there are the Zuma allies in cabinet positions deemed too powerful to dislodge. For example Bathabile Dlamini, who last year was found by the Constitutional Court to have been “reckless” and “grossly negligent” in her conduct before an inquiry into her ineptitude as the minister in charge of welfare payments. In the 2000s the party devolved more power to the nine provinces, en- ▶▶

▶ couraging the growth of local barons. Many of these, such as Supra Mahumapelo, a strongman and former premier in North West province, have patronage networks that they do not want unspun by Mr Ramaphosa. Since they control a lot of party cadres, they must be handled with care.

Increasingly regional barons have taken up positions in Luthuli House, the ANC headquarters. It is here that the party's day-to-day operations are conducted and decisions are made about party jobs. This includes who gets to become MPs.

The secretary-general of the party is Ace Magashule, another client of Mr Zuma's. From 2009 to 2018 he was premier of the Free State—one of the provincial big men. Under him the province cemented its reputation for corruption, including with a deal using 570m rand of public funds to set up a failing dairy farm, which went to a group involving his son, Mr Zuma's son and the Guptas. Mr Magashule has denied any wrongdoing.

Another former regional baron is David Mabuza, the deputy president of both the ANC and the country. Mr Mabuza was appointed by Mr Zuma as premier of Mpumalanga in 2009, shortly after he donated 400,000 rand for the former president's fourth wedding. As premier he faced many allegations of misconduct. In 2017 Mr Mabuza used his power to be the kingmaker at the ANC election. At the last moment he switched from Mr Zuma's ex-wife and preferred candidate (since he assumed she would protect him from prosecution) to Mr Ramaphosa, ensuring his victory. Many close to the president fear that his deputy wants to dislodge him.

It can be hard to distinguish champagne socialists from real ones

Mr Ramaphosa's supporters say much will change after the election. They believe a clear victory would give him a mandate, make it easier to push his policies, and encourage amoral cadres to align with his camp. Yet there is no magic share of the vote that can solve problems with his party.

There are two reasons for that. The first is that the ANC has already adopted several left-wing policies. While all the attention at the conference in 2017 was on personalities, the party also formally agreed to support a national minimum wage, expropriation of land without compensation, and the nationalisation of the central bank. Mr Ramaphosa may try to limit the negative sideeffects from these ideas, but the fact that they exist as party policy reduces his room for manoeuvre.

The second reason why a clear Ramaphosa victory will not solve his internal problems is that it will not change the occupants of the ANC's senior positions. It is possible that certain senior figures could face prosecution for their roles in state-capture scandals. But many wield a lot of power over delegates at future ANC conferences and could make life difficult for the president. Those people who want to see Mr Ramaphosa go after the worst of his party have so far been disappointed. The clearest evidence for his weakness came in March, when the ANC published its list of candidates for the election. It is a rogues' gallery, full of people fingered by state-capture inquiries. ■

Memories of Madiba

Why some South Africans are rethinking Nelson Mandela's legacy

SINCE THE 100th anniversary of his birth last year the world has been busy celebrating Nelson Mandela. In December pop stars such as Beyoncé, Jay-Z and Ed Sheeran appeared at a "Mandela 100" concert in Johannesburg. In February a museum exhibition curated by his family foundation began its global tour in London. A month earlier viewers of "Icons", a British TV show, voted Madiba, the clan name by which he is affectionately known in South Africa, as the greatest figure of the 20th century.

Yet at the same time as being feted abroad, his legacy is being rethought at home. Prompted by the persistence of inequality and economic hardship, some young South Africans are questioning whether the late president did enough to emancipate black people economically. "There's a growing sense of anti-Mandela," says Eugene Dhlamini, a 29-year-old from Soweto. "As our generation studies history we are making up our own minds about the decisions he made." Some feel Madiba made too many concessions to whites during the time of democratic transition.

It is a sentiment supported by the left-wing of the ANC and its offshoot, the

Economic Freedom Fighters (EFF). Julius Malema, the thuggish populist leader of the EFF has called Madiba a "sell-out".

Some correction to Madiba's shiny image is perhaps useful. The idea, often pushed by his family, of the man as a secular saint was apparent at events like the Johannesburg concert. It is also there in the Mandela-branded tea that visitors can buy at the gift shop on Robben Island, where he spent 18 of his 27 years in jail.

All of which may make it harder to point out, for example, that he was soft on corruption within the ANC or that many other people in the struggle have been crowded out by his deification. And there is a genuine debate to be had about the economic policies of the 1990s. It does South Africans no favours to elevate anyone to cult-like status.

Yet there is a danger of inaccurate revisionism, and of being taken in by the cynical posturing of the likes of Mr Malema. Madiba was undoubtedly a brave, moral person who was a visionary leader. To read "Long Walk to

Freedom", his autobiography, is to learn of innumerable personal sacrifices made in the name of the cause.

The notion of Madiba selling out black South Africans is also laughable. Leaving aside the self-evident success he had in winning equal democratic rights for non-white South Africans, it is worth remembering the circumstances of the negotiations over transition in the 1990s. The country was broke and in a three-year recession. Violent elements, often supported by far-right groups, were killing dozens of the ANC's own members. Some thought civil war a real possibility. Madiba not only prevented that but broadly achieved everything he sought in the negotiations (thanks in part to Mr Ramaphosa, who led the ANC team in talks with the National Party).

Plenty of young South Africans are unwilling to besmirch Madiba. "They say the negotiations were a sell-out," says 17-year-old student, Onthetile Aphane. "But it was a 'sell-out' that gave us our human rights."





The economy

Any job will do

Tragically high unemployment is a symptom of South Africa's economic malaise

AFTER LEAVING school in 2006 Delvia Mbalati spent the next 12 years looking for a job. Her search took her from her village in Limpopo, a province in the north of the country, to Johannesburg, where she spent a year studying for a qualification at a college which turned out to be a fraud. Whenever her mother scraped together funds she took other courses, but they proved useless too. Whatever work she sought the result was the same: rejection. The 32-year-old's self-esteem plummeted. Three years ago the mother-of-two began selling vegetables from her home to make ends meet. Ms Mbalati's experience is not unusual. The average secondary-school graduate does not get her first job until the age of 30. By that time most of them will be parents.

The struggle to get a job partly reflects how hard it is to search for one. Under apartheid non-whites were forcibly moved to areas far from city centres. The spatial inequality endures, making transport time-consuming and costly. On average black South Africans spend more than 100 minutes per day commuting, almost four times as much as the average American commuter. A study published in 2016 found that young unemployed people spent 560 rand (\$38) per month searching for work, an amount more than the average per-person income of their households. The barriers are not just financial. Since more than 40% of 15- to 24-year-olds grow up in houses without anyone in employment, they lack role models and contacts in the workplace.

Harambee, a social enterprise founded in 2011, is making it easier for young people to find work, and for companies to hire them. As well as paying for transport and mobile data, it acts as a finishing school, assessing jobseekers' skills, boosting their confidence and helping them look for work. Because companies trust the Harambee brand, they are more likely to give its graduates a chance. Vodacom, a telecoms firm, has even set up a call centre in the Harambee office in Johannesburg. And since October Ms Mbalati has

been working there. "When I took my first call I was shaking. I couldn't even hold my mouse," she recalls. But over time she has thrived. "I am a transformed person," she says. "I am happy with this person that I have become."

Organisations like Harambee are impressive. But the scale of the unemployment crisis is vast. Opinion polls suggest unemployment is the most important issue for South Africans, and with good reason. Only Venezuela has a higher official unemployment rate. South Africa also has a large number of people who have given up looking. The country has 38.1m people aged 15-64; just 16.5m are employed. This ratio, equating to just over two workers for every five people of working-age, is far lower than the global average, which is nearly three in five.

The history of the South African economy partly explains these horrible numbers. Though precise data are hard to find, the unemployment rate grew steadily during the last two decades of apartheid, which can be thought of as a system of feudal capitalism for blacks and coloureds and cushy socialism for whites. South Africa's isolation from the global economy alongside structural changes to mining, manufacturing and agriculture meant that growth slowed and there was less demand for unskilled labour. Since black South Africans were deliberately undereducated, and were hindered from moving to find work, the unemployment rate probably grew to about 13-15% by the time of transition.

After the ANC took power in 1994 unemployment rose further, reaching 25% by the end of Nelson Mandela's time in office. This was caused by a perfect storm of post-apartheid problems, says Abhijit Banerjee of MIT. Because non-whites could move more freely to look for work, many previously idle people, especially black women, began looking again for jobs. At the same time as this supply of unskilled labour was growing, structural changes in the economy meant that demand for it was falling.

Economic theory would suggest that the rational response would be to make it easier and cheaper to hire people. Better to have people in poorly paid jobs than no jobs at all. But the ANC, through a mix of left-wing ideology, the need to keep its allies in trade unions happy, and its experience of apartheid, went in the other direction. It legislated for a highly regulated labour market. The ANC empowered trade unions and wage-bargaining councils, while insisting that firms larger than 50 people had to hire a minimum share of non-white workers. (This is why a disproportionate share of South African businesses have 49 employees.) It pursued this while rolling out cash grants for poor parents and pensioners.

Insiders and outsiders

These policy decisions set South Africa on its path to chronically high joblessness. They also helped crimp the export-oriented, labour-intensive manufacturers that had ensured high growth and employment in other emerging markets. The result was what Mr Gordhan, the former finance minister now in charge of SOES, calls "an insider-outsider economy", where the minority with a steady formal job can live a rich-world lifestyle, and the rest suffer.

And the problem is getting worse. Over the past decade South Africa's labour force has grown by almost 4m, but the number of people in employment has increased by only 2m. Yet if economic growth had continued on its path before Mr Zuma, unemployment would have been merely awful, rather than horrific. From 1994 to 2008 Mandela and his successor, Thabo Mbeki, pursued prudent macroeconomic policies that sought to keep inflation, interest rates and public debt low.

During that time GDP growth averaged 3.6%. In the three years before 2008 it surpassed 5%, the threshold many economists set for growth that could have a serious impact on the unemployment rate. Under Mr Zuma, however, growth averaged only 1.6%, just higher than the rate of population growth. Last year the economy ►►

▶ entered recession and in total grew only 0.8%.

Certainly the former president had some unlucky timing. The global financial crisis of 2008, followed by a collapse in commodity prices, inevitably hit an open, mineral-rich economy. But South Africa has not recovered. The policies of the Zuma administration towards several of South Africa's key industries bordered on the masochistic. Tourism was undermined by daft visa regulations. Mining investment dried up as a result of proposals, encapsulated in the draft mining charter of 2017, that more equity in firms be handed over to black investors. "No gold will be produced in South Africa in ten years time," predicts a former chairman of a mining house. Manufacturing was hobbled by labour-market regulations. All these steps were done under the banner of "radical economic transformation", a hollow slogan that often served to distract from the wholesale looting by the ruling party.

While Mr Zuma was harming the private sector he was expanding the state. The number of workers in "community and social services", a proxy for civil servants, increased from 2.7m to 3.6m. The civil-service wage bill has risen by an average of more than 10% per year since 2009. On current trends spending on welfare and state workers will account for all government revenue by 2026.

High public spending and low growth has left the country in a perilous fiscal position. After running surpluses every year from 2005-6 to 2008-9, there has been a fiscal deficit every year since. Debt-interest payments will make up 13% by 2021-22, more than is spent on health or education. The ratio of public debt to GDP will reach 60% by 2023-24. The real figure is even higher once debts from SOEs are added. Because of this, two of the three major credit-rating agencies assess South African debt as "junk".

Rather than add to the competence of the state, the Zuma splurge encouraged its evisceration. In private the honest civil servants who have remained are aghast at the woeful administration. Others worry about the effects of corruption at the South African Revenue Service, and the ever greater reliance on a small group of taxpayers. Just 1% of taxpayers pay 61% of personal income tax.

High unemployment, low growth, and an indebted, corrupted state—this is Mr Ramaphosa's inheritance. Since taking office in February 2018 he has tried to strike an upbeat tone, insisting that growth and jobs are his priorities. He has brought back wise old hands such as Mr Gordhan and Tito Mboweni, the finance minister. He has travelled abroad to drum up investment, and hosted investment and jobs "summits" at home. (In private, diplomats note that it is much easier to get a meeting to talk about investment with the president than it is to talk about foreign policy.)

In February, at the annual state of the nation address, he proposed a number of sensible policies, such as easing the visa regime

to boost tourism. He outlined the aim of raising South Africa's ranking in the World Bank's "ease of doing business" list from 82 to inside the top 50.

Yet it would be wrong to expect too much. The capacity of the state has been denuded. Even if he could do what he wants to do, many believe it would be insufficient. It would take 25 years of 5% growth to bring unemployment down to internationally normal levels, reckons Mike Schussler, an economist. But official growth forecasts for the next three years are about 2%. And there is no sign that the president is willing to change the basic insider/outsider structure of the economy. A national minimum wage, which came into effect in January, will make it harder for the unskilled to find work, says Ann Bernstein of the Centre for Development and Enterprise, a think-tank. "We need policies for the labour force we have, not the highly skilled one we wished we had," she says. ■

Land reform

Rights and wrongs

A constitutional amendment will not solve any of the problems with land reform

SIGNED INTO law by Nelson Mandela in 1996, South Africa's constitution is one of the world's great liberal documents. It enshrines the basic rights of all South Africans to equality before the law, regardless of race, gender or sexuality. It insists on citizens' rights to education, health care and shelter. Mandela said that it showed, "We are at last maturing to become a normal society."

One section has, however, remained controversial. Section 25 outlines the law on land and property rights, prohibiting the "arbitrary deprivation of property", while limiting expropriation to cases in the public interest, for which landholders would receive "just and equitable" compensation. Since its founding in 2013 the Economic Freedom Fighters (EFF), a hard-left black-nationalist offshoot of the ANC, has called for this section to be ripped up. It wants Zimbabwe-style seizures, with all land passing to the ownership of the state. Though this policy would be the fast-track to economic ruin it has proved attractive to some frustrated voters.

The ANC long opposed changes to Section 25. But last year, fearing that the EFF was eroding its base of black voters, and keen to make life difficult for Mr Ramaphosa, the left wing of the party persuaded it to support "expropriation without compensation". The government is now committed to amending the constitution.

Though Mr Ramaphosa vows that any change will not hurt the economy, many people are worried. Opponents say it is just one of more than two dozen initiatives launched since 2007 that jeopardise property rights. A further assault, they say, would undermine a fragile environment for investment.

Any discussion of land in South Africa must reckon with the unequal legacy of white rule. It must also recognise that since 1994 the ANC's approach to land has involved administrative incompetence and widespread corruption. That has meant the poorest, landless South Africans continue to suffer.

There were wars of conquest in southern Africa before Dutch settlers arrived in 1652. But white rule changed the nature of conflicts over land. Superior weaponry meant the taking of land was a one-way occurrence. And whites legislated for, and codified, dispossession in a way that was also new. In 1913 the Natives Land Act reserved 90% of the country for whites, who then made up 21% of ▶

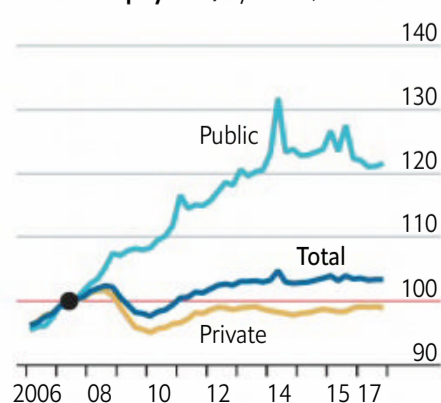
Bloated South Africa

Gross loan debt*, % of GDP



Sources: National statistics; UASA

Non-farm payrolls, by sector, 2007=100



*Financial years †Estimate



No sign of compromise

▶ the population. Under the formalised racism of apartheid 3.5m blacks were forcibly moved to isolated reservations called “homelands”. These were often far from places of work, so men would have to travel and stay in single-sex hostels (like Glebelands). Thus apartheid not only deprived black South Africans of the ability to own property, but also broke up family units. Today much of the most concentrated poverty is in the former homelands.

Mr Ramaphosa calls the displacement of black people South Africa’s “original sin”. When the ANC took office in 1994 it pledged to tackle historic injustices. It promised restitution to those removed from their land after 1913, funding for the broader redistribution of land from whites to blacks, and strengthening of property rights for the black majority. It set itself the target of transferring 30% of white land to black ownership by 2014.

Today more land is under black ownership. Although there is no comprehensive audit of land based on the race of owners, a paper by Wandile Sihlobo and Tinashe Kapuya estimates that 17.4m hectares (43m acres) have been transferred from white ownership since 1994, equivalent to 21% of freehold farmland. This includes land bought by the state or by individuals on the open market. “Land reform, with the assistance of the market, has, therefore, moved us closer to the 30% target than what is commonly believed,” the authors conclude.

That more has not been achieved is primarily the failure of the ANC. More than 90% of land bought and redistributed by the state lies fallow, much of it turned over to subsistence farming or squatter camps. Commercial farming is a complex, capital-intensive business. But few black farmers were given the skills or capital to help them pursue such projects. The government spends more money each year on security for VIPs than on land redistribution.

Progress in the area of land restitution—compensation for those known to have been dispossessed—has been similarly slow. Nelson Mandela’s government said that all claims would have to be submitted by 1998. But the complexity of the cases soon overwhelmed the bureaucracy. Rather than fund the process properly

the ANC let the cases pile up. Then in 2009 there was a “catastrophic shift”, says Glenn Farred of AFRA, an NGO that campaigns on behalf of the landless. After Mr Zuma became president he allowed new claims to be filed, and prioritised the often dubious cases of powerful tribal authorities.

And yet this is not even the biggest failure of land policy. Under apartheid most black citizens had no land titles, which meant they had no ability to borrow against their property or to sell land for market value. The ANC promised that it would secure tenure for the landless. But, as William Beinart, Peter Delius and Michelle Hay argue in their book, “Rights to Land”, most people’s property rights are “probably weaker and more uncertain” than in 1994.

Most people’s property rights are “probably weaker and more uncertain” than in 1994

These include the 60% of landowners who have “off-register” titles, where their property is not part of a formal register. Then there are the roughly 20m South Africans in the former homelands, who have next to no property rights. In theory the land is owned “communally”. In practice it belongs to local leaders. And, says Aninka Claassens of the University of Cape Town, since those leaders are useful for getting out the vote, and for providing kickbacks, the ANC has joined with them in “extraordinary levels of corruption”.

At best the desire for land reform is an understandable reflection of the enduring inequalities caused by white rule. At worst it is a cynical tool that risks hurting the economy and thus the poorest citizens. Either way it threatens to undermine confidence in Mr Ramaphosa’s economic policies. Like any politician, the president has to take into account the dynamics of his party. But a truly reformist president would not just meekly accept a needless change to the constitution. He would properly fund land reforms. And he would insist that the millions of people left landless by apartheid and the ANC finally get title to their own piece of earth. ■

Education

School's out

A lousy school system wastes the potential of South Africa's younger generation

WHEN YOUR correspondent arrives at Hlabizulu primary school, near the town of Willowvale in the Eastern Cape, there is the familiar sound of children playing, but it is not break time. The pupils have been left to their own devices. In one classroom they have been padlocked inside. "What can we do?" asks one of the staff. "They're locked in because they have no teachers." Just three of the seven teaching staff have turned up for work.

Locking up children may be unusual but a similar lack of learning occurs on a daily basis in South African schools. For even when teachers show up they often do not teach pupils anything. "There is very little education taking place here," sighs Mkhusele Ngcube of Public School Partnerships, an NGO trying to change that.

Education both reflects and entrenches the inequalities in South African society. The top 200 high schools in the country produce more distinction marks in maths and science exams than the other 6,476 high schools put together. Meanwhile in 47% of high schools not a single pupil meets a commonly accepted international standard for maths. The equivalent figure in Botswana is just 2%. These schools could be called "cognitive wastelands", says Nic Spaull of Stellenbosch University.

Apartheid still casts a shadow over education. Non-whites were deliberately given poor schooling, lest they get uppity or, worse, skilled. In 1994 per-pupil spending was 1.5 to 5 times higher for white pupils, depending on the location of the school. Hendrik Verwoerd, the architect of apartheid, said blacks should be educated enough only to be "hewers of wood and drawers of water".

The legacy of this racism is starkly apparent in the villages around Willowvale. Most pupils' parents have left to seek work in nearby cities such as East London. They leave their children with grandparents, most of whom are illiterate.

After 1994 the ANC opted for a compromise on education policy. Formerly white-only schools would have to accept children from all races, but they could still charge fees. In theory they cannot exclude any pupil for being too poor, but in practice, poor children do not live near these schools, and the costs of transport, uniforms, sports and trips make them prohibitively expensive.

As in other areas of South African life the effect of post-apartheid policy has been to replace a system directly based on race with one based on wealth (and thus, still indirectly racially skewed). More than 180 of the top 200 schools took only white pupils under apartheid. Today non-whites make up 60% of the pupils across all fee-charging schools, but they are overwhelmingly from the country's elites.

Since 1994 there has been some progress. There is no basis to the notion that education is worse than under apartheid, notes Mr Spaull. Piecing together evidence from various test data, he reckons children today are roughly two years ahead of where they would have been before 1994. Yet in re-

cent years progress is "stalling", he says. South Africa ranks bottom or near-bottom when countries are ranked by their pupils' scores in comparable international tests. Nearly 80% of children in grade four (9- or 10-year-olds) cannot read and understand sentences in any language; 61% of pupils a year older cannot add or subtract whole numbers.

Small wonder then that, of the 100 pupils who begin a school year, just 50-60 can be expected to take the end-of-school "matriculation" exam, with 40-50 passing, and only six going on to complete university. All of this has a big impact on a labour market that offers a premium for skilled labour. The jobless rate for people with a high-school certificate (28%) is more than quadruple that for university graduates.

The quality of teaching is a major obstacle to better education. Nearly four in five maths teachers cannot do the sums expected of their 12- or 13-year-old pupils. Many of these teachers were themselves educated under apartheid. Nevertheless the lack of accountability for poor performance has been the responsibility of ANC governments. It is all but impossible to fire a teacher in South Africa. Even when school leaders are suspected of sexual harassment of pupils they are more likely to be moved to a different school than prosecuted.

The problems of South African schools are not for a lack of money. Public spending on education is more than 6% of GDP, a higher share than the average in the OECD club of mostly rich countries. Spending is also higher than in other African countries with better results, such as Kenya. The tolerance of failure, as well as the relatively lavish spending on salaries, is largely a result of the power of teaching unions. The South African Democratic Teachers Union (SADTU) is one of the largest unions in the Congress of South African Trade Unions, the federation that forms part of the "tripartite alliance" with the ANC, along with the South African Communist Party. SADTU's political influence means it can get away with stunning levels of mediocrity and corruption.

Its shamefulness was outlined in a report for the government in 2016. Written by John Volmink, it documented widespread fraud and corruption in the school system, such as the sale of jobs for cash or cows. It also found that SADTU was in "de facto control" of the education departments in six of the nine provinces in the country, concluding that "it is not improbable to say that schooling throughout South Africa is run by SADTU".

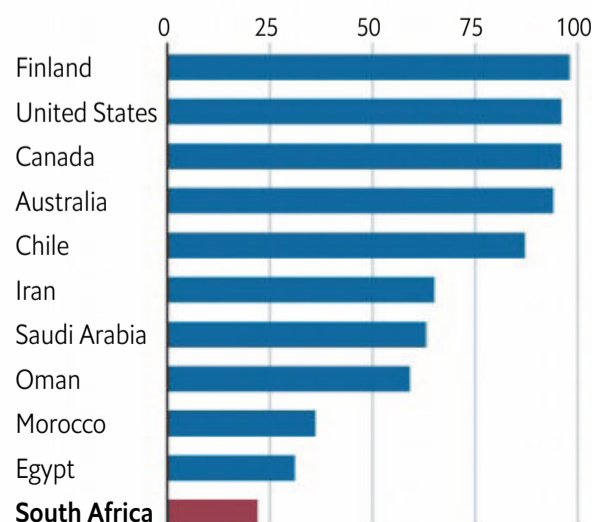
Those who can afford to extricate their children from this mess are doing so. Low-cost private schools are increasingly popular.

Parents are showing similar preferences for the private over the public as they do in other sectors. In 1997 the number of private security guards and policemen was the same. Today there are three times more private guards than police. No one who can afford private health care relies on the public system.

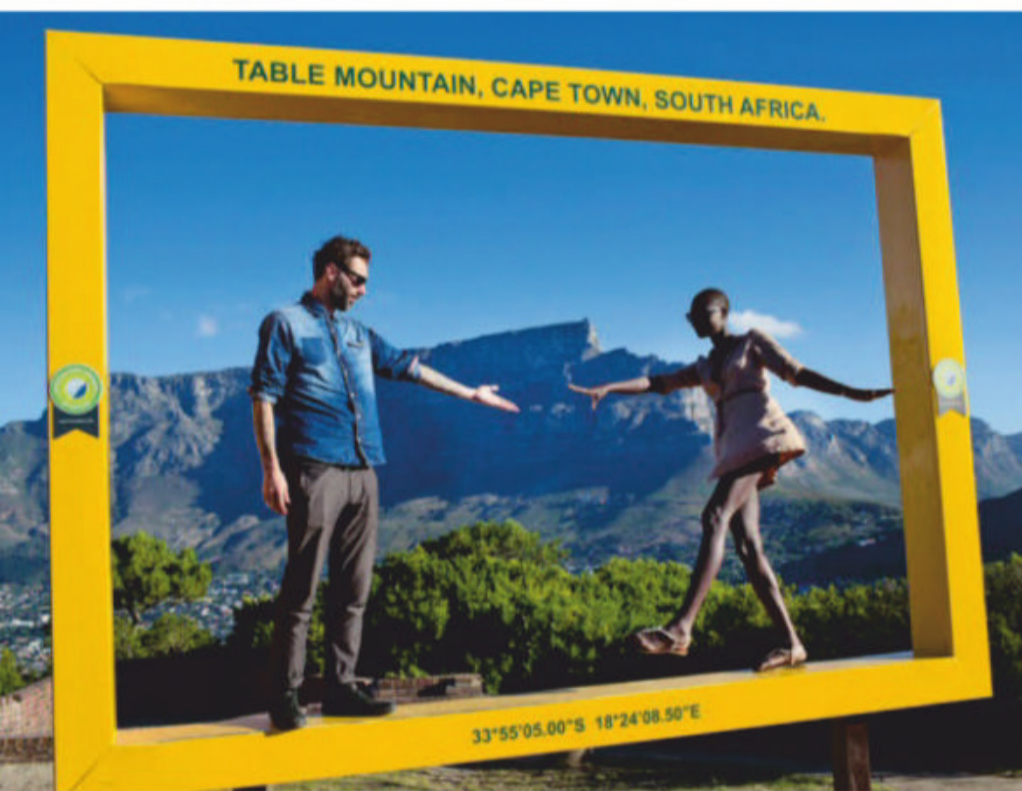
Yet, given the state of the South African economy, there is a limit to the number of people who can afford to go private. The future of the poorest pupils depends on government policy. Mr Ramaphosa has made some promising suggestions, for example saying that he will embrace an intensive evidence-based reading programme championed by Mr Spaull. That would be a great start. But ultimately a better education system requires the president to take on the unions. Only then will teachers spend more time teaching children than looking out for their own interests. ■

Must try harder

Students reaching low international benchmark in reading, 2016, selected countries, %



Source: Progress in International Reading Literacy Study



The future

Balancing act

Assuming the president wins the election on May 8th, what happens next?

ACROSS SOUTHERN Africa self-styled liberation parties have proved adept at clinging on to power. Angola, Botswana, Mozambique, Namibia and Zimbabwe are all still run by the parties that took office after the end of white rule. The ANC, which came to power last among its peers, has also proved stubbornly enduring.

Despite presiding over a lost decade, opinion polls suggest that it will retain power at the elections on May 8th. The average support for the party in the eight publicly available opinion polls published since Cyril Ramaphosa became president is 56.4%. That would be a drop from its performance in the 2014 national elections (62%), but re-election nevertheless.

There are several reasons for the party's resilience. The ANC can point to its (patchy) delivery of basic services and social grants, which it alleges would be threatened if it were voted out. Though it will lose votes in townships to the hard-left Economic Freedom Fighters, its role in the struggle counts for a lot among black voters, especially older ones. This emotional pull is combined with a perceived lack of alternatives.

The main opposition party, the Democratic Alliance (DA), has done progressively better at national elections since its founding in 2000, winning 22% in 2014. A strong showing at the 2016 local elections (27%) suggested that it was poised to challenge the ANC. But while it retains the loyalty of most white and "coloured" voters, especially in its stronghold in the Western Cape, it needs to win over more black voters, a task made harder since the departure of the singularly unpopular Mr Zuma. Since 2015 it has had a black leader, Mmusi Maimane, but it remains divided between its mostly white, mostly liberal members, and its newer recruits from the black middle class, who are seen to want a more active state.

If the ANC wins in May, then what? Recently there have been some pessimistic predictions made about the future of South Afri-

ca. In "How Long Will South Africa Survive?", published in 2017, R.W. Johnson, who wrote a book of the same title in 1977 predicting the end of apartheid, forecast that the country would soon face "regime change" as a result of the "complete fecklessness" of ANC rule. The elevation of Mr Ramaphosa seems to have changed little; last year Mr Johnson wrote that: "It feels as if the country is beginning to unravel, that it is slipping towards ungovernability."

It is not hard to find other examples of reasoned apocalypticism. Some think it inevitable that South Africa will eventually need to go cap in hand to the International Monetary Fund. Others worry that corruption and economic conditions will lead to a scenario reminiscent of the Arab spring protests throughout 2011.

On the other hand there are the optimists imbued with a sense of "Ramaphoria". Once he gets a "mandate" (60% of the vote is often mooted), they argue, South Africa will be back on track. The president will clean up his party, bring discipline to the SOEs, entice enough foreign investment so that the economy will grow by at least 5% per year and all will be well.

Yet it might be the case that South Africa avoids the worst while improving only slowly. (Jan Smuts, the country's prime minister during the second world war, once said that in South Africa, "the best never happens, and the worst never happens", though it is not clear whether he asked black South Africans whether they agreed.) In his first year Mr Ramaphosa has made uneven progress cleaning up South Africa's institutions, within the limits set by his own caution and his party's dynamics. That pattern of stuttering, incremental repair work is the surest guide to the next five years.

It is also possible that, even if he does a competent job, he may be the last ANC president to enjoy a majority. For, though the party should hang on this time around, it seems unable to add to its existing core of voters, which have hovered around 11m for the past four national elections. Since the adult population has ticked up over that time, the party's share of registered voters has progressively slipped. In the four national elections since 1999 it took 58%, 53%, 50% and then 45% of the share of those signed up to vote. Because only about 70% of registered voters actually go to the polling booths, it will survive for now. But the pattern is one of decline.

That would not be a bad thing. Despite the ANC's official history, the struggle against apartheid was fought by more than a single party. South Africa has a vibrant democracy with resilient institutions such as its judiciary, press and civil society, all of which protected the country during the Zuma era. In the DA it has an opposition that has been consistent in holding the ANC to account.

This special report has sought to show that South Africa faces profound challenges, whether related to corruption, the economy or public services. So long as the ANC is in power Mr Ramaphosa is the best person to address them. Yet it is not healthy for a democracy when a ruling party sees itself as indispensable, or when voters see a single person as the only hope for the country, as some South Africans say of the president. Democracy means real choices. And in the future, South Africa could do with more of them. ■

ACKNOWLEDGMENTS A list of acknowledgments and sources is included in the online version of this special report

OFFER TO READERS Reprints of this special report are available, with a minimum order of five copies. For academic institutions the minimum order is 50 and for companies 100. We also offer a customisation service. To order, contact Foster Printing Service: Tel: +1 866 879 9144; email: economist@fosterprinting.com

For information on reusing the articles featured in this special report, or for copyright queries, contact The Economist Rights and Syndication Department: Tel: +44 (0)20 7576 8000; email: rights@economist.com; Online: Economist.com/rights/reprints+and+permissions.html

MORE SPECIAL REPORTS Previous special reports, and a list of forthcoming ones, can be found at: Economist.com/specialreports



→ Also in this section

42 A deadly delicacy in Egypt

43 Masses v military in Sudan

Egypt's economy

Running to stand still

CAIRO

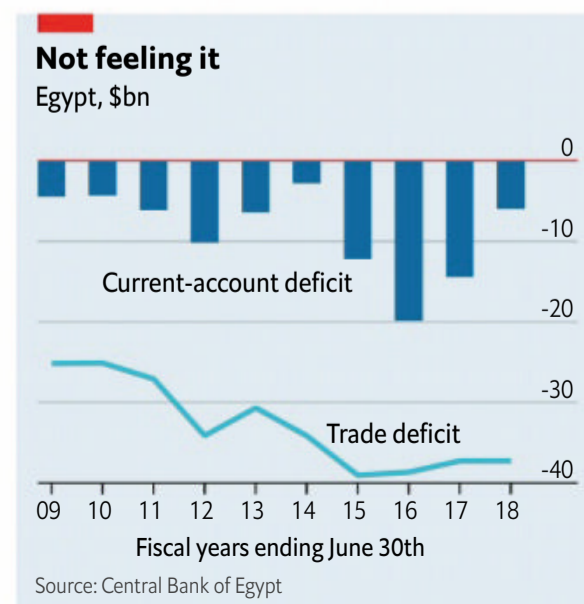
The government's reforms cleaned up a fiscal mess. Investors are thrilled, but Egyptians are still struggling

THE INVESTORS gathered at a posh Cairo restaurant were eager to pour money into an economy that, just three years ago, lacked the hard currency to import cooking oil. A revolution in 2011 (and a coup two years later) tipped Egypt into economic crisis. Investors and tourists fled. Growth was anaemic. Unemployment peaked at 13.2%. President Abdel-Fattah al-Sisi had to seek a \$12bn loan from the IMF in 2016.

Since then, though, his government has followed what one executive admiringly calls "almost a caricature" of an IMF programme. The state has raised electricity and fuel prices. This summer the (previously massively subsidised) official price of many types of petrol will be indexed to market rates. Quite a few people have been trimmed from subsidy rolls. A budget deficit that hit 12.5% of GDP in 2015-16 has fallen. Next year it is expected to be a manageable 7.5%. The current-account deficit, which bottomed out at \$19.8bn three years ago, was \$6bn last year (see chart). Investors call Egypt the world's hottest emerging market. Bond sales are oversubscribed.

Despite the positive indicators, few

Egyptians feel progress. The past few years have brought higher prices and stagnant wages. Mr Sisi has shown little sympathy for their distress. He dismissed complaints over a surge in the price of vegetables last year—then criticised Egyptians for being overweight. A new hint of discontent came earlier this month, when 89% of voters approved constitutional changes that let Mr



Sisi stay in power until 2030, instead of 2022 under the previous charter. The result was a foregone conclusion, since his autocratic regime did not permit a "no" campaign. But turnout was just 44%. Sympathetic businessmen had to lure voters to the polls with boxes of food.

For all the hot money flooding in, bricks-and-mortar investment is scarce. "I'm comfortable buying one-year paper," says a trader from a big American firm. "Buying a factory would be a different story." Inflows of foreign direct investment (FDI) were \$6.6bn in the first half of the current fiscal year, unchanged from the previous year and 11% lower than 2016-17. Net FDI is down 35% over that two-year period. Much of it goes to hydrocarbons. Recent natural-gas discoveries have turned Egypt into a net exporter. Such investment boosts revenue, but creates few jobs.

Officials insist that FDI is coming—that it is always a lagging indicator. Trade tensions and uncertain growth forecasts have caused investment to fall around the world. Some firms had profits stuck in Egypt during the dollar shortages and are leery about coming back. "It takes time to rebuild that confidence," says Razan Nasser of HSBC, a bank. Though Egypt will not seek an extension when the IMF scheme ends in November, most analysts think it will stick with its reforms.

But sluggish investment also reflects the weakness of Egypt's domestic market. Its size—almost 100m people, with 2.5m added annually—means it will always have ▶▶

▶ robust demand for basic consumer goods. Last year both Coca-Cola and Pepsi announced \$500m in investments. Mars, a confectionery giant, is opening two new production lines. Few Egyptians can afford products that would create better-paying jobs, however. “It’s a classic developing market where 20% of the population has 80% of the purchasing power,” says the head of a local business federation.

Take the car industry, which officials hope will be an engine of growth. Sales slumped after a devaluation in 2016 which halved the value of the pound. Even in a good year, though, only about 100,000 Egyptians can afford new cars. (Wealthy Saudi Arabia has one-quarter of Egypt’s population and sells about half a million.)

Instead of selling cars at home, Egypt wants to export them to other parts of Africa and the Middle East. The government plans to offer incentives for using domestic suppliers: firms that buy lots of locally made components could have 80% shaved off their customs bills. Nissan has agreed to produce 100,000 cars in Egypt each year with El Nasr Automotive, a state-run firm. But Egypt will have to compete with Morocco, which has invested heavily in infrastructure. Textile firms, another possible source of jobs, will struggle to undercut big players in Bangladesh and Vietnam.

The improvement in Egypt’s current account comes entirely from travel and transfers. Tourism revenues more than doubled to \$9.8bn (4% of GDP) last year, while remittances grew by a fifth to \$26.4bn. Both are important. Tourism employs one in ten workers. Hundreds of thousands of families rely on transfers. But the trade deficit in goods is getting wider. It hit \$9.8bn in the first quarter of 2018-19, up \$1bn from the previous year. Though the devaluation made Egyptian goods cheaper to export, it also made them more expensive to produce, because manufacturers depend on imports. Raw and intermediate goods make up 41% of Egypt’s import basket.

After years of weak investment, there is little idle capacity at Egyptian factories. High interest rates mean local businesses cannot afford to borrow for expansion. In February the central bank cut the overnight lending rate by 100 basis points, to 16.75%. In March, however, the bank defied expectations and kept rates steady. The Ramadan holiday and a looming subsidy cut will bring higher inflation this summer, so further cuts are unlikely until autumn.

There is one final obstacle to growth: the institution where Mr Sisi spent most of his life. It is hard to quantify how much of Egypt’s economy is controlled by the army. Its budget is secret, its profits untaxed. But everyone agrees it is growing. The minister of military production, Muhammad al-Assar, said his revenues hit 11.6bn pounds last year, a 130% increase. It has a \$2bn deal

The scent of spring

Fish in a barrel

CAIRO

Egyptians celebrate spring with a potentially deadly delicacy

IN A CONCRETE jungle of 23m people, the signs of spring are subtle. A strong breeze lofts off the Nile; policemen doff their black winter uniforms for summer white. And in Abdeen, a historic bit of downtown Cairo, the sour scent of fermented fish draws crowds of shoppers. The Shaheen family has spent more than a century selling *feseekh*, grey mullet dried in the sun and submerged in salt water for 45 days. It is a unique holiday delicacy that crosses borders, amiably divides families—and kills people.

Most of Egypt’s festivals come from its main religions, Islam and Christianity, or the rituals of the modern republic founded in 1952. The exception is Sham an-Nessim, an indigenous celebration that long predates the rest. Ancient Egyptians made offerings to the gods before the Nile flooded in springtime. After Christianity took root, the church embraced the tradition. Two millennia later it is still celebrated on the day after Easter (this year, April 29th) by Christians and Muslims alike. It is a chance to savour Egypt’s fleeting spring.

Feseekh’s appeal is more of a mystery.



Smells like hell, tastes divine

The taste is pungent, but traditional side dishes—lemons, spring onions, pockets of *baladi* bread—soften the blow. Harder to mask is the sour smell, which crosses rooms and seeps out of plastic wrappers. It is variously compared to rotten eggs, mouldy cheese and garbage. Many restaurants do not serve it lest the odour linger like an unwanted houseguest.

No one knows quite why smelly fish became a symbol of spring. The Nile was once an abundant source of seafood. One theory holds that grey mullet simply washed up on the banks as water levels rose. Today the Nile is too polluted and overfished to yield a big catch, so *feseekh* are farmed or caught in the Mediterranean and Red Sea. The process of making it has not changed, though. “The salt is the key,” says Shady Shaheen. Not enough and the fish rot in the barrel; too much and the taste is ruined. The result looks ordinary until you slice it open with a fork, revealing a gooey mess. A kilo fetches up to 200 pounds (\$12), a day’s wage for an average worker.

Egypt has cycled through five rulers in the past decade, but all have agreed on one thing: their citizens should not eat *feseekh*, which can cause botulism if not prepared properly. The health ministry publishes annual statistics on fishy fatalities. The worst year was 1991, when *feseekh* felled 18 people. Two died in both 2009 and 2010. Dozens fall ill each year.

No wonder some Egyptians hate the stuff. For many, though, spring would not be spring without *feseekh*. In countries with lots of Egyptian migrants, restaurants serve it to nostalgic expats. Chefs dream up ways to make it more palatable. One supermarket turns it into a salad. Like big cities everywhere, Cairo has gone through a cake craze. A few bakers have concocted special desserts for Sham an-Nessim—among them a cheesecake that mixes cream, crudités and salted fish. That innovation may be too much, even for *feseekh* fanatics.

with a Chinese firm to manufacture solar panels and an agreement with a French pharmaceutical giant to make vaccines. When firms struggled to get hold of dollars, the army offered them a deal—all the foreign currency you need, in exchange for a share of your company. Several executives tell a version of the same joke: “There are two kinds of successful businesses in Egypt, those run by the military, and those

that will soon be run by the military.”

Officials like to contrast Egypt’s recent progress with the dark days after 2011. Take a slightly longer view, though, and it looks like a reversion to the norm. Before the revolution Egypt posted healthy growth rates and manageable deficits. It was also a poor country with a weak industrial base, low wages—and a president out of touch with the struggles of his people. ■

Sudan

The struggle continues

KHARTOUM

An inspiring but leaderless revolution tries to take power from Sudan's generals

TO WALK AMONG the protesters in Khartoum, Sudan's capital, is to be caught up in an intoxicating scene. Students, cheeks painted with Sudanese flags, march past, singing revolutionary songs. As their noise subsides so others rise: the rhymes of passing street poets, the speeches of firebrands atop makeshift stages. All around friends grab each other for selfies, recording for history (and Facebook) their role in ending three decades of dictatorship. They may call it a sit-in, but here nothing is still.

It was the protesters' sustained energy over several months that led to the ousting of Omar al-Bashir, Sudan's president since 1989, on April 11th. The next day they forced his successor, Awad Ibn Auf, to step down as well. Today the street is calling for the "third fall", that of the ten-member Transitional Military Council (TMC), which is in charge of the country. "We have to keep applying the pressure," says Abuzar Awad, a 31-year-old engineer. "Otherwise the military won't give us our rights."

The military says it is willing to share power with a transitional government for an interim period, as a presidential election is prepared. But there is little doubt that it wants to maintain a hold on the country. For that reason the Sudanese Professionals Association (SPA), a coalition of trade unions that spearheads the protests, suspended talks with the TMC on April 21st. "We want the military to protect the country, not rule the country," said Ismail Eltag, a lawyer and spokesman for the SPA.

The talks resumed on April 24th. A spokesman for the TMC said the two sides had reached an "agreement on most demands" and that, in a show of good faith, it would dismiss three generals who were close to Mr Bashir. A joint committee has been formed to try to bring order to the negotiations. But much was left vague, including whether any transitional government would answer to the generals.

Unhelpfully, there is something of a political vacuum on the civilian side. The SPA has no single leader and has struggled to agree on who should be part of any new government. Meanwhile, other political groupings under the opposition umbrella group, the Alliance of Freedom and Change, are jostling for position. "Unless there is a clear plan the military will take over again," warns Osman Mirghani, a newspaper editor.

Lieutenant-General Abdel Fattah Abdel-

rahman Burhan, the head of the TMC, and Muhammad Hamdan Dagalo, the deputy head who goes by the nickname Hemedti, say the right things, but seem reluctant to cede authority. Hemedti, a militia commander whom many believe to be the most powerful member of the TMC, is "playing a game", says a Western diplomat, by suggesting to the demonstrators that he is on their side, while hoping to take the top job.

The junta has much to lose. An estimated 65%-70% of state spending goes on security, compared with just 5% for public health and education. Families connected to the military and security services run the businesses that dominate the Sudanese economy. Corruption is rife.

Helping or hurting?

Neighbouring powers are helping the TMC cling on. On April 21st Saudi Arabia and the United Arab Emirates (UAE) gave Sudan \$3bn worth of aid, including \$500m in cash deposited at the central bank—a lifeline in an inflationary economy short of hard currency. At a meeting in Cairo on April 23rd, members of the African Union, chaired this year by Abdel Fattah al-Sisi, Egypt's president (who himself took power in a coup), extended the bloc's deadline for the TMC to give up power by three months.

Egypt, Saudi Arabia and the UAE see opportunities in Sudan's upheaval. Mr Bashir's National Congress Party grew out of the Muslim Brotherhood, an Islamist

group that is loathed by the three countries. They now spy a chance to tear Sudan away from the Islamists of Turkey and Qatar, their regional rivals. The trio also wants to stamp out any hope of a new Arab spring. Egypt, Saudi Arabia and the UAE are being "unhelpful", says another diplomat.

The "troika" of America, Britain and Norway is urging negotiations between the military and the protesters. It is also suggesting that the SPA reconsider some of its demands, such as having a civilian-led transitional government for four years (to allow the political scene to mature).

The TMC may think it can buy time and grind down the protesters. But at the sit-in there is no sign of flagging spirits. If anything, the movement is growing. When a train from Atbara, more than 200 miles north, arrived in Khartoum on April 23rd, thousands of protesters greeted it. The carriages were as packed as those of a Tokyo subway train—but with more joyous passengers. On April 25th a "million-man march" was held in Khartoum, one of the largest gatherings yet.

Sudanese youth are the vanguard of the protest movement, but this is not a juvenile revolt. Their parents are behind them. Abd Elazim Muhammad Kheir, a 65-year-old businessman, spent 21 years working at the Sudanese central bank. "All of the old regime are completely corrupt; if you're not corrupt you cannot stay in office," he says. "But the kids are not accepting it."

His 15-year-old son, Aamin, and 23-year-old daughter, Roan, have gone to the sit-in almost every day. Roan came back from Manchester, England, to join her peers. "I told them they will be killed, but they are willing to die for their country," says Mr Kheir, with a mixture of fatherly pride and concern. Now he goes to the protests too. "To build a new society we have to sacrifice," he says. ■



They're not backing down



Ukraine

Ready for prime time?

KIEV

Will Ukraine's comedian-turned-president be able to govern?

JOKES ABOUT Ukraine's newly elected president, Volodymyr Zelensky, come easily. He is, after all, a comedian. At times his campaign seemed too frivolous to be consequential. While Petro Poroshenko, the incumbent president, staged political rallies, Mr Zelensky could be found filming his popular TV show, "Servant of the People", in which he plays a schoolteacher who accidentally becomes president. His public announcement that he was fighting the election was enough of an afterthought that he forgot to tell his wife about it.

Yet Mr Zelensky's victory in the second-round run-off election on April 21st, with 73% of the vote, is a serious achievement. In four months, he built the biggest majority since Ukraine's independence in 1991, helped by voters' frustration with Mr Poroshenko's chequered leadership and their hopes for a better future. While Mr Poroshenko ran a divisive and nationalistic campaign, Mr Zelensky, a native Russian-speaker of Jewish heritage hailing from Ukraine's south-east, galvanised support from across the country. Ukrainian politicians have long exploited ethnic and lin-

guistic divides, splitting the country into an "orange" west and a "blue" east. Mr Zelensky, whose name means "green", carried all but one of 25 regions.

Although war with Russia is still simmering in the country's east, the election was free, fair and peaceful. Civil society and independent media held politicians to account. Now, thanks to Mr Poroshenko's prompt concession, Ukraine's voters have removed a sitting president through the ballot box—a rarity in the region. Mr Zelensky celebrated the example it could set: "To all the countries of the former Soviet Union: look at us, everything is possible."

Mr Zelensky's improbable path to the

→ Also in this section

45 **Bosnia on the edge**

46 **Vietnamese in Visegrad**

46 **Syrians in Turkey**

47 **Brexit moves Europe's centre**

48 **Charlemagne: Europe votes**

presidency began in Krivoi Rog, a midsized industrial city. The son of a university professor and an engineer, he dreamed of studying international relations in Moscow or Kiev, but settled for law at the local university, where he became involved in a popular comedy contest. He spun his success on the show into a production company, became a household name and made a lot of money from producing and appearing in tv programmes and films.

In the election, being a celebrity outsider was an asset. Oligarchs control Ukraine's main television channels, but Mr Zelensky's fame helped bypass this barrier to entry. As a new face on the political stage, he appealed to voters who saw the promise of change after the 2014 revolution hijacked by the old elites, including Mr Poroshenko. At 41, he is too young to have participated in the theft by Ukraine's political class of Soviet-era economic assets. His informality contrasts with the distance which most leaders in the former Soviet Union maintain between themselves and the voters. His first post-election message was a video posted on Instagram that begins with the grinning president-elect saying, "Heeeyy everybody!" It has been watched 6m times.

The presentation is undoubtedly appealing; it is the substance that will be Mr Zelensky's main challenge. He has promised to maintain a pro-Western stance, to fight corruption and to end the war, but his course remains uncertain. Groups jockeying for influence include old friends from the entertainment world, shrewd advisers ►►

▶ linked to powerful outside backers, and Western-oriented reformers.

Which has the upper hand will become clear only once he begins making appointments and proposing laws. Ukraine's constitution gives the president responsibility for foreign and security policy, including picking the ministers of foreign affairs and defence, the heads of the intelligence service and of the military general staff, and the prosecutor-general. Among the policies that Mr Zelensky's team is discussing are plans to strip immunity from MPs and judges, to create a body to investigate financial crimes and to offer an amnesty for undeclared assets. Balazs Jarabik of the Carnegie Endowment for International Peace predicts that the new president will "try to build a state less preoccupied by ideology and more focused on offering people efficient services".

Ukrainians tend to sour on their leaders quickly. Their most urgent demand, say the polls, is that Mr Zelensky lower utility prices—which lies outside the president's prerogative and would violate the terms of the IMF loan programme on which Ukraine's economy depends. Public disappointment with the president is the subject of the second season of Mr Zelensky's show, entitled "From Love to Impeachment". As one aide says: "We know what can happen: we wrote all of this already."

To change the story, Mr Zelensky must overcome several adversaries. First is the Rada (parliament), which will remain hostile at least until elections this autumn. Mr Zelensky could try to force an early election, but since he has not yet built a party, he may prefer to wait. In the meantime, others are massing their forces against him. The current prime minister, Volodymyr Groysman, plans to form his own party. Mr Poroshenko will continue the fight. Pro-Russian parties, which won 16% of the vote in the first round of presidential elections, could unite and challenge Mr Zelensky in the east.

The second is Russia, with which Ukraine remains in a stand-off. Prospects for resolving it are slim. Vladimir Putin can use his proxies in the Donbas region to test the new commander-in-chief's mettle, and also has economic levers: even after five years of war, Russia remains Ukraine's single largest trading partner. On April 24th, Mr Putin announced that Russia will allow Ukrainians living in the breakaway regions to receive Russian passports, a provocative move towards a de facto annexation of Ukrainian territory and a direct challenge to the new president. Both Mr Poroshenko and Mr Zelensky have called for an urgent UN security council meeting.

Third, and most important, are Ukraine's oligarchs. There is much speculation about Mr Zelensky's links to Ihor Kolomoisky, whose TV channel airs his shows.

While both men deny ties beyond business, investigative journalists discovered that in recent years Mr Zelensky flew 13 times to Geneva and Tel Aviv, where Mr Kolomoisky has been living in exile since being accused of defrauding his bank, PrivatBank, of some \$5bn. The two men also share cars, security guards and a lawyer. Days before the election, when Mr Zelensky seemed likely to win, a court in Kiev did Mr Kolomoisky a big favour by declaring the nationalisation of PrivatBank illegal; after Mr Zelensky's victory, Mr Kolomoisky announced plans to return to Ukraine. Those moves may not be Mr Zelensky's doing, but handling them will be his problem.

That points to the biggest risk of the Zelensky presidency: not that he turns out to be an oligarchic puppet or a Kremlin agent, but that he will not be strong enough to defend the progress that Ukraine has made against his powerful adversaries. The oligarchs will probably aim to weaken the presidency and concentrate power in the more easily controlled parliament. Mr Putin will seek to keep Ukraine from becoming a functioning democracy. Mr Zelensky will have to learn fast, with the cameras rolling and no second takes. ■

Bosnia

Hanging together

SARAJEVO

But only just

BOSNIA-HERCEGOVINA might have a new government soon. Or maybe it won't. No one seems to know. The country held elections last October but the winning parties have still not agreed on how to form one. In any case, Bosnia's central government has little power; the country has three presidents, and their current chairman wishes it did not even exist. Tens of thousands of people emigrate every year, having lost any hope for the future.

From 1992 to 1995 Bosnia was the Syria of its day. Some 100,000 people died in the three-way war between the country's communities: its Orthodox Serbs, its Catholic Croats and its Muslims (often referred to as Bosniaks). Unlike in Syria, though, Western powers intervened and eventually ended the shooting. A peace agreement was signed at an American airbase in Dayton, Ohio, and 60,000 peacekeepers were sent to make it stick. But today few believe that the complex deal made to end the war now delivers good governance. And there is no political will to reform the country in a way that could benefit everyone.

Bosnia's central government has few



powers, but co-operation with NATO is one of them, and disagreements about this are an obstacle to forming a new administration. Most power lies further down. Under the Dayton accords, the country was divided into two statelets. One is the Republika Srpska, populated overwhelmingly by Serbs, which is itself split into two pieces because a region around the town of Brcko was allowed to be autonomous. The other is a Bosniak-Croat federation, consisting of ten cantons. Many Croats want this federation to be divided up, too, because they argue that the Muslim Bosniaks, who are more numerous, can always outvote them. The war swept away a tolerant and mixed society, yet Bosnians still work, trade and sometimes drink coffee together. They do not tend to live together, though, and mostly vote for nationalist parties which in turn parcel out jobs and patronage.

Milorad Dodik, who has long dominated the Republika Srpska, is the current chairman of the country's tripartite presidency. In Banja Luka, the capital of the Republika Srpska, you would hardly know you were in Bosnia. Mr Dodik says he usually travels on a passport from Serbia, and that the presidency building in Sarajevo is like a tomb. He visits Russia's Vladimir Putin as often as he can, wants independence for his statelet and has invested in militarising his police forces. "Bosniaks are dissatisfied because they have not succeeded in establishing control over the whole of Bosnia," he says. "Croats are dissatisfied because they are outvoted by Bosniaks, and Serbs are dissatisfied because they did not want to be in Bosnia in the first place."

In March Bosnia's security minister alleged that the Croatian intelligence service had tried to force Bosniaks to smuggle arms to certain mosques. He said the plan was that they would then be discovered and the Croatian president's claim that Bosnia was home to "thousands" of jihadists returned from the Middle East could thus be vindicated. The Croatian government ridicules the story. The SDA, the main Bosniak party, whose leader visits Turkey's Recep Tayyip Erdogan as often as he can, ▶▶

▶ has mounted a campaign to have the name of Republika Srpska declared illegal. On April 18th the parliament of Republika Srpska voted to establish a new reserve police force, a move which risks sparking an arms race with the federation.

When they want to, Bosnian politicians can put aside their disagreements and work together effectively. And though Bosnia's demise has been widely and long predicted, it still functions. Yet the omens are not good. Although its economy grew by 3.1% last year, more and more people are leaving. "For 25 years I lived in hope," says Ilija, a Croat lorry driver in Sarajevo. "Now I hate myself because of that." Having secured the necessary permits, he is emigrating to Germany. Before the war about 4m people lived in Bosnia. There are perhaps 3.3m now, and the country has one of the lowest birth rates in the world. If you could measure beauty and bitterness, Bosnia would also be a world beater. ■

Assimilation

Pholand

WOLKA KOSOWSKA

Vietnamese migrants have integrated well in an anti-migrant bit of Europe

"THE BUSINESS CENTRE", a sprawling warehouse in Wolka Kosowska outside Warsaw, has a distinctly East Asian feel. The air is filled with zither music and haggling in Vietnamese. Impromptu bouts of *tien len*, a card game, are set up on cardboard boxes. A sign warns that "burning incense is prohibited"; another that tea dregs are not to clog the wash basin.

Poland and the Czech Republic, both of which vehemently oppose European efforts to redistribute Syrian refugees, are home to large Asian communities. The first Vietnamese arrived in the 1980s as part of a student exchange between their country and the socialist republics of Eastern Europe. Many settled and brought over relatives. Today there are an estimated 40,000-50,000 of them in Poland, and 60,000-80,000 in the Czech Republic, the highest by proportion in Europe. The Buddhist temples and cultural centres sprouting up suggest that they are here to stay.

In both countries the Vietnamese have integrated well. The consonant-heavy local languages initially forced them into mute professions such as wholesaling food and textiles. The more industrious flocked to trading centres in Poland and fanned out across the Czech Republic to open grocery stores and even retail chains. Some struck gold: Tao Ngoc Tu, who came as a student, now runs an Asian condiment import com-

pany and is one of Poland's richest people. "I call myself a bat," says Phan Chau Thanh, who came as a student in the 1990s. "Neither mouse nor bird: still a Vietnamese head, but Polish thoughts."

Local acceptance of the Vietnamese contrasts with views on other migrants. Czechs re-elected an anti-immigrant firebrand as president last year, and a survey by the Pew Research Centre, a think-tank, shows that almost half of Poles think there should be less immigration. Many in the Vietnamese diaspora say Czechs and Poles have over time come to see them as a "safe" type of migrant. Anh Tuyet Nguyen, a café-owner in Prague, says she has often heard Czechs contrast the "hardworking" Vietnamese with other migrants who they think "leech off the state".

Yet the welcome can sometimes feel brittle. Many Vietnamese, particularly in Poland, recount instances of finger-pointing on public transport and bullying in schools. After the financial crash of 2008, some Vietnamese-Czechs turned to drug dealing, a trend exaggerated by media scaremongers. As both countries have made it harder for people to immigrate to them, the flow of new arrivals from Vietnam is now a trickle, mostly consisting of people reuniting with relatives who are already in Europe.

Still, second-generation migrants are fitting in well. Most attended local state schools and some are Czech or Polish citizens. Trang Do Thu, a Czech blogger born in Vietnam, says that like many other Vietnamese-Czechs, she learned the local tongue from a Czech nanny while her parents worked long shifts in clothes markets. Her generation's speaking out against the drug-dealer stereotype was crucial in dispelling it, she says. And *pho* (noodle soup) is now all the rage in Prague and Warsaw. ■



Prague spring roll

Syrians in Turkey

A long way from home

MERSIN

As the economy slows, attitudes towards refugees harden

EARLIER THIS year, shortly after he launched his campaign for mayor in Mersin, a port city on the Mediterranean, Vahap Secer asked his constituents to identify their most pressing concerns in an online poll. About a tenth chose congestion and public transport. About a fifth mentioned unemployment. A whopping 66% answered: "Syrians".

Abroad, Turkey has earned praise for its treatment of the 3.6m refugees who have settled here since the start of Syria's murderous war. But at home, amid deepening economic malaise, frustration with the government's policy and resentment towards the refugees have been growing. In the recent local elections, in which the opposition defeated the ruling Justice and Development (AK) party in most of the country's big cities, including Mersin, much of that frustration came to the fore. Opposition politicians regularly played the refugee card. Meral Aksener, the head of the nationalist İyi party, pledged to send the Syrians packing. One of her colleagues claimed the refugees had to go home for Turkey to start digging itself out of recession. In one northern town, a newly elected mayor from the secular Republican People's Party (CHP) celebrated his first day in office by cutting off aid to local Syrians.

Even the AK party and its leader, president Recep Tayyip Erdogan, a hero to most of the refugees, suggested they had worn out their welcome. The party's losing candidate in the Istanbul mayoral contest, a former prime minister, warned he would have Syrians who posed a threat to security and public order "grabbed by the ears" and deported. (As *The Economist* went to press, Turkey's electoral authority was still weighing AK's request to have the Istanbul election cancelled and repeated.) Mr Erdogan himself has proposed resettling at least some of the refugees in a safe zone he wants set up in northern Syria. All of this is legally possible. Syrians in Turkey do not enjoy formal refugee status, which would protect them from deportation, but "temporary protection", which does not.

The politicians seem to be taking their cue from voters. Resentment towards the refugees seems to be one of the few issues that unites public opinion. A study last year found that 86% of all Turks, wanted the government to send the refugees back to Syria. "Erdogan is a real Muslim, and he opened our doors in the name of humanity, ▶▶



Children of the ummah

▶ which was the right thing to do,” says Ayhan, who runs a jewellery shop in Mersin’s old city centre. “But when you come as a guest, you should start leaving after three or five years.”

In Mersin, where Syrians make up more than a tenth of the population, locals complain that they undercut wages, drive up rents and avoid paying taxes. (The government has granted temporary work permits to only 70,000 Syrians. The vast majority work off the books.) Turks also say the newcomers have failed to assimilate, a charge often levelled by Europe’s populists against Turkish migrants and their descendants. Mr Secer, the new CHP mayor, says such grievances are bound to grow as the economy slumps and jobs become scarce. Turkey’s unemployment rate recently reached 15%, the highest level in ten years. “Our citizens cannot find jobs, but Syrians work under the table and open unregistered businesses, and this makes people here angry,” says Mr Secer. He, too, complains of cultural differences. “We are a more modern, more contemporary society,” he says. The CHP describes itself as a social democratic party. Occasionally, its language resembles that of the far right.

In Mersin and elsewhere, the authorities have largely managed to keep a lid on tensions between Turks and Syrians. Inter-communal violence remains rare. However, experts warn that Turkey’s policy towards the refugees is no longer sustainable. Mr Erdogan’s government claims to have spent some \$37bn on providing shelter, health care and education for Syria’s displaced since 2011. That sum might be grossly exaggerated, yet there is

Europe’s geography

Stuck in the middle of the EU

GADHEIM

Another casualty of Brexit

NOT MUCH happens in Gadheim, a Bavarian hamlet of 89 souls. A handful of part-time farmers cultivate wheat, barley and rapeseed. A hotel trains apprentices in gardening and carpentry. Birds tweet, cars whoosh by. The landscape undulates, mildly.

But Britain’s impending departure from the European Union has disturbed the rustic peace. Whenever the club’s composition changes, the French National Institute of Geographic and Forest Information (IGN) calculates its new geographical centre. Over the years eastward enlargements have tugged the point from France to Belgium and then southern Germany; since 2013, when Croatia joined, it has sat in Westerngrund, a town in north-west Bavaria. But in April 2017 the IGN judged that Brexit would shift the EU’s centre 70km farther east, to Gadheim.

A baker from a neighbouring village broke the news to Karin Kessler, a Gadheim farmer upon whose 33 hectares (82 acres) Europe’s centre will now sit. At first she thought it was an April fool. But then her son confirmed the finding, the world’s media descended (although some unaccountably confused the village with Gädheim, 45km away), and the locals began to plan. Gunila Weidner, a lawyer, cut an amusing spoof video promising ample space and low traffic for London bankers obliged to relocate, and urging Scotland not to think of seceding from Britain and rejoining the EU.

After some deliberation, an “EU centre” began to emerge on Ms Kessler’s land. A stone marks the co-ordinates of the centre. Flagpoles await European and local standards. Green shoots poking through the soil promise visitors verdant

surroundings. Early April saw delivery of a wooden bench and table, organised when Gadheim expected Britain to leave in March, and a red-and-white “arrow” that protrudes at an angle from the stone, metaphorically fired from Westerngrund to signify the changing of the guard.

Gadheimers share in Europe’s frustration at Britain’s inability to ratify a deal. Without a date for Brexit they cannot plan the centre’s opening ceremony (Markus Söder, Bavaria’s premier, has promised to attend) nor reap the modest tourist bounty some hope for. Yet as solid pro-Europeans, many feel ambivalent about celebrating the consequence of an event they deeply regret. Ms Kessler suspects Brexit might never happen, and would be delighted to be proven right. Jürgen Götz, the local mayor, hopes for a second referendum, leaving the EU centre a memorial to disaster averted. Ms Weidner agrees. “Gadheim doesn’t need a spot in the history books,” she says. “It needs a well-functioning EU.”



no denying Turkey has done more for the Syrians than any European country. Now it must take the next step and grant them formal refugee status, including the right to work and to settle, says Metin Corabatir, head of the Research Centre on Asylum and Migration. With a prolonged economic slowdown on the horizon, Turkey will need outside help. The EU already pays Turkey billions of dollars to keep the refugees away from its own shores. In the future, says Mr Corabatir, it will have to invest more in integration and public awareness programmes in Turkey.

Mr Erdogan’s government has played up the idea that Syrians will eventually and

voluntarily return home. Studies suggest that most do not want to. Certainly not Firas Fanari, a former lawyer, who escaped from his native Aleppo five years ago, after Syrian regime forces began bombing his neighbourhood. “When a drunk soldier tried to abduct my daughter at a checkpoint, I decided Syria was finished for me,” he recalls over coffee, cigarettes and biscuits in his apartment in Mersin. His daughter is now a student in Mersin, and hopes to attend an MBA programme in Istanbul. His wife wants to open a pastry shop. His teenage son speaks better Turkish than Arabic. “We are now Turkish,” he says, “only without the right papers.” ■

Charlemagne | Votes without frontiers

Why the upcoming European Parliament elections will be the most European yet



EVEN BY THE standards of the Zappeion, a neoclassical palace in Athens once used for Olympic fencing matches, it was an extravagant affair. Over footage of space rockets and mountain ranges a voice crooned, in English: “A human being is extraordinary, a perfect machine that can achieve it all.” Drummers beat on four giant drums, soaring music echoed off the columns and the name “WEber” flashed up on a screen, transforming into “The power of WE”. Manfred Weber bounded onto the stage and launched his programme for Europe, which included a European FBI, ending the EU’s accession talks with Turkey and new efforts to find a cure for cancer.

It all felt rather silly. Mr Weber is the *Spitzenkandidat* or “lead candidate” of the European People’s Party (EPP), the group of European centre-right parties, for the European Parliament elections that will be held between May 23rd and the 26th. Under a system introduced last time, in 2014, the *Spitzenkandidat* of the largest group becomes the president of the European Commission, the EU’s executive. That is likely to remain the EPP. But some national leaders dislike this process and want to discontinue it. Mr Weber, a soft-spoken man with no executive experience, is barely known. A poll in his native Germany shows that only 26% of voters even there have heard of him.

Introduced in 1979, European Parliament elections have always lacked a proper European dimension, serving instead as increasingly low-turnout referendums on national domestic matters. The *Spitzenkandidat* process was meant to change that, but few took it seriously in 2014. And this time? Journalists may be more familiar with it, a big TV debate is planned for May 15th and Mr Weber plans to campaign in almost every EU state. But even he does not expect a transformative surge of interest: “We are not on the level of American or French presidential elections,” he says.

Yet something is changing—thanks not to the *Spitzenkandidaten* but to events. The unprecedented wave of crisis and change over the 2014 to 2019 parliamentary term has emphasised Europe’s interdependence and with it the role of pan-European politics. The migration surge of 2015 was a European drama, not just a Greek or Hungarian or German one. Terror networks have crossed borders and struck cities in various European countries. Brexit, Donald

Trump’s presidency and the rise of China threaten Europe as a whole. The crowd scenes have been continental, not national: refugees trudging along motorways, pro- and anti-migration demonstrations, the anti-establishment *gilets jaunes* protests and, most recently, environmentalist school strikes.

This does not mean Europeans are satisfied with the EU. But Britain’s humiliating attempt to leave has directed Eurosceptic energies away from quitting—support for membership has risen across the union—and towards changing the EU from within. More generally, outside threats and internal crises have increased the EU’s prominence and salience. They have made the notion of “a Europe that protects” more appealing. And they have brought forth a small but genuinely European cast of characters. Angela Merkel is known continent-wide as a protagonist of the euro and migration crises, Viktor Orban in Hungary as a self-styled defender of a “Christian Europe”, Emmanuel Macron as an anti-populist bastion and Matteo Salvini, Italy’s deputy prime minister and dominant politician, as his sparring partner. Print and broadcast media mostly observe national borders, but social and digital media do not; from his Facebook page Mr Salvini has cheered France’s *gilets jaunes* and urged French voters to vote against Mr Macron.

Perhaps surprisingly, this Europeanisation is most advanced among nationalists and populists. Anti-establishment tactics, ideas and messages spread online, in pan-European movements like the *gilets jaunes*, the anti-Islam PEGIDA and the Identitarians and at multinational party summits. On April 8th Mr Salvini launched a new far-right electoral alliance with German, Danish and Finnish party leaders. On April 19th, Marine Le Pen’s National Rally joined them. They will hold a joint rally in Milan on the final weekend of the campaign in May.

The internationalists react

The centre is slowly catching up. Last month Mr Macron launched a grand plan for Europe with an interview in Italy and an article published in 22 languages—the battle-cry of what he hopes will be a powerful new centrist group in the next parliament. Annegret Kramp-Karrenbauer, the leader of Germany’s Christian Democrats, has campaigned with Mr Weber in Brussels. Mrs Merkel will next month join the trail for her first-ever electoral event outside Germany. That these efforts might increase turnout among moderate voters is questionable, but not unthinkable: the elections of keenly pro-European presidents in France, Austria and Slovakia and the rise of federalist parties like the Greens in Germany and the Netherlands are testament to what Ivan Krastev, Mark Leonard and Susi Dennison of the European Council on Foreign Relations (ECFR), a think-tank, call in a new report a “counter-mobilisation of pro-European voters” in response to rising populism.

All of which means voters are paying a bit more attention to European debates. A Eurobarometer poll last summer found that 41% knew roughly when the elections would take place, up from 34% at the equivalent point before the previous elections. By September reported interest in the election had hit 51%, a level only reached a month before the vote in 2014. “Voters no longer take the EU for granted,” observe the ECFR authors.

To be sure, national politics will continue to dominate. But Mr Krastev, Mr Leonard and Ms Dennison are on solid ground when they argue that the coming electoral battles will be a sort of hybrid: “nationally grounded, but affected by debates elsewhere in Europe”. Slow, tentative and perhaps even temporary it may prove, but European politics is becoming more European. ■



→ Also in this section

50 A death in Derry

51 Bagehot: Ignore the EU election

Inheritance

Return to Downton Abbey

Inherited wealth is making a comeback. What does it mean for Britain?

IT IS ONE of the great themes of English literature of the 19th and early 20th centuries. Novels from Jane Austen's "Sense and Sensibility" to Charles Dickens's "Bleak House" and E.M. Forster's "Howards End" revolve around the question of inheritance. Rich relatives finance Bertie Wooster's jolly japes. Writers' preoccupation with inheritance reflected the fact that, back then, transfers of wealth from one generation to the next were enormously significant. Now evidence is emerging which suggests that Britain is entering another golden age of inheritance.

Two main factors determine inheritance flows from one generation to the next: the amount of wealth in an economy; and the rate at which the owners of that wealth die. The plutocrats of the 19th century amassed fortunes in the form of financial investments, mines and factories. The destruction and inflation of the first and second world wars put paid to many of them. Between 1910 and 1950 the value of capital in the British economy fell from

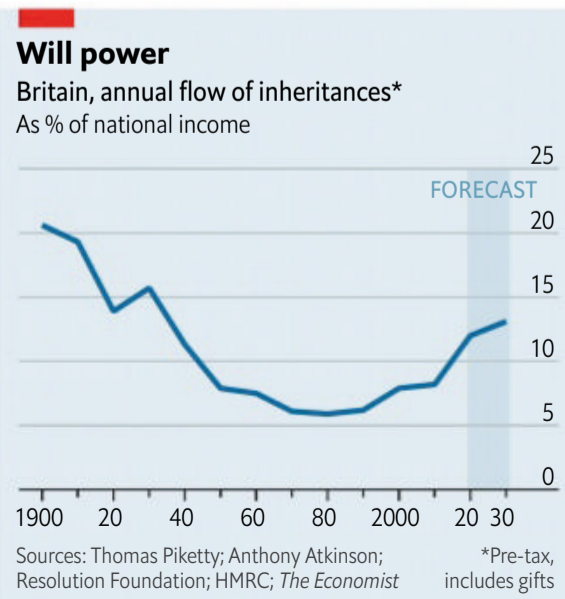
nearly 700% of national income to 250%. Britons had less to pass on to their descendants, and so the significance of inheritance fell.

Lately, however, wealth as a share of output has risen. Baby-boomers, the bumper generation born between the

mid-1940s and mid-1960s, possess much of this wealth, and are starting to die off. The upshot is that inheritances are making a comeback (see chart). In the past 20 years the total value of estates has more than doubled in real terms. These days, for every £100 that they earn in wages, Britons receive £17 in gifts and bequests. Inheritance has not played as big a role in the economy since the 1930s—and if anything the boom may be even bigger than our chart makes it look, since the effective tax rate on bequests is low by historical standards.

Economists disagree on why wealth has risen as a share of national income. Disciples of Thomas Piketty, a French economist (and Austen fan), claim that capitalism tends to follow an almost natural law whereby, in normal times, capital growth outpaces GDP growth. Mr Piketty's work shows that wealth is becoming more economically significant across many advanced economies.

In the British case, however, a particularly important role may be played by the unusual housing market. From the 1970s, rules on mortgage lending were liberalised, which has allowed people to bid up prices. Tighter planning policy, including the growth of protected "green belt" land from the 1940s onwards, has made it hard for the country to build the homes it needs. In the past four decades real house prices have increased by more than in almost any other rich country, according to our house- ▶



price index. The rising value of housing forms a big share of the total increase in Britain's capital stock.

Whatever the cause, inheritance is once again making its mark on the national consciousness. "Capital", a novel by John Lanchester which was published in 2012, includes a character who inherits a house in London ("The equation was too plain and too depressing. In the debit column, she had lost her mother; in the credit column, she now had a gigantic pile of cash"). Alan Hollinghurst's "The Line of Beauty" explores themes of inheritance and privilege. "Downton Abbey", a recent television drama series about the aristocratic Crawley family, in which questions of inheritance loom large, was a runaway hit; a film adaptation is due in September.

Lawyers have also noticed Britain's inheritance boom. The High Court considered around 150 inheritance disputes in 2017, three times more than it examined a decade earlier. Many will be hoping for repeats of *Jarndyce v Jarndyce*, a fictional case concerning a large inheritance in "Bleak House" which is abandoned after "the whole estate is found to have been absorbed in costs."

Heir conditioning

But Britain's inheritance boom may have more profound consequences. It is fuelling a sense of unfairness. Politicos have puzzled over why apparently well-off people are drawn to the Labour Party, which promises a radical redistribution of wealth for the benefit of "the many, not the few" if it comes to power. Among upper-middle- and middle-class folk (as defined by occupation), Labour's share of the vote at the general election in 2017 was just ten percentage points lower than the Tories', compared with 37 points in 1992.

Inheritance, which usually is not counted in official surveys of household income, may hold part of the answer. By one estimate, one in 20 British people receives an inheritance worth more than ten years of their net earnings. Surveys suggest that grandparents help to pay the fees of 15-20% of private-school pupils. Research by Legal & General, a financial-services firm, suggests that the "Bank of Mum and Dad" lends some £7bn (\$9.1bn) a year for house purchases, making it a top-ten mortgage provider.

As the amount of inherited wealth sloshing around the economy increases, those with high salaries but without a family fortune feel ever less like members of the elite. A recent paper from the Resolution Foundation, a think-tank, suggests that 30-year-olds whose parents are not homeowners are 60% less likely than others their age to own a home themselves. To put it in Labour's terms, those whose income from employment means they might

be classified as members of the lucky "few" increasingly feel as if they belong to the excluded "many".

The inheritance boom is set to continue, not least because baby-boomer deaths are on course to rise until the mid-2030s. What's more, Britons in line for big inheritances are likely to partner up with similarly fortunate folk. Those people are also disproportionately likely to be well educated. Over time Britain could see the emergence of a turbocharged elite—brainy, in well-paid jobs, and with plenty of capital behind them—that is even more enduring than the landed gentry of old. ■



Northern Ireland

A death in Derry

BELFAST

A journalist's killing sparks anger at volatile dissidents and inert politicians

THE SHOT that killed Lyra McKee, one of Northern Ireland's most promising young journalists, was fired by a youth urged on by embittered ancients still convinced that Irish republicanism can prevail only through the barrel of a gun. Leaders of the so-called New IRA, which has admitted responsibility, persuaded the unidentified killer that mainstream republicans had betrayed their followers by swapping violence for politics. Yet in provoking the murder, they have damaged their cause.

The killing of Ms McKee, hit when rioting youths opened fire on police in Londonderry on April 18th, has caused shock waves. Her funeral in Belfast on April 24th was attended by the heads of the British and Irish governments, as well as Northern

Irish political leaders, who made a rare show of unity after more than two years of bickering in which the region's assembly has been suspended. Father Martin Magill, leading the service, received a standing ovation when he demanded of the politicians: "Why in God's name does it take the death of a 29-year-old woman with her whole life in front of her to get to this point?" That she died on the eve of the anniversary of the Good Friday Agreement, which brought an end to three decades of sectarian Troubles in 1998, has only underlined what is at stake.

No one expects a return to violence of the scale seen in the Troubles, whatever Brexit or any other development may bring. By the time it disbanded in 1998 the IRA had killed more than 1,700 people. Dissident republicans, who never accepted the peace, have since then killed fewer than 100. This is enough for the security services to rate their threat as "severe". But the "micro-groups", as Sinn Fein, the main republican party, dismisses them, lack the experience or skills to maintain an effective and sustained campaign.

They are dangerous nonetheless. This has recently been illustrated twice in Derry, with Ms McKee's killing and, in January, the detonation of a car bomb in a busy street following a warning of only 30 minutes. Dissident republicans also claimed responsibility for a number of parcel bombs posted to British addresses last month. The riot that Ms McKee was observing was sparked by police raids which gave troublemakers an excuse to blood young men in the arts of street warfare.

So-called loyalist paramilitary groups represent a different sort of threat, still roaming the backstreets of Belfast but these days less interested in sectarian violence than everyday gangsterism. Since the end of the Troubles they have devoted themselves to lining their pockets through drug-dealing, loan-sharking and extortion in Protestant ghettos. In January an east-Belfast man who had fallen foul of a loyalist organisation was murdered by a five-man gang who stabbed him in the back 11 times.

Over the years the pattern has been that acts of terrorism which kill civilians cause widespread revulsion and lead to a dip in terrorist activity. Ms McKee's killers have issued an apology, well aware that deaths like hers cost them public support. The Derry office of Saoradh, a political party supported by the New IRA, was smeared with red handprints by protesters. "Not in our name" was painted beneath a local republican mural. Police said that by the end of the Easter weekend over 140 people had offered information on the killing, a "sea change" in a city that has historically been reluctant to talk. Many Derry doors which were once opened to dissidents may now be shut in their faces. ■

Bagehot | Much ado about nothing

The results of the European election are best ignored



THE BRITISH are all aflutter about an election which shouldn't really be happening: the contest for 73 seats in the European Parliament, due on May 23rd. Change UK, a newly born pro-Remain party, has unveiled a list of candidates that includes Boris Johnson's sister, Rachel. Nigel Farage, who has abandoned the UK Independence Party (UKIP) to set up a new Brexit Party, is once again striding the political stage. The Conservatives' poll numbers are in free-fall. Labour is coming under ever greater pressure from its supporters to come out unambiguously for Remain.

Along with excitement, the election is generating a frenzy of speculation about the coming shape of British politics. Is the Conservative Party in for such a drubbing that Theresa May's government will fall? Does the implosion of the Conservatives in the poll prove that the party's future lies with embracing Brexit and Boris Johnson? Will the election break the mould of the country's two-party system? And will it act as a sort of soft referendum that will demonstrate that Britain wants to leave without a deal or that it wants to call the whole thing off? The *Times* says the election is "shaping up to be a moment of profound political importance".

This is not only nonsense. It is dangerous nonsense. Nonsense because the European election won't tell us anything useful about long-term voting intentions. Dangerous nonsense because politicians may be seduced by the results into making catastrophic decisions. David Cameron made his fateful choice to support a Brexit referendum in part because he was worried about Mr Farage's surge in the European election of 2014. The big danger is that Tory MPs will conclude that another Farage surge proves that they need to embrace a hard Brexit.

The European election is almost perfectly designed to produce misleading results about any future British general election. In the last one only 35.6% of eligible voters turned out. This time more will probably vote, given the buzz. But they will still be taking part in a contest that is strikingly different from the Westminster system, replacing first-past-the-post with a complicated type of proportional representation and downgrading the role of constituency parties by using lists of candidates to represent large regions.

The contest is also shaping up to be a classic protest vote: a way of kicking the establishment without any real-world conse-

quences. Brexiteers are angry that the country has still not Brexited (in one of the many paradoxes that surround the poll, some of the most motivated voters will be those who believe that they shouldn't be voting in the first place). Remainers are angry that they are not remaining. And everyone is angry with the Tories for making such a mega-mess of everything. No candidate is saying much about what they would actually do in Strasbourg.

This protest vote masquerading as an election will undoubtedly humiliate the Tories. They are running at 17% in a three-poll average, compared with 22% for the Brexit Party and 26% for Labour. Some 62% of Conservative members and 40% of Conservative councillors tell pollsters that they are planning to vote for the Brexit Party. It will also do wonders for Britain's lengthening list of political upstarts. The Brexit Party has surged to first place in many polls (and at the same time obscured UKIP). Change UK started life only a couple of months ago as a band of breakaway Labour and Tory MPs called the Independent Group. On April 23rd it unveiled a list of candidates for the EU election in a blaze of publicity.

But recent history suggests that this could easily come to nothing, as the remorseless logic of the Westminster system reasserts itself. In the European election of 2014 UKIP came first with 27.5%, while the Tories came third, the first time they had missed the top two in a national election. Later that year a poll put UKIP at 24% and two Tory MPs, Douglas Carswell and Mark Reckless, defected to it. Yet in the general election in 2015 the Conservatives managed their best performance since 1992, winning an outright majority of 11; Mr Farage retired from the political stage in humiliation, having failed to win a seat in Westminster; and UKIP itself collapsed like a soufflé, first electing a series of joke leaders and then an extremely nasty one.

Describing the European election as a referendum on Brexit is particularly misguided. The Remain side seems determined to punch below its weight. Five pro-Remain parties (Change UK, the Lib Dems, Greens and Scottish and Welsh nationalists) are competing for Remain voters, a foolish strategy at the best of times, but particularly foolish under this voting system, which, though more forgiving than first-past-the-post, still punishes small parties. The Leave side, meanwhile, is limbering up to punch above its weight. The Brexit Party has a single leader, single message and, unusually for a Farage vehicle, highly efficient organisation.

The common response to this, that you can simply add up all the votes of the Leave parties and the Remain ones and come up with a sense of where the country stands, is flawed. What do you do about Leavers who vote Labour out of party loyalty or a belief that Jeremy Corbyn, the Eurosceptic leader, is really one of them? Or Tory Remainers who stick with their party out of a combination of habit and dislike of both Mr Farage and Mr Corbyn?

You don't want to know the result. Look away now

The biggest danger for British politics at the moment is that the Conservative Party will draw the wrong conclusions from the European election, abandoning the middle ground and its messy compromises and instead trying to win back Brexit voters by replacing Mrs May with Mr Johnson. That would be a tragedy for the country, because it would leave voters with a choice between the devil and the deep blue sea. And it would be a mistake for the Tories, because their best chance of winning, despite everything, lies in harvesting middle-of-the-road voters who are terrified of putting a Marxist into Downing Street. Sometimes, the wisest option is to hold your nerve and ignore the electorate. ■



Monarchy

Sovereign immunity

AMMAN, BANGKOK AND TOKYO

In many countries monarchy no longer looks like a relic of a past age. It is flourishing—partly because of democracy's difficulties

ON APRIL 18th Akihito, the 125th emperor of Japan and descendant of the sun goddess Amaterasu, returned to a shrine the sword extracted by Amaterasu's brother Susanowo from a vanquished monster's tail and a necklace stolen by Susanowo from his sister, thus reuniting them with a mirror used to tempt Amaterasu out of the cave where she had hidden from her brother. This ceremony, pictured above, was one of nine required before the emperor's abdication on April 30th, which will bring an end to the Heisei ("achieving peace") era. The next day, his son, Naruhito, will ascend the throne, and a new era, Reiwa ("beautiful harmony"), can begin.

If monarchy did not exist, nobody would invent it today. Its legitimacy stems from ancient ritual and childish stories, not from a system based on reason and intended to achieve good governance. It transfers power through a mechanism which promotes congenital defects rather than intelligence. It is sexist, classist, racist and designed specifically to prevent diversity, equality and personal merit from

creeping into its inbred ranks.

The 20th century seemed to herald its demise (see chart on next page). Revolutions and a couple of world wars brought monarchies tumbling down across Europe; they clung on only in the southern, northern and western peripheries. Republican movements flourished, including in Britain. And, as democracy swept the developing world late in the century, any sensible observer would have predicted that the institution would soon have gone the way of the Habsburgs and Bourbons.

Staying power

But that didn't happen. Only two monarchies have gone out of business this century—the Samoan one, which slipped away naturally with the death of its last incumbent, and the Nepali one, which needed the combination of a communist rebellion, a popular uprising and a murderous prince, high on drink and drugs, who killed nine family members, to bring it down. Forty-four countries (including Queen Elizabeth's 16 realms) still have a monarch as

head of state. Some of them, arguably, are barely monarchies (Australia keeps the arrangement largely because choosing another would be contentious) and many are tiny (Tonga, Lesotho and Liechtenstein come to mind), but plenty of influential countries (Britain, Denmark, Japan, the Netherlands, Spain, Thailand) are monarchies, and there are plenty of monarchies in an important part of the world (the Middle East). There are even significant movements to revive defunct monarchies, in Iraq and Romania. So why does the system now look more durable than it once did?

One reason is that most of the surviving monarchs are virtually powerless, and the less power a monarchy has, the less anybody bothers to try to get rid of it. Complete impotence was imposed on the (already weak) Japanese emperor after the second world war; in Britain the monarchy was stripped of its powers over centuries. In every developed-country monarchy the head of state's job is ceremonial. Politicians keep them informed; what they say is closely analysed for political content. But any constitutional monarch worth his or her salt knows that job security depends on keeping shtum about politics. Even in Britain's baffling constitutional crisis over Brexit, nobody seriously expects the queen, who in theory dissolves Parliament and appoints prime ministers, to have a role in sorting out the mess.

Another reason is that many of the poor, weak monarchies have already gone, and ▶▶

▶ some of the enduring ones have pots of money. Maintaining absolute power is a great deal easier for the Saudi or Emirati royal families than it was for the Albanians or the Romanians. They can afford lavish welfare handouts to keep the people happy and well-paid goons to keep them quiet. And having a small population, as the Gulf monarchies do, reduces the danger that an angry crowd will storm the palace and stick the monarch's head on a pike.

Also helping the monarchs keep their jobs are democracy's difficulties. When Francis Fukuyama declared the end of history in 1992, the global victory of liberal democracy seemed imminent. But this century, democracy's progress has stalled. In the Middle East, wars and uprisings to institute democracy failed. In parts of Africa and Asia, democracy has been struggling. Even in the West, populism and polarisation have tarnished it, and anti-democratic politicians are on the rise. Monarchy has benefited from the comparison.

A question of breeding

Unlike most democracies or republics, monarchy has the advantage of historical pedigree. Sometimes it is real, as with the Japanese emperor, whose ancestors are ancient, even if they do not actually share DNA with the sun goddess. The roots of the British monarchy are more than a millennium old, even if the current incumbents' families were German immigrants little more than a couple of centuries ago. Sometimes it is a more recent invention, as with those Middle Easterners who were planted by the British as the Ottoman empire collapsed, and fashioned in the imperialists' image. For want of a national anthem, a British band played "God Save the King" and fired a 21-gun salute when Faisal I was crowned the first king of Iraq in 1921.

But even the more recent implants root their claims to leadership in ancient myths and religious traditions which resonate with their subjects. The Hashemites in Jordan and the Alouites in Morocco both claim descent from the Prophet Muhammad. Morocco's king bears the title Com-

mander of the Faithful; Saudi Arabia's that of Custodian of the Two Holy Mosques. British advisers steeped in the niceties of protocol often give advice on how to embellish royal authority with paraphernalia, decoration and ritual. Historical legitimacy helps explain why, besides those rich enough to stuff their people's mouths with petrodollars, the two countries that best weathered the regional pro-democracy uprisings of the Arab spring in 2011 were monarchies—Morocco and Jordan.

Monarchies were less ruthless and more dexterous than the brittle republics. Only three people, including two policemen, were killed in 7,000 protests over two years in Jordan. Bahrain was the youngest and most brutal of the kingdoms. Its security forces killed scores as they suppressed its uprising. That was a lot in a population of 1.4m, but still just a day's work for some of the Arab republics' killing machines.

Unlike republics, which mark a rupture with the religious and tribal institutions of the past, monarchies tend to build on them. Their consultative systems are a mishmash of European and tribal traditions. Morocco has an elected parliament. Jordan has an appointed upper and elected lower house. Even Saudi Arabia has an appointed Shura or Consultative Assembly. The king, not parliament, is sovereign and chooses his prime minister. But each representative body—in theory at least—has some power to review legislation.

With a broader power base than military dictatorships, monarchies have less need for the repression more often seen in Egypt, Iraq, Syria and Algeria to keep power. Their media tend to be freer, and in Morocco and Jordan they allow a degree of opposition. Morocco, for instance, had a system called "alternance", allowing former republicans in the late 1990s and Islamists after 2011 to form governments.

Democracy's difficulties in Thailand are both cause and consequence of the monarchy's survival. After a bloodless coup in 1932 replaced the absolute monarchy with a constitutional one, a symbiotic relationship developed between the monarchy and

the military. The symbolic authority of the former has legitimised the political authority of the latter, providing cover for numerous coups. The most recent, in 2014, saw the military topple the government of the democratically elected Pheu Thai party, linked to Thaksin Shinawatra, a prime minister ousted in a coup back in 2006.

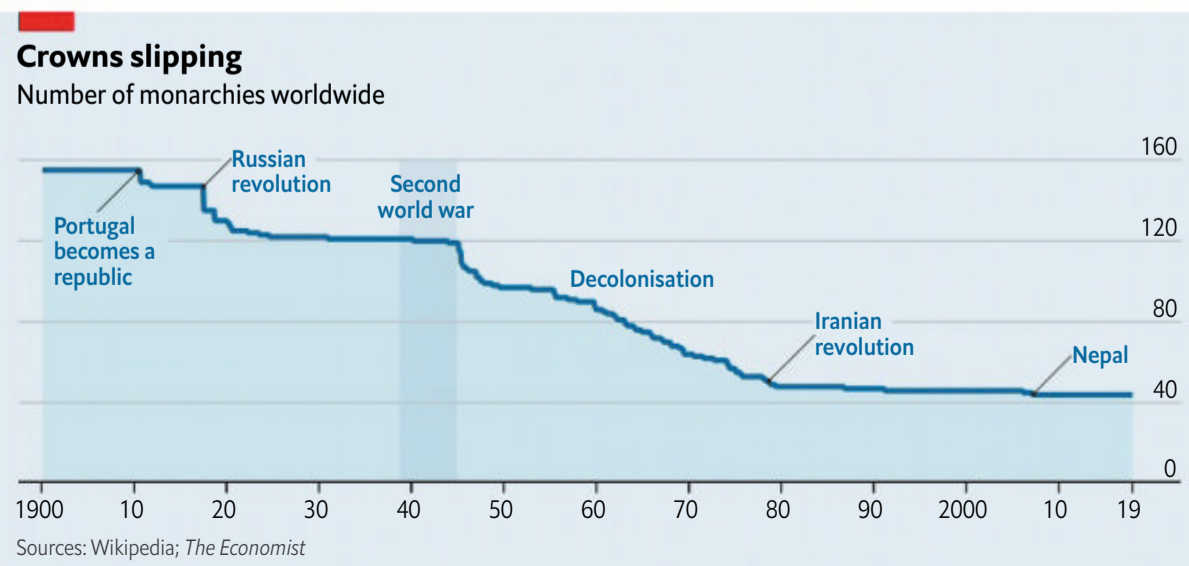
Even in constitutional monarchies, where democracy's future is not in question, the appeal of a monarchy is more obvious in these contentious times. When politics is as polarised as it is now, there is a lot to be said for a non-political head of state. Many liberal Britons might have envied the glamour the Obamas brought to America as they toured the world. But few—whatever their political views—would swap the queen for Donald Trump. "Politics is about what divides us," says one of Queen Elizabeth's former courtiers. "Monarchy is about what unites us."

Modern times

But, however impressive their pedigrees, and however favourable the conditions, modern monarchies are fragile. Their survival depends on the judgment of the individuals in charge. And in two of the big ones, the incumbents have been remarkably successful at holding fast to the historical roots from which they derive their legitimacy while cautiously modernising the institution. Discretion and subtlety have been central to their success.

Makoto Inoue, author of books on the imperial family, describes Akihito as a "revolutionary emperor". Rather than sit in the palace and pray for the people of Japan, the emperor has gone out and become close to them; kneeling with them and talking to them. He has paid particular attention to the disabled, elderly and victims of natural disasters. Unlike the country's conservative politicians, he has consistently expressed "deep remorse" for Japan's wartime actions during his speeches. In 1992 Akihito became the first reigning Japanese monarch to visit China, and later travelled to second world war battlefields abroad (Saipan in 2005, Palau in 2015, the Philippines in 2016), to pay tribute to those killed during the war. And he has refused to visit the Yasukuni shrine in Tokyo, where class-A war criminals are honoured.

Conservative politicians bridle at his attempts to atone for Japan's wartime behaviour, but his personal conduct makes him hard to criticise. He and Empress Michiko are seen as models of morality and decorum. Their court retains the forms of tradition; the observance of ancient ceremonies is correct in the finest detail. The approach seems to work. According to the latest poll by NHK, Japan's national broadcaster, almost 80% of the public have a positive view of the emperor. Given his popularity, his abdication, the first in Japan in over 200 ▶



► years, was a surprise. But it has, if anything, made him more popular.

Queen Elizabeth has not played as political a role as Akihito has, but she has, subtly, modernised the monarchy, opening Buckingham Palace to the public, paying tax and taking great care over public relations—always, for instance, wearing bright colours so that cameras pick her out in a crowd. Her family retains some archaic habits—dressing in tweed, hunting and shooting, adhering to ancient rules of protocol and precedence—but it will also, when the Duchess of Sussex gives birth, acquire its first mixed-race baby.

Like Akihito, the queen has abandoned the palace for the street, famously saying, “I have to be seen to be believed.” In the 67 years she has been on the throne, she has kept up a punishing schedule of engagements, with the astonishing result that, according to a YouGov poll, nearly a third of Britons, and half of those over 65, have seen her in the flesh. And, like Akihito, she is the soul of discretion. Indeed, one of her greatest achievements is that she has never said anything of any interest in public.

She has come far

This has served her well. Even during her darkest days, when she was widely regarded as having failed to show sufficient grief at the death of her wildly popular former daughter-in-law Diana in 1997, three-quarters of the population supported the monarchy—much the same level as now. On the most recent count, in 2016, 86% thought that she was doing a good job. By contrast, half of the Spanish population would like to be rid of their scandal-ridden monarchy.

But although the queen is 93, there is no sign of her following Akihito's example. The A-word is not uttered in her court. Whether that is because she regards it as her sacred duty to die in the job (she swore her coronation oath to God, and is discreetly but intensely religious) or because she does not trust her son, who has spoken out in support of sometimes eccentric and contentious points of view (he hates modern architecture and champions homeopathic quackery), nobody knows.

Succession is a dangerous moment for a monarchy, and many observers wonder whether Thailand's will survive the current transition. The late King Bhumibol appeared to embody the virtues of a devout Buddhist monarch. He championed thousands of development initiatives, including irrigation projects, farming schemes and medical services. Thais grew up surrounded by photographs of him peering intently through his round spectacles at projects in far-flung fields.

The contrast between King Bhumibol and his successor, King Maha Vajiralongkorn, whose sumptuous coronation will occur between May 4th and 6th, is sharp.

The new monarch, who lives in Germany, barely spends any time in his realm, let alone inspecting rural projects. He has a string of abandoned children and dumped consorts around the world. He made a poodle an Air Chief Marshal. His escapades inspire disdain; his rule, fear. Strict *lèse majesté* laws promise three to 15 years in prison for those critical of the royals.

Unlike his father, he is open in his hunger for power. Assets belonging to a royal property portfolio—thought to be worth some \$40bn—are now held “in the name of His Majesty”. In recent months he criticised his sister's plan to run for prime minister with a party opposed to the ruling military regime (in effect barring her from doing so); he told Thais to vote for “good people” to avoid “chaos” ahead of a stage-managed election on March 24th (inspiring the hashtag #OldEnoughToVoteOurselves to trend on Twitter in Thai); and after the contest he stripped Mr Thaksin of his royal decorations. The decision came after a party linked to Mr Thaksin and others in favour of democracy claimed to have won a majority of seats in the lower house. The election's full results will be announced on May 9th.

King Bhumibol's steady presence discouraged efforts to fix a broken political system prone to deadlock between royalist elites and their more democratic opponents. The system now lacks a respected referee, and King Vajiralongkorn's interventions damage the monarchy's standing further. The result could be turmoil as the military regime clings to power.

A similar accretion of power has been taking place in Saudi Arabia, where Muhammad bin Salman, eldest son of King Salman, conducted a purge shortly after being appointed crown prince. He got rid of the head of the Saudi National Guard, the

head of the navy and the economy minister, as well as detaining hundreds of business people and princes in the Ritz-Carlton in Riyadh, supposedly for tax offences.

His supporters argue that he needed to arrogate more power to himself in order to modernise the country's society and economy—proposing the sale of shares in the national oil company, for instance, to raise money to invest in a post-oil future, and liberalising the position of women. But his pursuit of a bloody, unsuccessful war in Yemen has weakened him at home, and the murder—widely blamed on him—of Jamal Khashoggi, a Saudi journalist who was dismembered in the Saudi consulate in Istanbul, has damaged him abroad.

And though mbs, as he is generally known, has strengthened himself, he has weakened the institution. He has viewed the traditional pillars of the Saudi monarchy—the clerics, the royal household and the tribes—as challengers rather than props, and cut them down. Though far less brutal, he is compared to Saddam Hussein. Some think that by reducing decision-making to one man's whim, he has left the Saudi monarchy only a bullet away from collapse—and fear what may come after it.

One of democracy's many virtues is that the institution refreshes its personnel constantly, so its survival does not depend on the performance of an individual. A monarchy's does, for the office may be held by the same person for decades. And the selection process often throws up candidates too stupid, too corrupt or too arrogant to do such a difficult job. The surprising survival of monarchies is in part a tribute to the nous of the old guard, who have understood the need to subsume their interests into those of the institution. If some of the new bloods fail to learn that lesson, the monarchy may resume its decline. ■



Far from the end of the line



Chinese companies abroad

Dragons, disrupted

SHANGHAI

Growing foreign suspicion is hemming in China Inc's rising global stars

TEENS EVERYWHERE love lip-synching to TikTok. Parents may be less enamoured of the boppy music-video app, whose popularity has exploded of late. For different reasons, governments appear wary, too. In February TikTok paid a record \$5.7m fine in America for illegally collecting data on users under the age of 13. This month an Indian court banned the app on the grounds that it abets sexual predators. Bangladesh and, briefly, Indonesia, have banned it in the past year, alleging it promotes porn.

TikTok is not the only social-media app to perturb regulators concerned about data privacy, fake news or dangerous content. But there is another reason for the attention: TikTok is Chinese. The angst surrounding its parent company, ByteDance, and China's other tech titans is a measure of their rising global relevance. Five of the ten most popular apps used by Indians last year were Chinese. Two in five TikTok users live in India, ByteDance's largest market outside China, ahead of America. Baidu,

Alibaba and Tencent—technology behemoths collectively known as the BATS—hold stakes in 150 companies abroad, according to Abacus, a research arm of the *South China Morning Post*, a newspaper. Alibaba has 56 data centres overseas. Tencent owns 17.5% of Snap, creator of a popular American messaging app, and 7.5% of Spotify, a Swedish music-streaming service.

No firm has animated worries about

→ Also in this section

56 Bartleby: An office with a view

57 Kraft Heinz's new boss

58 Online education

58 Smart-ish phones

59 Europe's consolidating airlines...

59 ...and its flagging tour operators

60 Schumpeter: Can Uber make money?

China Inc's overseas forays more than Huawei, its most successful global company. Governments worry that its telecoms gear might enable spying on behalf of the Chinese state (see Briefing). Scrutiny of Huawei is understandable, given the strategic importance of 5G. But "the Huawei effect", as Samm Sacks of New America, a think-tank in Washington, DC, calls it, is infecting internet and consumer-electronics firms hitherto viewed as innocuous, because their technologies were regarded as less important and their links to the Communist party looser.

In foreign eyes, both of these mitigating factors appear to be weakening. The BATS in particular have moved beyond their core businesses of internet search, e-commerce and gaming, respectively. They control and crunch flows of data, at home and abroad, and manage cloud-computing services. This allies them to the state-led "Made in China 2025" scheme to dominate advanced technologies such as artificial intelligence.

Meanwhile, a two-year-old security law compels firms to participate in intelligence-gathering when the party asks them to. Since November the police can enter the offices of any Chinese internet-services provider to copy data deemed relevant to cyber-security. Hard as it is to imagine Chinese companies refusing requests from their authoritarian government even in the absence of formal rules, these develop- ▶

ments highlighted the risk. Now, observes Ms Sacks, “if you pair the words ‘China’ and ‘tech’, red flags go up”.

As a result, more Chinese acquisitions that involve the transfer of sensitive technologies are being scotched. Last summer America’s Congress beefed up the screening regime for foreign investments, making life harder for acquisitive firms from China. On April 1st Beijing Kunlun Tech, a gaming company, said that it was in talks with American government officials over its ownership of Grindr, a popular gay dating app that it acquired last year. The Com-

mittee on Foreign Investment in the United States (CFIUS), an American agency that vets foreign deals for national-security risks, has reportedly ordered it to sell. CFIUS fears, it is thought, that personal data submitted by the app’s users, which include messages, location and even HIV status, could be used by the Chinese government to blackmail American officials.

In a similar case this month Patients-LikeMe, which helps connect people suffering from the same illness, was reported to be looking for a buyer after CFIUS had forced iCarbonX, a Chinese health-data an-

alytics firm backed by Tencent, to sell its majority stake in the American platform. Last year CFIUS blocked the \$1.2bn purchase of MoneyGram, a money-transfer firm, by Ant Financial, an Alibaba affiliate, on national-security grounds. Investment by Chinese firms in America fell below \$5bn last year, from \$46bn in 2016, according to Rhodium Group, a consultancy.

Authorities are beginning to restrict not just Chinese companies’ investments, but their products. In 2017 American officials warned that those of DJI, a leading drone-maker, were probably sending data on crit- ▶▶

Bartleby An office with a view

The benefits of working in an attractive environment

LOOK OUT of the window of your workplace. Is the vista pleasing? Can you see trees and grassy areas, or barbed wire and rubbish bins? Do you enjoy leaving the building at lunchtime or would you rather stay chained to your desk?

A review of the academic literature* suggests that indoor work environments (in particular factors like light, noise and temperature) have an impact on employee productivity. WeWork’s business model is based on the idea that attractive offices, with common areas and leisure activities, will appeal to small businesses and freelance workers. If a positive office interior helps, it makes sense that a nice outdoor environment should boost morale too.

The ancient universities clearly believed in building quiet cloisters where academics would have the freedom to think. Big technology companies in California usually aim for a similar effect—and have the finances (plus the space) available to achieve it. Corporate campuses have also been adopted by their Indian counterparts, like Infosys in Bengaluru or Tata Consultancy Services in Chennai. But these projects tend to be built by giant multinationals who employ lots of workers on a single site, out of town with lots of parking space.

Those who work in a big city are typically resigned to being stuck in cramped conditions, surrounded by busy roads. But there are exceptions. Chiswick Park in west London is the kind of area that local residents like to frequent on their days off. It has its own waterfall and lake, where ducks have taken up residence, and there are tree-shaded lawns where one can picnic on sunny summer days. The actively minded can head for a recreation area to play basketball or five-a-side football.



During the week, however, 9,000 people flock into the park’s 12 office buildings. They are home to 73 businesses, including big media companies like Paramount and CBS, Japanese conglomerates such as Sony and Mitsubishi, and Danone, a French food conglomerate.

The area used to be a London Transport bus depot, which explains the abundance of space. It was first developed 20 years ago by Stuart Lipton (who also built Broadgate, an office complex in London’s financial district) but bits of infrastructure are still being erected. In January a footbridge was installed over a railway junction to provide access to the nearby Chiswick Park underground station.

Matt Coulson is the chief executive of the site’s management company, Enjoy-Work, which is part-owned by Blackstone, a private-equity group. Mr Coulson, who previously worked for Centreparks, a holiday camp, talks about “guests” rather than workers or tenants, and says his focus is services. The autumn brings firework displays and when the weather is good, the site holds food fairs, concerts or other

events. A zip wire is occasionally hung from the tallest buildings for the pleasure of thrill-seeking workers.

Anyone who has visited a tech company headquarters will recognise other quirks such as guitars in the lobby or bikes for hire. Bartleby was shown around one newly renovated workspace; with its comfy chairs and pool table, it might have been the lounge of an up-market hotel.

The cynical view of such facilities is that they aim to keep employees in the office for as long as possible. If you can eat, go to the gym and even get your dry cleaning done at work, why go home?

The industrial revolution led to workers being shepherded into factories with rigid rules and repetitive tasks. Later, workers moved to stultifying offices where they sat in regimented rows of desks and waited impatiently for the clocks to hit 5pm. But futurists constantly warn that routine tasks will be automated and humans will focus on more creative endeavours. That suggests the need for different working spaces, which encourage independent thought.

The danger, as with many aspects of the future economy, is of another class divide. On top of fat pay cheques, luxury offices with top-notch facilities nestled in attractive parks for the fortunate few who code for big tech groups or run profitable multinationals; unfulfilling jobs in “fulfilment centres” and dingy office blocks for the rest. On the bright side, humble drudges will at least still have a reason to head home.

* An Overview of the Influence of Physical Office Environments towards Employees by N Kamarulzaman, A A Saleh, S Z Hashim, H Hashim and A A Abdul-Ghani, Procedia Engineering, 2011

ical infrastructure back to China's government; the US Army barred DJI drones from its bases. In 2018 American government agencies were banned from using cameras made by Hikvision, the world's biggest manufacturer of CCTV kit. Some large American funds have quietly sold their stakes in the firm, which also risks sanctions in America for supplying technology that aids repression in parts of China.

It is not just America picking on its chief geopolitical rival. Defence ministries in Australia and India have prohibited staff from using WeChat, Tencent's messaging app. The Australian Strategic Policy Institute has urged the app's 1.5m Australian users to beware of propaganda and censorship. In March India's ruling Bharatiya Janata Party complained to the election commission that Bytedance's social-media apps were interfering in elections. It wants to ban a Bytedance news aggregator called Helo. Fearing Chinese propaganda ahead of its own general election in 2020, Taiwan may ban Baidu's iQIYI, called China's Netflix, and stop Tencent from launching its own video-streaming service on the island (which China views as a part of its territory). Israel, where Chinese investors accounted for 12% of tech deals in the first nine months of 2018, is thinking of creating a CFIUS-like oversight body.

As China's businesses push overseas, its all-powerful president, Xi Jinping, expects more loyalty at home. After the government nixed its popular six-year-old jokes app last year, Bytedance's founder, Zhang Yiming, apologised publicly. The firm's news app, Jinri Toutiao, has devoted a channel to party pronouncements. According to Reuters, a widespread app launched in February called "Study the Great Nation"—a little red book for the digital age—was built by Alibaba (which declined to comment). The firm has 200-odd Communist-party branches; 600 party members reportedly join its workforce yearly. A recent revelation by a state newspaper that Jack Ma, its boss, was a party member stunned outsiders, who viewed him as the embodiment of a market-driven China.

Chinese companies are doing "a lot of persuading" to show they have no political agenda, says William Chou, vice-chairman of the China practice at Deloitte, a consulting and accountancy firm. Alibaba and Tencent have spent lavishly on their foreign holdings, but would relish a bigger global footprint. Barely 10% of Alibaba's revenues come from outside China.

In China's "socialist market economy" it is hard to tell which firms are closer to the party, and so more deserving of suspicion. Assuming they are all an arm of the state, as some foreign politicians urge, carries its own risks. Blacklist too many Chinese firms and you hurt your own. China can retaliate by blocking access to the world's big-

gest market. Even if it doesn't, spurning Chinese advances deprives foreigners of opportunities. PatientsLikeMe hoped the iCarbonx tie-up would grant it access to Chinese machine-learning technology.

Treating all Chinese companies alike also underestimates the vibrancy of China's private sector. Ms Sacks reckons that the new cyber-security laws may be a tacit recognition by the party that the BATs have grown powerful—more so, even, than some government ministries. If Mr Xi really wants Chinese firms to succeed abroad, he should cut them some slack at home. ■

Kraft Heinz

A new broom for dusty brands

The incoming boss must rethink the food conglomerate's cost-cutting creed

WHILE WORKING at Coca-Cola, Philip Morris and Johnson & Johnson in the 1990s, Miguel Patricio gained a reputation as a marketing wizard. Shareholders of Kraft Heinz, who appointed him as the food maker's chief executive on April 22nd, are hoping his magic touch extends to corporate turnarounds. Born of a merger in 2015 between two American icons, Kraft Heinz has struggled to keep up with changes in consumer taste. In February it announced a \$15bn impairment, cut its dividend by a third and said that American authorities had launched an inquiry into its procurement practices. Its share price has fallen by 45% in 12 months.

The new boss replaces Bernardo Hees, a

Brazilian who had led Kraft Heinz since the merger. In his previous job as chief marketer at Anheuser-Busch InBev, the world's biggest brewer, Mr Patricio was credited with increasing the sales of Corona, Budweiser and Stella Artois. The three brands now account for more than one-fifth of AB InBev's sales. His idea of replacing the Budweiser name with "America" on limited-edition bottles and cans was a hit.

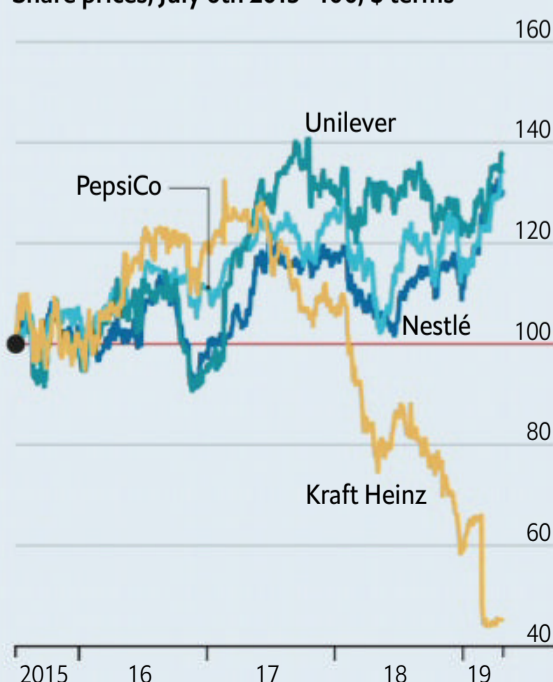
He is also familiar with Kraft Heinz's management culture. AB InBev's biggest shareholder is 3G Capital, the same private-equity firm led by a trio of Brazilians that backs Kraft Heinz. 3G made its name with its quasi-religious devotion to "zero-based budgeting", a cost-cutting practice whereby managers must justify their expenses anew each year.

Critics claim that 3G's obsession with slashing costs may have blinded Kraft Heinz to the need to invest in products that appeal to consumers. Sales have been flat since the merger. Operating profits edged up for a few years—until they didn't (see chart). Even excluding the impairment, margins declined in 2018, while those of rivals such as PepsiCo and Nestlé held up. At Unilever, which Kraft Heinz tried unsuccessfully to buy in 2017, they increased.

As a marketer rather than a financier like Mr Hees, Mr Patricio may, despite his 3G pedigree, be happier to loosen the purse-strings for investments and research. He may want to buy a rival with a bigger presence in developed markets outside Kraft's and Heinz's American home. He insists that he wants to revive illustrious but "dusty" brands, like Kraft Macaroni and Cheese, Philadelphia cream cheese and Planters nuts. Reviving the tarnished image of Kraft Heinz itself is likely to prove considerably trickier. ■

Making a meal of it

Share prices, July 6th 2015=100, \$ terms

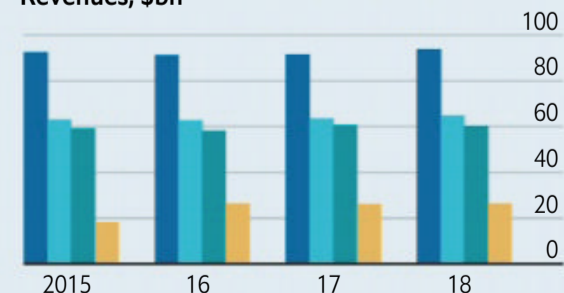


Sources: Datastream from Refinitiv; Bloomberg

Market capitalisation, April 24th 2019, \$bn



Revenues, \$bn



Adjusted* operating income, \$bn



*Bloomberg calculations

Online education

Patient learning

SAN FRANCISCO

A new kind of online school wants to teach nursing, and more

IHAVE BEEN this close to buying a nursing school." This is not a sentence you expect to hear from a startup founder. Nursing seems a world away from the high-tech whizziness of Silicon Valley. And, to use a venture-capital cliché, it does not scale easily. Austen Allred, boss of Lambda School, sees things differently. His two-year-old firm matches labour supply and demand by providing fast, efficient training to potential employees. It offers five online courses that prepare candidates to write software at technology firms. Training nurses, more of which are sorely needed to care for America's ageing population, is not an illogical next step—especially when many nursing schools have to turn people away.

Instead of responding to the threat of joblessness posed by automation with a universal basic income, Mr Allred wants to help people to switch jobs faster. Unlike most online courses, Lambda does not charge students up front to attend (though admissions are competitive) and online tuition is live and interactive, not recorded. Full-time students attend for nine months, Monday to Friday, 8am to 5pm San Francisco time. Latecomers risk falling behind. In most recent classes, 85% of students who began a course finished it.

The school only starts getting paid back for its services after its students have landed a job which pays them more than \$50,000 a year, something Lambda expends significant energy to help them do. Around 70% of those enrolled do so within six months of graduation. Lambda then gets a cut of about a sixth of their income for the next two years, until they have paid about \$30,000. (Or they can pay \$20,000 up front.)

The firm devotes about a third of its time and resources to finding jobs for its graduates, an unusually high share. Another third goes to recruiting students and the rest to teaching. Courses are created with employers' requirements in mind. For its web-development programme, the list given to Lambda by companies runs to 280 items. Unlike coding, nursing cannot be taught entirely over the internet, so Lambda wants to co-operate with nursing schools across America that could provide the necessary hands-on instruction.

After nursing, Lambda plans to work its way down the list of professions with the biggest job shortages. It is also examining

the problem from the other side, identifying available jobs that require skills akin to those of victims of automation—truckers displaced by self-driving lorries or call-centre workers replaced by robocalls.

Lambda's quirks set it apart in Silicon Valley, but Mr Allred is not the first to recognise the value of work-focused education and training. Germany is famed for its widespread vocational training and apprenticeships. Closer to California, the University of Waterloo, a technology-oriented Canadian institution, has had gainful employment within the field of study as one of its core goals since it was founded 62 years ago. Students seeking an internship can enroll in a special scheme which matches them with firms. Norah McRae, who runs the programme, says that most universities spend little time finding work for the graduates, or teaching the

skills they need to prosper in the job market. Too often students are treated as cash cows to be milked for research funding.

But Ms McRae is also concerned that programmes like Lambda School, though well-meaning, risk undermining existing educational institutions by offering a quicker route to work. The kind of intense optimisation which Lambda espouses cannot, she worries, replace conventional learning, which strives to create not just capable workers but rounded individuals.

Such fears presuppose that Lambda can succeed beyond even Mr Allred's wildest dreams—or those of the venture capitalists who pumped \$30m into the firm in January, valuing it at \$150m. Student numbers, and so upfront costs, are growing faster than revenues. If Lambda can turn a profit by offering people a stab at a decent job, that would be a fine lesson in capitalism. ■

Mobile devices

Wizard of OS

MUMBAI

A challenger to the Apple-Google duopoly in mobile operating systems

FIREFOX, A WEB BROWSER made by the non-profit Mozilla Foundation, was born as "Phoenix". It rose from the ashes of Netscape Navigator, slain by Microsoft's Internet Explorer. In 2012 Mozilla created Firefox OS, to rival Apple's iOS and Google's Android mobile operating systems. Unable to compete with the duopoly, Mozilla killed the project.

Another phoenix has arisen from it. Kaios, an operating system conjured from the defunct software, powered 30m devices in 2017 and another 50m in 2018. Most were simple flip-phones sold in the West for about \$80 apiece, or even simpler ones which Indians and Indonesians can have for as little as \$20 or \$7, respectively. Smartphones start at about \$100. The company behind the software,

also called Kaios and based in Hong Kong, designed it for smart-ish phones—with an old-fashioned number pad and long battery life, plus 4G connectivity, popular apps such as Facebook and modern features like contactless payments, but not snazzy touchscreens.

Most such devices are found in India. Reliance Jio, a network that has upended the local mobile industry with heavily discounted 4G data plans, sells subsidised, Jio-branded phones that use Kaios software. A customer at a Jio store in Mumbai's Bandra district wonders out loud why anyone would pay for a pricier Android smartphone when you can stream cricket and snap selfies on the cheaper JioPhone. Kaios has signed deals with Orange and MTN, two big networks in Africa. It is eyeing Latin America and the Middle East.

Google, which invested \$22m in Kaios last year, prioritises getting people in emerging markets online, where it can sell their attention to advertisers, over getting them onto Android smartphones. Smart-ish phones help with this. In India they will persist for another decade, reckons Chris Lane of Bernstein, a research firm. But Jio cannot subsidise handsets for ever. Even if Kaios software powers another 70m devices this year, as the company expects, that would be barely one-twentieth of the 1.5bn Apple and Android phones sold annually. Carving out a niche before ever-cheaper smartphones make its compromises obsolete will not be easy.



It's not just cricket

European travel (1)

Going American

BRUSSELS

Consolidation in the airline industry is good for shareholders, less so for flyers

AMERICA MAY be the land of free-market competition. But look up at the sky and Europe looks freer. The European Union is home to 135 scheduled airlines; America has 59. The five biggest carriers in America control around 70% of the market; the EU's top five barely hold half. Concentration has resulted in poorer service: three American operators can be found on the list of the world's 50 best carriers, as rated by Skytrax, an aviation website, compared with 13 European ones. As predictably, it has benefited shareholders, who earn three times as much for every frazzled passenger as those in Europe (see chart). Signs of American-style consolidation will therefore please Europe's capitalists as much as they worry competition authorities—and flyers.

European skies have grown less crowded of late. The number of airlines in Europe has fallen from a peak of 180 in 2003. Since the start of 2018 at least 14 have collapsed. In March wow, an Icelandic low-cost carrier, entered bankruptcy. The previous month Flybmi and Germania went bust, following VLM of Belgium, Primera Air, based in Latvia, Cobalt Air of Cyprus, Germany's Azur Air, Lithuania's Small Planet Airlines and a Swiss carrier, SkyWork. Flybe, Europe's largest regional airline, is barely hanging on.

Meanwhile, mature carriers these fledglings were meant to disrupt are flying high. The past two financial years have seen record profits at Europe's three biggest airline groups: Lufthansa, Ryanair and IAG, owner of British Airways and Iberia.

Michael O'Leary, the chief executive of Ryanair, Europe's largest low-cost carrier, thinks that the industry is moving "inexorably" towards five airline groups—Lufthansa, IAG, Air France-KLM, Ryanair and easyJet—controlling 80% of the continent's air traffic, more like America, within five years. He predicts that more mid-sized carriers will be swallowed by them over the next five years: Norwegian and TAP Air Portugal could be bought by IAG; Lufthansa is eyeing Hungary's Wizz Air; Alitalia, Italy's perpetually failing flag carrier, could merge with its stronger joint-venture partner, Air France-KLM. Analysts broadly concur with Mr O'Leary's conclusions.

The dominance of Europe's established carriers is not down to state backing. Of the top six only Air France-KLM has governments (of France and the Netherlands) as shareholders. Rather, their success reflects

Runway profits

Airlines' profit per passenger, by region, \$



the importance of scale, explains Kenny Jacobs, Ryanair's chief marketing officer. Heft was not always an advantage in the past. When fuel prices rose before the recession of 2007-09, legacy airlines with older, thirstier planes cut capacity while upstarts with more fuel-efficient aircraft expanded. Now the former are growing faster than the market overall, using greater heft to cut costs. The biggest airlines are better able to hedge against higher fuel costs, get lower prices from suppliers such as catering firms and aircraft-makers, and borrow cheaply to buy or lease new fuel-efficient planes. Smaller carriers cannot keep up.

Regional airlines and operators of charter flights have suffered most. The former, which specialise in flying short hops between provincial airports using smaller aircraft, have been knocked by the rapid expansion of low-cost carriers, with larger planes and lower costs per passenger, into their most profitable routes. Many charter operators, too small to compete with the likes of Ryanair, are leaving the airline business altogether. In February Thomas Cook, a British travel agent, put its carrier up for sale (see next article).

Planes, trains and oligopolies

Aviation regulators at the European Commission, the EU's executive arm, argue that Europe's airline business is structurally more competitive than America's. More cities have secondary airports to rival fortress hubs dominated by one airline. Railways compete against airlines on shorter routes. The commission's transport chief, Henrik Hololei, is nonetheless ready to step in to stop Europe's five biggest airline groups from becoming more dominant. Britain's competition authority, meanwhile, wants to reform slot allocation at London's busy Heathrow Airport to make it harder for IAG to grow its market share beyond today's 55%. All this would keep Europe's airspace from turning too American. But market forces favour consolidation. Resisting it looks like a flight of fancy. ■

European travel (2)

Give us a break

Life for the kings of package holidays is no picnic

THE WORLD'S oldest tour operator is looking for a place in the shade. Since September, when it announced the first of two consecutive profit warnings, Thomas Cook's share price has fallen by nearly two-thirds. The British company, which sells flights, hotel rooms and tours to 20m holiday-makers, is saddled with £1.4bn (\$1.8bn) in debt, three times its market value. IHS Markit, a data provider, estimates that 8% of its stock has been borrowed—typically a signal that short-sellers are circling.

Easter brought some solace, if only because Thomas Cook's low valuation has made it an increasingly tempting takeover target. Its shares rose by 18% on April 23rd, after Sky News reported that Fosun, a Chinese conglomerate that is its largest shareholder, and two buy-out firms were interested in parts or the whole of the company.

Thomas Cook's woes reflect broader malaise in the industry. On March 29th TUI, its Anglo-German arch-rival and the world's biggest tourism group, issued a profit warning. Combined, the two companies account for two-thirds of the European package-holiday market.

Some of the problems are cyclical. Last year's torrid summer convinced many Europeans to seek sunshine at home. The weak pound has dampened traditionally peripatetic Britons' enthusiasm for travel. The grounding by authorities around the world of Boeing's 737 MAX planes after two of them crashed could cost TUI, which owns 15 such aircraft, €300m (\$336m).

But the companies must also grapple with structural changes. From 2015 to 2018 profits barely budged at TUI. Thomas Cook's fell by 20%. Millennials prefer independent travel to package tours. Low-cost airlines and booking websites have made it easy for people to craft their own holiday, says Vitali Morgovski of Moody's, a rating agency. Online platforms need no physical stores; Thomas Cook has 566 in Britain.

To repay its debts Thomas Cook wants to sell its airline business, itself pummeled by competition from low-cost carriers. It has some worthy airport slots but is on the block at the same time as other failing airlines, notes Richard Clarke of Bernstein, a research firm. It wants to bring more retail online and focus on higher-margin premium services. At least TUI has more hotels and a thriving cruise business, which generates a third of its profits. But its prospects hardly look sunny. ■

Schumpeter | Can Uber ever make money?

A ride back through history offers sobering lessons



LONDON CABBIES enjoy a good moan. But few can match the satirical indignation of a former ferry operator, John Taylor, who used to carry passengers on the Thames. As well as being a “waterman”, Taylor was a poet, writing in the 1620s just when horse-drawn Hackney carriages were making their debut on the streets of the capital. In “An Arrant Thief”, published in 1622, he described the carnage from “upstart Hell-cart-coaches” robbing his brethren of their fares. “Against the ground, we stand and knock our heels/ Whilst all our profit runs away on wheels.”

Four centuries later, profits across the global taxi industry are again running away—but this time into thin air. Until recently, the fortunes of regulated cab companies drew the most attention. Uber and Lyft in America, Didi in China and other ride-hailing firms elsewhere have used sackloads of venture capital to drive down fares and flood the streets of big cities with cars, clobbering the earnings of licensed rivals. But now their own losses are in the spotlight. In a filing released in the run-up to its initial public offering, Uber says it has lost \$7.9bn since 2009. Lyft, which listed last month, lost \$2.9bn in seven years. Uber is seeking a valuation of up to \$100bn but as yet it is unclear if it can make money. To understand why, it helps to look at the history of the taxi industry. When regulated, it is a cushy business. When not, it is cut-throat.

Start with Uber’s most oft-touted attributes. Its name has become synonymous with ride-hailing thanks to rapid expansion that its advocates put down to “first-mover advantage” and network effects, or the belief that it will become more valuable as more people use it. The company claims to have more than 65% of the ride-hailing market in the United States and Canada, Europe, Australia and New Zealand, and Latin America. But it sees itself as more than just a taxi company, with car ownership and public transport in its sights. The proposed valuation implies a huge market which Uber would need to all but monopolise.

Look through history, though, and taxi monopolies look anything but impregnable. That is because the ride-hailing business, which will remain Uber’s bread and butter for the foreseeable future, is local, not global. And, as long as competition is unregulated, entering local markets is relatively easy. Len Sherman of Columbia Business School draws a parallel between Uber’s business

and that of unregulated taxis in New York in the 1930s, when Ford’s Model T emerged as a new, low-cost cab. During the Depression many jobless workers took to taxi-driving for a living, undercutting each other viciously. The streets were saturated with vehicles but the earnings of drivers and taxi companies evaporated. Customers benefited, but no one else did. Uber and Lyft are reprising that episode as they fight city by city for drivers and customers.

Uber’s name recognition may help. Historically, taxi firms have benefited from strong brands. London’s black taxis, or New York’s yellow ones, for instance, attract users despite high fares and relative scarcity. They are hallmarks of their cities. In an ideal world for Uber, brand awareness would mean customers went straight to its app rather than that of a rival, convincing more drivers to work for it because they can access a bigger market. This would produce the vaunted network effect for drivers and riders.

The trouble is, as competition increases, ride-hailing becomes a commodity business. Customers care little whether they ride with Uber or Lyft, as long as it gets them from A to B. That means neither firm can easily increase profits by raising fares, but may instead have to offer discounts. Likewise, the ride-hailing firms do not own their cars: their drivers do, and so have no reason to be loyal. That forces the firms to pile on incentives to stop drivers from deserting, kicking profits even further down the road.

Throughout taxi history, the answer to such a race to the bottom has been regulation. In 1635 the number of Hackney carriages in London was restricted to reduce congestion (Taylor must have breathed a sigh of relief). In 1937 the Haas Act introduced the medallion system in New York, putting strict curbs on the number of medallions and driving up their value. Recently the city’s regulators have moved to control ride-hailing, capping the number of vehicles and introducing a minimum wage for drivers. That could become a trend.

So much for the past. What about the future? Uber’s foray into Uber Eats, its food-delivery service, may be an even tougher business proposition than ride-hailing; it has to give restaurateurs a cut of each sale, as well as drivers. Its core measure of revenue at Uber Eats fell in the second half of 2018 compared with the first half. That was not encouraging. The firm is expanding into broader mobility services, such as scooters and electric bikes, and is building a platform that includes public transport, so customers can travel more seamlessly across a city. But again, competition will be intense: city governments will be loth to link access to their public-transport systems to a single platform, for safety, data-privacy and other reasons.

Uber’s long-term goal is autonomous vehicles (AVs), which would reduce its need to share revenues with human drivers. On April 18th Toyota and other investors put \$1bn into Uber’s AV division. On April 22nd Tesla unveiled plans to roll out robotaxis next year. That promise is subject to huge regulatory uncertainty, plus an Elon Musk bravado discount. But many other companies are keen to enter the fray. Expect fisticuffs.

Too Uber to fail

Uber will surely have a place in the future of transport. It may be able to increase rider and driver loyalty by replacing fares with monthly subscriptions. It may settle for dominating some cities, leaving others to rivals, provided that does not violate antitrust rules. History suggests that profits will be hard to come by. But at least its name should live on, just as Taylor’s hated Hackney “Hell-carts” do in London’s black cabs, 400 years later. ■



→ Also in this section

- 62 Price controls in Argentina
- 63 Nigeria's banks bulk up
- 63 Germany's bank-merger fiasco
- 64 Buttonwood: The art of selling
- 65 Evaluating NAFTA's successor
- 65 Efficient markets and the law
- 66 Free exchange: Geoengineering

Oil markets

Crude tactics

America's risky new exploits as an energy superpower

AMERICA HAS been a superpower for decades. As a superpower in global energy markets, however, it is barely an adolescent. As recently as 2015 it was illegal to export oil. Within ten years the shale boom has transformed it into the world's biggest producer of crude. No longer must it tiptoe around regimes whose policies it detests but whose oil it craves. President Donald Trump touts an age of "energy dominance". He has put its burgeoning energy prowess to the test with sanctions on Iran and Venezuela. But dreams of dominance are running into the realities of energy markets.

On April 22nd the American administration announced that no further waivers would be granted to countries importing oil from Iran. "We are going to zero," declared Mike Pompeo, the secretary of state. Waivers to eight countries, granted in November, were due to expire on May 2nd. Even so, investors were shocked that no exceptions were allowed. According to the state department, Saudi Arabia, the United Arab Emirates and America will help meet demand. But Brent crude, the international

benchmark, quickly topped \$74, the highest level in nearly six months.

The Trump administration is right to make a fuss about America's oil boom. According to the International Energy Agency, by 2021 the country may be a net exporter of oil. This would be a stunning

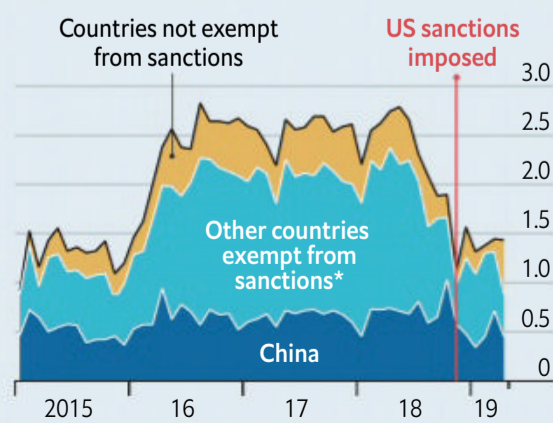
reversal. Not long ago, notes Amy Myers Jaffe of the Council on Foreign Relations, a think-tank, oil imports were the largest cause of America's current-account deficit.

But it is wrong to think it can bring about dramatic change in Iran and Venezuela without risking dramatic spikes in petrol prices. (Those concerned about climate change might welcome expensive oil; Mr Trump is not one of those people.) America's government does not control its oil industry. Oil firms are backed by investors whose interests do not necessarily align with those of the president. Nor can it control the world's many buyers and sellers of crude. American production accounts for about 15% of global output, a striking increase from what it was but still a small share of total supply. Complicating matters, investors have struggled to anticipate the Trump administration's actions. Rather than stabilise oil markets, America has been as likely to do the opposite.

Mr Trump announced last May that America would impose sanctions on Iran and withdraw from the deal on international oversight of its nuclear capacity signed during Barack Obama's presidency—the "worst deal ever", as Mr Trump liked to call it. He urged the Organisation of Petroleum Exporting Countries (OPEC), privately and on Twitter, to boost production to help restrain oil prices. Saudi Arabia duly did so, increasing output by 600,000 barrels a day from June to November, when the sanctions were to take effect.

Choke point

Iran, seaborne exports of crude oil and condensates by destination, barrels per day, m



Source: Kpler

*Greece, India, Italy, Japan, South Korea, Taiwan and Turkey

At the last minute, however, Mr Trump announced that eight countries would be exempt from the waivers for six months—including China and India, the biggest importers of Iranian oil. Investors and Saudi Arabia were caught off guard. The kingdom requires oil at around \$80 a barrel to meet its budgetary needs; in December Brent prices sank to \$51. OPEC and its allies scrambled to cut production and shore up prices. In December they said they would decrease output by 1.2m barrels a day.

The next sanctions came in January, after opponents of Nicolás Maduro's ruinous regime in Venezuela declared Juan Guaidó, the head of its national assembly, the legitimate leader. America recognised Mr Guaidó and unveiled sanctions to choke off the country's oil company, Mr Maduro's main source of cash. "America now appreciates that energy is a source of foreign-policy strength rather than a vulnerability," says Meghan O'Sullivan, a former adviser to George W. Bush and a professor at Harvard University.

But using that strength effectively can be difficult. Sanctions on Iran and Venezuela have yet to produce the desired effect. Mr Maduro still clings to power. Iran has met none of Mr Trump's demands. Its crude exports have fallen by about half since Mr Trump said America would withdraw from the nuclear deal last year, but they remained well above zero in March, at about 1.4m barrels a day, according to Kpler, a data firm. China, in particular, has continued to import Iranian oil (see chart on previous page). The announcement that waivers will expire seeks to change that. Countries that continue to import Iranian oil, the state department says, could be cut off from America's banking system.

This manoeuvre is risky, says Helima Croft of RBC Capital Markets, an investment bank. Iran's foreign ministry is threatening to retaliate by closing the Strait of Hormuz, a major export channel for the region's crude. With little left to lose, it may stop allowing international inspectors to monitor its nuclear programme. Oil markets, too, face uncertainty. Prices were already rising, because of plunging output in Venezuela and civil war looming in Libya. The state department has not said how soon America might impose sanctions on countries that continue to import Iranian oil. China may do so—an official from its foreign ministry declared that China "opposes the unilateral sanctions". That could complicate a bilateral trade dispute that had looked close to resolution.

The number of rigs drilling in America has risen since the start of the year, as the oil price has climbed. Yet American shale oil is mostly "light". Refineries in America and elsewhere are thirsty for heavy crude, because Venezuela's production of the stuff has dropped and demand for distil-

lates made with it is strong. There is a "fundamental mismatch" between the type of crude the world increasingly wants and what America is pumping, says Bernadette Johnson of Drillinginfo, a research firm.

Much therefore depends on whether Saudi Arabia boosts production, as the Trump administration hopes. After last year's flip-flops, it is unlikely to move fast. OPEC and its partners have their next formal meeting in late June. Even if Saudi Arabia were to ramp up production quickly and dramatically, analysts debate how long that boost could be sustained. A recent bond prospectus for Saudi Aramco, the kingdom's oil giant, disclosed that a famous oilfield is ready to sustain production of 3.8m barrels a day, about 25% less than analysts had assumed.

Neil Beveridge of Bernstein, a research firm, points out that OPEC's spare capacity could drop dangerously low as Iran's production falls and Saudi Arabia works to ramp up. That would leave the oil price vulnerable to supply shocks—if fighting in Libya escalates, for instance. America, the energy adolescent, can certainly roil oil markets. But it is unable to control them. ■

Argentina's economy

The price of desperation

BUENOS AIRES

A populist is a liberal who has been mugged by inflation

"I JUST WANT an end to the price madness," says Sonia Valverde, a mother of three, at a supermarket in Buenos Aires. She points to a government sticker advertising new price controls, which have frozen the price of 64 products, including sachets of milk. The only difficulty is that no sachets remain on the shelf.

Ending Argentina's price madness was Mauricio Macri's guiding mission when he won the presidency in 2015. He lifted currency controls imposed by his populist predecessor, Cristina Fernández de Kirchner, and began to cut energy subsidies. He gave the central bank a target for inflation and let the statisticians measure it honestly. And he loosened price controls Ms Fernández had imposed on hundreds of items, including soap and chicken.

But Argentina's maddening prices refuse to be tamed. When inflation fell less quickly than hoped, the government relaxed the central bank's inflation target in late 2017, undermining its credibility. As American Treasury yields rose months later, the peso dropped and inflation soared. Argentina embraced the IMF and abandoned its inflation target in favour of the



more direct goal of constraining the money supply. But even after the central bank promised to freeze the quantity of money until the end of this year, the peso wobbled and annual inflation soared, to almost 55% in March (see chart).

Mr Macri's popularity is headed in the other direction. An opinion poll last week suggested he would lose October's election to Ms Fernández, despite corruption charges against her. To defeat her, Mr Macri has chosen to emulate her, demanding that shops refrain from raising "essential prices" for six months. In a meeting with supermarket bosses, he insisted that he would win by 52% to 48%—the kind of thin margin that makes retailers nervous.

"Such agreements over prices will never solve the real problem: never have, never will," says Miguel Acevedo, the head of the country's leading employers association. In Buenos Aires, the freeze and other controls affect only about 3% of the consumption basket, according to JPMorgan Chase, a bank. Many of these prices jumped in the few days between the announcement and imposition of the freeze. And if any products are withdrawn from the shelves, they drop out of the inflation figures anyway.

But the controls may still have an indirect impact, through psychology and politics. Argentina's macroeconomic policies are now consistent with lower inflation: the fiscal deficit is narrowing, interest rates are painfully high and the IMF has boosted the central bank's foreign-exchange reserves. But inflation has its own momentum: it is high, because it was high, and is expected to remain so. The hope is that freezing some high-profile prices might help curb those expectations, at least until the election. Whereas Ms Fernández's controls tried, unsuccessfully, to suppress the inflationary effects of loose policies, Mr Macri's are trying to reinforce the disinflationary impact of tight ones.

That inflationary psychology also de- ▶▶

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal,
providing you various content:
brand new books, trending movies,
fresh magazines, hot games,
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



AVXLIVE **ICU**

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>

depends on the exchange rate, which Argentines watch with grim fascination. Under the country's agreement with the IMF, the central bank can step in to defend the peso if it weakens beyond a "non-intervention zone". This has moved slowly over time, so as to allow the peso to cheapen gradually, thus keeping exports competitive despite rising peso prices. But for the rest of the year, the central bank will strive to stop the currency weakening beyond 51.5 pesos to the dollar, whatever the damage to exports.

If the peso holds, inflation should start to fall. And if that happens, Mr Macri could yet win re-election. According to Eduardo D'Alessio, a pollster, 71% of voters approve of the anti-inflation package, which also provides credit for the poor and elderly, as well as cancelling planned increases in electricity and transport prices. But if Mr Macri's election chances look too bleak, Argentines might resume their flight into dollars, weakening the peso, worsening inflation and thereby guaranteeing his defeat. In this way, Argentina could succumb to a self-fulfilling fear of Ms Fernández. In politics, as in economics, expectations can precipitate the dangers they foresee. ■

Nigerian banks

Bigger the better

LAGOS

Large banks have weathered a storm. Smaller ones look shaky

THE COLLAPSE of the oil price that began in 2014 was bad news for Nigerian banks. A quarter of their lending was to oil and gas firms. Many businesses were left reeling after a currency crisis. The economy stuttered, then plunged into recession. Before the oil slump just 3% of loans were not being paid back. By 2017 some 15% had gone sour.

The oil shock underscored an old truth: in choppy waters, it helps to be a big ship. The country's large banks made tidy profits and now sit on sufficient capital. But smaller ones look shaky, even as currency problems have eased and the economy has recovered. Last year the central bank revoked the licence of Skye Bank, a struggling mid-sized lender.

Diamond, another middling bank, was on the rocks before being taken over by Access, a bigger rival. The combined bank began operations this month, becoming Nigeria's largest bank by assets (see chart). It now boasts more customers than any other in Africa.

Large banks were able to find ways to make money in the crisis, notes Olamipo Ogunsanya, an analyst at Renaissance Cap-

ital. They swapped spare dollars for naira with the central bank, which was trying to rebuild its foreign-exchange reserves. Flush with spare funds, they were in a position to lend naira at attractive rates to the government, which was borrowing heavily to plug the gap left by shrinking oil revenues. Meanwhile credit to the private sector stagnated.

By contrast smaller banks had fewer branches and weaker brands, which made it harder to attract deposits. Some relied more on borrowing money from pension funds and asset managers, says Wale Okunrinboye of Sigma Pensions, a Nigerian fund. They suffered when those institutional investors were lured away by juicy yields on government securities.

In that regard, Diamond was unusual. It had plenty of retail deposits and a leading digital app, so it could raise funds cheaply. But it had lent out a lot of that money to oil companies and to Nigeria's floundering power sector. By late last year some 40% of its loans were in trouble. Its share price had tumbled by 90% since the start of the oil slump. Access, which had fewer customers despite holding three times as many assets, saw an opportunity to pick up a strong franchise on the cheap.

Access reckons that the merger will bring 150bn naira (\$417m) of extra revenue and reduced costs over the next three years, from savings on shared computer systems, procurement and the like. But some think that optimistic. Ronak Gadhia, an analyst at EFG Hermes, a brokerage, calculates that the projected savings represent about 90% of Diamond's pre-merger costs, excluding some regulatory levies that cannot be reduced. "I don't think I've seen any cost savings which even come close to that level globally," he says. Thus far the broader impact of the merger on the banking sector has been muted. Access might now be Nigeria's biggest bank, but it is far from being its most profitable.

Cost concerns point to an awkward truth: though scale is an advantage, mergers are hard to pull off. A big consolidation in 2005-06 cut the number of Nigerian

banks from 89 to 24; banks chased returns on their extra capital by lending to stock-market speculators, leading four years later to a financial crisis. More recent deals have also disappointed. The large banks have little appetite for further acquisitions. In the long run, there is huge growth potential in a country where 60% of adults still do not have an account. But bankers will have to work to unlock it. ■

Deutsche Bank and Commerzbank

It's off

FRANKFURT

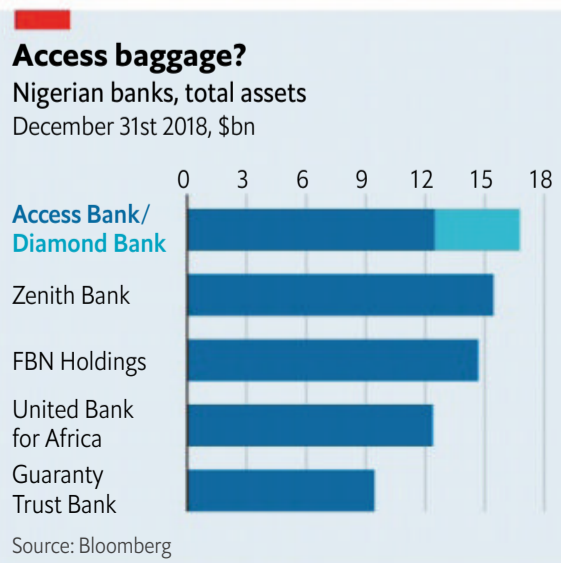
Merger talks between two big German banks end in dismal failure

AFTER SIX weeks of rumour, a progress report was due. Deutsche Bank, Germany's biggest bank, had promised investors an update on merger discussions with its Frankfurt neighbour, Commerzbank, on April 26th, alongside its first-quarter earnings. The update came, unplanned, a day early. On April 25th the two banks said they had called off the talks, the announcement prompted by a Reuters report that negotiations were about to fail.

The pair said that a deal would not justify the "additional execution risks, restructuring costs and capital requirements associated with such a large-scale integration". Outside the two banks and the German government, Commerzbank's biggest shareholder with a 15% stake, plenty had reached that conclusion even before the banks said in mid-March that talks were under way and embarked on weeks of negotiation. Two troubled lenders looked unlikely to make one strong one. Deutsche eked out only a tiny profit in 2018, its first for four years, while Commerzbank has made paltry returns. Deutsche's shares have been trading at about 25% of book value, Commerzbank's at little more.

Though Commerzbank has done a lot of reconstructive work since taking over Dresdner Bank during the global financial crisis, Deutsche still resembles a building site. It is still attempting to integrate Postbank, a retail business it bought in 2008-10, tried to sell and then decided to keep. It has retreated in investment banking, especially trading, to focus on corporate clients, who it still believes need a strong European alternative to Wall Street firms. Even a combined entity, after deep cuts in costs, would have found it difficult to build profitability in an overcrowded domestic market in which the co-operative and public sectors are also strong competitors.

So what was the logic of a merger? There was some, if never enough. It would have ►►



► created Germany's biggest retail bank by some distance, with about a fifth of deposits in a highly fragmented market. It might have forced a faster digitisation of German retail banking, including branch closures—loudly opposed by trade unions at both banks while the talks were under way. Commerzbank's deposit base would have brought Deutsche cheaper and more stable funding. It would have tilted Deutsche faster towards serving companies—notably by bringing more business from Germany's *Mittelstand*, the backbone of both Commerzbank's revenues and the national

economy. Given Europe's lack of banks with the clout of America's giants, domestic consolidation has long been seen as a stepping stone to creating continent-wide players, with economies of scale.

For the government, one attraction of a merger was that Commerzbank would then be sure not to fall into the hands of one of the foreign suitors with which it has been repeatedly linked. Even in the past few weeks, reports have surfaced of interest from Italy's UniCredit, which already owns HVB, a large Munich-based lender, and from ING, of the Netherlands, which al-

ready has a successful branchless retail bank in Germany.

With Deutsche ruled out, such rumours are unlikely to go away. Ironically, the failed talks may, through a bid for Commerzbank, hasten a cross-border deal. Deutsche's situation is as dismal as ever. In a preview of its first-quarter earnings with the announcement that talks had failed, it said it had made only a puny €200m (\$227m) or so in net profit, with corporate and investment-banking revenues down on a year earlier. Put away the drawing board, and get back to the building site. ■

Buttonwood Sales assistance

Why investors are careful buyers but careless sellers

JACK SCHWAGER was once a moderately successful trader who wondered why he was not an immoderately successful trader. Perhaps if he knew the secrets of trading superstars, such as Paul Tudor Jones or Jim Rogers, he might improve. So he asked them for those secrets. "Market Wizards", his book of interviews with hedge-fund traders, was published in 1989. A second volume soon followed.

Both books have since been pored over by a generation of hedge-fund wannabes. They are full of great stories and tips covering a range of investing styles. Yet there are common elements. It is striking, for instance, how little emphasis the wizards put on getting into a position—finding the right trade at the right entry price—compared with when to get out of it. That makes sense. Deciding what and when to sell surely matters at least as much as, and perhaps more than, deciding what to buy.

The wizardly injunction to cut your losses and let your winners ride has hardened into hedge-fund doctrine. Even so, it is not widely practised in mainstream investing. Fund managers pay lots of attention to buying decisions. But they are remarkably careless in deciding what to sell.

That is the central finding of "Selling Fast and Buying Slow", published late last year by a trio of academics—Klark Akepanidtaorn of the University of Chicago's Booth School of Business, Alex Imas of Carnegie Mellon University and Lawrence Schmidt of the Massachusetts Institute of Technology—together with Rick Di Mascio of Inalytics, a data firm. They examined the daily turnover of hundreds of portfolios over several years, tracking more than 2m stock purchases and almost as many sales. Buying decisions, they found, were good:

the addition of a stock generally improved a portfolio. But selling decisions were bad—so bad that a fund manager would have been much better off choosing a stock to sell at random.

The disparity between sales and purchases is explained by the attention given to each. Fund managers are careful buyers. Purchases come at the end of a long period of serious thought and research. But they do not give stock sales anything like the same attention. That is especially true when they are stressed because their portfolio has recently done badly. Instead of deliberating, they use a mental shortcut. Stocks that have done either really well or really badly, and so stick in the mind, are far more likely to be sold. The more inclined fund managers are to sell in this way, the worse they perform.

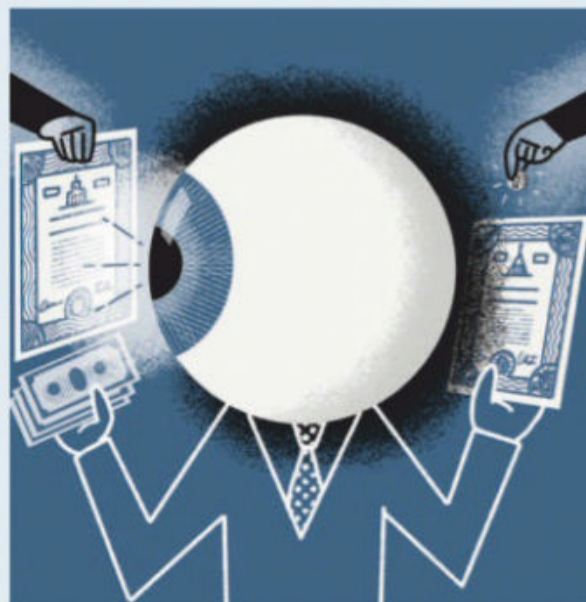
They do not realise that careless selling is harmful, it seems. "Selling is simply a cash-raising exercise for the next buying idea," one told the paper's authors. "Buying is an investment decision; selling is something else," said another. Fund managers sell the stocks that come most readily to

mind. Yet they are able to sell wisely, if they pay attention. Sales made when they are focused on information about a stock, for example around the time of an earnings report, are almost as smart as buying decisions, the authors say.

The message is clear. If fund managers took more care over selling, they would be more successful. But the world is not arranged in such a way as to make them take that care. They will be asked often for their best buying ideas, but rarely about stocks they own that are ripe for selling. This lopsided approach to decision-making is not confined to fund management. Businesses often spend an age deciding whom to hire but put off thinking about whom to let go until there is a pressing financial need, by which point the decision is likely to be rushed.

Why do fund managers take their losses on bad stocks too late and their profits on good stocks too early? A body of empirical research, surveyed by Brad Barber and Terrance Odean of the University of California, finds that individual investors show a strong preference for selling winners over losers. They may be impatient to experience the burst of pride that comes from selling a winner. And they hold on to losers for too long in the hope of avoiding feelings of regret.

The type of superstar trader profiled in "Market Wizards" is as likely to sell a currency, commodity or stock short as to buy it. For them, selling is as natural as buying, and requires just as much attention. For his part, Mr Schwager recalls in the book how he lost a lot of money trading soybeans. He failed to get out of his position when the market moved against him. The decision to buy the beans might not have been a great one. But it was his selling decision that he truly regretted.



Trade deals

Much to report

An assessment of NAFTA's successor is less flattering on close inspection

USMCA WILL boost economic growth and create jobs." This was the triumphant headline from the White House's media machine summarising an official assessment of the impact of America's new trade deal with Mexico and Canada. According to the United States International Trade Commission (USITC), an independent government agency, the deal will increase American GDP by 0.35% and employment by 0.12%.

Since the North American Free Trade Agreement (NAFTA), which the USMCA replaced, had already slashed most tariffs between the three countries, it would be unfair to expect the impact to be large. But two aspects of the analysis offer fairer grounds for scepticism. One concerns trade in cars; the other the way the assessment accounts for policy stability in the future.

New rules of origin for cars were intended to push up wages and bring more production to North America. For a car to move from Mexico to America tariff-free, a much higher share of its parts must now be sourced in the region than had been required under NAFTA. Car manufacturers could have opted to ignore the deal, pay the 2.5% tariff for non-USMCA imports and source parts wherever made business sense. Instead, most seem to be reworking supply chains to meet the new requirements. The USITC predicted that employment in America in car parts would increase by nearly 30,000 workers, or around 6% of the existing total.

But this victory of governmental micro-management comes with costs. As a separate report published on April 22nd highlighted, the benefits of trade restrictions are small compared with their price tag. That report described the impact of tariffs on imported washing machines, which it estimated had cost American consumers around \$820,000 for each new job. Similarly, the USITC predicted that cars would become pricier, and that Americans would buy fewer of them. And although it predicted higher employment, output and wages in manufacturing and mining, those gains come at the expense of other parts of America's economy.

That could have led the USITC to conclude that NAFTA's replacement would have a negative effect overall. But the USITC added an extra step to its analysis. Such studies usually include the effects of new policies, such as cuts to tariffs or changes

to local-content rules. The USITC, however, also took account of the administration's promise to hold policy steady in the future, which should make businesses more confident about cross-border trade and investment. Its estimates of those benefits were enough to swing its overall assessment of the USMCA to positive. (The office of the United States Trade Representative, which leads trade negotiations, has produced its own, rival report, which comes to a sunnier conclusion on the basis of car companies' promises of investment and employment.)

The methodology used by the USITC has strong academic foundations. But the impact assessment is also an indictment of the uncertainty of the past few years. If commitments to stick to the status quo are all that make NAFTA's replacement worthwhile, what harm was done by the Trump administration's threats to tear it up in the first place? ■



Merger appraisal

Picking up \$20 bills

NEW YORK

Should judges assume that markets are efficient?

ECONOMISTS HAVE long argued about the workings of financial markets. Some, like Eugene Fama, argue that markets adjust swiftly to include all available information, an idea supported by the difficulty of predicting short-term stockmarket moves. Others, like Robert Shiller, posit that psychology has a big effect on market prices, pointing out that share prices fluctuate far more than fundamental variables such as dividends. The pair were jointly awarded the Nobel prize in economics in 2013 (along with Lars Peter Hansen).

The question is puzzling judges (or "chancellors") in Delaware, where more

than half of America's public companies are listed. Last year the chancery court of Delaware decided that some shareholders of Aruba Networks, a company that Hewlett Packard (HP) acquired in 2015, should be awarded just \$17.13 per share—the price before the deal was announced. HP paid \$24.67. The judgment deferred entirely to the market, above all other evidence of what Aruba might be worth—including what HP was willing to pay. It was overturned by Delaware's supreme court on April 16th.

Usually, if investors differ from the market in their opinion of a company's value, they can buy or sell its shares. The exception is during a takeover. If most shareholders vote to sell at a given price, the rest must sell at that price, too. A process known as merger appraisal allows those who opposed the deal to argue before a judge that they have been short-changed. If the judge agrees, the company will have to pay the holdouts more for their shares.

Merger appraisal had become appealing to arbitrageurs, who would buy shares of takeover targets, vote against any deal and sue for appraisal. If their bid succeeded, they could get a large payout. If it failed, the acquiring company would still have to pay them the deal price. It would also have to pay them interest for holding the cash they would have received for their shares for the duration of legal proceedings—at a remarkably juicy 5 percentage points above the federal discount rate, currently 3%.

Legislators in Delaware first sought to stop investors flocking into this no-lose proposition by enabling companies to avoid accruing interest by making early payments to holdouts. Then, in 2017, the state's supreme court introduced an element of risk by ruling that investors would no longer automatically get the deal price if their argument failed.

It is this ruling that has ignited the debate about how much weight judges should place on market values. The state supreme court decided to award more than the market price of \$17.13, but less than the deal price of \$24.67. It came to its price, of \$19.10, by subtracting from the deal price an estimate of the value of synergies. (This has always been excluded from calculations of fair value in merger appraisals, since shareholders are deemed to have opted out of being compensated for synergies by voting against the deal).

Followers of Mr Fama will no doubt wish that the Delaware supreme court had followed the chancery court's decision to defer entirely to market pricing. Those who hold that markets often err may fret that both courts' rulings have made it riskier for a shareholder to point this imperfection out. But the changes are certainly likely to result in one efficiency: fewer lawyers will be involved. ■

Free exchange | A hot mess

Political economy suggests that geoengineering is likely to be used, and certain to be contentious



A QUARTER-CENTURY has passed since the first global climate-change treaty, the UN Framework Convention on Climate Change. Humanity's record of following through on its climate promises is dismal. The concentration of carbon dioxide in the atmosphere has risen by 15% since 1994. The average global temperature, relative to the norm for 1951-80, has gone up by about 0.5°C over that period. And in 2018 annual emissions reached their highest level ever. To have a good chance of stopping global temperatures rising more than 1.5°C relative to the pre-industrial norm, by 2030 annual greenhouse-gas emissions must fall by almost half, relative to levels in 2010, according to the Intergovernmental Panel on Climate Change. They almost certainly will not.

A much warmer and more hostile climate might yet be avoided, however, through geoengineering: tinkering with climate processes to reduce the global temperature. (The possibilities are described at length in "The Planet Remade" by Oliver Morton, a journalist on this newspaper.) The longer climate targets are missed, the more likely geoengineering is to be used—and the more urgent it is that governments understand its tricky political economy.

Earth is warming because carbon dioxide and other greenhouse gases are accumulating in the atmosphere, shifting the balance of energy arriving from the sun and flowing back out into space. For a generation, the main political response has been to set targets for reducing emissions, in the hope that new laws and technologies will see them met. But decarbonising an industrialised economy is monumentally hard. America's Energy Information Agency reckons that the share of renewables in the global energy mix will touch 18% of the total by 2050, up from just over 13% now. Vast systems of fossil-fuel infrastructure—tens of thousands of power stations, a billion vehicles—remain in place. The most ambitious decarbonisation programmes, such as Germany's *Energie-wende*, have made progress. But developed economies will meet their climate goals only if they all cut emissions faster than the peak rate Germany had managed as of 2017, for decades. And developing economies must either perform the unprecedented feat of growing without fossil fuels, or stop growing altogether.

Such costs might be borne, were it not for the dreadful political economy of climate-change mitigation. It is the stock of carbon in

the atmosphere that determines how much warming there will be, not the flow. Warming today is the consequence of past emissions. Correspondingly, cuts are irksome when they are made but bring benefits only in the future. Furthermore, the benefits of reducing emissions are spread globally whereas the costs—of new power plants, vehicles and so on—are local. That creates an incentive to free-ride: to continue using dirty fuels while hoping other countries' efforts will avert future disaster. To decarbonise knowing that the benefits will take decades to arrive, and even then only if every other big country also acts, is a lot to ask of a political system.

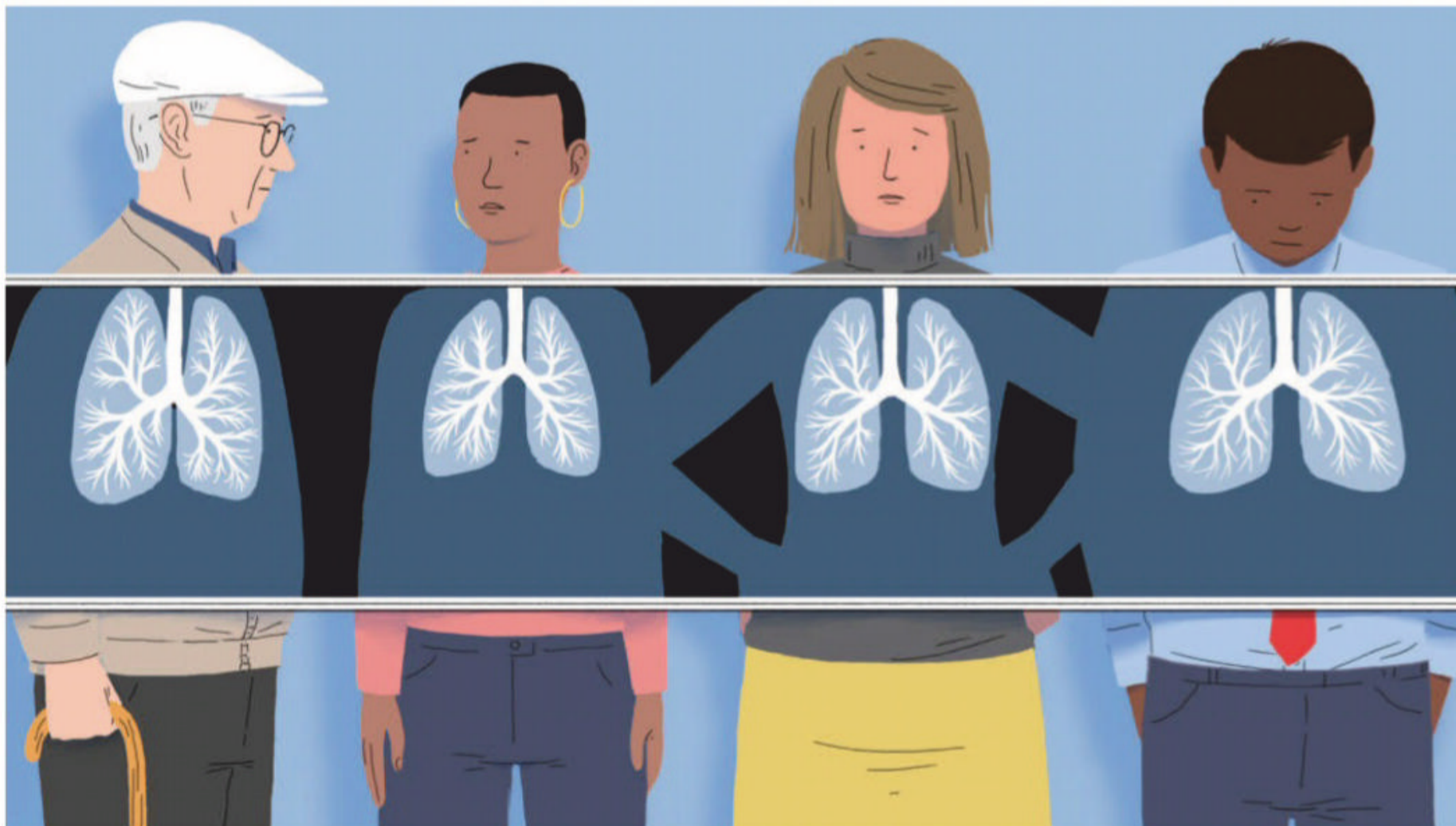
Solar geoengineering is different. Big volcanic eruptions cool the planet by releasing plumes of sulphur dioxide into the upper atmosphere. These eventually turn into an aerosol mist of reflective sulphate particles, which block a little of the sun's energy from making its way to Earth's surface. Humans could try something similar to offset the warming effect of greenhouse-gas emissions. Building and maintaining a system for pumping out reflective particles would be expensive, but much less so than rebuilding the world's energy infrastructure. If successful, it would begin to offset the greenhouse effect immediately. And a single determined country could go it alone. America could potentially launch a programme at a cost less than NASA's annual budget, and—if all goes to plan—stop warming in its tracks. At some point, a large country may reckon that the costs to it alone of warming are higher than the costs to it alone of a geoengineering programme. If political economy makes cutting emissions near-impossible, it seems to make geoengineering something like inevitable.

Look closer, however, and solar geoengineering would be anything but politically straightforward. It is not a solution to climate change, for one thing, but a stopgap. Until emissions are reduced it must continue, or sudden, catastrophic warming will result. Deflecting sunlight does nothing to fix other emission-linked problems, such as the oceans becoming more acidic. The effects of cooling, like warming, would be global, and sure to provoke an international response. Some countries might object to unilateral tinkering with the climate. Others might fight over how much cooling should take place. The effects of warming and cooling (as well as shifts in things like precipitation) could be geographically uneven in politically explosive ways. Some climate models suggest that geoengineering that left China at a comfortable temperature could cool India to below the level of the late 20th century.

The winds of winter

Perhaps a collective approach to geoengineering could be negotiated. The possibility of unilateral action might focus minds. Relative to dramatic, binding emission cuts, it would be cheaper and more immediately effective, and so perhaps easier to agree on. A more leisurely decarbonisation could then take place.

Still, any agreement would be difficult. The longer talks are put off the more likely unilateral action becomes, perhaps in response to a climate emergency. Some powerful countries would no doubt see climatic changes imposed on them as a security threat. Should one of them develop a geoengineering capacity, others might feel pressed to as well. Countries could seek to move first rather than risk seeing a rival reshape the global climate to its liking, and hang all others—or see everyone hang back, with the result being dangerous warming for all. More likely, geoengineering would not relieve humanity of the need to co-operate globally. Having embarked on the great experiment of industrialisation, countries must either work together or burn together. ■



Lung cancer

Gathering the evidence

Screening for lung cancer is surprisingly controversial, but evidence to support doing it is growing

IT CAN START with something as trivial as a small cough that will not go away. But often lung cancers cause no symptoms at all until it is too late. Ask Graham Thomas, who in 2014 found that hiding behind his pneumonia was a lung cancer at stage IV of its development. Stage IV is medical jargon for a tumour which has spread to other parts of the body. There is no stage V.

Mr Thomas now speaks out as part of a campaign by the Roy Castle Lung Cancer Foundation, a charity, to raise awareness about the illness in Britain. He started smoking at 14, and says people think he brought his illness on himself and that it is the cancer least deserving of sympathy. But he argues that perhaps it should not be, because it is the cancer that kills the most.

One reason lung cancer is so deadly is that at the moment of diagnosis three-quarters of people have, like Mr Thomas, already arrived at stage IV. In Europe the five-year survival rate following diagnosis is around 13%, with little variation between countries. Finding tumours earlier would permit them to be treated before they spread—improving outcomes and reduc-

ing medical bills. Yet a lot of places which happily invite people to participate in screening programmes intended to uncover cancers of the breast, bowel, prostate gland and cervix have resisted extending the idea to cancers of the lung.

Screening screening

The question is whether such screening would do more good than harm. Screening's history shows the answer is not obvious. In 1985, for example, Japan began a mass-screening programme for neuroblastoma, a rare tumour of the infantile nervous system. The programme unmasked 337 such tumours in its first three years, but two decades later there was no evidence that this had reduced the number of chil-

dren dying. The effort had mostly picked up slow-growing tumours which were unlikely to have had harmful outcomes. Yet the discovery of these tumours had prompted much unnecessary treatment.

Prostate-cancer screening is similarly plagued. The current test often raises concern over a possible cancer which turns out not to be there (a false positive). Finding that out, however, involves tests such as biopsies which are invasive, painful and may cause infection. If a group of men aged 55 to 69 is screened regularly for more than a decade, 12% will experience such a false positive and may therefore undergo an unnecessary biopsy. Conversely, prostate-cancer screening misses 15% of men who actually do have cancer (a false negative).

Moreover, even when prostate screening gets it right, by flagging up a tumour which really is there, that tumour is often one that would not have shortened a patient's life, because he would have died of other causes before the tumour killed him (overdiagnosis). Yet all men who screening suggests have cancer are offered treatment, and many take it, risking side-effects such as incontinence and impotence. According to Bob Steele, a professor at the University of Dundee who is chairman of the UK National Screening Committee, "You have to treat 30 men to save one from dying."

The first evidence that screening for lung cancer might be beneficial, despite these sorts of concerns, came from an American study called the National Lung Screening Trial (NLST), which was conduct-

→ Also in this section

68 Testing new materials

69 How lemurs lost their colour vision

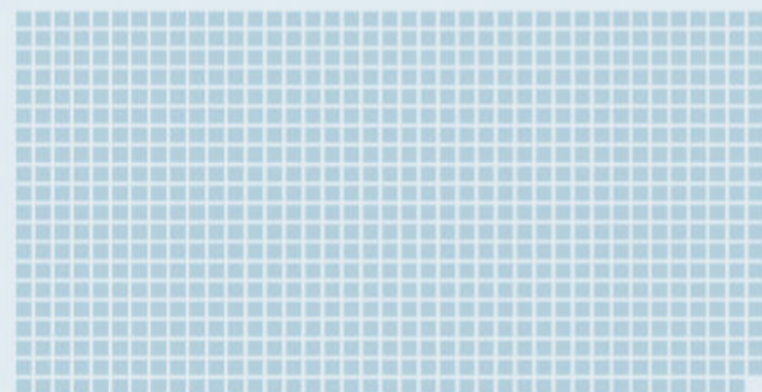
70 Giving voice to the speechless

70 The psychology of golf

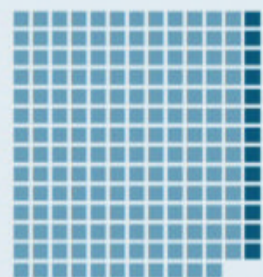
Screen time

If 1,000 eligible individuals are scanned three times for lung cancer

779 will have normal scans

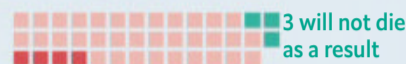


180 will need an extra scan but will not have lung cancer



13 will need an invasive procedure to rule out lung cancer

41 will be diagnosed with lung cancer



4 cancers would never have caused the person harm (overdiagnosis)

Source: International Agency for Research on Cancer

► ed between 2002 and 2009. The NLST enrolled about 53,000 people aged between 55 and 74 who had a smoking history of 30 pack-years or more (one pack-year is the equivalent of one packet of cigarettes per day for a year). It tested standard chest x-rays against low-dose computerised tomography (CT)—an enhanced x-ray-based technique. Participants were screened once a year for three years, and appropriate treatment was offered to those whose scans suggested the presence of tumours. At the end of the trial those who had been CT-scanned were 20% less likely than those who had been x-rayed to have died from lung cancer. This was equivalent to three fewer deaths per 1,000 people screened, and also showed up as a decline in all-cause mortality of 7%.

The NLST established CT scanning as the route to take. As Hilary Robbins of the International Agency for Research on Cancer, part of the World Health Organisation, observes, that trial still raised concerns about false positives because it flagged up 356 people in 1,000 as needing follow-ups. But improvements to the protocol used, which now ignores the smallest anomalies because they are rarely cancerous, have seen false-positive rates halve (see chart)—and the number of people suffering complications has fallen as well.

The latest trial, NELSON, was conducted in Europe. It took ten years and involved four annual scans. Although it has not yet been published formally, its main conclusions were announced last year and were extremely encouraging.

Two-thirds of cancers found in the experimental arm of the trial were at stage I or II of their growth, and thus eminently treatable. In the trial's control arm, by contrast, two-thirds were at stage III or IV. Moreover, NELSON had a more nuanced approach to the problem of false positives. If something potentially sinister was seen, the protocol employed was to order a three-month follow-up scan. Only if a growth had expanded in the intervening period was it

deemed likely to be cancerous and treated accordingly. Screening, the researchers behind NELSON found, decreased mortality by 26% in men and 61% in women over the course of the study.

Evidence such as this has convinced some (though by no means all) that screening for lung cancer is worthwhile in some circumstances. And in one part of the world that conviction is being translated into action. There are now plans for more than half a million people in England who are current or former smokers to be offered, over the next four years, the chance to attend a lung-health check at a local clin-

ic. This follows a pilot project in Manchester which screened 2,541 people and found 61 patients with lung cancer—80% of whose cancers were at an early stage.

There is of course the question of cost, which some say is too high. Economists measure the efficiency of medical technology by how much health is gained for the money spent. The unit of health-gain used is the QALY (quality-adjusted life year, which attempts to factor in a patient's experience as well as increased life expectancy). By this measure, the study in Manchester was extremely efficient. It cost £10,069 (about \$13,000) per QALY—a third of the sum set by the NHS as the maximum for a procedure to be regarded as cost-effective.

Though some sceptics still argue that money spent on screening would be better deployed trying to stop people smoking—or, better still, preventing them from starting in the first place—the case for screening smokers for lung cancer now seems a good one. There is a wrinkle, though. Focusing screening on smokers will certainly achieve the best outcomes. But that will leave out the one in five sufferers from the illness who have never touched a cigarette in their lives. To be cost-effective, screening needs to be focused on those, like Mr Thomas, who have knowingly put themselves in peril. Everyone else will be excluded from the process. What an irony. ■

Materials science

Ask questions first. Shoot afterwards

How to speed up the testing of new materials

THOMAS EDISON believed in the power of trial and error. "I have not failed," he is alleged to have said. "I've just found ten thousand ways that won't work." After rejecting many alternatives, Edison's team discovered the carbon filament and thus revolutionised electric lighting.

Trial and error of this sort is a long-winded way of making discoveries. It is still, though, surprisingly common. The pharmaceutical industry has speeded things up by employing robotic devices that handle trays containing hundreds of test tubes or plates, permitting researchers to test, simultaneously, the effects of many potential drugs on cell cultures. But in other areas, notably materials science, tests are still done one at a time, by hand—and progress is often painfully slow. This is certainly true of the quest for better ceramics for body armour.

And it is something Michael Golt of the

United States Army Research Laboratory (ARL) is acutely aware of. America's Congress has, he says, requested a 20% reduction in the weight of the body armour worn by the country's troops. But historical trends suggest this improvement will take decades to achieve. Fortunately, Dr Golt has a plan to speed things up.

Modern body armour is made of ceramic plates up to a centimetre thick. These plates are stronger and lighter than steel—strong enough to stop a rifle bullet. They are made by mixing powdered ceramics, typically silicon carbide or boron carbide, with small quantities of binding agent and then heating the mixture until it fuses. Experience shows that minute variations in the details of the composition, mixing and cooking involved in these recipes can make a big difference to the finished product. But, though theory suggests it should be possible to make ceramics more robust ►►

▶ than those which already exist, in practice tinkering with existing successful recipes usually makes them worse.

The challenge, therefore, is finding the right recipe for improvement among the zillions of possible wrong ones. And, at the moment, the only way to do this is to test plates by firing bullets at them—which is literally a one-shot process. Every variation in testing conditions, for example in the velocity or calibre of the bullet, requires a new plate, so gathering information is both time- and money-consuming.

Dr Golt's better way is to probe a ceramic plate's source of strength—its particular granular structure—before firing anything at it. This is not a new idea *per se*. But the obvious way of doing it, which is to look at the grains through a microscope, has in practice proved a poor predictor of how well a plate can withstand a shot. Instead, Dr Golt probes the plates' grain structures electrically. He and his colleagues at the ARL's Aberdeen Proving Ground, in Maryland, have developed a test in which they apply alternating currents of various frequencies across a plate.

Plates' electrical properties, it turns out, are different at different frequencies, depending on their grain structure. Moreover, they vary in a way that is closely related to a plate's ballistic performance. This gives an indication of how effective that plate is likely to be, and thus whether it is worth testing. Crucially, this electrical test can be automated in a way similar to the way that drug testing is automated, so that many plates, of many different compositions, can be tested quickly. And, better still, information from these tests can be run through a machine-learning system that permits researchers to explore the effects of slight changes in manufacture without having to test every possible combination with actual bullets. Only the most promising changes need to be turned into plates, to confirm that the software's predictions were correct.

This process is thus a vast improvement on the Edisonian approach of blindly testing everything. It has already helped the team produce plates which outperform existing versions. But Dr Golt would like to introduce a further tweak. A continuous feedback loop, in which the results of each ballistic test are used to adjust the manufacturing process automatically, would produce successive generations of new ceramics, each generation having superior properties to the last.

Nor is Dr Golt's technique necessarily restricted to ballistics. Applying it elsewhere could help uncover all sorts of new and improved ceramics for things like electronic devices, heat-resistant components in car engines and the blades of wind turbines (which have ceramic cores). Edison would surely have approved. ■

Primateology

When less is more

Why have some lemurs lost their colour vision?

PRIMATES' TRICHROMATIC colour vision, with its red-, blue- and green-sensitive cone cells in the retina of the eye, is better than that of most mammals, which have to limp along dichromatically. It is thought to have evolved because primates are generally arboreal frugivores, and fruit are often brightly coloured. Some lemurs, however, are exceptions. They do indeed live in trees and consume fruit. But they have only two sorts of cone cell and are therefore unable to distinguish what other primates see as red and green, even though close relatives are trichromatic. That might be expected to make it hard to pick out red fruit, in particular, from a green, leafy background.

The assumption until now has been that these lemurs have been unlucky and have lost part of their colour vision by chance at some point in the past. But Rachel Jacobs of George Washington University, in America, disagrees. A paper she has published in *Behavioral Ecology and Sociobiology* argues that these lemurs' loss of the ability to see red, as it were, is no accident.

Colour-blind lemurs all belong to the genus *Eulemur*, meaning they are closely related. That suggests they descend from a single individual, alive in the fairly recent evolutionary past, in which the pertinent mutation happened. To find out more, Dr Jacobs and her colleagues collected blood from 142 animals belonging to ten species of *Eulemur* and analysed the DNA of the

cells therein to search for this mutation.

Two of the ten, they found, had no relevant mutation, and presumably retained trichromatic vision. The others were, indeed, mutated in a way that made them dichromatic. But, to their surprise, not all in the same way. Seven of the eight shared one particular mutation. The other, *Eulemur rubriventer*, had a different one. Colour blindness has thus evolved twice in this group, meaning it is probably no accident. But if it is not an accident, then how does it help a lemur to have what is, on the face of things, a diminution of its visual capability?

To find out, Dr Jacobs and her colleagues, who were already studying *Eulemur rubriventer*, spent eight months following nine troops of them through the Madagascan forest. They noted every item of food the animals consumed and used a spectrometer to measure the amount of light each food type reflected.

The result of this arduous travail was the discovery that *Eulemur rubriventer* is indeed adept at finding red fruit. The crucial point was that unlike their primate cousins, monkeys and apes, which are mainly diurnal, lemurs come out at night. The advantage of trichromy disappears in darkness, when colours are hard to distinguish. But the spectrometer data showed that fruit still stand out against a leafy background because they reflect more light than leaves do, and therefore look brighter.

These observations suggest that colour vision ceases to be an advantage at night. But Dr Jacobs goes further. She proposes that full colour vision might actually hinder the animals' night sight, by interfering with perceptions of brightness. This will require further testing. But, if true, it would be enough for evolution to reverse itself and favour the dichromatic mutations that members of *Eulemur* now sport. ■



Vision on? ■

Medical technology

A real brain wave

How to give voice to the speechless

OF THE MANY memorable things about Stephen Hawking, perhaps the most memorable of all was his conversation. The amyotrophic lateral sclerosis that confined him to a wheelchair also stopped him talking, so instead a computer synthesised what became a world-famous voice.

It was, though, a laborious process. Hawking had to twitch a muscle in his cheek to control a computer that helped him build up sentences, word by word. Others who have lost the ability to speak because of disease, or a stroke, can similarly use head or eye movements to control computer cursors to select letters and spell out words. But, at their best, users of these methods struggle to produce more than ten words a minute. That is far slower than the average rate of natural speech, around 150 words a minute.

A better way to communicate would be to read the brain of a paralysed person directly and then translate those readings into synthetic speech. And a study published in *Nature* this week, by Edward Chang, a neurosurgeon at the University of California, San Francisco, describes just such a technique. Speaking requires the precise control of almost 100 muscles in the lips, jaw, tongue and throat to produce the characteristic breaths and sounds that make up sentences. By measuring the brain signals that control these vocal-tract muscles, Dr Chang has been able to use a computer to synthesise speech accurately.

The volunteers for Dr Chang's study were five people with epilepsy who had had electrodes implanted into their brains as part of their treatment. He and his colleagues used these electrodes to record the volunteers' brain activity while those volunteers spoke several hundred sentences out loud. Specifically, the researchers tracked activity in parts of the brain responsible for controlling the muscles of the vocal tract.

To convert those signals into speech they did two things. First, they trained a computer program to recognise what the signals meant. They did this by feeding the program simultaneously with output from the electrodes and with representations of the shapes the vocal tract adopts when speaking the test sentences—data known from decades of study of voices. Then, when the program had learned the relevant associations, they used it to translate electrode signals into vocal-tract configura-

Sports psychology

It's all in the mind

How hard a hole at golf is does not depend solely on how hard it is

FED UP WITH watching professional golfers humble historic courses, tournament organisers have lengthened holes, dug deeper bunkers and grown thicker rough to make things harder. But traditionalists—and there are many—complain of vandalism to beloved venues. So what is a golf official to do?

Some change the par of the holes—the number of strokes a good golfer should need to complete a hole. Par allows a set number of shots to reach the green, and then two putts to sink the ball. For men, holes over 430 metres (470 yards) are typically assigned a par of five. Those between 230 and 430 metres are par four.

To make long holes seem trickier several courses have relabelled a par five as par four, so elite golfers over the years

have played these holes as both. And that sets up an intriguing natural experiment. Did those golfers try harder when they played them as par fours? If so, they would be showing what behavioural economists call loss-aversion bias: working harder to cling to something they already have (their status as par players of that course) than they did to get it in the first place.

To find out, Ryan Elmore and Andrew Urbaczewski of the University of Denver looked at scores from the US Open, a major tournament. They focused on two holes—the second at Pebble Beach and the ninth at Oakmont. Both have been switched in the past from par five to par four. And both courses hosted the Open at least twice in the years before and after the switch.

The researchers' analysis, posted on SSRN, a preprint site, is as startling as an alligator emerging from a water hazard. Unsurprisingly, players' scores relative to par on these two holes got worse when they were par fours. But their absolute scores improved, by an average of a whole shot over a tournament (during which the golfers play the same course four times). That can be the difference between winning and losing. Scores on other holes did not change, so the improvement was not explained by generally better play, better equipment or better weather. It seems to have been caused by players trying to protect par.

That is not a rational response. Golfers play against each other, not the course. The player who takes the fewest shots wins. Individual performance against par is irrelevant—except that, apparently, it isn't.



Par what, you said?

tions, and thus into sound.

The principle proved, Dr Chang and his team went on to show that their system could synthesise speech even when a volunteer mimed sentences, rather than speaking them out loud. Although the accuracy was not as good, this is an important further step. A practical device that might serve the needs of people like Hawking would need to respond to brain signals which moved few or no muscles at all. Miming is a stepping stone to that. The team have also shown that the relationship between brain signals and speech is sufficiently similar from person to person for their approach to be employed to create a generic template that a user could fine-

tune. That, too, will ease the process of making the technique practical.

So far, Dr Chang has worked with people able to speak normally. The next stage will be to ask whether his system can work for those who cannot speak. There is reason for cautious optimism here. What Dr Chang is doing is analogous to the now well-established field of using brain-computer interfaces to allow paralysed individuals to control limb movements simply by thinking about what it is they want to do. Restoring speech is a more complex task than moving limbs—but sufficiently similar in principle to give hope to those now in a position similar to that once endured by the late Dr Hawking. ■



Learning from the past

The psychology of nations

A bold overview of major crises illuminates the slipperiness of history

BY ITS OWN lights, this book fails. And yet, as a meditation about a world on edge, it is also well worth reading.

Jared Diamond sets out to construct a diagnostic framework for political systems in turmoil. What enables some societies to cope with a crisis but condemns others to mayhem? Do past crises reveal patterns that could guide today's leaders as they gaze into the contemporary abyss? Mr Diamond readily acknowledges that his book is just a first stab at answering these questions. He hopes that "Upheaval" will encourage other scholars to take up his ideas and mould them into something more rigorous. It may instead convince them that the project is doomed.

Even so, the journey towards failure, via seven countries at turning-points in their pasts, is enjoyable and informative. Mr Diamond is the doyen of a class of scientifically literate, anthropologically aware and culturally astute thinkers. He is an enlightened guide and a sympathetic observer. Though "Upheaval" cannot achieve its implausible goals, this quixotic effort illuminates what it means to learn from history.

Upheaval. By Jared Diamond. *Little, Brown and Company*; 512 pages; \$35. *Allen Lane*; £25

The idea at the heart of "Upheaval" is that the insights which help people cope with personal crises, such as crushing disappointment, divorce or bereavement, can also shed light on those that afflict states. Therapists seek to get their patients to acknowledge that they are in trouble and that they are empowered to do something about it. Individuals can learn from the behaviour of others. They can identify what it is about them that needs to change—and what should remain the same.

Countries are not people, of course. But Mr Diamond believes the parallels are instructive. Are a country's politicians and media honest about their situation? Do they take responsibility for fixing a problem, or simply blame others? Can they learn from what has happened elsewhere? Are they willing to adapt, even as they cleave to what makes their society work?

As the spectre of nationalist populism hovers overhead, "Upheaval" develops this

→ Also in this section

72 African-American history

72 A novel of London

73 Johnson: Polyglot politicians

74 How music works

74 Guinea-Bissau's writers' club

framework by examining such crises as the modernisation of Japan after Matthew Perry's black ships sailed into Tokyo bay in 1853, the mass slaughter when Indonesia put down a communist revolt in 1965 and the coup against Salvador Allende in Chile in 1973.

Finland's dealings with the existential threat from the Soviet Union during and after the second world war are another good example. Mr Diamond reckons that Finnish leaders displayed many of the coping characteristics of resilient individuals. They were brutally realistic about their vulnerability. Finland is a small place that could not depend on help from other countries; its best chance of remaining independent was to persuade the Soviet Union that it was not worth conquering. That meant fighting to the last man when Soviet troops invaded during the war, but then working closely with Moscow in peace time, even though Stalin had just ravaged eastern Finland. By following this pragmatically deferential policy—which came to be known as "Finlandisation"—Finns conceded what they had to, but would not compromise over their independence.

Here Mr Diamond's method tells you plenty about Finland's travails in the 20th century. But as an exercise in political science it falls short. You cannot compress history into a self-help guide. For one thing, even if the grand sweep is relayed accurately, it is a superhuman task to gather the underlying facts—even the assiduous Mr Diamond labels Finland "Scandina- ▶

vian” when Finns call themselves Nordic. For another, the notion that individual psychology can be projected onto nations is fanciful. People talk about a “national character”, but it is a slippery metaphor that leads to cartoonish over-simplification.

Most of all, Mr Diamond’s approach depends upon a flawed understanding of what history is. For his scheme to succeed, he needs to be able to pin history down to an interpretation, as if it were a laboratory specimen. History is not so compliant. In a scientific sense it is unique—an experiment without controls. In another way it is too abundant, overflowing with facts that might or might not be salient. The past is endlessly open to interpretation, as historians rifle through it for the perspectives that grab them.

To crown it all, supposing you can agree on the meaning of the past, Mr Diamond’s method requires a consensus about the challenges of the present, too. Good luck with that in Westminster or Washington.

Those who do not want to repeat it should learn history. Mr Diamond is right about that. But the lesson it teaches comes as a parable, not an algorithm. ■

American history

A kind of freedom

Stony the Road: Reconstruction, White Supremacy and the Rise of Jim Crow. By Henry Louis Gates junior. Penguin Press; 320 pages; \$30 and £25

“IN WHAT NEW skin will the old snake come forth?” The abolitionist and former slave Frederick Douglass posed this question in 1865, a month after America’s civil war ended. Slavery was dead. Hopes soared—and were soon dashed. As another great African-American intellectual, W.E.B. Du Bois, put it: “The slave went free; stood a brief moment in the sun; then moved back again toward slavery.”

The post-war history of civil rights in America was dismal. Reconstruction—in which the North tried to rebuild and reform the South—lasted only a dozen years. It included some triumphs; for example, roughly 2,000 black politicians entered government in the late 19th century. But when Ulysses S. Grant, a racially progressive president, left office in 1877, the North tired of browbeating the South. White supremacy returned in force during a period shockingly known (by some) as “Redemption”. The discrimination and segregation of Jim Crow took hold; black people were oppressed and denied the right to vote.



“Stony the Road”, the new book by Henry Louis Gates junior, a professor at Harvard, is a concise, powerful account of African-Americans’ efforts to resist the rollback of their rights. It describes the onslaught of degradations they faced and their leaders’ valiant, if flawed, bid to reverse bigoted perceptions, highlighting the role of literature and the arts. It is an important addition to America’s evolving view of its own history.

The cultural and scientific assault on African-Americans was relentless. They were seen by many whites as subhuman, consigned to inferiority by pseudo-science. Theirs was a “childlike” race (though according to the propaganda, black men were also prone to savagely raping white women). In white literature, blacks were nostalgic for slavery and its supposed protections. A story of 1893 featured a character known as “little Mammy” who “grieved, as she crept down the street, that she had never mounted the auctioneer’s block.”

Such representations were everywhere, serving the political goal of keeping black Americans out of power—for who would trust a beast or a child to make laws? Mr Gates includes dozens of searing images: cartoons showing black men eyeing white women, “Sambo art” lampooning blacks as imbeciles, and grotesque postcards distributed to celebrate lynchings.

Well-to-do black people fought back. But so ingrained were the dehumanising stereotypes, all those Mammies and Uncle Toms, that the only solution seemed to be separating themselves from the impoverished masses. Enter the “New Negro”, a term adopted by the black elite of the late 19th century. Whereas the “Old Negro” was “degraded” or “degenerate”, Mr Gates summarises, the New Negro was sober, classy and sophisticated. The rebranding culminated in the Harlem Renaissance (originally known as the New Negro Renaissance), which showcased the talents of the starriest African-Americans.

From today’s perspective, the glitch is obvious. As Mr Gates writes: “You might

say that its own formulation embedded its own critique.” The existence of the New Negro implied the inadequacy of the old. In its own way the strategy adhered to white standards, as some African-Americans observed at the time. In the end, as Mr Gates notes, some of the richest elements of African-American culture—jazz, blues and spirituals—arose from the grassroots, rather than descending from the elite.

The New Negro was ultimately a “vain attempt to confect positive images of noble black people powerful enough to brace against the maelstrom of excruciating images that the white supremacist imagination had spawned”. But the enterprise still mattered. This was the era in which anti-lynching campaigns began and the NAACP was formed. Eventually, says Mr Gates, such acts of resistance grew into the civil-rights movement of the 1960s, when real and lasting change occurred—a century after Reconstruction.

Even so, as he laments, the awful imagery of the Redemption period still “drifts like a toxic oil slick” through contemporary culture. Far as America has travelled, the road remains stony. ■

Love in the time of Brexit

Up from the depths

A Stranger City. By Linda Grant. Virago; 336 pages; £16.99

AT THE END of the 19th century much of Europe was transfixed by the body of a woman that was pulled from the river in Paris. *L’Inconnue de la Seine* became a symbol of inscrutable beauty. Linda Grant’s shimmering new novel opens with an echo of that episode, as a female corpse retrieved from the Thames is buried in east London in 2016. But only Pete, a policeman preoccupied by the case, and Alan, a documentary film-maker, pay their respects.

“A Stranger City” is not a mystery; its real quarry is not a missing person. In place of a linear plot it follows the London lives of Pete, Alan and Chrissie—an Irish nurse who crossed paths with the dead woman just before her supposed suicide—and others in their orbits. Recovering from cancer, Pete’s wife resolves to escape the teeming city he loves. Alan marries a woman from a Jewish Persian family for whom “life was a perpetual game of snakes and ladders”. People covet and renovate properties, as Londoners do. For Chrissie, life is “a load of obligations to other people and trying to find the good times in them apart from all the boring shite”. Yet when her patients die, ▶▶

▶ she realises as dawn breaks that “they’d missed it for ever now and you were still here with everything in front of you”.

Collectively these characters run a gauntlet of 21st-century urban horror: terrorism, racist violence, social-media vitriol. A viral video generates an alternative, online version of Chrissie, even as, in the physical world, the drowned woman remains unclaimed. Brexit-era xenophobia crescendoes. From a recognisable post-referendum present (“Aren’t you going home now?” a classmate asks the daughter of Alan’s German neighbours), the references

modulate to an imagined sequel of mass deportations and prison ships in the Thames estuary. The meticulous detail of Ms Grant’s observations lends credibility to her dystopian leaps.

Amid these dramas, the unknown woman comes to seem symbolic, like her French counterpart. As Alan says, “She looked like anyone...a kind of blurred person.” She stands for the anonymity of modern cities and the effacement of identities by the internet—or for a society losing its sense of itself. She is everywoman; it seems almost that she was never truly there.

Until it turns out that she was a real person after all. Almost in spite of itself, meanwhile, Ms Grant’s book is as much a love letter to London as a lament, an ode to pink skin after sunny days and lost gloves waving from railings. London is indestructible, those German neighbours think: “too absorbed in its own individual business, too intent on getting to work and going shopping and having dates and affairs”. “It was impossible”, Alan reflects, “to tell London’s story; it was too large, too ancient...too contradictory”. Perhaps, but Ms Grant has made a pretty good fist of it. ■

Johnson Speaking in tongues

Foreign languages ought to be an asset for politicians—not a liability

IT SEEMS HARD to imagine, but once a British prime minister could not only aim to put Britain “at the heart of Europe”; he could say so in fluent French to the Assemblée Nationale. Today, even if Theresa May, a successor to the Europhile Tony Blair, could emulate him, the politics of patriotism might require her to hide it. In the nationalistic climate, many people in the Anglophone democracies seem to consider the ability to talk to foreigners in their own languages distasteful, even suspect.

Foreign-language skill has become yet another cultural-political divider: it is associated with despised liberal elites, like a fondness for sushi or a passport full of stamps. And like the general disgust with those elites, this attitude crosses the left-right divide. Pete Buttigieg, the young mayor of a medium-sized city in Indiana, is enjoying a surprise moment in the sun as a presidential candidate—and nearly every profile of him mentions that he speaks seven foreign languages: French, Spanish, Italian, Maltese (his family’s heritage tongue), Norwegian, Arabic (from which Maltese is descended), and Dari, a language of Afghanistan.

The way Mr Buttigieg’s skills are regarded betrays a lack of understanding of what learning a language means. Mr Buttigieg is not fluent in all of them, as he admits. He conceded that “I just ran out of Norwegian” after several well-delivered sentences in reply to a Norwegian journalist. He struggled in an answer to an Italian. Asked how many languages he speaks, he said: “It depends on what you mean by ‘speak’.”

Spoken like a linguist. How his abilities are described often says more about those doing the describing. The left likes to see itself as the brainy wing of politics, in contrast to science-bashing conserva-

tism. Yet that has not stopped some on the left from attacking Mr Buttigieg for his signature aptitude. To Nathan Robinson, writing in *Current Affairs*, Mr Buttigieg’s polyglottery is of a piece with his time as a consultant at McKinsey; a slick trick, an ability to tell people what they want to hear. Another left-wing outlet, *Jacobin*, sarcastically headlined its unflattering profile: “Have you heard? Pete Buttigieg is really smart.”

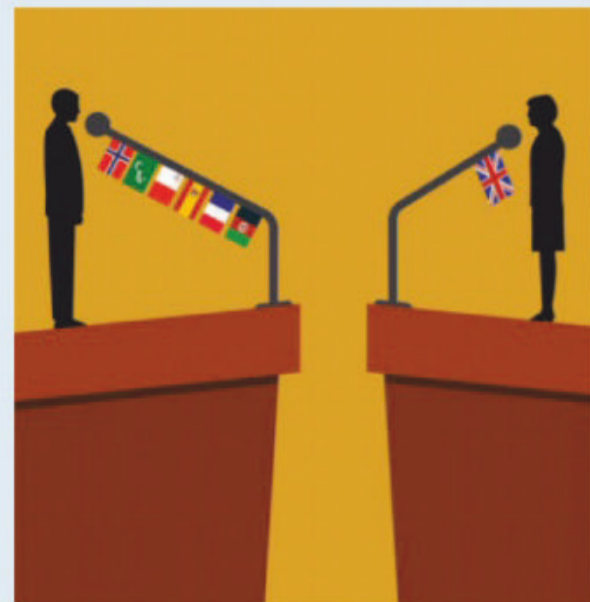
All the same, languages remain more of a Democratic than a Republican trait. Of this year’s Democratic presidential candidates, Beto O’Rourke speaks good Spanish (Julian Castro’s and John Hickenlooper’s is rather less good); Kristen Gillibrand has some Mandarin, and Kamala Harris conversational French. Barack Obama managed a few phrases in Indonesian on trips to the country where he spent some of his youth. John Kerry, the Democrats’ nominee in 2004, proudly spoke French; his wife Teresa addressed the national convention in a string of languages.

On the Republican side, it is not so much ability as attitude that differs.

Though Mitt Romney speaks good French, he made little of it while running for president in 2012. Marco Rubio and Jeb Bush were unusual in speaking some Spanish on the campaign trail in 2016, but not without controversy. Ted Cruz took a swipe at Mr Rubio, a fellow Cuban-American, over an interview he had given in Spanish. Donald Trump said that Mr Bush should “set the example by speaking English in the United States”. The party is known for pushing English-only laws across the country, as if tolerating another language necessarily entailed insufficient pride in your own.

Elsewhere in the Anglophone world, Canadian politicians are usually bilingual as a matter of course, and New Zealanders are rediscovering a fondness for Maori. Kevin Rudd, an Australian prime minister, was fluent in Mandarin. But most leaders know they can get by with only English. Not so those in office in other places. Besides learning English, continental European leaders often know a couple of each other’s languages. Multilingualism is a national virtue in multi-ethnic countries such as Singapore and Switzerland. Angela Merkel can speak to Vladimir Putin in Russian, and he can reply in German.

It is a short-sighted shame to be dismissive of language ability. The link to xenophobia in America and Britain is obvious, but too easy an explanation: after all, such resentment is rising elsewhere, too. Just as importantly, as people the world over learn English, so Anglophones are spending less and less time acquiring foreign languages. That is sad for politicians and everybody else, as even xenophobes should see. Even if they believe that foreigners are the enemy, doesn’t it make sense to know what they are talking about?



How music works

The beat goes on

Why You Like It. By Nolan Gasser. *Flatiron Books*; 720 pages; \$32.50

THE ADAGE that “writing about music is like dancing about architecture” has been ascribed to Elvis Costello, Laurie Anderson and Thelonious Monk, among others. Undaunted, in “Why You Like It” Nolan Gasser attempts to explain the ineffable ways music produces sensations in listeners’ brains: its power to move people to tears, evoke awe and induce involuntary toe-tapping. Plus the odd proclivity of sad songs to seem uplifting.

Mr Gasser rose from playing the piano in American malls to featuring in Steve Miller’s backing band; he has a PhD in musicology from Stanford. But his analysis relies most on his stint at Pandora, a pioneering music-streaming service. He presided over an algorithm that, by recommending new tracks based strictly on the musical characteristics of users’ favourites, purports to sift out ulterior considerations such as fashion. One listener was aghast at the results: “Oh my God, I like Celine Dion!” “Why You Like It” is similarly clarifying.

Human beings really can feel the groove, Mr Gasser writes; “individually and communally” they have a unique ability to lock into a beat. This propensity for “entrainment” may be an evolutionary advantage, enhancing as it does the “capacity for collaboration”. Likewise, he explains, people are suckers for repetition. Most kinds of music, from pop and rock to jazz and classical, rely on the repetition of melodies, harmonies and so on.

Why? Repetition allows people not merely to “listen to the music, but listen along with it...by virtue of the fact that on some level...we know what’s coming next.” This in turn explains how surprise governs musical responses. Composers play on emotions by “thwarting, delaying or granting...what our ears expect to hear.” Recalling the words of John Peel, a DJ, on the attraction of The Fall, a post-punk band—“They are always different, they are always the same”—Mr Gasser concludes that fans “want to hear material that is at once fresh and familiar”.

He takes on “the paradox of negative emotions”. Scholars speculate that sad music spurs secretion of prolactin, a consoling hormone produced at times of mental torment (and by lactating mothers). The payoff is heightened by the “absence of an actual sad event”. In other words sad songs, like other kinds of tragic art, appeal as a

source of safely vicarious sentiment.

This is a work of staggering erudition and breadth. Mr Gasser extols the artistry of Taylor Swift beside that of Cheb Mami, an Algerian singer; he advises hip-hop fans to check out Haydn. It ought to be read in the company of a streaming service and the tracks it dissects—as a 21st-century version of the best-album guides prized by musos during vinyl’s heyday. In taxonomising the responses music elicits, Mr Gasser identifies the peak high as “frisson”, characterised by “thrills and chills”. Fewer than one in three listeners report feeling this, he writes, but “it is far more common amid avid music lovers”. “Why You Like It” is a gateway to this exalted state. ■



Literary camaraderie

Brothers in art

BISSAU

An evening with the soldier-poets of Guinea-Bissau

AS DUSK FALLS, Manuel da Costa scans the university garden for an unoccupied plastic chair. He shakes a student’s hand, waves at a politician and winks at a playwright as a meeting of Guinea-Bissau’s only writers’ club begins.

Since October 2013 an eclectic mix of around 30 writers and literature enthusiasts have gathered every month in Bissau, the country’s capital, to hear new work, debate the latest political crisis, and gossip. “I was shy at first, but then I got used to reading out poetry and expressing my feelings,” says Mr da Costa. For its members, the Guinea-Bissau Writers Association is a rare chance to hone and promote their craft.

The legacy of Portuguese rule, and the failures of the African Party for the Independence of Guinea and Cape Verde (PAIGC), which has governed almost unin-

terrupted since independence in 1974, have left Guinea-Bissau desperately poor. Among other deprivations, there is no functioning, state-funded library. Poverty is compounded by crime. In 2008 the country was labelled a narco-state by the UN; diplomats say the crooks have diversified into people- and arms-trafficking.

Mr da Costa confronts these problems in his writing. In his novel “Mare Branca em Bulinia”, Latin American drug cartels, in league with shadowy figures in the local armed forces, overrun a fictional west African country. It is a story he is well-qualified to tell: as well as being a writer he is a retired lieutenant-colonel.

He leads a surprisingly large contingent of soldier-poets. “Most of us in the military have seen a lot, and that’s why so many are writers,” Mr da Costa explains. Many Guineans proudly recall that Amilcar Cabral, a murdered guerrilla leader, was a fine poet as well as an independence fighter. Samuel Fernandes, a serving army colonel, borrowed the title of one of Cabral’s most famous poems, “Regresso”, for one of his own. It laments the desire of many young Guineans to leave the country at the earliest opportunity and urges them to return:

Because love of country
Is better than beautiful buildings
Pretty avenues and modern cars

Mr Fernandes says his first verses were odes he sent home to a girlfriend during a Soviet-era stint in Leningrad (now St Petersburg). Today China is the main sponsor of student exchanges for Guineans.

Along with politics, the divisive issue of language frequently crops up at the writers’ get-togethers. Portuguese is Guinea-Bissau’s sole official language, but around 90% of the population of 2m do not speak, read or write it. The adult literacy rate is below 60%; roughly half of children do not go to school. Those who do are often taught by teachers who barely know Portuguese themselves. The principal lingua franca in a patchwork of ethnic languages is Creole, which is influenced by tribal dialects, Portuguese and (in some places) French.

Edson Incopte—an up-and-coming poet who spent part of his youth overseas and works for a Portuguese NGO—resists choosing between the two tongues. “When I need to write to Guinean people, and express Guinean things, I write in Creole,” he says, but he publishes in both languages. Odete Semedo, a more established poet, recalls the prejudice she once suffered as a student in Portugal. Creole, she says, is “the language of my heart”.

Despite serving as the spokeswoman of the PAIGC, Ms Semedo accepts that the hope of “a happier and more equitable society” after independence has not been realised. “The despair of the poets”, she says, “chimes with the despair of the people.” ■

INSIDE MIHMEP: JOIN US ON 9 MAY 2019

MEET THE DIRECTOR, ONLINE OR F2F

Attend our event to discover how MIHMEP can help you expand your international career in the healthcare sector. Come to Milano or watch the live stream online to interact directly with the MIHMEP Director Claudio Jommi and his students.

9 May 13:30 CEST

MIHMEP: New Frontiers, New Markets for Healthcare Managers

For more information and to register:
SDABOCCONI.IT/MIHMEP

**MIHMEP 1-YEAR MASTER
OF INTERNATIONAL HEALTHCARE MANAGEMENT,
ECONOMICS AND POLICY**



SDA Bocconi



**Bocconi
School of Management**

MILANO | ITALY

Seminars

Not *If*, But *When*

The good times can't last forever. A major bear market is coming. And probably sooner than you think.

The warning signs are everywhere. And it frankly doesn't matter which one straw finally breaks the camel's back.

The possible triggers are endless...

Trade Wars... Interest Rate Hikes...
Brexit... the Russia investigation...
Unsustainable Government Debt... the
Corporate Debt Bubble... the Student
Debt Bubble... Subprime Auto Loans...
the End of QE... the China Collapse...
a Corporate Fraud Like Enron...
Overvalued Big Tech... Rising Socialism
in America... Slowing Global Growth...
War with North Korea, Venezuela, China,
or Iran... Health Care Debt... Job
Automation... Zero GDP Growth...

Economist John Hussman predicts the S&P 500 will fall as much as 60%, beginning in under two years.

But you don't need to predict the exact day it will arrive.

What matters is – *when it does, it will already be too late to protect your wealth.*

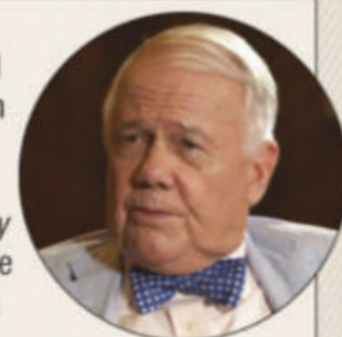
Your investments – and retirement savings are on the line.

Legendary investor Jim Rogers (co-founder of the Quantum Fund) believes the next bear market will be worse than anything in our lifetimes.

- ➔ Worse than 2008.
- ➔ Worse than the 2000 NASDAQ crash.
- ➔ Worse than 1987.
- ➔ Maybe even worse than 1929...

Rogers is prepared. **And you can be too.**

Join Jim Rogers and Stansberry Research for a special one-hour, live online event on exactly *why* the next crash will be worse than anything we've seen before...



And – more importantly – exactly what to do *right now* to prepare.

May 15th at 8:00 PM ET
The Bear Market Survival Event (featuring Jim Rogers) is 100% free of charge.
But you must reserve your spot to attend. Simply go to:

www.JimRogersEvent14.com

Or you can instantly secure your spot by text.

**Text the keyword CRASH to
246810**



Economic data

	Gross domestic product			Consumer prices		Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units				
	% change on year ago			% change on year ago		%		% of GDP, 2019†		% of GDP, 2019†		10-yr gov't bonds		per \$ % change				
	latest	quarter*	2019†	latest	2019†							latest,%	change on year ago, bp	Apr 23rd	on year ago			
United States	3.0	Q4	2.2	2.2	1.9	Mar	2.2	3.8	Mar	-2.6		-4.7		2.5	-32.0	-		
China	6.4	Q1	5.7	6.3	2.3	Mar	2.5	3.7	Q1§	0.2		-4.5		3.2	§§	3.0	6.72	-6.3
Japan	0.3	Q4	1.9	1.0	0.5	Mar	1.4	2.3	Feb	3.9		-3.4		-0.1		-7.0	112	-3.1
Britain	1.4	Q4	0.9	1.0	1.9	Mar	2.0	3.9	Jan††	-4.2		-1.6		1.2		-25.0	0.77	-6.5
Canada	1.6	Q4	0.4	1.6	1.9	Mar	1.7	5.8	Mar	-2.6		-1.1		1.7		-68.0	1.34	-4.5
Euro area	1.2	Q4	0.9	1.3	1.4	Mar	1.4	7.8	Feb	3.0		-1.1		nil		-64.0	0.89	-7.9
Austria	2.4	Q4	5.1	1.3	1.8	Mar	1.8	5.0	Feb	2.0		-0.1		0.3		-56.0	0.89	-7.9
Belgium	1.2	Q4	1.4	1.3	2.3	Mar	2.2	5.7	Feb	0.1		-1.0		0.4		-42.0	0.89	-7.9
France	1.0	Q4	1.3	1.2	1.1	Mar	1.3	8.8	Feb	-0.6		-3.3		0.4		-38.0	0.89	-7.9
Germany	0.6	Q4	0.1	1.0	1.3	Mar	1.4	3.1	Feb‡	6.6		0.8		nil		-64.0	0.89	-7.9
Greece	1.6	Q4	-0.4	1.8	0.9	Mar	0.9	18.5	Jan	-2.5		-0.4		3.3		-68.0	0.89	-7.9
Italy	nil	Q4	-0.4	0.1	1.0	Mar	0.9	10.7	Feb	2.1		-2.9		2.6		86.0	0.89	-7.9
Netherlands	2.2	Q4	2.2	1.5	2.8	Mar	2.3	4.2	Mar	9.9		0.8		0.2		-56.0	0.89	-7.9
Spain	2.4	Q4	2.2	2.1	1.3	Mar	1.2	13.9	Feb	0.8		-2.4		1.0		-19.0	0.89	-7.9
Czech Republic	3.0	Q4	3.4	2.8	3.0	Mar	2.2	2.0	Feb‡	0.2		0.7		1.9		9.0	23.0	-9.5
Denmark	2.5	Q4	3.4	1.9	1.2	Mar	1.1	3.7	Feb	6.7		0.2		0.1		-56.0	6.66	-8.6
Norway	1.7	Q4	1.9	1.9	2.9	Mar	2.3	3.9	Jan††	7.1		6.4		1.8		-19.0	8.56	-7.9
Poland	4.5	Q4	2.0	3.8	1.7	Mar	1.7	5.9	Mar§	-0.6		-2.4		2.9		-19.0	3.83	-10.2
Russia	2.7	Q4	na	1.5	5.3	Mar	4.9	4.7	Mar§	6.5		2.4		8.3		98.0	63.8	-3.1
Sweden	2.4	Q4	4.7	1.6	1.9	Mar	1.7	7.1	Mar§	2.6		0.3		0.3		-51.0	9.37	-9.3
Switzerland	1.4	Q4	0.7	1.8	0.7	Mar	0.5	2.4	Mar	9.7		0.5		-0.3		-41.0	1.02	-3.9
Turkey	-3.0	Q4	na	1.1	19.7	Mar	15.5	14.7	Jan§	-3.8		-2.3		18.3		558	5.85	-29.7
Australia	2.3	Q4	0.7	2.5	1.3	Q1	2.0	5.0	Mar	-2.4		-0.2		1.9		-97.0	1.41	-7.1
Hong Kong	1.3	Q4	-1.4	2.2	2.1	Mar	2.3	2.8	Mar††	4.5		0.5		1.7		-49.0	7.84	nil
India	6.6	Q4	5.1	7.2	2.9	Mar	3.3	6.7	Mar	-1.6		-3.4		7.4		-26.0	69.6	-4.5
Indonesia	5.2	Q4	na	5.2	2.5	Mar	2.8	5.3	Q3§	-2.9		-2.2		7.7		88.0	14,078	-1.3
Malaysia	4.7	Q4	na	4.5	0.2	Mar	0.8	3.3	Feb§	2.4		-3.4		3.9		-33.0	4.13	-5.6
Pakistan	5.4	2018**	na	3.4	9.4	Mar	7.8	5.8	2018	-4.2		-6.0		13.2	†††	421	141	-18.3
Philippines	6.3	Q4	6.6	5.9	3.3	Mar	4.4	5.2	Q1§	-2.2		-2.5		6.1		-62.0	52.0	0.4
Singapore	1.3	Q1	2.0	2.4	0.6	Mar	0.5	2.2	Q4	17.0		-0.6		2.2		-34.0	1.36	-2.9
South Korea	1.8	Q1	-1.4	2.4	0.4	Mar	1.1	4.3	Mar§	4.5		0.7		1.9		-82.0	1,142	-6.4
Taiwan	1.8	Q4	1.5	1.8	0.6	Mar	0.1	3.7	Mar	13.1		-1.2		0.8		-26.0	30.9	-4.4
Thailand	3.7	Q4	3.3	3.5	1.2	Mar	0.9	0.8	Feb§	8.8		-2.5		2.2		-31.0	31.9	-1.4
Argentina	-6.2	Q4	-4.7	-0.9	54.1	Mar	46.1	9.1	Q4§	-2.1		-3.2		11.3		562	42.5	-52.4
Brazil	1.1	Q4	0.5	1.5	4.6	Mar	4.0	12.4	Feb§	-1.3		-5.8		7.0		-85.0	3.95	-12.9
Chile	3.6	Q4	5.3	3.2	2.0	Mar	2.2	6.7	Feb§††	-2.8		-1.4		3.9		-48.0	669	-10.3
Colombia	2.9	Q4	2.4	3.1	3.2	Mar	2.9	11.8	Feb§	-3.5		-2.0		6.5		1.0	3,183	-12.2
Mexico	1.7	Q4	1.0	1.6	4.0	Mar	4.1	3.6	Mar	-1.7		-2.3		8.2		58.0	18.9	-0.6
Peru	4.8	Q4	11.4	3.7	2.2	Mar	2.2	9.0	Feb§	-1.6		-2.0		5.6		64.0	3.31	-2.4
Egypt	5.5	Q4	na	5.1	14.2	Mar	12.1	8.9	Q4§	-0.1		-7.3		na		nil	17.2	3.1
Israel	2.9	Q4	3.1	3.1	1.4	Mar	1.2	4.1	Feb	2.7		-3.7		1.8		-7.0	3.61	-1.9
Saudi Arabia	2.2	2018	na	1.8	-2.1	Mar	-1.1	6.0	Q4	2.7		-7.7		na		nil	3.75	nil
South Africa	1.1	Q4	1.4	1.5	4.5	Mar	5.0	27.1	Q4§	-3.2		-4.0		8.6		33.0	14.3	-14.3

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

Markets

In local currency	Index	% change on:	
		Apr 24th	one week
United States S&P 500	2,927.3	0.9	16.8
United States NAScomp	8,102.0	1.3	22.1
China Shanghai Comp	3,201.6	-1.9	28.4
China Shenzhen Comp	1,747.9	-1.4	37.9
Japan Nikkei 225	22,200.0	-0.3	10.9
Japan Topix	1,612.1	-1.1	7.9
Britain FTSE 100	7,471.8	nil	11.1
Canada S&P TSX	16,586.5	0.3	15.8
Euro area EURO STOXX 50	3,502.6	0.7	16.7
France CAC 40	5,576.1	0.2	17.9
Germany DAX*	12,313.2	1.3	16.6
Italy FTSE/MIB	21,724.4	-1.3	18.6
Netherlands AEX	568.4	0.4	16.5
Spain IBEX 35	9,456.4	-1.0	10.7
Poland WIG	60,959.7	-0.3	5.7
Russia RTS, \$ terms	1,264.0	-0.1	18.6
Switzerland SMI	9,655.7	0.6	14.5
Turkey BIST	96,142.1	-2.1	5.3
Australia All Ord.	6,470.6	1.9	13.3
Hong Kong Hang Seng	29,805.8	-1.1	15.3
India BSE	39,054.7	-0.6	8.3
Indonesia IDX	6,447.9	-0.5	4.1
Malaysia KLSE	1,638.0	1.1	-3.1

	index	% change on:	
		Apr 24th	one week
Pakistan KSE	36,504.3	-0.7	-1.5
Singapore STI	3,362.4	0.4	9.6
South Korea KOSPI	2,201.0	-2.0	7.8
Taiwan TWI	11,027.6	0.3	13.4
Thailand SET	1,673.4	nil	7.0
Argentina MERV	29,746.6	-7.1	-1.8
Brazil BVSP	95,045.4	1.9	8.1
Mexico IPC	45,045.3	-1.1	8.2
Egypt EGX 30	14,770.3	-0.6	13.3
Israel TA-125	1,484.6	1.0	11.4
Saudi Arabia Tadawul	9,237.8	nil	18.0
South Africa JSE AS	59,102.7	0.3	12.1
World, dev'd MSCI	2,168.8	0.4	15.1
Emerging markets MSCI	1,084.5	-1.1	12.3

US corporate bonds, spread over Treasuries

	Basis points	
	latest	Dec 31st 2018
Investment grade	156	190
High-yield	435	571

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

Commodities

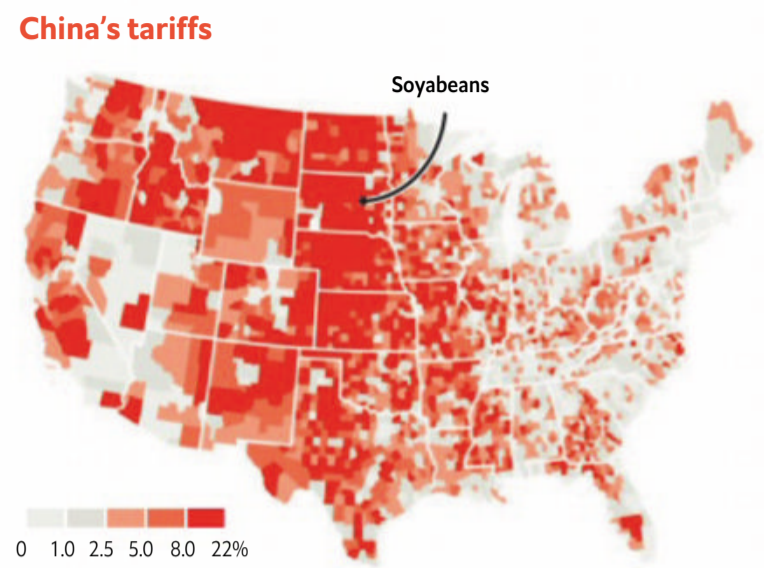
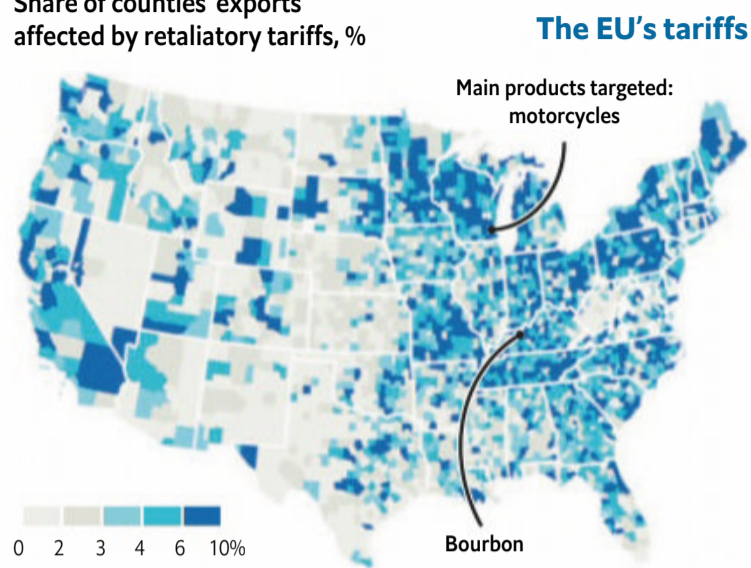
The Economist commodity-price index	% change on:				
	2005=100	Apr 16th	Apr 23rd*	month	year
Dollar Index					
All Items	138.7	137.6	-1.3	-11.2	
Food	142.3	140.8	-2.1	-10.6	
Industrials					
All	135.0	134.3	-0.4	-11.8	
Non-food agriculturals	125.3	124.5	-1.0	-12.8	
Metals	139.1	138.5	-0.1	-11.4	
Sterling Index					
All items	193.2	193.4	0.8	-4.1	
Euro Index					
All items	152.6	152.7	-0.7	-3.2	
Gold					
\$ per oz	1,276.2	1,268.8	-3.4	-4.5	
West Texas Intermediate					
\$ per barrel	64.1	66.3	10.6	-2.1	

Sources: CME Group; Cotlook; Darmann & 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](https://www.economist.com/indicators)

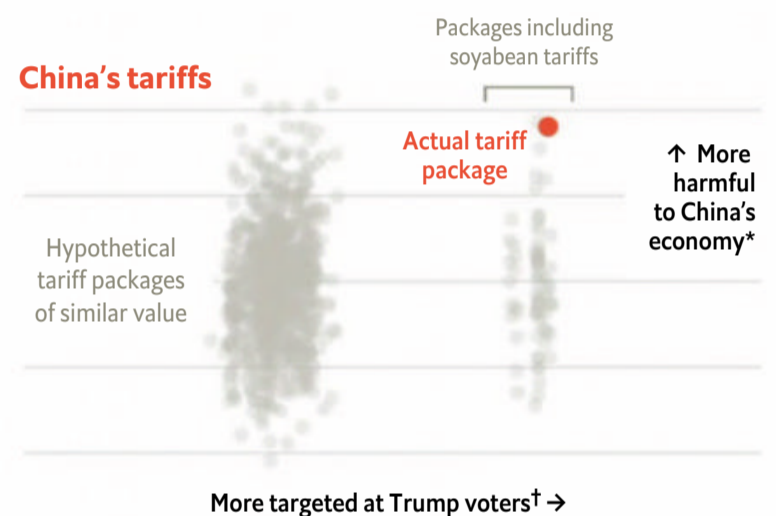
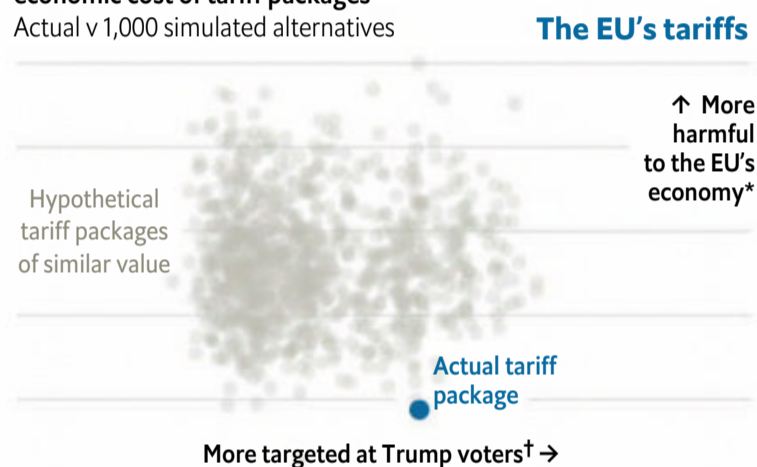
America's trading rivals have aimed tariffs at Trump voters: Europe in the Rust Belt, China in the Great Plains

Share of counties' exports affected by retaliatory tariffs, %



The EU tried to minimise the harm of its tariffs to its own economies. China showed no such concern

Political impact and domestic economic cost of tariff packages
Actual v 1,000 simulated alternatives



*Share of retaliating country's total imports of targeted goods that come from the US †Impact of change in Republican presidential vote share from 2012-16 on probability of a county being in the top 10% of exposure to retaliatory tariffs
Source: "Tariffs and Politics: Evidence from Trump's Trade Wars", working paper by T. Fetzer and C. Schwarz, 2019

You get what you give

Why you should never start a trade war with an autocracy

ECONOMISTS OFTEN argue that trade wars cannot be won. Yet they will be among the few beneficiaries from America's barrage of tariffs. For decades, rich countries' sound trade policies denied academics cases of tit-for-tat protectionism to study. But new American taxes on many goods from China and metals from everywhere have produced the data set of their dreams.

America's government seems unfazed by the damage its tariffs do to the economy. One study by scholars at the Federal Reserve and Princeton and Columbia Universities found that the new levies have raised costs for consumers by \$1.4bn per month.

However, Donald Trump is devoted to his voters. And his trading rivals have retaliated where it hurts. A paper by Joseph

Parilla and Max Bouchet of the Brookings Institution, a think-tank, estimated that 61% of jobs affected by retaliatory tariffs are in counties that voted for Mr Trump.

Is this a coincidence? If a country's imports from America already come from mostly Republican areas, those regions will bear the brunt of a trade war. However, a new paper by Thiemo Fetzer and Carlo Schwarz of the University of Warwick finds that America's rivals probably did consider politics when crafting their policies.

To test if recent tariffs were politically motivated, the authors needed to compare them with alternatives that were not. They devised this benchmark by creating at random 1,000 hypothetical bundles of targeted goods for each trading partner, all worth the same as the actual trade facing tariffs.

The authors then compared real-world policies with these alternatives. First, they assessed the political impact of each plan, by measuring how closely its targeted areas matched Republican gains when Mr Trump was elected. Next, they estimated how much each policy would harm a retaliating bloc's own economy, by counting the share

of its imports of the chosen goods that come from America. The more a country relies on one supplier, the more switching to a less efficient source is likely to hurt.

The study found that the EU prioritised minimising such damage. Its tariffs deftly protected domestic consumers, causing less disruption than 99% of alternatives. The bloc targeted Trump voters as well—its tariffs matched the election of 2016 more closely than in 87% of simulations—but not at the cost of upsetting its own citizens.

In contrast, China focused on punishing Trump voters. Its tariffs tracked the election better than 99% of alternatives. They also disrupted China's own economy more than in 99% of simulations. Even among plans including soyabeans—one of China's main imports, grown mostly in Republican areas—China's policy was just slightly more politically targeted than similar options, but far worse for its economy.

China's choice of tariffs seems designed to deter escalation at any cost. Only regimes with no voters to satisfy can run that risk. The lesson is clear: if you start a trade war, fight a democracy, not an autocracy. ■



American Icarus

Charles Van Doren, TV quiz whizz, died on April 9th, aged 93

HE SEEMED a very nervy contestant. Standing in the soundproof glass booth on the set of “Twenty-One”, NBC’s flagship quiz show during the winter of 1956-57, he’d bite his lip, furrow his eyebrows, blow out his cheeks. “Oh my goodness!” he would sigh, and then pull out a big white handkerchief and mop his face all over, taking care to pat not smear, as he’d been instructed.

Week after week he returned to grapple with questions that seemed to get ever harder: about explorers and boxing and the American civil war, about newspaper history, the boundaries of the Black Sea and what happened to the six wives of Henry VIII. As his winnings grew—to \$129,000 (worth \$1.2m today), more than anybody had ever won on this new klondike, the television quiz show—America became transfixed. Nearly 50m people tuned in each week. Geritol, manufacturers of a tonic for “tired blood” and the show’s sponsors, came to believe their own punchline: “Feel stronger fast.” Women wrote to him in their thousands, more than a few proposing marriage. He appeared on the cover of *Time*.

The next public part he played, three years later, was even more nerve-racking. It was in Washington, DC, rather than New York. Instead of the nation, it was the eyes of the House special subcommittee on legislative oversight that were on him. “I would give almost anything I have to reverse the course of my life in the last three years,” he told the congressmen. “I have deceived my friends, and I had millions of them...I was involved, deeply involved, in a deception.” The road to perdition and back would be a long one. Charles Lincoln Van Doren was clever; no one doubted that. Few had known how deeply flawed he was.

He was born into America’s intellectual aristocracy. His mother was a novelist and former editor at the *Nation*; his father a beloved and respected teacher who won a Pulitzer prize for poetry and praise for a biography of Nathaniel Hawthorne. His uncle also won a Pulitzer, and his aunt was the influential books editor of the *Her-*

ald Tribune. Over summer lunches at the long table in their country garden in Connecticut, young Van Dorens fought to be the first to identify lines from Shakespeare. “Some rise by sin, and some by virtue fall” (“Measure for Measure”); “To do a great right, do a little wrong” (“The Merchant of Venice”).

Young Charles was a speed reader, getting through two or three books a day. His parents gave him free rein—and he ran. The High School of Music & Art in New York, a masters in astrophysics, a PhD in English, both from Columbia. “I believe nothing is of more vital importance to our civilisation than education.” He would follow his father and teach at Columbia, where they would share an office.

Reality television, then as now, was a form of hand-to-hand combat, though at first only the producers saw that. There had to be winners, of course, but also losers. Some came willingly. For Van Doren’s opponent, Herb Stempel, a clever boy from the Bronx with bad teeth, it was money. Offered the chance to make \$25,000, he immediately said yes. For six weeks, he felt he was a star. People recognised him in the street; restaurants offered him free steaks.

Looking for someone to take on their champion, NBC gave Van Doren a call. But he resisted. “It’s not my world,” he told the producers. “My world is academe and I like it very much.” They asked how much he was making. “About \$4,000 a year.” How could he bring up a family on that? Sensing that everyone had their weak spot, David Halberstam suggested in his book, “The Fifties”, the producers persisted. By appearing on national television he would be doing a great service to teachers. “You can be erudite and learned, but show that you don’t have to be an intellectual snob,” Mr Halberstam quotes one as saying.

Convinced that he might, at last, do something he could call his own, he signed. But after 14 weeks his reign came to an end (he lost to a lawyer called Vivienne Nearing whose husband he had beaten in an earlier round). NBC offered him a job as its special cultural correspondent. The pay was \$50,000 a year. The brainy gladiator would be doing it for the children of America. After all, television was the largest classroom in the world.

Escaping from Stempel’s shadow was more difficult. The poor man from the Bronx had lost most of his winnings to a bookie who skipped town. When his own promised future in television failed to materialise, he began telling anyone who would listen that the shows were rigged with the contestants given the questions in advance. No one believed him, at least not at first.

But eventually the questions grew louder. Van Doren panicked. He lied to his family, even to his lawyer. He dissembled before his superiors. He sent a telegram to the congressional committee declaring his innocence, and then for a week he vanished. He took his car up to New England and drove round aimlessly from one town to another before holing up in his parents’ country house in Connecticut. There he pondered a letter from a complete stranger, a woman who’d seen him on television. “She admired my work there. She told me that the only way I could ever live with myself, and make up for what I had done—of course, she, too, did not know exactly what that was—was to admit it, clearly, openly, truly.”

Betrayal

A reading man, he would have known the story of Icarus, who flew too high on borrowed wings. As he would tell the congressmen in Washington, “I wanted to be a writer and a teacher of literature. I seemed to be moving farther and farther away from that aim.” Stempel stood at the back of the committee room, having taken the train down from New York at his own expense to watch Van Doren’s public *mea culpa*. Before the day was out, NBC had sacked him. Columbia too. He had broken the trust of America. Through his father (again), he found work as a jobbing editor at the “Encyclopedia Britannica”. He refused to co-operate with “The Quiz Show”, the film Robert Redford made nearly 40 years after the scandal broke. It was a long time before he taught again, but the lesson he took away lasted his whole life. ■

HYDRO + TOM DIXON

Innovation happens
when experts unite



Recycling begins at the drawing board

Sustainability is one of the biggest challenges facing modern society. Products need to last longer and be recyclable when their useful life ends. It all starts with good design and material selection. This is why Hydro is partnering with the world's leading designers and producers. Offering both low carbon and highly recycled aluminum. Together we can work to reduce emissions and enable the future circular economy.

asi Aluminium
Stewardship
Initiative



Hydro

We are aluminum