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# Handle with extreme care





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## Politics



Theresa May surprised her opponents—and her own cabinet—by calling a snap general election in **Britain** for June 8th. Since becoming prime minister in the wake of David Cameron's defeat in the Brexit referendum last summer, Mrs May has consistently ruled out fresh elections. But she now wants her own mandate in order to end "division" in Parliament over the negotiations to leave the European Union. Opinion polls give her Conservative Party a 20-point lead, though the electorate is in an irascible mood.

**George Osborne**, one of the most powerful politicians in Britain until the Brexit vote, decided to quit as an MP. The former chancellor of the exchequer had been criticised for trying to stay in Parliament while taking up a new job as editor of a newspaper.

Voters in **Turkey** narrowly approved, by 51% to 49%, a new constitution that hands sweeping new powers to the president and abolishes the job of prime minister. Recep Tayyip Erdogan says he needs the powers to deal with the instability and terrorism that have beset Turkey, but his opponents fear he will now feel emboldened to extend his political crackdown.

Police in **France** arrested two Islamist extremists for allegedly planning terrorist attacks in the run-up to the first round of the presidential election on April 23rd. Three leading candidates, Emmanuel Macron, Marine Le Pen and François Fillon, had been warned of the

risk of an attack. More than 50,000 security personnel will be deployed for the election, mostly at polling stations.

### A country in turmoil

Two students and a member of the national guard were killed during mass anti-government demonstrations in **Venezuela**. The opposition blamed armed supporters of the government for the students' deaths.

**Paraguay's** president, Horacio Cartes, dropped his plan to change the country's constitution to allow him to seek re-election. In March people protesting against his scheme set fire to Congress.

Javier Duarte, a former governor of the **Mexican** state of Veracruz, was arrested at a hotel in Guatemala. He had disappeared in October, accused of corruption and involvement in organised crime. The nabbing of Mr Duarte follows the arrest in Italy of Tomás Yarrington, a former governor of Tamaulipas, who has been charged with bank fraud, money laundering and drug smuggling. He had been on the run for nearly five years.

The government of **Canada** proposed a bill to legalise the recreational use of cannabis. Under the plan, people will be allowed to possess up to 30 grams of pot and will be able to buy it from licensed retailers or grow up to four marijuana plants at home. The law would set a minimum age of 18 for buying weed.

### Bigotry wins



Anies Baswedan, a former minister of education, won the race to become **Jakarta's** next governor. He defeated the incumbent, Basuki Tjahaja

Purnama, a Christian of Chinese descent, after a row about religion came to dominate the campaign.

**India's** Supreme Court said three senior figures in the ruling Bharatiya Janata Party should stand trial for their part in the violent demolition of a mosque in Ayodhya in 1992.

America used the biggest conventional bomb in its arsenal against fighters for Islamic State sheltering in tunnels in eastern **Afghanistan**. The Massive Ordnance Air Blast, or "Mother Of All Bombs", as the media quickly dubbed it, weighs 10 tonnes.

**China** said Interpol had issued an international request for the arrest of a Chinese property tycoon, Guo Wengui. Officials gave no details. The businessman is believed to have angered the Chinese authorities with interviews he had given abroad about high-level corruption in China.

The chief regulator of China's insurance industry, Xiang Junbo, was dismissed for "serious violation" of **Communist Party** discipline. Such language often means a suspect has been accused of corruption.

### Security measures

**Ethiopia** extended a state of emergency it declared in October last year amid protests against the government. Meanwhile a government-affiliated human-rights organisation said that 669 people have been killed in violence and protests since November 2015.

**Uganda** withdrew its forces from the **Central African Republic** and called off a long hunt for Joseph Kony and his rebel Lord's Resistance Army, a brutal group that forcibly recruits children as soldiers.

Donald Trump ordered a review of the nuclear deal with **Iran**, whereby most international sanctions on the country were rescinded in return for it dismantling much of its nuclear programme.

At least 65 children were among more than 120 people killed in a bomb attack on buses carrying residents from besieged **Syrian** towns as part of an agreed evacuation.

The government of **Zimbabwe** ordered banks to accept livestock as collateral for loans and schools to accept goats as payment amid a deepening economic and currency crisis. A shortage of American dollars has forced the government to print its own version, known as "bond notes", to ease a cash crunch.

### The killing factory

**Arkansas's** rush to execute eight death-row inmates within 11 days ran into trouble in various courts, including the Supreme Court. The state faces legal challenges to its reasoning that it needs to carry out the executions before the expiry date on its stock of a controversial sedative used in lethal injections.

Police in Fresno, a city in central **California**, said that a black man who shot dead three white people was motivated by racial hatred. The man shouted "God is great" in Arabic as he was arrested, but the police do not believe his was a terrorist act.



A Democrat came first in a **special election** for a congressional district in the Atlanta suburbs that has been held by the Republicans since the 1970s and had once been represented by Newt Gingrich. Jon Ossoff took just under 50% of the vote, so he faces a run-off against Karen Handel, a Republican. Democrats think they can take the seat. Mr Ossoff's campaign theme is "Make Trump Furious".

## Business

**America's big banks** reported robust earnings for the first quarter. Morgan Stanley's net profit soared by 70% compared with the same three months last year, to \$1.9bn, and Bank of America's was up by 40%, to \$4.9bn. Those banks, along with Citigroup, benefited from increased trading in bonds, currencies and commodities. But Goldman Sachs, the bank most associated with such activity, had a flat quarter in bond trading. Its elevated profit of \$2.2bn did not stop investors from sending its share price down by 5%.

### The gamble

Theresa May's decision to call a snap election in Britain pushed the pound above \$1.28, its highest level since September, as markets speculated that a bigger majority in Parliament would give a Conservative government room to negotiate a softer Brexit. The FTSE 100 dropped by 2.5%. A stronger pound hits the foreign revenues of the multinationals that dominate the index.

With attention focused on the snap election, the British government admitted that it may have to sell its remaining majority stake in **Royal Bank of Scotland** at a loss to the taxpayer. RBS was bailed out during the financial crisis, when the government bought shares at £5.02 (\$6.40). After nine consecutive years of huge losses its shares are now worth less than half that.

**China's economy** had a strong start to the year. GDP expanded by 6.9% in the first quarter compared with the same period in 2016, the best performance in 18 months. Industrial output rose by a mighty 7.6%. The economy continued its "rebalancing", with consumption accounting for a much larger proportion of growth.

The IMF slightly raised its forecast for growth in the **world economy** this year, to 3.5%. Among the richest econo-

mies, Britain saw the biggest upward revision to its GDP, which is now expected to increase by 2%.

Shinzo Abe, Japan's prime minister, nominated candidates to replace two members of the **Bank of Japan's** policy committee who have regularly held back from endorsing stimulus measures. If the two candidates are approved by Parliament Mr Abe will have selected all nine members of the central bank's board.

### Dropping the anchor

**Fox News** decided that Bill O'Reilly, the channel's biggest star, should not return to work after it reviewed allegations that he had sexually harassed several women. The claims had prompted a number of big advertisers to pull their business from Fox.

Donald Trump signed an order that aims to restrict outsourcing companies' ability to use the **H1-B employment-visa programme** to bring their staff to America. Mr Trump believes that foreign workers are getting jobs that should go to Americans and he wants more of the visas to be given to immigrants with greater skills. But his order avoided the tougher language on H1-Bs that he has

previously used. In Australia, Malcolm Turnbull, the prime minister, sounded a similar note, saying that his government would abolish its 457 visa programme for temporary foreign workers because they take jobs that should go to Australians.

Fending off a hostile-takeover approach from an American rival, **AkzoNobel** proposed a plan to separate its chemical division from its paints business, which includes the Dulux brand. The chemical division would either be sold or listed separately.



**Volkswagen** reported a quarterly operating profit of €4.4bn (\$4.7bn), which was well above market expectations. The carmaker benefited from a surge in sales at its core VW brand as well as cost-cutting. It is revamping its range as it tries to put the emissions-cheating

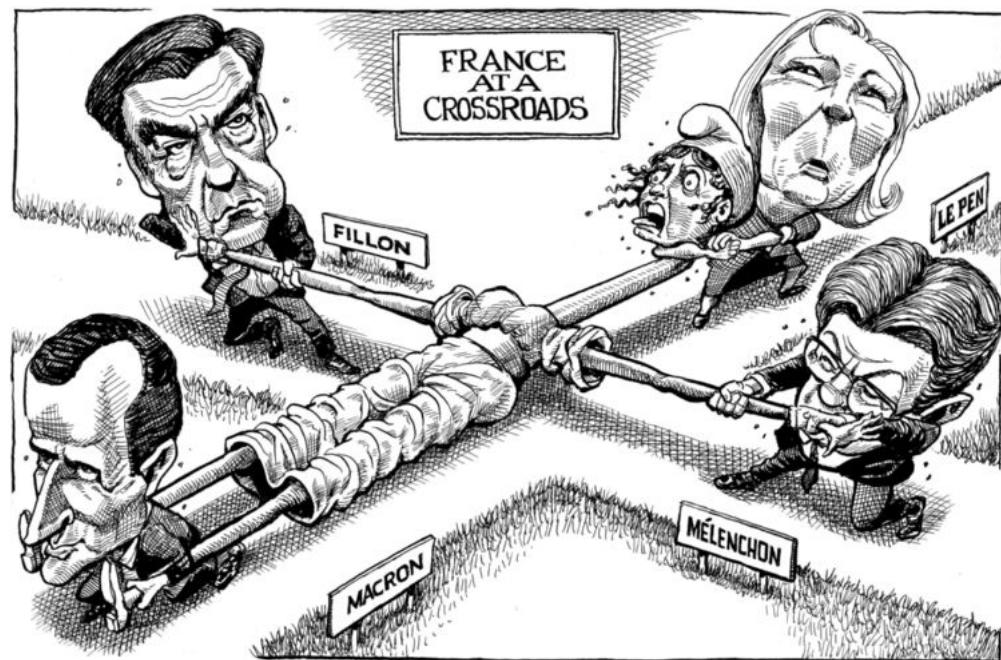
scandal behind it. The sense of a fresh start was underlined recently when it emerged that Ferdinand Piëch, the long-time driving force behind the company, had sold most of his stake in the group.

Police in London arrested **Vijay Mallya**, as part of the process of hearing the Indian government's request to extradite the entrepreneur. Once known as the King of the Good Times, Mr Mallya left India last year as banks piled on the pressure over debts racked up by Kingfisher Airlines, which collapsed in 2012. The Indian government accuses him of fraud. Mr Mallya denies absconding. He has been placed on bail in London; extraditing him to India could take years.

### Passenger numbers

**United Airlines'** customers may not have been delighted to hear that its revenue increased to \$8.4bn in the first quarter. The opening paragraph of United's earnings statement acknowledged the furore surrounding the violent removal of a passenger from a flight after he was bumped to make way for staff, describing it as "a humbling experience".

Other economic data and news can be found on pages 76-77



# Handle with extreme care

**How Donald Trump should approach the world's most dangerous regime**



"eternal president" despite having died in 1994. To celebrate grandpa Kim's birthday on April 15th, his grandson ordered warplanes to fly past in a formation spelling out his age: 105. He also ordered a gigantic parade, with goose-stepping soldiers and missiles on trucks. A male-voice choir belted out "Peace is guaranteed by our arms", even as the regime threatens to rain nuclear destruction on its enemies and is building a missile designed to reach the continental United States.

Dealing with the bellicose junior god-king will be one of Donald Trump's trickiest tasks. It will also be the first big test of how he handles relations with China, which are shifting as the rising superpower challenges the Pax Americana in Asia (see our special report). There are no good options, but arriving at the least-bad ones will require understanding both the regime and the Asian geopolitical jigsaw into which it fits. It will also require patience. Ominously, Mr Trump says he has little when it comes to North Korea, and his vice-president, Mike Pence, says that "all options" are on the table.

Wanting to do something quickly is emotionally appealing. North Korea is a vile, blood-drenched dictatorship where any hint of disloyalty is punishable by gulag or death. Mr Kim has children imprisoned for their parents' thought-crimes and his own relatives murdered on a whim. The prospect of such a man threatening Los Angeles is harrowing. Yet a pre-emptive strike on North Korea would be reckless beyond belief (see page 19). Its nuclear devices are hidden, possibly deep underground. Its missiles are dispersed on mobile launchers. Tokyo is just across the Sea of Japan. Seoul, the capital of peaceful, capitalist South Korea, is only a few miles from the border. Northern artillery and conventional missiles could devastate it; a conflict could rapidly turn nuclear and kill millions.

Mr Trump cannot possibly want to start a war. His military actions in Syria and Afghanistan suggest that he is more cautious than his bluster makes him sound. But even creating the impression that he might strike first is dangerous. If Mr Kim were to believe that an American attack is imminent, he might order his own pre-emptive nuclear attack, with disastrous consequences. So Mr Trump should cool his rhetoric immediately.

## Dealmaker, meet deal-breaker

For all his eccentricities, Mr Kim is behaving rationally. He watched Muammar Qaddafi of Libya give up his nuclear programme in return for better relations with the West—and end up dead. He sees his nuclear arsenal as a guarantee that his regime, and he, will survive. (Though it would be suicidal for him to use it.) Mr Trump can do little to change his mind. Economic sanctions that harm his people will not spoil his lunch. Cyber-attacks, which may account for the failure of some re-

cent missile launches, can slow but not stop him. America can solve the Korean conundrum only with China's help.

China has leverage over Mr Kim. It accounts for 85% of North Korea's foreign trade and could shut off its oil supply. But its interests are not the same as America's. North Korea is its ally. China's leaders do not like the Kim regime, but they do not wish to see it collapse and North Korea reunite, German-style, with the democratic South. That, China fears, would mean the loss of a valuable buffer. There are 28,500 American troops stationed in the South; China does not want them on its border.

To contain North Korea—and to conduct a successful foreign policy more broadly—Mr Trump has to learn how to talk to China. His instinct is to do deals. Last week he tweeted that he told Xi Jinping, China's president, that "a trade deal with the US will be far better for them if they solve the North Korean problem!" Later he explained that his decision not to label China a currency manipulator, as he had threatened, was a *quid pro quo* for China helping out over North Korea. Dropping the currency threat was the right policy, but Mr Trump's transactional approach to diplomacy is exactly the wrong one.

China would love to carve up the world bilaterally into spheres of influence, with the great powers dominating their regions and trading favours elsewhere. America has long been the guardian of something different: a rules-based order that applies to every country, big or small, and which has underpinned the relative peace and remarkable growth of the world since 1945. That Mr Trump appears to scorn this rules-based global order is worrying. The world would become a more dangerous place if America started letting China break the rules (for example, in the South China Sea) in exchange for help to resolve whichever issue happens to be in the news. A better response to China's rise would be for America to strengthen the rules-based order and invite China to join it more actively. Alas, Mr Trump is unlikely to do this.

So the best hope is that he or his diplomats persuade China that it is in its own interest to curb North Korea. And the way to do this is to talk about North Korea itself, not the yuan or American steel jobs.

## Three generations of Kims are enough

China does not gain if North Korea destabilises East Asia, or starts a regional arms race that leads Japan and South Korea to build their own nuclear weapons. Mr Trump should reassure his allies in Tokyo and Seoul that they remain under Uncle Sam's protection. But he should also deal with China's concerns. To that end, he could make it clear that freezing and then rolling back the North's nuclear programme is his goal rather than regime change. He could also guarantee that, were the North to collapse into the arms of the South, America would keep its troops south of the current north-south boundary. China hates to admit that the Kim dynasty might not last, but it is rash not to plan for that possibility.

The crucial message for Mr Kim as for his predecessors is that, if the North were to use its nukes, the regime would be obliterated. In the long run, reunification is inevitable and desirable. Meanwhile, the junior god-king can be deterred. ■

## The French election

# Time to decide

As it goes to the polls, France faces the most consequential choice in decades—and the most uncertain



market reformers in the middle. Seldom has a European democracy been so torn between progress and disaster.

After votes for Brexit, Donald Trump and, last week in Turkey, for a constitution that cements Recep Tayyip Erdogan's power (see page 41), the battle over liberal internationalism has moved to the cradle of the Enlightenment. The fate of France is not all that is at stake. The European Union will stall if one of its driving forces is in chaos or hostile. It may even fail, wrecking the organising principle of an entire continent.

Outright victory on May 7th for Marine Le Pen, on the far right, or Jean-Luc Mélenchon, on the hard left, would be a catastrophe. On that count alone, either of the two pro-market candidates would be a blessing. But choosing between them involves a trade-off and a gamble (see pages 15-18). Emmanuel Macron is untested and lacks the support of an established party; François Fillon is a social conservative tarnished by scandal. On balance, we would support Mr Macron.

## Un coup de rouge

Whoever is president will inherit a discontented country. Unemployment has been stuck above 10% since 2012; for young people, it is still above 20%. The economy is growing slowly and does not yield enough tax to pay for the public services that voters believe are their right. Racial and religious tensions run high, exacerbated by jihadist attacks. Dislike of the EU is even stronger than it was in pre-referendum Britain.

France used to be governed by a cadre of brainy officials, who enjoyed privileges and power to match. But that contract is dead. The approval rating of today's president was at one point as low as 4%. The people believe that the elite has failed.

Ms Le Pen and Mr Mélenchon echo their fury. In their own ways, both hold out the promise of a return to an idealised past when the state was generous and life more secure. They say that protectionism can make France richer; that less involvement with NATO and more with Russia would make it safer; that by renegotiating or leaving the EU it can prosper; and that earlier retirement and more welfare would increase solidarity. All this would make France only weaker and more indebted.

To such incoherence, they add their own kind of venom. Ms Le Pen would put a moratorium on immigration. She says the French state bore no guilt for the detention and deportation of Jews from a Paris velodrome in the second world war. Mr Mélenchon would raise taxes on those earning more than €400,000 (\$430,000) a year to 100% and join a "Bolivarian Alliance" with Cuba and Venezuela.

Instead of strife in the Elysée, France needs a president to carry through reform. Unlike most EU countries, it has never taken genuinely painful steps to free the labour market, trim

the state and tighten benefits. Its labour code is longer than the Bible. Measured against GDP, government spending is higher than Sweden's. It has its share of world-class firms, but its public unions are world-class, too—in seeing off change.

Mr Fillon thinks he can break this impasse with shock therapy. He wants to cut 500,000 jobs from the civil service and €100bn from public spending. He would end the 35-hour work week, raise the retirement age by three years, to 65, and junk 95% of the labour code. An avowed fan of Britain's former prime minister, Margaret Thatcher, in a country where she is loathed, he is pro-business. As important, he has the stomach for the protracted fights that reform will surely demand.

Unfortunately, his claim to lead France through divisive change has been weakened by his own misconduct. One of those protracted fights has been over the €900,000 in parliamentary salaries that he got the state to pay his wife and two of his children, allegedly for doing nothing. In this he is not alone among French politicians, but he is running for president on a ticket of unimpeachable probity. Mr Fillon is asking his compatriots to make sacrifices and to sign up to a new social contract when he himself embodies the arrogance of the old one.

Mr Macron is untainted, if only because he is a political outsider. He has never held elected office, though he was the appointed economy minister in the present government. His plans are less bold than Mr Fillon's, cutting only 120,000 public jobs and €60bn in spending, but an independent study rates them as equally free-market. Mr Macron is pro-business, but more subtle about it. Instead of abolishing the 35-hour week, he would help companies work around it. Rather than raise the retirement age, he would unify the country's 35 pension schemes, eventually doing more to enhance labour mobility.

Mr Macron is more outward-looking, too. He backs recent EU free-trade deals that Mr Fillon rejects. He is more likely to be able to work with Germany to strengthen the governance of the euro. He is socially liberal, whereas his opponent, close to Roman Catholic traditionalists, opposed gay marriage and wants to limit gay adoption. Mr Fillon would impose immigration quotas and end sanctions against Russia; Mr Macron exhorts the French to live up to their values.

## Macron the mould-breaker

The worry is that Mr Macron will not get his reforms through the legislature. Though En Marche!, the party he founded, will run in every constituency in elections to the National Assembly in June, it will struggle to win a majority, unlike Mr Fillon's Republicans. But do not write off his political skills. In rallies and on TV he has more than held his own. En Marche! is barely a year old, but it has 250,000 members—more than twice as many as the Socialists.

His critics say Mr Macron is wishy-washy. But he is the only candidate who has made a full-blooded case for the open society and economy this newspaper believes in. That takes courage—the courage to step outside France's party system, to defend complex arguments against polarising sound bites and to stand for optimism in an age of identity politics. That is a message all democracies need to hear. ■

## Islam in Indonesia

# The rise of intolerance

The world's biggest Muslim country has been mercifully resistant to extremism—until now



**F**IRST came the fake news: a doctored video, making it look as if the governor of Jakarta, an ethnic-Chinese Christian, was disparaging the Koran. Next, mass protests flooding the city centre with outraged Muslims. Then came blasphemy charges that the police, under public pressure, eventually lodged against Basuki Tjahaja Purnama, usually known as Ahok. Before long a seemingly pedestrian election became a referendum on the role of Islam in Indonesian politics. Was it permissible for a Christian to hold the second-most prominent elected office in an overwhelmingly Muslim country?

On April 19th voters delivered their verdict: no. Ahok, once the clear front-runner, had won the first round of the election, in February, by a slim three percentage points. But supporters of the eliminated candidate appear to have plumped for Ahok's remaining rival, Anies Baswedan, who won the second round by 58% to 42% (see page 20). Although Mr Baswedan praised Ahok in his victory speech, he had openly wooed the chauvinist vote during the campaign, for instance by joining rabble-rousing clerics for dawn prayers before a vituperative anti-Ahok rally. Plainly, the outcome is a defeat for tolerance, in a country that prides itself on it.

It is easy to forget, but Indonesia, not Egypt or Iran, much less Saudi Arabia, is the world's most populous Muslim country. There are far more Muslims in South and South-East Asia than there are in the Middle East. And Muslims in Asia are traditionally much less doctrinaire than Middle Easterners.

Indonesia is a case in point: many local Muslims follow practices that would cause riots in Arabia, making offerings to saints and spirits, say, or worshipping at shrines shared with Hindus and Buddhists. Indonesia's biggest Islamic organisa-

tion is Nahdlatul Ulama (NU), which embraces folksy forms of Islam and explicitly campaigns against extremism. Its wise-cracking former leader, Abdurrahman Wahid, was the first president to be elected—albeit by parliament, not by popular vote—after the overthrow of Suharto, Indonesia's dictator of 32 years. The next president was Megawati Sukarnoputri, a woman. No avowedly religious party has ever received more than 8% of the vote in parliamentary elections.

## The call from Arabia

And yet for decades less tolerant forms of Islam have been seeping into the country. In fact, NU was founded in 1926 to resist the growing influence of puritanical Arabian preachers. To this day Gulf Arabs fund lots of mosques. Rabble-rousers are able to turn out big crowds to protest against perceived insults to Islam. The agitators portray traditional Indonesian Islam as rural and backward, implying that educated city-dwellers should follow a purer form of the religion. Politicians, even otherwise reasonable ones like Mr Baswedan, seldom resist the urge to cloak themselves in piety.

Joko Widodo, Indonesia's president and Ahok's predecessor as Jakarta's governor, supported his embattled protégé in the election. But he was careful to be respectful of the protesters, meeting their leaders and offering only veiled criticism of their conduct. Local mores, it is often said, demand such reticence. But the other side felt no such obligation, brandishing signs with slogans like "Burn Christians, Jail Ahok".

The governor's race has given unscrupulous politicians a simple blueprint for winning office: stir up religious fervour by decrying real or invented insults to Islam. The opposition is likely to resort to such tactics in the next presidential election, due in 2019. If Mr Joko wants to keep his job, and preserve Indonesia's plural society, he needs to speak out forcefully against zealotry, not treat it with kid gloves. ■

## Airlines in America

# Whack-a-passenger

Americans are treated abysmally by their airlines. They should look to Europe for lessons



DECADES ago travelling by air in America was a glamorous affair. Today it signals delays, discomfort, extra charges and the threat of violence. A video of a passenger being forcibly dragged from a United Airlines flight on April 9th, after too few people volunteered to give up their seats, has sparked an outpouring of complaints about flying in America. Passengers are right to moan. America's airlines really do compare badly with foreign ones. European carriers are the best point of reference.

Air fares are higher per seat mile in America than in Europe.

When costs fall, consumers in America fail to enjoy the benefits. The global price of jet fuel—one of the biggest costs for airlines—has fallen by half since 2014. That triggered a fare war between European carriers, but in America ticket prices have hardly budged. Airlines in North America posted a profit of \$22.40 per passenger last year; in Europe the figure was \$7.84.

Standards of service are also worse. Only one operator based in America can be found in the world's 30 best carriers, as rated by Skytrax, an aviation website, compared with nine from Europe. When Ryanair, currently Europe's largest and cheapest airline, cut service to the bone, it began to lose customers and money. That prompted it to perform a U-turn and be "nicer" to customers, in order to protect its market share ►

▶ from rivals like easyJet, Wizz Air and Norwegian.

This happy combination of low fares and reasonable service has a simple explanation: competition. American policymakers have presided over a wave of mergers in the past few years. The biggest four carriers in America between them now control 80% of the market, compared with just 48% a decade ago. Warren Buffett, a man who knows an oligopoly when he sees one, bought nearly \$10bn-worth of airline stock in 2016. In Europe, where the top four carriers have around 45% of the market, policymakers have got three things right.

First, European regulators have tried harder to preserve competition between existing carriers. The EU has been willing to block mergers, such as a proposed tie-up between Ryanair and Aer Lingus, and to prevent airlines from building monopoly positions at airports. Not so in America: at 40 of its 100 biggest hubs, a single carrier now accounts for more than half of capacity. That pushes up prices. The merger of American and US Airways in 2013 increased American's market share at Philadelphia's airport to 77%. Fares rose from 4% below the national average in 2013 to 11% above after the merger.

Second, Europe has made it easier for foreigners to boost competition by entering new markets. There are no ownership

limits at all between European countries; and the EU lets airlines with a non-EU owner that has a stake of up to 49% fly anywhere within the bloc. America caps foreign ownership at 25%. Foreign joint ventures, such as Virgin America (which was acquired by Alaska Air Group last year) struggle to take off.

Third, Europe has also encouraged competition between different airports and their main operators. Breaking up the ownership of London's biggest three airports has saved passengers £420m (\$628m) in fares since 2009, according to ICF International, a consultancy. In contrast, most American cities have only one airport, many of them publicly owned.

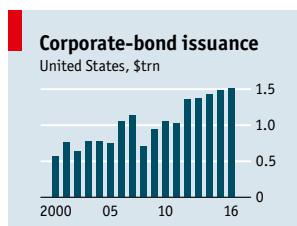
### Dogfighters

Some of Europe's advantages are hard to replicate. Distances between big cities are shorter, making road and rail transport serious rivals. Yet that is all the more reason for America to promote competition in the sky. America's regulators should loosen the cap on foreign ownership, take away slots from incumbents and promote the use of secondary airports to give new entrants a leg-up. If that doesn't yield dividends, regulators should consider breaking up the big airlines. Allowing competition to wither was a huge mistake. It should be rectified. ■

## Corporate-bond markets

# Broken dealers

**Corporate-bond markets are astonishingly archaic. Time to bring them into the 21st century**



for corporate bonds the total was \$1.5trn.

The market for corporate debt is not just vast, at \$50trn globally, it has also been growing fast as a result of ultra-cheap borrowing. Issuance in America has risen by half over the past five years. Yet despite its importance as a source of financing for companies, the corporate-bond market is shockingly archaic. Even basic price data are hard to come by. Whereas stocks can be traded at the click of a button, buying and selling corporate bonds often requires a phone call to a trading desk at an investment bank. This method of trading still accounts for over 80% of volume in America. Processes are correspondingly slow: 8% of trades in Europe fail to settle in the allotted two days.

Such inefficiencies partly reflect the particularities of bond markets. An individual firm may have one or two types of shares, but issue dozens of bonds that differ by maturity, date and seniority in its capital structure. Any given bond is thus traded only rarely. In the past, banks made markets by holding an inventory of bonds on their balance-sheet until a buyer came along. Those electronic platforms that do exist have largely stuck to this dealer-based model: under "request for quote" systems that account for almost 95% of electronic trading, dealers are still the only ones with the power to provide a quote and to buy or sell (see page 61).

But this system is creaking. Tougher capital regulations im-

plemented after the financial crisis sought to discourage banks from holding bonds. Trading desks now hold just 1% of all bonds, down from 2.4% as recently as 2007. Average trade sizes have also fallen. Demand from central banks, in places where corporate-bond purchases were part of quantitative-easing (QE) programmes, may have obscured the extent to which marketmakers have pulled back. As QE unwinds, shortfalls in liquidity may become apparent.

Restoring the banks to their market-making role by relaxing capital rules is no answer. If trouble strikes, it is better for banks to be out of harm's way. Instead, corporate-bond markets need to learn from equities and help buyers and sellers to meet and trade. Regulators can do their bit by requiring prices to be reported for completed transactions, as incoming European rules will from early 2018, and as America has in a more limited fashion since 2002. But the market is also showing the way. A new technology known as "all-to-all" trading allows one institutional investor in a network to trade bonds with any other. There are also systems to help dealers keep track of inquiries across time, turning them from risk-takers into matchmakers.

### Entering the electronic age

These innovations will not suit everyone. The automation of equity markets has cut the earnings of brokers; an end to those chummy phone calls will do the same in the bond markets. But investors can only gain from an environment where it is easier and cheaper to buy and sell bonds. Issuers will also benefit from markets that can smooth out turbulence rather than turn it into a full-scale panic and, in normal times, from a lower cost of capital. The corporate-bond market will never be as simple or liquid as the stockmarket. But it can still learn lessons from its higher-profile cousin. ■

Britain's election

# Game change

An election gives Theresa May the hope of a far larger majority. It also offers the chance of a better Brexit



FOR an event that was supposed to settle a big political question once and for all, last year's referendum on Britain's membership of the European Union has proved spectacularly disruptive. First it did for the government of David Cameron, who had called it expecting a win for Remain. Then it provoked renewed calls for separation in Scotland and Northern Ireland, which opposed Brexit. Now Theresa May, who entered Downing Street only last summer, has called a snap general election for June 8th, having previously insisted that such a course would cause further "instability". Britons are facing their third national poll in two years.

Mrs May says the election is necessary to protect the Brexit process from mischievous opposition parties that plan to derail it. That is nonsense: although most MPs, including her own, campaigned to Remain, they have dutifully upheld the referendum result in Parliament. Surely more important in the prime minister's calculation are the opinion polls that show her Conservative Party more than 20 percentage points ahead of the Labour opposition, which is hamstrung by its ineffectual leader, Jeremy Corbyn (see page 47). Elections are inherently hard to predict—this one could be treated by voters as a poll about everything from the railways to the National Health Service. But, with Mr Corbyn clinging on and the economy yet to feel the smack of Brexit, Mrs May has a chance to increase her working majority of 17 to perhaps more than 100.

For the 48% of voters who, like this newspaper, opposed Brexit, this may look ominous. Mrs May is aiming for a "hard" exit, needlessly taking Britain out of the EU's single market so she can clamp down on immigration, which would do more harm still. The election looks likely to strengthen her hand. In fact, it offers an opportunity for those who believe in a more open, liberal Britain. A bigger majority would leave Mrs May freer to strike sensible compromises with the EU. And the election provides a chance to give liberals of all political stripes a louder voice in the debate that will dominate the next few years. The outcome could be a less damaging Brexit.

## June, the making of May

From a prime minister who has made several u-turns in her nine months in power, this one was dramatic. Only last month her official spokesman insisted: "There is not going to be a general election." But it is a reversal that might mean fewer u-turns in future. Mrs May will draw up her own manifesto, rather than being half-bound by the promises of her predecessor, which forced her into the embarrassing withdrawal of part of last month's budget. If the polls are correct, she will have enough MPs to push through unpopular but necessary solutions to problems such as the housing shortage and the funding crisis in social care, which she has so far approached only timidly. With a proper mandate and some clout in Parliament, the prime minister would have the chance to shake off the "Theresa Maybe" nickname that we gave her earlier this year.

Nowhere does that matter more than with Brexit. Having triggered Article 50 last month, Britain and the rest of the EU have two years to negotiate a deal. Almost nobody thinks that offers enough time. After March 2019, unless both sides agree on some sort of transition, Britain will crash ruinously out of the union. Until a new regime is sorted out over a number of years, Britain will be able to sell into its most important market only under World Trade Organisation rules.

The election makes this less likely. Although Mrs May has sometimes threatened to leave without any agreement, saying "no deal is better than a bad deal", she has lately accepted the need for a transition arrangement after Brexit. With a larger majority she can more easily stand up to her ultra-Eurosceptic backbenchers, some of whom seem actively to want Britain to crash out. That explains why the pound rose this week.

The election also buys Mrs May time. Holding a vote this year means that she need not face the polls again until 2022, three years after Britain's formal exit from the EU. Avoiding the pressure of an imminent contest at home will further strengthen her against the headbanging fringe of her own party and the right-wing press, which screams treachery at any hint of the compromises needed to secure a deal with the EU.

## Maybe not

Just what use Mrs May makes of that freedom depends upon her own preferences for Brexit—which are still not entirely clear even if she sounds tough. Her record is neither rabidly pro (in the referendum she was a reluctant Remainer) nor instinctively against (see Bagehot). Crucially, though, to the extent that the hard Brexiteers are pushed to the margins, other voices will be able to enter the debate.

In Parliament the election will end the odd situation in which MPs have been bound both by the wishes of their constituents in the previous election and also by the referendum. The next parliament's MPs will have a mandate to stand up for whatever they advocate on the stump, be it hard Brexit, soft Brexit or complete Breversal.

The Liberal Democrats, reduced to just eight seats at the last election, are the most pro-EU force in British politics. Their resurgence—and the likely collapse of the vote for the pro-Brexit UK Independence Party—would increase the ranks of Remainers in Parliament, and encourage the Conservatives to choose Eurosensible candidates in marginal seats. Last year Zac Goldsmith, a prominent Tory Leaver, was ejected by the Lib Dems in a by-election. Tories fighting seats in Remain-voting areas such as London and the university towns may have to soften their line on Brexit if they are to avoid a similar fate.

The debate outside Parliament will matter more, too. Since the referendum those advocating a soft Brexit have been shouted down as anti-democratic. All that changes with the news of an election. Businesses, lobby groups and, of course, private citizens have a chance to make the case for a soft Brexit both during the campaign and after it, during the long months of negotiation to follow. The battle over Brexit was fought last summer. The battle to define what form it should take is far from over. ■

**Deal or no deal?**

Most sensible people would agree that after all this time together in the European Union single market, London and Brussels should try to preserve as much preferential treatment as possible by entering into a high-quality free-trade agreement, and not revert to trade only on WTO terms if there is no deal. But how bad would no deal be?

"A race against time" (April 1st) gave the impression that reverting to trade on WTO terms would be damaging to Britain, citing tariffs on exports to the EU of 10% on cars, 15% on food and 36% on dairy products. But if this looks bad for Britain, it is much worse for the remaining EU members.

In January this year, Britain exported £1.5bn-worth (\$1.9bn) of vehicles to other EU countries, but imported £3.6bn-worth of vehicles from these other members. When we add the pound's more than 10% depreciation since the Brexit vote, the WTO-based tariff protection for cars is, in effect, eliminated on British exports but doubled on those from other EU members to Britain.

As for food and agriculture, in January, British exports of all categories of food and agricultural goods amounted to just 6.3% of all British exports to the EU. In that month alone, Britain had a trade deficit of £1.4bn in its agricultural trade with the EU.

Surely, if there are sensible people in Brussels, they will recognise that it is very much in their interests to join Theresa May in arguing for the negotiation of a high-quality free-trade deal concurrently with other Brexit negotiations.

ANDREW STOLER  
Former deputy director-general  
of the World Trade Organisation  
Adelaide, Australia

**Taking on the neighsayers**

The place of the horse in the economy and society did indeed vanish quickly (Free exchange, April 1st). But horses can't vote. We can. The comparison of humans to horses being displaced by technology

raises the question of just how democracies will cope with the disruption of jobs by automation. We have already seen the rise of virulent, sometimes revanchist politicians, promising to bring back jobs. What will happen when human labour is squeezed further?

There are solutions to an economy where full employment is either impossible or more unstable than it has been since the Industrial Revolution. These solutions, such as a universal basic income, or universal national service, or shifting tax to passive income rather than wages and salaries, will take substantial changes in government. How fortunate that we, unlike equine labourers, have the means to expand our freedoms and choose our response to the growing potential of machines.

EVAN PRESTON  
Programme director  
Fair Share Education Fund  
Washington, DC



The number of robots may be increasing, but it is still humans who decide how many there will be, and the work they do. The limits of robot capabilities can be demonstrated by a simple test: just give one a shovel and ask it to muck out a stable, having first determined whether there is a horse in residence, what mood it is in and how to persuade Dobbin not to kick R2-D2's digital derrière.

MALCOM HARKER  
Seattle

**The scales of justice**

Fees for employment tribunals are not the only barrier to enforcing employment rights in Britain ("Justice in an age of austerity", April 1st). In 2013 legal aid was withdrawn from

many areas of law other than discrimination cases, including employment-law advice and representation. Fewer legal-advice centres are able to provide a service for their vulnerable clients, and many continue to face cuts in funding. The economic cost of unresolved legal problems however can be enormous. The government is promising a review of cuts to legal aid and a consultation paper next year on legal support. Action to improve access to justice is urgently needed.

MARTIN BARNES  
Chief executive  
LawWorks  
London

**Waste of papers**

The notion that scientific journals are slowing progress is an opinion that is increasingly articulated by scientists themselves ("Time's up", March 25th). As an editor and reviewer of research articles, I see the problem differently. Many of us assume that the publication of research is to inform accurately, and in the instance of clinical research, to improve the health of people. But many clinical-research papers submitted for review are on the march to irrelevance. These articles are scientifically sound, well-designed, utilise the best biomedical advances and employ the most sophisticated statistical programmes. The problem is that too many of them are not relevant to the readership of the journals. If the claim is correct that most clinical research is false and most of it not useful, then the risk of trying to fix the wrong target is that it will foster the proliferation of more false and non-useful research, but do so more quickly.

ARTHUR AMMANN  
San Rafael, California

How do you fund an international journal that is open access? I edit a journal, and there are costs that have to be covered for editing (most authors are not native English speakers), translation (authors can submit papers in French,

Spanish or Portuguese) and the management of the submissions process. We also have to cover the costs of a policy that provides free subscriptions to institutions in poorer countries. If I have to fund this journal from payments made by authors, I would lose most of my most insightful (and influential) writers.

DAVID SATTERTHWAITE  
Editor  
Environment and Urbanisation  
London

**Is they right?**

I was delighted to read Johnson's column on trying to find a gender-neutral pronoun (April 1st). As he said, the Oxford English Dictionary's first use of a sex-neutral, indefinite "they" was about 1375. For some mysterious reason, school marm and style manuals decided that the epicene "they" was ungrammatical. As a result, people began saying truly ungrammatical sentences such as "Everybody likes pizza, doesn't he or she" in an attempt to sound correct. They failed.

I wrote about this subject in an essay that appeared in *American Speech* in 1982.

GEORGE JOCHNOWITZ  
Professor emeritus of linguistics  
College of Staten Island, CUNY  
New York

**A bumpy flight**

On September 26th 2015 you published a letter of mine, in which I speculated that the new United Airlines' CEO's prior experience as a railroad executive would serve him well when squeezing passengers into planes like cattle cars. How prescient I must have been. Looks like the same experience applies to squeezing people out of planes ("Air rage", April 15th).

PETER PRASTHOFER  
The Woodlands, Texas ■

Letters are welcome and should be addressed to the Editor at The Economist, 25 St James's Street, London SW1A 1HG  
E-mail: letters@economist.com  
More letters are available at: Economist.com/letters



## La lutte

ANGERS, PARIS AND STRASBOURG

**The stakes, and the uncertainty, surrounding this vote are higher than at any time in recent history**

THE local co-ordinator, Bruno Studer, turns up on a bicycle, his front basket stuffed with leaflets. On a tree-lined Strasbourg square he, Georges and Florent—a high-school teacher, a medical student and an auditor—huddle over a printout from Google maps. They tick off the streets already trodden, divide up those still to go, and head out for another evening of door-to-door canvassing. With over 3,000 local members, the team has organised 50 political meetings in the area over the past four months, and distributed 150,000 manifestos and flyers. "We've shown we can do a lot with very little," says Mr Studer.

This cheerful trio is part of the army of enthusiastic local volunteers behind *En Marche!* ("On the Move!"), the movement founded a year ago by Emmanuel Macron, a 39-year-old former Socialist economy minister and one-time investment banker. In their t-shirts emblazoned with the movement's handwritten logo and bearing festive balloons, they have helped, street by street, to achieve something remarkable: turning a rank outsider once dismissed as a traitor, an upstart, or a dreamer, into someone who could quite plausibly soon be the president. Four days before the first round of France's presidential election on April 23rd, the polls put Mr Macron, who has never been elected to anything, at

the head of the field. The race is very close (see chart 1 on next page). But if the first round does indeed go well for him, Mr Macron's chances in the head-to-head second round on May 7th seem pretty good

Since the Fifth Republic was set up by Charles de Gaulle in 1958, no independent candidate without electoral experience has come anything like this close to the French presidency. When Valéry Giscard d'Estaing set up a new party, the Independent Republicans, in 1966, it took him eight more years to become president—by which time he had been in parliament, off and on, for almost two decades. Mr Macron's experience is limited to two years as a staffer to François Hollande, the incumbent Socialist president, and two years as an appointed minister.

His rise is made all the more extraordinary by the fact that his sunny outlook seems singularly ill-suited to the sullen, angry mood that his main competitors seek to capitalise on. In the 1990s his unapologetically optimistic, market-minded internationalism would have seemed unexceptional; in the 2010s hearing him stir crowds with praise for Europe and openness seems both brave and incongruous.

But if he is more upbeat than his populist competitors on many subjects, Mr Macron shares one crucial bit of *ras-le-bol* (fed-

up-ness) with France's voters: he has had enough of the established political groupings that have dominated the Fifth Republic. As a minister he spent nearly 200 hours in parliamentary commissions and debates trying to convince deputies of the merits of his draft law to deregulate Sunday trading, the notary profession, coach transport and other protected industries. He came away convinced that centre-leaning deputies from the left and right might have backed his bill, but party machines tied their hands.

Less than a year after a watered-down version of the bill was finally forced through the assembly, Mr Macron launched *En Marche!* in his home town of Amiens, in the Somme region of northern France. The idea, he declared, was to "un-block" France, build cross-party support for reform among those willing to forego party dogma, and bring fresh faces and new thinking into politics. Few paid much heed; the country has a minor history of liberals and centrists who come to naught. Until September last year, no polling group even investigated his potential as an independent candidate.

But as the campaign heated up the established parties of left and right did their deprecator a big favour. For the first time they both held primaries open to the general public, and both ended up picking a candidate that suited the more radical elements of their respective bases. Benoît Hamon, a Socialist former backbench rebel, sits to the left of his party. François Fillon, a former prime minister, is on the conservative Roman Catholic right of the Republicans. That opened an unusually wide space in the unfashionable political centre ➤

► for Mr Macron.

Abandoning the centre did not make the established parties popular with the extremes. Those on the hard and far right have stood by Marine Le Pen of the National Front. Those on the left have in the past few weeks rallied to Jean-Luc Mélenchon, a fist-clenching admirer of Venezuela's Hugo Chávez. Add to this the fact that Mr Hamon has run a campaign too pallid to give him a shot at the second round and Mr Fillon has been damaged by scandal—his use of the parliamentary payroll to remunerate his wife and two of his children is now under judicial investigation—and you have an unprecedented collapse in support for the groupings that have run France over the past 60 years.

Three-quarters of voters are telling pollsters that they may back a candidate from neither of the established parties. Fully half of them say they could vote for Mr Mélenchon, Ms Le Pen, or one of the minor fringe candidates—a cause of deep concern for other European countries, since both Mr Mélenchon and Ms Le Pen want, in effect, to break up the EU.

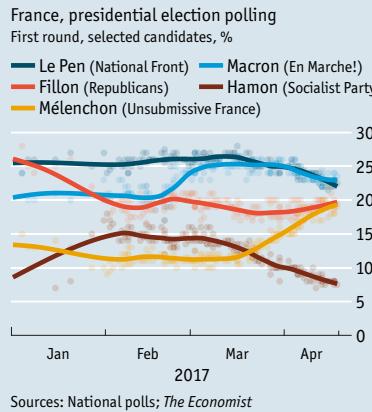
Ms Le Pen, Mr Macron, Mr Fillon and Mr Mélenchon all have a shot at getting through Sunday's first round. The Economist has built a model based on polling from this and past years to rate their subsequent chances (see chart 2 on next page). It offers good news to the mainstream candidates, bad news to those on the extremes. Mr Macron, if he makes it through, appears a strong favourite; whoever she meets in the second round, Ms Le Pen looks highly likely to lose.

It should be noted, though, that in past elections the main candidates tended to have established parties and the range of views was narrower. This may limit the old data's predictive value: a lead in the polls that gave, say, a 90% chance of victory in the past may not do so this time round. Jérôme Fourquet of Ifop, a pollster, speaks for many seasoned observers of French politics when he says nothing can be ruled out—even Ms Le Pen v Mr Mélenchon.

### Taxinspectors and peasants

With 250,000 members En Marche! is now more than twice the size of the ruling Socialist Party. Mr Macron's supporters tend to be well educated, metropolitan—the Uber-using classes—and happy. Fully 72% call themselves “optimistic”, next to just 29% of those who back Ms Le Pen, who was consistently ahead in the polls earlier in the campaign. “It's the first time that a candidate is offering something different, something positive,” says a retired tax inspector at a Macron rally in Angers, a cathedral town in western France. But Mr Macron's support extends beyond the urban well-to-do. At a dairy farm in nearby Mayenne, where village shops shut at lunchtime and mud clings to his city shoes, he

### Tighter still



draws curious locals as if to a prize breed. “All the other candidates live off politics,” says Patrick Pervis, who calls himself a *paysan* (peasant). “But Macron hasn't been in politics; he knows the world of work.”

Mr Macron sleeps little, reads a lot, lingers with dinner guests until late, and has an uncanny ability to give the person he is speaking to, whether a disgruntled farmer or a visiting entrepreneur, the feeling that he is actually interested in what they have to say. Early in the campaign he used his sense of humour to brush aside a rumour, long circulating in Paris, that he was having a secret gay affair: it must have been his “hologram”, he joked, nodding to a campaign tool used by one of his rivals. He has gathered an eclectic mix of supporters including François Bayrou, a many-time presidential candidate who tried and failed to build popular support for his own centrist politics; Alain Madelin, a liberal ex-finance minister; Daniel Cohn-Bendit, a 1968 rebel-turned-Green politician; and Manuel Valls, a Socialist ex-prime minister who was beaten by Mr Hamon in his party's primary.

While Mr Macron is trying to mobilise the France that still waves Europe's flag at rallies, two other candidates are harnessing the howl of rage against it, and the political establishment more generally. Ms Le Pen campaigns against Europe and the euro, as well as immigration and “Islamism”, with the slogan “In the name of the people”. Mr Mélenchon calls Europe “the dictatorship of banks” and campaigns with the slogan “The force of the people”. While not explicitly in favour of “Frexit”, as Ms Le Pen is, he talks of breaking Europe's rules and taking back power in a way that the EU—and, particularly, Germany—would be unable to stomach, raising the possibility of France being thrown out of the club it founded (“Frejection”?).

Mr Fillon is not as much of a Europhile as Mr Macron. And he sides with Ms Le Pen and Mr Mélenchon in favouring closer ties with Vladimir Putin's Russia. On Syrian refugees Mr Mélenchon and Mr Macron

stand together, urging France to be more welcoming; Mr Fillon and Ms Le Pen would keep the door shut. The two on the right were against the legalisation of gay marriage in 2013, with Mr Macron and Mr Mélenchon in favour. The only two candidates with no position in common are Mr Macron and Ms Le Pen.

In general, though, there are two world views in competition. One is a broadly pro-European, business-friendly approach, embodied by Mr Macron and Mr Fillon. They recognise the need to keep France open and shrink and adapt its state; at the moment public-sector spending is 57% of GDP, higher than any other euro-zone country bar Finland. The other is a protectionist, high-spending, anti-market Euroscepticism, pushed in its left-wing, anti-American version by Mr Mélenchon, and in its xenophobic, anti-immigration brand by Ms Le Pen. Génération Libre, a liberal think-tank, gives Mr Fillon and Mr Macron a 60% “liberal” rating: all the other candidates get less than 34%.

Mr Macron and Mr Fillon agree on a basic premise: that, over the past ten years, France has lost economic ground to Germany that it must regain. Its GDP has grown more slowly. Its unemployment rate, at 10%, is more than twice as high. And its government budget, which Germany balances, has been in deficit since 1975.

To set this right they offer variations on reformist themes, promising to free up enterprise, lighten the weight of the state, encourage job creation, reward risk and improve education. Mr Fillon talks a more ambitious game, especially when it comes to shrinking the state. He vows to end the 35-hour week, slash the 3,000-page labour code to just 150 pages, abolish the annual levy on property and financial assets over €1.3m, cut 500,000 civil-service jobs (about 9% of the total) and reduce public spending by €100 billion over his five-year term.

Mr Macron's plans are more modest: he proposes to cut 120,000 public-sector jobs and cut €60 billion from annual spending. Rather than removing the 35-hour working week, Mr Macron wants to weaken it by devolving negotiations over working time to firms. Rather than abolishing the wealth tax, he wants to limit its effect by applying it only to property. Overall, Mr Fillon vows to reduce the state's spending to 50% of GDP by 2022; Mr Macron to 52%.

“What this economy needs is urgent measures, and a clear signal on day one,” argues Henri de Castries, formerly head of AXA, an insurer, and part of Mr Fillon's inner circle. Mr Macron prefers a progressive approach, based less on the immediate tightening of existing rules than on a longer-term rethink of the state. “A five-year term cannot consist of six months of brutal reform followed by u-turns,” argues Jean Pisani-Ferry, his economic adviser.

► A good example of the two candidates' differences is pension reform. Mr Fillon wants to raise the retirement age from 62 years to 65. Mr Macron would keep it as it is and concentrate on a longer term but, he claims, deeper reform which the Fillon team sees as unrealistic: unifying France's anemone-like pension system, made up of 35 different public regimes, into a single structure with universal transparent rules. He says providing people with the security they need to move from job to job would give the economy a long-term boost.

Given France's pesky tendency to resist change, even after voting for it, a key question is whether either candidate would be able to put his plans into practice. The tweedy Mr Fillon, who lives in a grand manor house complete with a chapel and a horse, would be the more polarising figure, likely to provoke strikes and street protests—though his team insists that, if he can resist the popular outrage at the salaries he has paid to his family, he can face down the streets on matters of policy, too. If elected he would stand a decent chance of securing a majority at the parliamentary elections to be held in June.

The same cannot be said for sure about Mr Macron. He claims he can secure a majority, promising that En Marche! will put up candidates in all 577 constituencies; half, he says, will be new recruits to politics—the party has already received some 14,000 applications—and half will be deputies and local councillors who will leave their old parties. In reality he may well need to seek a cross-party coalition in order to govern. This is an idea alien to national French politics, although, as Benjamin Griveaux, a co-founder of En Marche!, points out, it is fairly familiar at other levels. Gérard Collomb, a Macron-supporting Socialist who runs the city of Lyon, for instance, is backed by an alliance reaching from the left to the centre-right.

This election campaign, however, has not been about contrasting rival versions of reformist economic policy and the likelihood of their practical implementation. With 11 candidates it has at times felt more like reality television. Comic one-liners, memorable slogans and clips of blunders have dominated social media. When Mr Fillon argued during a debate that industrial relations should be decentralised to firms, the quick-witted Mr Mélenchon retorted: “I’m not in favour of one labour code per firm, just as I am not in favour of one highway code per road.”

This mood has seemed to play into the hands of those with binary messages, notably Ms Le Pen (no to Europe; yes to France) and Mr Mélenchon (quit NATO; end war on Russia). Mr Macron has found himself the victim of merciless satire over his neither-left-nor-right politics, giving rise to the hashtag #EnMêmeTemps (#AtTheSameTime) as a dig at his perceived ambiguity. “You’ve spoken for seven minutes, and I have no idea what you said,” Ms Le Pen told him during one debate. “Every time you talk, you say a bit of this, a bit of that, and never decide.”

It is the 65-year-old Mr Mélenchon, a former Trotskyist, who has emerged as the campaign’s revelation, using technology to make his old-school socialism hip in a campaign modelled on that of Bernie Sanders in last year’s American primaries. Mr Mélenchon’s YouTube channel has a huge following; the beaming “hologram” through which he addresses rallies from a distance has been a hit with the crowds as well as a source of quips for other candidates. He has also launched a popular online video game, Fiscal Kombat, which features his character shaking down men in suits to empty cash from their pockets.

A former Socialist senator, Mr Mélenchon is in some ways an odd sort of revolutionary. He confesses to a fondness for qui-

noa salads, and owns a big flat in Paris as well as a country pad. Yet in a country with a romantic fascination for revolutionary talk, his pugnacious style and crowd-pleasing promises carry a nostalgic appeal. As well as promising to bust the EU’s deficit rules by spending an extra €170 billion of public money over five years and to pull France out of NATO, the Communist-backed candidate vows to share work by moving to a four-day week and to bring in a top tax rate of 100% for those earning over €400,000. He has a particular weakness for Latin American dictators, and plans to join the “Bolivarian” alliance, alongside Venezuela and Cuba; “France”, he says, “is not a Western country.”

That he can be a remotely serious contender for the presidency shows the depths of the country’s political disillusion, particularly among the young. Youth unemployment of 25% marks France off from Britain, where younger voters sided with the establishment on Brexit. In France Mr Mélenchon and Ms Le Pen have been the preferred candidates of the under 25s, though polls now show Ms Le Pen losing ground and Mr Macron rising fast.

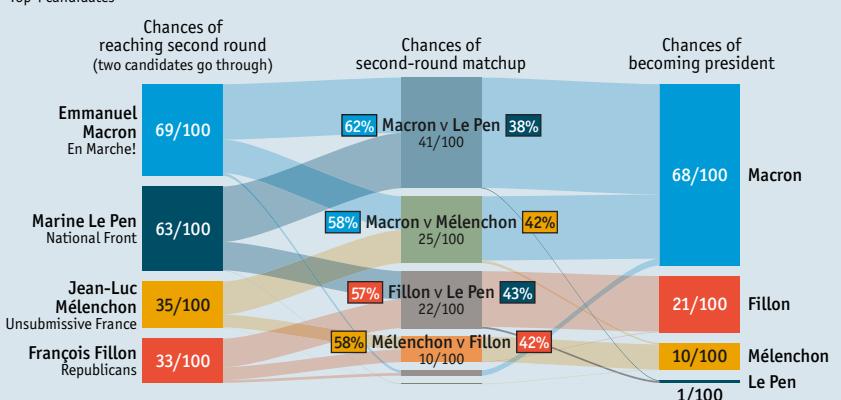
### Battlefield memories

In judging the choices before them, first-time voters have no personal basis for comparison. Those running the mainstream candidates’ campaigns, though, do—and as a result feel a deep sense of historic responsibility. Already the faint possibility of a run-off between Mr Mélenchon and Ms Le Pen has prompted a nervous widening of market spreads between French and German bonds. In the more likely scenarios where one or other of them faces either Mr Macron or Mr Fillon and loses, the victor would have a weakened mandate for reform, owing his victory as much to those voting to keep out a populist alternative as to support for his own policies. Though no recent polls have shown Ms Le Pen beating any of the other candidates in the second round, one has suggested that Mr Mélenchon might beat Mr Fillon.

Back in Strasbourg, where En Marche! volunteers are clambering up stairwells and knocking on doors, the campaigns’ rival aspirations carry particular symbolism. The city lies in Alsace, a borderland scarred—like the Somme—by war between Germany and France; Mr Studer’s grandparents fought on opposite sides. Pro-European feeling here has deep roots. Yet just 50km away, in the village of Monswiller, over 1,000 locals recently turned out to hear Ms Le Pen, chanting what has become her supporters’ xenophobic battle cry, “On est chez nous” (“This is our home”). It is a chilling reminder that, if Mr Macron wins, he will not only make history. He will also need to heal, and reform, a country that history has deeply divided. ■

### Four-way street

Probability\* of outcomes of the French presidential election, to April 19th 2017  
Top 4 candidates



Sources: National polls; Jennings & Wlezien; *The Economist*

\*Probabilities are derived from a model based on *The Economist*'s poll of polls and historical data; second-round polling averages are from head-to-head results in the poll of polls

**Methodology:** Read how we arrived at these probabilities at [Economist.com/FR17method](http://Economist.com/FR17method)



## North Korea

## Strategic confusion

SEOUL

**America stokes tensions on the Korean peninsula, then tries to lower them again**

MUCH of the language used by Mike Pence, America's vice-president, on his three-day trip to South Korea this week was familiar: America stands "shoulder-to-shoulder" with South Korea in an alliance that is a "linchpin" for peace, he said; its commitment to its ally is "ironclad". The partnership, Mr Pence insisted, will be stronger under Donald Trump than under his predecessor, Barack Obama.

The vice-president's trip provided a little reassurance to South Korean officials, who have been feeling queasy about Mr Trump's pronouncements. He once threatened to bring home the 28,000-odd American troops that have been stationed in South Korea for decades to guard against a North Korean attack. More recently Mr Trump seemed to be contemplating a pre-emptive strike on North Korea, prompting a frenzy of speculation in the South Korean media about whether he was serious. The local press is now worrying about "Korea passing"—the idea that America and China will strike a deal on North Korea without consulting the South.

Unease spiked on April 9th as reports emerged that an American flotilla led by the USS *Carl Vinson*, an aircraft-carrier, had been ordered to sail north from Singapore, instead of proceeding with a scheduled trip to Australia. "North Korea", "aircraft-carrier" and "Carl Vinson" promptly appeared in the top ten queries on Naver,

South Korea's most popular search engine. Mr Trump's typically grandiose claim that he was "sending an armada" to nearby waters added to local fears of an April crisis for the Korean peninsula.

Tensions were already high because the month is full of the sort of patriotic holidays that North Korea has in the past marked with tests of missiles or nuclear devices. On April 13th, in the first televised debate ahead of South Korea's presidential election next month, candidates were asked how they would respond to a pre-emptive American strike on North Korea. In Japan the prime minister's security council discussed plans to evacuate its 60,000-odd citizens from South Korea.

### All at sea

Yet it later emerged that on April 15th, as North Korea marked the 105th anniversary of the birth of its founder, Kim Il Sung, the *Carl Vinson* had in fact been in Indonesian waters, over 3,000 miles from the Korean peninsula. The revelation added to mounting confusion about American intentions in the region: the day before NBC, an American news outlet, had reported that Mr Trump was prepared to attack if a nuclear test seemed imminent. The White House quickly denied the report.

In the end, North Korea marked the holiday with the launch of a missile that exploded soon after take-off (although

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preparations near a nuclear site suggest an atomic test may still be imminent). At a celebratory parade, the regime also showed off what appeared to be two new canister launchers for intercontinental ballistic missiles. It has said it is on the verge of perfecting a missile that can threaten the continental United States, although most experts believe this is an exaggeration. Han Song Ryol, North Korea's deputy foreign minister, promised "all-out war", including a pre-emptive nuclear strike, if America threatened North Korea.

An American attack has always seemed unlikely, given the destruction a rekindling of war on the peninsula would inevitably cause. Some estimates put casualties in greater Seoul, South Korea's capital, as high as 130,000 within the first two hours of combat, even assuming that only conventional weapons are used. North Korea would also suffer devastating losses.

Mr Pence (pictured) promised "seamless co-operation" and "watertight collaboration" with whichever candidate wins South Korea's election—and all of them would fiercely oppose a pre-emptive strike. But the two liberal front-runners have recently been striking a more hawkish tone: both seem to be coming around to the deployment of a missile-defence system known as THAAD (Terminal High-Altitude Area Defence) which was first agreed to under Mr Obama, and which they had previously pledged to review.

American officials, including Mr Pence this week, have made it clear that the policy of "strategic patience" favoured by the Obama administration in dealing with North Korea is ending. But it is not clear what will replace it. Mr Pence noted while in Seoul that "the world had witnessed the strength" of Mr Trump's punitive strike in Syria and his use of a massive bomb in Af- ►

► ghanistan, and suggested that North Korea would "do well not to test his resolve".

Yet the previous day H.R. McMaster, Mr Trump's national security adviser, had said that all actions should be undertaken "short of military options". These are said to include a global ban on North Korea's state airline, Air Koryo, as well as the blacklisting of Chinese firms doing business with sanctioned entities by getting banks to stop dealing with them—"secondary sanctions" that Mr Obama authorised last year, but used only timidly. Mr Trump said on Twitter that he offered China commercial inducements, and would not label it a currency manipulator, because it was helping with North Korea.

If Mr Trump's new policy is to sow confusion and roil the region, in short, it is working well. Otherwise, it's a mess. ■

#### The race for governor of Jakarta

## Division in diversity

JAKARTA

**A tense election leaves many worried about the future of pluralism**

THE mood in Jakarta was jittery in the days leading up to its gubernatorial election on April 19th. Around 64,000 police, soldiers and other security personnel were deployed to keep the peace. At least one policeman guarded every one of the 13,000-odd polling stations.

Islamist agitators implied the incumbent governor, Basuki Tjahaja Purnama, known as Ahok, was planning to steal the election, and threatened to flood the city with supporters to safeguard the vote. They accused Ahok, who is both Christian and of Chinese ancestry, of "Christianising" Jakarta because, to some paranoid minds, a mosque built by the city government resembles a cross. A Facebook user claimed the gang rape and murder of Ahok's supporters would not be sinful.

Anxious ethnic-Chinese, in turn, shared posts warning that the election of Ahok's rival, Anies Baswedan, would lead to the forcible imposition of Islamic law. "People are saying, 'Behave yourself, or we'll make another May 1998,'" said one Chinese Christian Jakartan—referring to the month when deadly pogroms against Chinese broke out across the city.

The head of Nahdlatul Ulama, Indonesia's biggest Muslim social organisation, with 60m members, appeared hand-in-hand with leaders of Indonesia's five other officially recognised faiths to appeal for unity and peace. Joko Widodo, Indonesia's president, universally known as Jokowi, voiced support for "the principle of live and let live, as well as unity in diversity"

(the latter phrase being Indonesia's national motto). Banners urging "A safe and peaceful election" and proclaiming "We are all brothers" flapped above intersections all around the city.

In the end, the election passed off peacefully. Unofficial counts showed Mr Baswedan, Jokowi's former minister for education, easily beat Ahok, with around 58% of the vote—a far wider margin of victory than opinion polls had predicted. Ahok had won an automatic promotion from vice-governor to governor when Jokowi, his predecessor, was elected president. He would have been the first Chinese Christian to win the job in an election. In the end, however, a row about religion ended his campaign.

Ahok had been popular, having waged war on Jakarta's corrupt and idle bureaucrats and laboured manfully to improve its infrastructure. His election seemed secure. But early in the campaign he gave a speech in which he urged voters not to heed those who used a particular verse from the Koran to argue that Muslims should not vote for Christians. Hardline Islamists, who had attacked Ahok for his race and religion since he became governor in 2014, edited the speech to make it sound as if he was criticising the Koran. The doctored video, disseminated widely on social media, succeeded in creating the desired uproar.

The agitators organised massive anti-Ahok rallies. In November prosecutors charged Ahok with blasphemy. The charge may be tendentious, but the potential penalty is severe: up to five years in prison. For nearly six months Ahok has spent every Tuesday in court, with conviction a genuine threat: very few of those charged with blasphemy are acquitted.

Mr Baswedan, a politician as slippery and accommodating as Ahok is blunt and forceful, spied an opening. On January 1st he spoke at the headquarters of the thuggish Islam Defenders Front (FPI), a vigilante

group. Mr Baswedan denies pandering to radicals: he says he visited just to "answer questions", and to quell rumours that he is a Shia (most Indonesian Muslims are Sunni; Shias have been prosecuted as "deviants"). But he said nothing to counter FPI's vituperative attacks on Ahok, and later joined its rabble-rousing leader, Rizieq Shihab, for prayers before a big anti-Ahok rally. The iconography of Mr Baswedan's campaign was also clear: throughout the campaign he sported a black peci—a cap worn by pious Javanese.

In the wake of his victory, Mr Baswedan made all the right noises, pledging to defend diversity. But he celebrated in the company of Mr Shihab, once again. His victory undoubtedly strengthens the hardliners who backed him. Marcus Mietzner of the Australian National University worries that the chauvinists have demonstrated "the capacity to shift a small but decisive segment of swing voters their way." What is more, he adds, "it demonstrates that militant Islamists have become more organised, established better connections with...elite networks, and have found ways of building alliances with mainstream politicians."

That will alarm Jokowi. Mr Baswedan had the backing of Prabowo Subianto, whom Jokowi defeated in 2014 and who is widely expected to challenge him again at the next presidential election, in 2019. Sandiaga Uno, Mr Baswedan's running-mate, says Mr Prabowo insisted that he and Mr Baswedan sign "a binding agreement" to stay in their new jobs for a full term, in effect excluding them from the next presidential election. But the governorship was a springboard to the presidency for Jokowi, and Mr Prabowo may yet tap one of the pair as his running-mate.

Mr Baswedan is not about to impose Islamic law in Jakarta. But hardline forces certainly helped him win. That genie is not easily returned to the bottle. ■



How would God vote?



### A lynching in Pakistan

## Places of darkness

ISLAMABAD

**The “blasphemy killing” of a student is a sign of rising intolerance on campuses**

IN THE room of Mashal Khan, a student at Abdul Wali Khan University in Mardan, a dusty town in north-west Pakistan, the late occupant’s handwriting is on almost every surface. Some of his scribblings in felt-tip pen are banal (“You beauty”) or crude (“Get your burger-flipping ass outta here”). But many hint at an idealistic and fiercely independent young mind: “Freedom is the right of every individual” and “Be crazy, curious and mad!” These were injunctions that Mr Khan, a journalism student, upheld—and that got him killed.

On April 13th Mr Khan was pulled from the room by a crowd of fellow students. The violence that followed, partially recorded on a mobile phone, was staggeringly brutal. The attackers shot Mr Khan twice, dragged his corpse through hallways, beat it with planks and stripped it naked.

Earlier in the day a fellow journalism student had accused Mr Khan of blasphemy. That allegation appears to have triggered the attack. The penalty for blasphemy under Pakistani law is death. But it is increasingly common that vigilantes take the law into their own hands before courts get involved. At least 65 people have been murdered by mobs for allegedly insulting Islam since 1990. As often in such cases, there was no evidence against Mr Khan, apart from the claims of the classmate who denounced him, Wajahat, a disgruntled young man with a fondness for the blood-curdling rhetoric of Islamist televangelists.

Mr Khan’s murder was the first mob

### Vietnamese naval diplomacy

## Dock and cover

CAM RANH BAY

**Vietnam attempts a delicate strategic balancing act**

NEAR the point where Vietnam bulges deepest into the South China Sea lies Cam Ranh Bay, perhaps the finest natural deepwater harbour in South-East Asia. France based a fleet there in colonial times. Russian ships made use of it in the Russo-Japanese war, Japanese ones during the second world war and American ones during the Vietnam war.

After the American withdrawal and communist triumph, the government of the newly reunited Vietnam leased the naval base to the Soviet Union. Russia gave up the facility in 2002. Today it is Russian tourists who flock to Cam Ranh International Airport, with its American-built airstrip, on their way to the beaches of nearby Nha Trang.

These days Vietnam ostensibly follows a policy of “Three Nos”: no military alliances, no foreign bases and no joining with another country to fight a third. Nonetheless, adjacent to the Vietnamese naval base at Cam Ranh is a facility that receives foreign military vessels. In theory it is a purely commercial venture, open to the ships of any country willing to pay for the maintenance and refuelling it provides. But it also serves a strategic purpose: sending a defiant message to a resurgent and expansionist China by allowing Vietnam to strengthen military ties with an increasingly diverse group of countries.

Anti-Chinese sentiment runs deep among ordinary Vietnamese. Vietnam fought wars against both America and China in the 1970s. But these days Americans, by and large, are received with affection, whereas many Vietnamese remain convinced that China still has territorial designs on their country.

In 2014 China sent an oil rig to a disputed part of the South China Sea, sparking anti-Chinese riots in Vietnam. Since then both sides have been careful not to stoke tensions. China has called off the drilling; Vietnam has made mollifying

blasphemy killing in Khyber Pakhtunkhwa province. It was also the first blasphemy killing at a university. Before this, the most horrific such attack had involved villagers who burned a Christian couple in a brick kiln in 2014. That well-off and literate young men were responsible for Mr Khan’s murder troubles many Pakistanis. Dawn, a liberal newspaper, lamented that a “cancer” afflicting Pakistan had even reached a place where “minds are supposed to be enlightened”.

noises about solving disputes bilaterally, as China prefers. But for Vietnam, the underlying problem is unchanged: how does a small, poor country defend itself against a bigger, richer one?

The Philippines, under Rodrigo Duterte, has pioneered one approach: apparent capitulation. In exchange for massive investment in infrastructure, Mr Duterte has decided not to press China over their territorial dispute. Vietnam, using Cam Ranh Bay, is trying something else: diversification. Since the foreign-vessel facility opened a year ago, it has received 19 ships from 10 countries. China and America tie for the most visits, at three each. But every other visit save one has come from countries that have shown some form of opposition to China’s expansive maritime claims, including France and Japan. Vietnam appears to be reminding China of just how many friends and suitors it has—and just how well it can look after their warships.



**Diplomacy by other means**

Allegations of blasphemy are often made by those with other grievances against the accused: the charge can be used as an excuse to knock off a business rival or someone who causes the accuser trouble. Three days before Mr Khan’s death, he had alleged that some members of the university’s staff were corrupt. Several of them, who have links with the Awami National Party, a secular Pashtun group which controls the university, have been arrested in connection with Mr Khan’s death.

The participation of so many students in Mr Khan's murder is a sign of growing religious intolerance on campuses. Pakistan's Islamist parties have been fanning the flames of it: since the assassination in 2011 of Salman Taseer, a governor of Punjab who had pushed for reform of blasphemous laws, support for the current ones appears only to have grown.

Student organisations sympathetic to the Islamists have taken up the cause. They often wield the threat of a blasphemy allegation in order to browbeat university departments into scrapping courses in music or comparative religion. A liberal lecturer at Bahauddin Zakariya University in the city of Multan was accused of blasphemy in 2013 by Islamist undergraduates; he remains in jail. His first lawyer was assassinated by unknown assailants.

Alarmingly, it took two days for the prime minister, Nawaz Sharif, to condemn Mr Khan's murder. He has helped to stoke hysteria about blasphemy himself: a few weeks ago he ordered police to hunt for blasphemous content on social media. In the eyes of Huma Yusuf, a columnist, blasphemy-related violence is now a more intractable problem in Pakistan than terrorism. A campaign against militant groups has sharply reduced deaths from terrorism. But, as Ms Yusuf notes: "You can't use the same tactics with the entire population." What is needed is better teaching in schools, religious and secular alike, about the evils of vigilante justice; a government that is far quicker to condemn it; and, crucially, legal change. Bringing any of that about will be hard: cases like Mr Khan's show all too clearly the perils involved. ■

to do away with the liberal constitution imposed by Japan's American occupiers in 1947. It dislikes the way the document renounces war, diminishes the status of the emperor and makes ringing declarations about the inviolability of fundamental human rights.

A draft of an alternative constitution endorsed by the LDP tosses out these ideas and replaces them with duties to the state. The national anthem and flag must be respected. Rights come with "responsibilities and obligations" and citizens "must comply with the public interest and public order". Freedom of speech can be restricted if it impedes that. Most alarmingly, says Lawrence Repeta of Meiji University, the prime minister would be empowered to declare a national emergency under "an extremely broad and undefined range of potential circumstances". Mr Repeta considers the document a blueprint for the abolition of Japan's liberal democracy.

Privately, some LDP politicians accept that the draft, written by hardliners while the party was briefly in the political wilderness, goes too far. "Nobody takes it seriously," says Tsuneo Watanabe of the Sasakiwa Peace Foundation, a think-tank. If the party really intended to sell the draft to voters, he says, it would have produced a more appealing document. The LDP's tilt rightwards since returning to power in 2012, however, suggests that the draft increasingly influences public policy.

Last year a UN special rapporteur criticised the government of Shinzo Abe for trying to intimidate the media by making a pointed reference to its power to shut down "biased" television channels under the law that regulates broadcasting. In 2013 the LDP pushed through a law that allows the government to declare all kinds of information state secrets, in spite of strong public opposition and noisy protests by journalists, lawyers and scholars. In theory, the law will help deepen co-operation on security between Japan and America, which had complained about a series of leaks of sensitive information. In practice, it has raised fears that seeking or revealing data about perfectly legitimate subjects, such as the extent of contamination from the Fukushima nuclear disaster, could be construed as criminal activity.

Few in the LDP want to return to the past, insists Yoshimasa Hayashi, an LDP MP, although he does concede that some want to tug it "too far right." Still, he supports the conspiracy law, which he says will help keep the Tokyo Olympics in 2020 safe. The LDP's dominance of both chambers of the Diet means the law will probably pass without trouble. It is the lack of a strong opposition that should most worry ordinary Japanese, says Mr Shina. The LDP may not be too worried about constraints on the power of the state, but in a healthy democracy, someone should be. ■



## Authoritarianism in Japan

# Nabbing imaginary terrorists

TOKYO

## A new bill continues a worrying trend toward stronger state powers

FOR several weeks Japan's Diet has been debating a law that would punish people who plan to commit crimes. The government says the conspiracy bill will protect the nation from terrorism. In a country where crime has fallen to a record low (a single fatal shooting was recorded for the whole of 2015) and where the last big terrorist attack was more than 20 years ago, that justification sounds feeble to many.

Japan's federation of bar associations questions whether the police need more powers. It says they can use existing laws to pursue criminal conspiracies. Critics of

the ruling Liberal Democratic Party (LDP) suspect ulterior motives. "The need for a new law is very small but the dangers of having the law are enormous," says Takeshi Shina of the Democratic Party, the main opposition. Passage of the bill, he argues, will lead to an erosion of personal liberty: "The government is far more passionate about the freedom of the state to act than about protecting the constitutional rights of the individual."

To be fair, the LDP, which has dominated Japanese politics for 60 years, has never hidden its authoritarian streak. It wants

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For many years now, traffic has been increasing through the Strait of Malacca, the shortest waterway connecting the nations of ASEAN to the rest of the world.

The Strait of Malacca which runs between Indonesia, Malaysia and Singapore, has long been a major gateway for trade to and from Asia, is also one of the narrowest chokepoints in the world. The narrowest point in the strait is only 1.7 miles wide, which creates a natural bottleneck for shipping.

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Datuk Wira  
Noormustafa  
Kamal Yahya

Managing Director  
of T.A.G. Marine  
Sdn. Bhd.

The International Maritime Organization (IMO) has repeatedly warned of the dangers of a collision and the catastrophic environmental impact this would have.

What's more, the Straits are about to get even more crowded: increased oil and gas production in the United States means that more oil exporters are targeting new customers in Asia and more tankers are sailing for China and elsewhere in East Asia.

Almost half of the world's total annual seaborne trade tonnage now passes through the Strait of Malacca and the nearby Straits of Sunda and Lombok. As the region's economies continue to expand so too will Malacca's economic importance both to Asia and the wider global economy.

Now, a Malaysian company is about to make a major contribution to the region's shipping infrastructure and the global shipping community by relieving pressure on the Strait of Malacca through an ambitious expansion that will see the creation of global maritime trading hub in Malacca's Kuala Linggi Port.

On November 1, 2016, T.A.G. Marine, the operator of the Kuala Sungai Linggi Port, launched the second phase of its \$4 billion plan to transform and upgrade the facility into the Kuala Linggi International Port (KLIP) using some 620 acres of reclaimed land to provide 1.5 million cubic meters of oil storage capacity, along with dry docks to handle the biggest of oil tankers, aiming for completion within a decade.

TAG Marine and Linggi Base, the port developer, intend to interface existing off-shore services with on-shore services, making KLIP a world-class global green industrial hub for the oil

and gas infrastructure, port and maritime services. KLIP will be a fully-fledged one-stop centre including ship repair yard, tank farm, marine fabrication yard, general cargo wharf and other marine supporting services.

"KLIP is directly addressing the IMO's concerns about the impact on global shipping caused by congestion in the Malacca Strait by mitigating the negative consequences of so many ships waiting for off-shore services," explains Datuk Wira Noormustafa Kamal Yahya T.A.G. Marine's Managing Director and CEO.

The services provided by KLIP at Kuala Linggi will help relieve marine traffic congestion at this over-crowded choke point, complimenting services of neighbouring facilities. The facilities and services provided by KLIP will provide an alternative for VLCCs and VLGCs to load and offload before the choke point at the southern part of the straits.

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Set up in March 2000, TAG Marine is a pioneer in the handling of LNG and LPG ship-to-ship offshore transfer in the region, having gained the trust and confidence of more than 50 international companies, among them global oil traders and oil majors.

"I started sailing in 1979 in the merchant marine and I have been to many ports in the world, gaining experience and expertise along the way. Now that I am on the other side of the table, as the port operator, I understand the needs and demands of merchant vessels," explains Noormustafa Kamal.

Over the last decade, T.A.G. Marine has transformed Kuala Linggi from a minor port used mainly by small traders and fishing vessels into a facility that now attracts the largest ultra-large crude carriers (ULLCs), very-large crude carriers (VLCCs) as well as liquefied natural gas and liquefied petroleum gas ship-to-ship offshore transfers, and Aframax and Panamax ships.

"Kuala Linggi has been tried and tested for 10 solid years. It is now time to take the port to another level and transform it into a full-fledged KLIP," says Noormustafa Kamal.

Noormustafa Kamal adds that KLIP has the potential to expand into new onshore facilities and meet the growing demands of the global shipping industry as well as the infrastructure needs of ASEAN.

At the same time, the project will reestablish Malacca's position as one of the busiest trading centres in Southeast Asia, impacting positively on the local economy.

"This port will restore Malacca as a regional hub by leveraging on its natural deep and sheltered waters," concludes Noormustafa Kamal, adding: "Our vision is based on the wellbeing of the people and we will bring economic value for the community through job creation."



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# Banyan | Canaries in the coal fumes

Spare a thought for Asia's 50m migrating waterbirds



**K**AATHERINE LEUNG was hunting for birds—black-tailed godwits to be precise. Armed with a wide net, she stood at dusk amid the Mai Po Marshes, a wide expanse of mudflats, mangroves and shrimp ponds on Hong Kong's border with mainland China, trying to nab a couple of birds as they came to roost after feeding. In her pocket were two tiny and expensive radio transmitters. An employee of the World Wide Fund for Nature (WWF), which manages Mai Po, she was hoping to affix them to the backs of two godwits heading north for the summer. By the time she gave up, at midnight, she had not caught any godwits, but she had snared three gorgeous greater painted snipe. She had also spotted an eagle owl out hunting and a leopard cat prowling nearby. She will be hunting herself again soon, as the godwits' twice-yearly transit reaches its peak.

Astonishingly little is known about the godwits that arrive at Mai Po in full breeding plumage at this time of year—neither where exactly in the warmer parts of Asia they have wintered nor where, in the far north, they will breed. Most of the world's migratory waterbirds barrel up and down one of eight big north-south “flyways”. The East Asian-Australasian Flyway, along which Mai Po is located, is the most rich in species. This spring 50m waterbirds will move from their winter homes in South-East Asia, Australia and New Zealand to their breeding grounds in Russia, Mongolia, northern China, the Korean peninsula, Japan and even Alaska. They rely on intertidal flats like those at Mai Po, teeming with nourishing molluscs, worms and crustaceans, as well as plants, to supply the food that fuels their journeys.

Of the eight big flyways, the East Asian-Australasian is also the one displaying the sharpest decline in the number of birds. Of its 155-odd waterbird species, at least 24 are now globally threatened. They include the diminutive spoon-billed sandpiper, a wader whose numbers are down to fewer than 200 pairs.

Transiting one of the world's most dynamic industrial regions is clearly taking a toll. Asia's migratory waterbirds face immense pressures, from hunting, pollution, ingested plastic and competition from aquaculture. But the biggest disaster is the destruction of coastal way-stations like Mai Po. Since 1950 China has lost over half its coastal wetlands to “reclamation”. According to the International Union for Conservation of Nature (IUCN), the Yellow

sea, into which the Yellow river flows, has lost over 35% of intertidal habitat since the early 1980s. An especially destructive moment was the run-up to the Beijing Olympics of 2008, for which a lot of heavy industry was moved from the capital to the coast.

Xianji Wen, who, like Ms Leung, works for the WWF, describes the Yellow sea as a “bottleneck” for the whole flyway: so many waders pass through it that the loss of habitat there is particularly consequential. Four-fifths of Asia's red knots, having wintered in Australasia, stop on their way north at one spot, Luannan, east of Beijing. The bar-tailed godwit flies non-stop from New Zealand to the Yellow sea—over 6,000km. After recovering there, the species flies non-stop again to its breeding grounds in the extreme north of Russia.

Populations of both species have crashed by over a third, probably because of coastal development. On the eastern side of the Yellow sea in South Korea, a huge reclamation scheme involving the world's longest dyke destroyed Saemangeum, a 400 square kilometre tidal estuary. The 330,000 shorebirds that used to use the area did not move to other staging sites—there is a limit to how many birds even rich mudflats can support. Most simply died. In 2010 the IUCN reclassified the great knot from a species of “least concern” to “vulnerable”, thanks largely to that dyke. It might also prove the death knell of the spoon-billed sandpiper. The reclamation scheme, meanwhile, is doing far less for the local economy than its backers promised it would.

There is a silver lining, however. The vast middle class created by the region's breakneck growth is becoming interested in conservation. Hong Kong has long had plenty of birdwatchers, and schoolchildren throng Mai Po's education centre. In Taiwan a conservation movement was spawned by another critically endangered species, the black-faced spoonbill. In the 1980s its numbers fell to fewer than 300. It bred on a few islands at the western end of the Korean peninsula's demilitarised zone and wintered at three sites: Mai Po, the Red river delta in Vietnam and Chiku in Taiwan. Taiwanese bird lovers first secured an end to hunting at Chiku and then, in 2000, fought off plans for a steel refinery. The spoonbill population has since grown to around 3,800—proof that it is possible to rescue species from the verge of extinction.

## Binoculars to the rescue

In China several hundred birdwatchers gather for the spring migration by the Yellow Sea near the North Korean border. And Mr Wen says that local governments in China increasingly take pride in the acclaim they win for conservation schemes—several work with the WWF. A year ago China and New Zealand even signed an agreement—an “air bridge” between the two countries—to protect the habitat of the bar-tailed godwits, whose annual departure, Maori mythology holds, is for the homeland of the ancestors who first colonised New Zealand.

South Korea's conservation movement is feeble. But the government of North Korea, by failing to develop the country, has inadvertently preserved a greater share of valuable waterbird habitats. It recently agreed to designate one as a protected site under the “Ramsar” international convention on wetlands—a rare instance of North Korea being drawn into international co-operation. Some even hope this innocuous step may prove habit-forming, paving the way for co-operation on trickier issues. After all, 30 years ago, Chinese and Russian conservationists helped thaw frosty relations between their two countries. Asia's beleaguered waterbirds might be diplomatic as well as zoological treasures. ■



## Climate change

## No cooling

BEIJING

## Donald Trump's indifference to climate change has not changed China's view

PRESIDENTS have found something else to blame for the toxic smog that envelops many Chinese cities for much of the year. Until recently the culprits that were usually fingered were the obvious ones: emissions from coal-fired power plants, exhaust fumes from cars and dust from building sites. This year, however, reports began to appear in state-run media that climate change is now reckoned to be a factor, too. Chinese scientists say that in eastern China global warming is resulting in less rain and wind to clear the pollutants. The government's weather bureau illustrated its online account of the discovery with a picture of zombie-looking figures in hazmat suits shrouded by haze.

America's president, Donald Trump, may have little interest in climate change: Wilbur Ross, his commerce secretary, said the subject was "not a major part of the discussion" when Mr Trump met his Chinese counterpart, Xi Jinping, at Mar-a-Lago, Florida, earlier this month. But in China the government, and increasingly the public, see it as a real danger, responsible for rising sea levels that threaten coastal cities as well as for aggravating droughts in the north, floods in the south and, as it now turns out, the omnipresent smog. Some people wonder whether Mr Trump's indifference might reduce China's willingness to take action against climate change. Why bother if the second-biggest emitter of

greenhouse gases appears to have lost faith in the cause? Fortunately, there is no sign that China, the biggest emitter, is wavering.

There was a time when it might have. Less than a decade ago China was dragging its feet, believing that the West was trying to use climate change as an excuse to impose policies that would harm China's economy. In 2009 China's intransigence was one of the main reasons why UN-led climate-change talks in Copenhagen failed to make much progress. But by the time of the UN's climate-change conference in Paris in 2015, much had changed. Li Shuo, a Beijing-based policy adviser for Greenpeace, says China was one of the "major driving forces" behind the consensus that

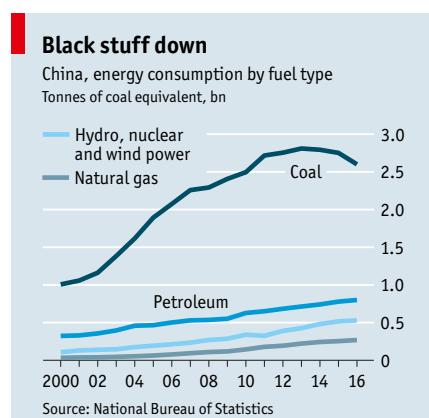
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was forged at the meeting.

For China's leaders, the reasons why they changed their minds remain just as valid today. Officials still worry about the huge build-up of debt and damage to the environment that have accompanied years of breakneck growth (citizens' complaints about polluted air, water and soil have been fuelling social unrest). The government now wants the economy to be less reliant on manufacturing that requires a lot of polluting energy, and less driven by massive investment in construction. This will involve using less coal, which in turn will help clear the air as well as reduce climate-changing emissions of carbon.

The government is spooked by an accumulation of research showing just how vulnerable the country is to damage caused by climate change. A study published in 2013 by the World Bank and the OECD concluded that economic losses in Guangzhou, in southern China, would be greater than in any other city in the world. In 2015 the government's chief meteorologist warned of "serious threats" to China's rivers, food supplies and infrastructure as a result of global warming, which he said had been greater than the global average.

China sees diplomatic benefit, too, in hanging tough on climate change. It talks of the "soft power" it won by pushing for the agreement in Paris. Shortly before Mr Trump's inauguration in January, Mr Xi told a gathering of the world's elite in Davos, Switzerland, that all signatories should stick to the Paris accord "instead of walking away from it"—a poke at Mr Trump that his audience applauded. Also that month China's climate envoy, Xie Zhenhua, ventured that his country was "capable of taking a leadership role in combating global climate change." China is reluctant to stick its neck out in negotiations ➤



► on global warming, but it enjoys the kudos of leading by example.

Chinese officials are blessed by the absence of a domestic lobby that questions climate change and its causes. "People generally see the urgency" of the problem, says Mr Li of Greenpeace, a lobby group. But there are powerful vested interests that resist carbon-cutting measures. Take the steel industry. It is heavily polluting and a huge consumer of coal-produced energy. The central government says it wants to cut steel production, but some local authorities have been ignoring its orders, partly because of the risk of protests by laid-off workers. Output of the metal still exceeds domestic demand by about one-seventh, or 100m tonnes a year.

But the government is succeeding in cutting the use of coal, which provides around 70% of China's electricity. In 2016 coal consumption dropped by 4.7%, the third successive year of decline (see chart on previous page). Many experts now believe it reached its peak in 2013, several years before even the most optimistic of them had been predicting. Greenpeace forecasts that this year will be China's

fourth successive one with flat or falling emissions of carbon dioxide.

China also hopes to profit from developing green technology that it can sell globally. It is investing huge sums in it. In January it announced plans to spend 2.5trn yuan (\$360bn) by 2020 on new generating capacity using renewable or low-carbon sources, including solar, wind, hydroelectric and nuclear plants. It says this will create 13m jobs and mean that half of the new capacity built between 2016 and 2020 will be renewable or nuclear (although China's record in attaching wind and solar farms to the grid has been less impressive than its rapid building of them).

The country is eager to experiment with other ways of reducing greenhouse gases. Later this year it plans to launch a nationwide carbon-trading scheme, mainly for heavy industries. It is also mulling the introduction of a carbon tax. The public will cheer: less carbon spewed into the air should mean less smog. "We will make our skies blue again," pledged the prime minister, Li Keqiang, last month. He is mindful of potential unrest if China doesn't. His resolve might help the planet, too. ■

Several other companies are piling in, as are investors who believe the firms have global potential. Bluegogo was the first to launch overseas, in San Francisco in February. Ofo has recently started services in Singapore and San Diego, California. It was due to launch another one in Cambridge, England, as *The Economist* went to press. Mobike, too, is operating in Singapore and is eyeing other markets.

The dockless system is prone to abuse. Some riders hide the bikes in or near their homes to prevent others from using them. Another trick involves photographing a bike's QR code and then scratching it off to stop others from scanning it. With the stored image, the rider can then monopolise the machine. But customers caught misbehaving can have points deducted from their accounts, making it more expensive for them to rent the bikes.

A bigger problem for the new firms is persuading people to use bikes instead of cars. Thirty years ago, 63% of Beijingers pedalled to work. Now only 12% do. Many people think that cycling is only for the poor. A dating-show contestant famously quipped in 2010 that she would "rather cry in a BMW than smile on a bike."

Cycling is also dangerous. About 40% of road accidents involve bicycles, according to a report in 2013. (Many bike lanes have been eliminated to make room for cars.) Some city authorities accuse the bike-sharing firms of causing congestion. This month the southern city of Shenzhen ordered limits on the number of shared bikes. Other cities, including Shanghai and Beijing, are considering similar measures.

But Chinese leaders like the services—they represent the kind of green innovation that China says it wants. In January the prime minister, Li Keqiang, told Mobike's co-founder that her business model was "a revolution". Not, presumably, the kind that Mao led, but one that would have made the chairman feel at home with its profusion of two-wheelers. ■

### Bicycle sharing

## The return of pedal power

BEIJING

**High-tech rental schemes are trying to make cycling cool again**

**A** MAN pedals a brand-new, orange and silver bicycle to his office door. He dismounts in the middle of the pavement, flicks down the kickstand and disappears inside. A woman approaches and waves her smartphone over a QR code near the rear mudguard. The lock snaps open and off she rides. These days, China's once bicycle-clogged streets are choked with cars. But some urbanites are getting back on two (motorless) wheels, lured by the ease of using shared "dockless" bikes controlled by high-tech gadgetry.

For years, bike-sharing schemes have been common in big cities around the world, including in China. Examples include Paris's Vélib and London's Santander Cycles ("Boris bikes"). But these require customers to return the bicycles to docking stations. In China, a more user-friendly approach is spreading rapidly. It involves bikes that can be paid for using a smartphone and left anywhere. GPS tracking enables them to be located with a mobile app. A ride typically costs only one yuan (\$0.15) on a sleek-framed bike in an eye-catching colour.

The first such service was launched in June 2015 by a startup called Ofo. The com-

pany now has around 2.5m yellow-framed bikes in more than 50 cities in China. Its main rival, Mobike, which started up only a year ago, says it has "several million" of its orange-wheeled bikes spread across a similar area. Bluegogo has half a million bikes in six Chinese cities. It plans to add a new city every two weeks.



Weighing them up against BMWs



### The death penalty

## And then there were none

VARNER, ARKANSAS

**A bid to execute eight prisoners at unprecedented speed underlines the difficulty of executing anyone at all**

IT WAS 11.15pm at the Cummins Unit, the facility on the Arkansas plains where death sentences are supposed to be carried out, and the clock was ticking. Not in the usual way, however: rather than the condemned man, Don Davis, seeking an emergency stay, on April 17th the state was asking the Supreme Court in Washington, DC, to lift one. The death warrant would expire at midnight; if it did, Arkansas might be unable to dispatch Mr Davis for the foreseeable future. That is because its supply of a drug it intended to use in a run of eight back-to-back lethal injections—a glut of executions unprecedented in the modern era—will soon expire, too.

The journalists who had been ushered through the electric fences, then past the watch towers and the incongruous rose garden, drew lots to decide who would serve as witnesses. It was unclear whether there was still time for a legal kill. Finally, at a quarter to midnight, the justices declined to lift the stay. Increasingly and chaotically, a gruesome plan that, had it been realised, might have suggested a revival of America's death penalty, has come instead to seem further evidence of its anachronism.

Arkansas has an unhappy history of multiple executions: in 1923 a man was taken from his coffin and put back in the electric chair after he was found still to be breathing. Nonetheless, in February Asa Hutchinson, the state's governor, scheduled eight executions in an 11-day period,

two each on four nights, beginning with Mr Davis and Bruce Ward, another convicted murderer. That would have been more than the rest of the country has performed so far this year, and almost half of last year's national total of 20, which was the lowest since 1991 (see chart). No state has executed two people on the same day since 2000. Arkansas has not executed anyone at all since 2005.

Mr Hutchinson's haste avowedly stemmed from the trouble that his state, like others, has faced in carrying out legal injections, which had seemed a reassuringly hygienic method, just as the electric chair once did. Because of European export bans and the reluctance of domestic

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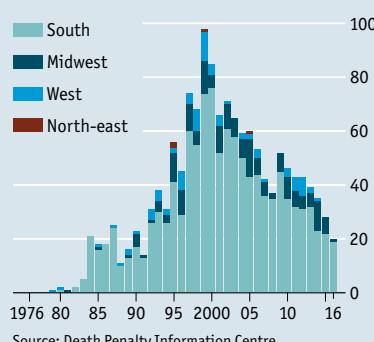
pharmaceutical firms to be involved, states have struggled to obtain the drugs they need. Arkansas is among those to have resorted to unusual shifts, such as importing a batch from a pharmacy run from the back of a driving school in London. Like other states, it has passed rules to cloak its procurement, which, as elsewhere, led to more litigation and delays. The supply it finally secured of midazolam, a sedative, is supposed to be administered by the end of April. When a legal opening arose, Mr Hutchinson issued his warrants.

Quite apart from the oddity of arranging deaths on the basis of a use-by date, midazolam is controversial. Critics say it does not always numb the pain caused by the other drugs, which prevent breathing and stop the heart; it came into fashion only after preferable anaesthetics were withdrawn. It has been implicated in a series of excruciatingly botched procedures, including one in Arizona in which Dale Baich, a public defender, saw his client take nearly two hours to die. It was "by far the most difficult to watch" of the 12 lethal injections Mr Baich has attended. Several states have renounced midazolam; a federal court in Ohio recently blocked its use (though the Supreme Court has permitted it). On April 15th a federal court stayed all the Arkansas executions on the grounds that midazolam might indeed lead to unconstitutional "cruel and unusual" punishment.

That order was reversed on appeal on the afternoon before Mr Davis and Mr Ward were meant to die—the judges ruling, in effect, that their colleague was too squeamish about the risk of pain. Still, this bout of litigation over lethal-injection cocktails was important because of the role of drug companies, two of which filed objections to the use of products apparently procured through middlemen. In separate actions in a county court, McKesson, a ➤

### The softening south

United States, executions by region



► distributor, accused Arkansas of obtaining a drug through deception. The original judge in that case granted a restraining order, then lay down on a mock gurney at a protest outside the governor's mansion; he now faces disciplinary action.

In the end Mr Davis—pictured on the previous page, top left—was saved by different considerations. The Arkansas Supreme Court issued a stay until the federal one hears a forthcoming case concerning the right of defendants to enlist independent mental-health experts. Mr Ward was covered both by that and a separate ruling regarding his competence to be executed (he hallucinates about dogs at the end of his bed). A third man, Jason McGehee, slated to die on April 27th, won a stay after the parole board recommended clemency.

### So many ways to live

"Our country does not participate in mass executions," lawyers for the men maintained. They may be right. The Arkansas eight are dwindling. Those remaining have likewise been convicted of heinous crimes. On the other hand, say their lawyers, they too can muster mitigating factors: childhood abuse, mental disability, lousy representation at their trials. As *The Economist* went to press, Stacey Johnson, whose execution was to be on April 20th, had earned a stay to allow him to pursue DNA testing. After yet another ruling, McKesson's complaint offered hope to Lezell Lee, who shared Mr Johnson's death date and, like him, protests his innocence.

Arkansas's officials harrumph about justice being thwarted. But even if, in some cases, they prevail, the rigmarole has shown that there are many sound reasons not to execute someone. Along with the myriad legal objections, it has highlighted the costs to those charged with overseeing the process. A group of former prison officials warned the governor that his eight-strike scheme would impose "unnecessary stress and trauma" on staff at the Cummins Unit and increase the risk of a botch. The state reportedly struggled to find enough citizen witnesses; the prisons chief is said to have solicited volunteers at a Rotary Club event. The waning enthusiasm for the death penalty of another group of laymen—juries—is a big factor in its decline.

Mr Davis spent April 17th in a cell opposite the death chamber. He had been there before, in fact, on another occasion when his demise was forestalled at the 11th hour. In the gathering execution-night mood—part hospital vigil, part crime scene—he was served a last meal, that ghoulish ritual. The state gave up its bid to do away with Mr Ward earlier in the evening, but relatives of both men's victims were at the prison. They were put "through hell", said Mr Hutchinson's spokesman, after the Supreme Court ruled and the clock ticked down. No doubt. ■

### Politics

## Ossoff's face-off

SANDY SPRINGS

### Donald Trump emerges unscathed from a vote in Georgia—just

**N**O RUN-OFF", exhorted a sign at Jon Ossoff's campaign office in Sandy Springs. As it turned out, in the special election for Georgia's sixth congressional district on April 18th—for a seat vacated by Tom Price, now Donald Trump's health secretary—the Democrat fell just short of the 50% needed to avoid a second round. Mr Trump thus narrowly escaped an ominous rebuke in the sort of place Democrats hope to flip in elections next year.

Mr Ossoff was a somewhat unlikely face for the resistance. Just 30 years old, he has managed a short stint as an investigative film-maker and a longer one as a congressional aide. Yet, with 48% of the vote, he almost seized what has been safe Republican territory since the 1970s. He was propelled by three big factors, not all of which will apply elsewhere.

First, Republican voters in the district—a stretch of mostly well-heeled, white and well-educated Atlanta suburbs—were never wild about Mr Trump. He only just prevailed there in November, whereas Mr Price, and Mitt Romney in 2012, won it thumping. That left the Republicans in the race ambivalent about how tightly to embrace him; the most devoted of them fared badly. And—second—there were lots of Republicans in the race: 11 in what was an open contest. They split their vote and spent a lot of time attacking each other.

Third, Mr Ossoff was buoyed by an astonishing surge of donations—he raised

more than \$8m, mostly from elsewhere in America—and by legions of volunteers. A group of women waving "Vote your Ossoff!" signs in Dunwoody said that they had been shaken out of political timidity by Mr Trump's antics and the women's march in Washington. Mr Ossoff, one claimed, is "wise beyond his years."

The man himself tried both to channel the anti-Trump indignation and to insist that local issues mattered, too. For his part the president criticised Mr Ossoff on Twitter and in a robocall to voters. "Glad to be of help!", he tweeted, as Mr Ossoff fell short. Possibly the millions of dollars' worth of attack adverts funded by outside Republican groups had more impact. Mr Ossoff was variously portrayed as a stooge of Democratic bigwigs, an associate of terrorists (his company has worked for Al Jazeera) and wearing a Han Solo costume at college. "I threaten the entrenched special interests," he explains.

The question now is whether he can prevail against a unified Republican front. His opponent on June 20th will be Karen Handel, a former Georgia secretary of state and failed candidate for governor and the Senate. Moreover, can Democrats who do not benefit from the zany dynamics of his campaign hope for the same momentum, especially when the first shock of Mr Trump's rise wears off? "We are changing the world," Mr Ossoff told supporters on election night. We shall see. ■



Mere inches away

## The border barrier

# Backs to the wall

OTAY MESA

**Those who will live and work near the border wall are cool on it**

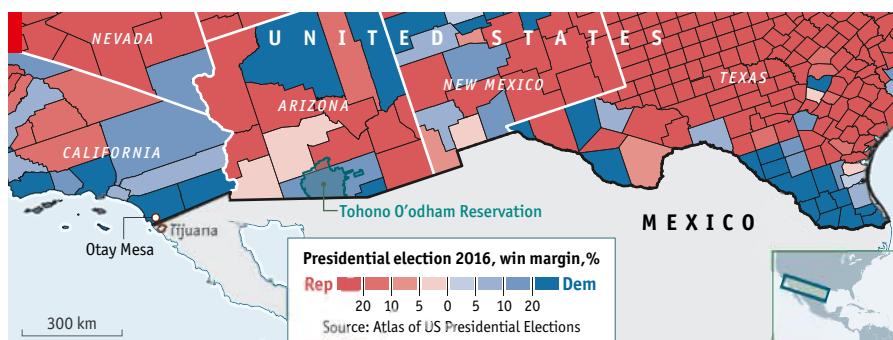
WILLIAM, a tractor-trailer driver, leans against his navy blue truck and stares across the highway to the crowded hills of Tijuana. He voted for Donald Trump, but roundly opposes the president's plans for a new border wall. "People will find a way around any wall. And it's going to be you and me paying for it," he warns, as NPR, a public-radio station, streams from his radio. His attitude, which is surprisingly widespread along the border, hints at trouble for the president.

On April 10th the customs and border protection agency announced that it will test prototypes of Donald Trump's proposed wall somewhere in the Otay Mesa area after it chooses finalists this summer. A barricade covered in solar panels, a wall topped by a monorail and an obstacle course in which one of the barriers is a 100-foot ditch full of nuclear waste are just some of the hundreds of proposals the department will choose from.

Otay Mesa is a natural place to test a wall (which is unlikely to be so whimsical), suggests Eric Frost, who directs the homeland-security graduate programme at San Diego State University. The border crossing is one of the county's busiest but Otay Mesa still has enough open land for new construction. "The prototypes need to interact with real people and real cars and real trucks. It doesn't make sense to build them in the middle of the desert," he says.

The trouble is that Otay Mesa is Democrat territory: the congressional district in which it lies voted overwhelmingly for Hillary Clinton. Nationally, only 8% of Democrats support a new border wall, compared with 74% of Republicans, according to the Pew Research Centre, a think-tank. Moreover, Republicans who live close to Mexico seem less keen on a wall than Republicans farther from the border. Locals are used to the sight of immigrants working at undesirable jobs, explains Silvia Lopez, a registered Republican who sells insurance in an Otay Mesa strip mall. Like other border-dwellers, she knows something that other Americans often forget: "We already have a wall."

California's lieutenant-governor, Gavin Newsom, has hinted that California's powerful environmental laws could stymie building. Obstruction could spread. Of the 22 counties in California, Arizona, New Mexico and Texas that share a border with Mexico, 14 voted for Mrs Clinton last November (see map).



At least the federal government owns a lot of land in southernmost California. In Arizona, a large stretch of the border belongs to the Tohono O'odham, a Native American tribe. In Texas, which has far less fencing than America's other border states, most border land is in state or private

hands. The Trump administration would have to use eminent domain to acquire any private lands—a lengthy process that involves negotiations, value appraisals and, often, lawsuits. Time, perhaps, for Mr Trump to demonstrate his vaunted deal-making skills. ■

## Immigrants and deficits

# Neither burdens nor saviours

WASHINGTON, DC

**Immigration cannot plug the hole in America's budget**

ON APRIL 12th almost 1,500 economists of varied political hues wrote to Donald Trump, urging him to consider the advantages of immigration. The benefits to America "far outweigh" the costs, they explained. Not only are immigrants often skilled (especially in the sciences) and entrepreneurial, they also tend to be young. As the baby-boom generation enters retirement, a demographic counterweight will come in handy.

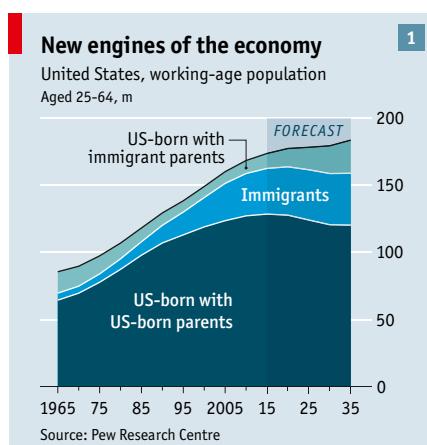
Mr Trump, who did not win the presidency by listening to economists, proceeded to order a review of high-skilled visas on April 18th. The order is vague; his language was not. "We're going to defend our workers, protect our jobs and finally put America first," he said. On this issue the

works can stand firm: highly educated immigrants are indisputably good for America. Still, they should not claim too much. As a treatment for America's long-term budgetary malaise, immigration is probably more of a painkiller than a cure.

The effects of immigration are hard to calculate, for three reasons. The first concerns timing. Were it not for immigrants and their children, the working-age population would be shrinking (see chart 1). More workers means the cost of supporting retirees is spread over more people. But these new taxpayers will eventually retire and claim benefits themselves. By 2050 nearly a third of the foreign-born population is expected to be over 65.

A second difficulty is that the costs and benefits of immigration fall on different levels of government. Workers pay federal taxes, but get comparably little back from the central government until they retire. In the interim, state governments pay to educate their children, at an average cost of \$11,000 a year per child.

Consider a related issue—the effect of legalising illegal immigrants already in America. The immigration reform that passed the Senate in 2013, only to fail in the House of Representatives, would have reduced deficits by 0.1% of GDP in its first decade and 0.2% of GDP in its second, according to official estimates. That bill would have provided a path to citizenship for illegal immigrants, which would have made them eligible for social security after ten ►



► years of work. Yet the cost of these pension promises was largely invisible, and even the short-term estimates covered only the federal budget. The Heritage Foundation, a conservative think-tank, claims that the full cost of a so-called “amnesty”—ignoring other parts of the reform—is \$5.3trn over 50 years, assuming no future changes to entitlement spending.

The final problem is the number of fiduciary assumptions needed to work out the fiscal contribution of anyone, let alone immigrants. How, for instance, should analysts treat spending on public goods, such as defence? This need not rise with population, but in practice it tends to. At what rate should they discount the tax payments of immigrants’ descendants? How might taxation and spending change in future?

A large panel of economists, convened by the National Academies, has tried to untangle this mess. Last September they estimated the fiscal impact of immigrants over 75 years, under different sets of assumptions. One scenario is shown in chart 2. It ignores public goods and assumes that taxes and spending grow at the same rate as productivity. It shows that, like natives, immigrants tend to benefit the treasury only if they are well-educated. The net contribution of an immigrant with a bachelor’s degree is worth over \$200,000 now. A thinly educated immigrant costs \$15,000.

Broadly, immigrants to America are less educated than natives. In recent years, 21% had less than a high-school education, compared with 7% of American-born folk. This brings down their estimated fiscal contribution over 75 years to \$92,000 each (under the given assumptions). If all immigrants, rather than only recent ones, are counted, the number turns negative.

Might low-skilled immigrants instead contribute to the coffers by having plenty of children? Immigrants have a fertility rate (the number of children per woman) of 2.3, compared with 1.9 among natives. Their children are more socially mobile, which also helps. Partly as a result, a 25-year-old immigrant is almost always a better bet for

the public purse than a 25-year-old native with a comparable education.

Yet immigrants’ social mobility is still low in absolute terms. Children of foreign-born parents who did not finish high school are thought to have less than a one-in-fifteen chance of graduating from college. The descendants of low-skilled immigrants are likely to remain a fiscal drag.

Even on the rosiest assumptions, much more immigration than is feasible would be needed to support the greying native population. The most generous model values the likely net fiscal contributions of a graduate immigrant of working age, and of his or her descendants, at a little over \$500,000 over 75 years. A rough calculation suggests that almost 40m such immi-

grants would need to arrive immediately in order to fill the hole caused by social-security payments and hospital visits for the over-65s. They would have to be followed by 36m more by 2047—arrivals that are already baked into budgetary forecasts. Migration on such a scale seemed unlikely even before the immigrant-bashing Mr Trump came along.

Whether they come as immigrants or as babies, new arrivals cannot change the fact that America promises more in benefits to its residents than it takes from them in taxes. Highly skilled migrants help the public finances—more so, probably, than comparably educated natives. But they cannot provide much of an escape from the coming fiscal squeeze. ■



### Post office v pooches

## Leash the hounds

NEW YORK

Online shopping helps the post office’s bottom line—and delights mutts

**C**HISELLED in granite on a post office in Manhattan is the United States Postal Service’s unofficial motto: “Neither snow nor rain nor heat nor gloom of night stays these couriers from the swift completion of their appointed rounds.” Dogs sometimes do, though. The number of canine attacks on postal workers has climbed from 5,581 in 2013 to 6,755 in 2016. Most attacks occur in cities, where postal workers often walk to make deliveries. Los Angeles has the worst record, with 80 dog attacks last year, followed by Houston with 62.

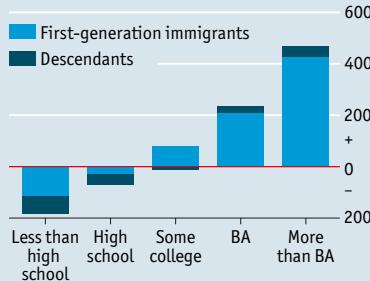
Thanks to e-mail, online banking and the like, the postal service delivers many fewer letters than it used to. The volume of first-class mail it handles has dropped from 91bn items in 2008 to 61bn in 2016. But internet shopping has led to a jump in parcel deliveries—up from 3.3bn to 5.2bn in the same period. Posties with parcels often knock on doors, which gives the dogs an opportunity.

Following a rise in canine attacks in 2015, the post office launched an app on postal workers’ hand-held scanners that warns of dogs at certain houses. Owners of repeat offenders are told to pick up post at a nearby post office. If a loose dog plagues a postman, delivery to an entire neighbourhood can be suspended. Carriers are also trained to use their satchels as barriers and carry pepper spray. Some carry dog biscuits to distract aggressive and hungry mutts.

Dog attacks cost the postal service \$2.8m in medical compensation and other expenses last year, up from \$1.2m in 2011. Half of the attacks in 2016 required medical treatment or time off from the mail route. The postal service has asked customers to put dogs in a different room before opening the door. But the danger is unlikely to disappear. Another reason to hope that Amazon can make drone deliveries work—though those drones could be worth a nibble, too.

### Give me your poor... oh, maybe not

United States, estimated 75-year fiscal impact\*  
By education level of first-generation immigrants  
2012 \$, '000



Source: National Academies of Sciences, Engineering and Medicine  
\*Net present value at all levels of government combined.  
Excludes public goods

## Health-care costs

# An arm and a leg

### Even people with insurance struggle to pay for medical care

**A**LTHOUGH Donald Trump occasionally pokes it in the ribs, the fight seems to have gone out of the Republican effort to reform America's health-care system. That is a shame, not because the first attempt at reform was well-judged, but because the system badly needs attention. Seven years after Obamacare became law, health care remains ruinously expensive.

Even as the number of people without insurance has fallen, the proportion of Americans who struggle to pay for treatment has hardly budged. In February of this year, 29% of people said they or a family member had struggled to pay a medical bill, according to a poll by the Kaiser Family Foundation; in March 2010, 30% said the same thing. About 60% of the strugglers in the latest poll had used up most or all of their savings; nearly three-quarters had cut back spending on food, clothes and basic household items.

Strikingly, 30% of people with health insurance reported struggling—not much lower than the 41% without insurance who did so (retired people, who are covered by a government scheme, fared better: only 20% said they struggled). One reason is that insurers have been passing on more medical charges to patients. A typical insurance plan has a long list of things for which patients must pay a share. In high-deductible plans, which are increasingly popular, families must pay at least \$2,600 before any insurance kicks in. Last year a quarter of employers, through whom most Americans get health insurance, offered only high-deductible plans. Some two-fifths plan to do so in the next three years.

Insurance can be alarmingly patchy. A surgeon who stitches up a patient rushed to the emergency room may not be covered by the patient's health insurance, even when the procedure takes place at a hospital where a stay would be covered. A survey in 2015 found that a third of Americans with private insurance had received such surprise bills, often from an anaesthetist or another doctor.

Patients often do not help themselves even when they can. Only half of Americans have tried to find out what they would be charged before seeking care, according to a recent survey by Public Agenda, a think-tank. Most people think, wrongly, that all doctors and hospitals charge about the same.

In the public's defence, health plans are opaque and complicated. Many people do

not know what type of plan they have because so many have cryptic names, says Larry Levitt at the Kaiser Family Foundation. Working out costs in advance is so tricky that the University of New Hampshire has started offering education on health-care literacy. David Schleifer, who led the Public Agenda survey, says the task can be mind-boggling. To find out the cost of a hernia operation, he had to peruse the list on the insurer's website, call the hospital to ask about the specific billing codes for the procedure and then call the insurer to check the patient's payment for those codes. Those who lack his nous must hope that their health holds. ■



### Population change

## Out of the frozen north

CHICAGO

### Migration southward and westward is picking up again

**L**IKE birds, people tend to move from place to place along established routes. Since the second world war, among the most travelled of these routes in America has been from the "snow belt" in the Midwest and north-east to the "sun belt" in the south and west. The recession that began in 2007 knocked Americans off course for a while, and led to confident predictions that old cities would recover some of their population losses. But people have begun to head southward and westward again.

According to recently released estimates by the census bureau, Maricopa county in Arizona, which includes Phoenix and its suburbs, grew by 222 people a day on average in the year to July 2016. It overtook Harris county in Texas, home to Houston, as the county with the highest annual population growth. Cook county, which includes Chicago, saw the largest population fall in the same period, with a net loss of more than 21,000 people. Seven of America's eight fastest-growing states

are in the west. (In addition to Arizona, they are Colorado, Idaho, Nevada, Oregon, Utah and Washington; the eighth state is Florida.) Illinois, which contains Chicago, has lost more people than any other state for three years in a row.

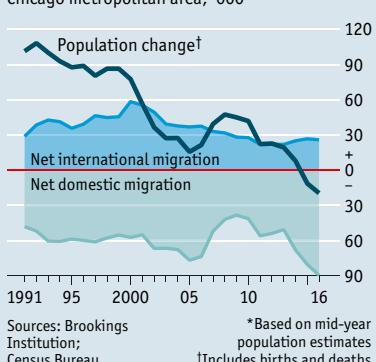
People tend to move for work, says William Frey, a demographer at the Brookings Institution, a think-tank. In that respect the west scores highly: Arizona and Nevada are expected to have exceptionally high job growth this year. Mortgages have become easier to obtain in general, and the recovering housing market has enabled retirees to sell up and move to warmer places. Simple fashion plays a part, too: trendy cities like Austin, Denver and San Francisco are drawing many people between the ages of 25 and 35.

Another context is race. Blacks seem especially keen to leave Chicago, and the Midwest in general, for the southern states that many of their ancestors fled about a century ago. Mr Frey calls this "the great migration of blacks in reverse". In 1970 the Chicago area had the second-largest black population in the country, with some 1.3m residents, more than double the black population of metropolitan Atlanta. Today more blacks live in and around Atlanta than Chicago. And the southern metropolis is much more racially mixed. According to the Urban Institute, a think-tank, Atlanta was the 41st most segregated of 100 large American metropolises in 2010 (down from 21st most segregated in 1990). Chicago ranked tenth.

"Blacks who live in only black areas do much worse in life," says Edward Glaeser, an economist at Harvard University who specialises in cities. Schools in such areas tend to be poor—the quality of public schools in Chicago's South Side, where many blacks live, ranges from poor to execrable. The Metropolitan Planning Council, a Chicago think-tank, estimates that regional GDP would be \$8bn a year higher if Chicago were only as segregated as the average American metropolis. It is only an educated guess. That segregation is costly is, however, almost certain. ■

### The great reversion

Chicago metropolitan area, '000\*



# Lexington | Divided by a common border

**Canadian and American neighbours see the Syrian refugee crisis from opposite sides**



A MILE of water divides the American village of Morristown from its Canadian neighbour, Brockville. Their economies were once closely linked, with small factories on each bank of the St Lawrence river producing patent medicines such as Dr Morse's Indian Root Pills and Dr Williams' Pink Pills for Pale People. Old folk remember winters when the river froze, and trees jammed into the ice marked a path to Canada. Both towns are conservative. The elected town supervisor of Morristown, Frank Putnam, a Republican, is especially exercised by welfare spending in his county, a struggling tract of upstate New York sustained by dairy farms, summer tourism and two state prisons.

Now a debate with worldwide resonance has revealed differences between the two settlements. In common with cities across Canada, Brockville has volunteered to host Syrian refugees. Residents, church groups and civic leaders are raising about \$25,000 in private funds to sponsor each family for a year. Across the St Lawrence, by contrast, Mr Putnam is sure that the cost of receiving refugees would cause "alarm" in Morristown. He supports President Donald Trump's attempts to halt refugee arrivals from Syria and impose "extreme vetting" on other travellers. Mr Trump wants a "time-out" to fine-tune security, says Mr Putnam, in private life a salesman for *Cowsmopolitan*, a magazine for dairy farmers: "Where's the dirtiness in doing that?"

Brockville is in southernmost Canada, a busily affluent region, Morristown in northernmost New York, an area in long-term decline. These diverging economic fortunes give people "a different outlook", suggests Mr Putnam. Morristown is not invariably hostile to outsiders, he insists: nearby farms employ Central Americans in jobs that "entitled" locals shun. But many resent being taxed to pay for welfare for less assiduous folk. The terror attacks of September 2001 also left a mark. The border patrol often erects road blocks on the highway; river security can be "extreme". Canada has been "pretty unscathed" by terrorism, he says, whereas America is "a little gun-shy."

Yet attitudes to refugees seem too visceral to be explained by economics or recent history alone. An hour down the road from Morristown, in Watertown, reverberations continue from a council meeting last October at which speakers outlined an economic and moral case for welcoming refugees. The council member be-

hind that discussion, Teresa Macaluso, has been accused in local blogs of wanting to import terrorists. Constituents telephoned to thunder: "We look after our own." At the next meeting, a local shouted about Muslims raping women and beheading people.

The counties around Morristown and Watertown voted decisively for Mr Trump. "People believe in Trump's rhetoric that refugees are bad," Ms Macaluso sighs—even though, she says, nearby cities such as Utica have benefited from refugees buying abandoned houses and starting businesses. Ms Macaluso, a retired nurse, is braced for a backlash at her next election in November. If she loses, "So be it."

Ms Macaluso has allies. The Roman Catholic diocese that covers Morristown and Watertown has called for compassionate immigration laws and is about to twin with a Maronite diocese in Latakia, Syria, offering support to Christians trying to survive there. Father Steven Murray, pastor of Holy Family Church, believes that Watertown will receive refugees one day. "In the present climate," though, he believes the State Department would not grant the required certification to a refugee committee.

Father Murray, who grew up in the American border town of Ogdensburg, near Morristown, argues that Canada has always been more open. Go back to the 19th and early 20th centuries, when upstate New York boomed and, he says: "We didn't want the Irish here, then they didn't want the Italians here."

In Canada Brockville's mayor, David Henderson, agrees that security has changed the river: he remembers windsurfing to America as a teenager to buy illicit beers. He also suspects that a big terror attack could shake the broad consensus that has seen over 40,000 Syrians welcomed to Canada since November 2015, about a third of them privately sponsored. Even now, perhaps a fifth of his residents are "uncomfortable" with refugees: he works hard to deal with concerns and rumours. But, crucially, his city of 22,000 people, 95% of them whites of European descent, knows that without new families it will shrink.

## The North America that never staged a revolution

Canadians are relatively trusting of the state, adds Jacqueline Schoemaker Holmes, head of "Refugees for Brockville", an umbrella group for private sponsors. A poll in March found that 41% of Canadians think that recent flows of asylum-seekers across the snowy border from America will make their country less safe—a trend that may yet threaten the vocally pro-refugee stance taken by the prime minister, Justin Trudeau. But to a striking degree, Ms Schoemaker Holmes suggests, Canadians have "faith in their government" to ensure that refugees are given a haven and are properly vetted. Americans seem more "individualistic".

Brockville's newest refugee, an engineer from Damascus, arrived in February with his wife and three children. He asks not to be named to protect family still in Syria. The "majority" of Brockvillians have been friendly, he says. He hopes to start a business with Ahmad Khadra, an old friend from Syria who emigrated to Canada in 1995. Though Canada will offer welfare payments to refugees who do not find work, Brockville's Muslims are anxious that newcomers find jobs. Some refugees have "less than zero education", concedes Mr Khadra, so parents struggle. But their children are thriving at school; he is sure they will go on to be productive citizens. Mr Khadra thinks Canadian-American differences go back to the War of Independence: only one country chose a revolution. His adopted country is "more civilised, I'm sorry," he apologises. Spoken like a Canadian. ■



### Corruption in Latin America (1)

## Fachin victims

SÃO PAULO

### Despite a mounting scandal, Brazil's government soldiers on

**T**HE latest revelations of wrongdoing in high places struck Brazil with the force of a Netflix release: they are riveting, but so far have left the real world undisturbed. On April 12th Edson Fachin, the supreme-court justice who is overseeing a vast probe into corruption centred on Petrobras, the state-controlled oil company, authorised prosecutors to investigate eight government ministers, 24 senators, 39 deputies in the lower house of congress and three state governors. He sent dozens of cases to lower courts; they will now consider whether to launch new criminal inquiries into nine more state governors and three former presidents. All the big political parties and most front-runners in next year's presidential election have been tarnished (see chart).

This fresh scourging of the political class comes at an awkward time. Brazil's worst recession on record has not ended. Michel Temer, who became president last year after the impeachment of his predecessor, Dilma Rousseff, hopes to stabilise the economy by enacting reforms. His approval rating is a dismal 20%; that of his government is ten points lower. Yet the storm of scandal has yet to capsize reforms or sink hopes of an economic recovery. The value of Brazil's currency, bonds and the index of the main stock exchange weakened after Mr Fachin's revelations, but only briefly. The extensive new inquiries "had largely been priced in", says Cláudio Couto, a political scientist at Fundação Getúlio Vargas, a university in São Paulo.

One reason for that is that Mr Fachin's targets are only being investigated, not indicted. He based his decision on statements by 78 former executives of Odebrecht, a big construction firm, who testified as part of plea bargains with prosecutors. One testified that Odebrecht funnelled \$3.3bn to politicians between 2006 and 2014, the equivalent of 80% of its net profits over the period. Most of this money came from padded contracts awarded to the company by state-controlled entities, including Petrobras. (Odebrecht has admitted to bribing officials in 11 other Latin American and African countries.)

The testimony disclosed by Mr Fachin,

and analysed by Brazilian journalists, reveals how much money the politicians allegedly received, to enrich themselves, their parties or both. Guido Mantega, a former finance minister from Ms Rousseff's Workers' Party (PT), reportedly got 93m reais (\$30m). Aécio Neves, a senator (and potential presidential candidate) from the Party of Brazilian Social Democracy (PSDB), part of Mr Temer's coalition, allegedly received 65.5m reais. Everyone on Mr Fachin's list denies wrongdoing. Odebrecht witnesses claim that Mr Temer himself was present at meetings where illegal campaign donations were discussed, which he denies. He is immune from prosecution for any crime he might have committed before he became president.

Mr Temer is striving to project an air of normality. The disclosures, he says, are "staggering", but "we have to move ahead". He has said he will only dismiss cabinet ministers who are formally charged. Although the supreme court has given Mr Fachin extra manpower to deal with the massive caseload, that may take months. The compromised cabinet has some breathing room.

Congress, too, is trying to conduct politics as usual. Most members of Mr Temer's centrist coalition, including his Party of the Brazilian Democratic Movement (PMDB), see economy-strengthening reforms as the only way to regain credibility with voters. The reforms themselves are not popular. Plans to liberalise labour laws, for example by deregulating working hours, are not a vote-winner. Still less is a proposal to fix the ruinously expensive pension system, Mr Temer's most important policy. Trade unions linked to the PT, which is as mired in scandal as government parties, have called a general strike against pension reform on April 28th.

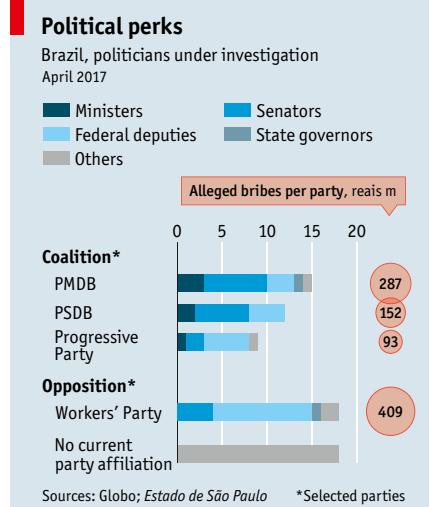
Nervous congressmen have forced Mr Temer to compromise. He has agreed to set a lower minimum pension age for women ➤

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than he had planned (62, rather than 65) and to ease transition rules for men and women. This reduces the prospective savings from pension reform by 170bn reais over ten years. Even so, it should still save the government a substantial 630bn reais over that period. If it goes through, women will retire ten years later than they do now on average. That is probably enough to reassure the central bank, which has been cutting interest rates, mainly in response to lower inflation. Without the prospect of savings on pensions, the central bank might reduce rates more slowly, which would hurt the economy.

Mr Temer is fortunate that voters are feeling cynical rather than fired up. There are no plans to repeat the big anti-corruption protests that helped topple Ms Rousseff last year. Disclosure of Mr Fachin's list has reassured Brazilians that the dragnet is going ahead without interference.

Any attempt by congress to change that would revive the outrage, warns João Castro Neves of Eurasia Group, a political consultancy. Earlier this year the legislature tried to give its members amnesty for taking undeclared campaign donations, but backed down in the face of popular opposition. The uneasy political calm could also end if congressmen start testifying against one another, or if investigations turn into indictments. Mr Temer has so far kept reforms moving forward and the scandal-plagued government afloat. His job is getting harder all the time. ■

#### Corruption in Latin America (2)

## The long arm of the policía

MEXICO CITY

**Two fugitive governors were a cause of embarrassment. Their arrest stirs hope**

ONE of the odder pieces of evidence turned up by investigations of Javier Duarte, a former governor of the state of Veracruz, was an exercise book with his wife's scrawl. "Sí merezco abundancia" ("Yes I deserve wealth"), she had written, over and over. During six years in charge of the state on the Gulf of Mexico, Mr Duarte allegedly did his best to acquire it. He was arrested at a resort in Guatemala on April 15th, after six months on the run. Five days earlier Tomás Yarrington, an ex-governor of the northern state of Tamaulipas, was nabbed in Florence, Italy. He had been eluding justice for five years.

The two fugitive governors are both former members of the Institutional Revolutionary Party (PRI), to which Mexico's president, Enrique Peña Nieto, belongs. The attorney-general has investigated at least 11 state governors since 2010, nine of them

from the PRI. Mr Peña once praised Mr Duarte and two other tainted governors as exemplars of the PRI's "new generation". This does its image no good ahead of an election in June in the State of Mexico, Mr Peña's political home. The outcome will be a harbinger of next year's presidential election (in which Mr Peña cannot run again). The governors' arrest is a sign that the country is cracking down on corruption, though not yet hard enough.

Veracruz under Mr Duarte became "a state of terror", according to the International Crisis Group, an NGO. At least 17 journalists were killed during his administration, from 2010 to 2016. He is being investigated on suspicion of having moved 233m pesos (\$12m) of public money into ghost companies. Mr Duarte's successor alleges that state hospitals administered fake cancer drugs to children during his rule. In 2016 the PRI lost control of the state for the first time in more than 80 years. Mr Duarte resigned in October, two months before the end of his term, and disappeared by the time an arrest warrant was issued a few days later.

Mr Yarrington, who governed Tamaulipas from 1999 to 2005, has been charged with collaborating with the Gulf Cartel, a drug gang. According to the *Wall Street Journal*, the state's government provided bodyguards for him even as he was on the run from federal charges.

Such crookedness is an old problem. "Corruption is not a disagreeable characteristic of the Mexican political system: it is the system," wrote Gabriel Zaid, an essayist, 30 years ago. At state level it may have got worse. When Mr Zaid was writing Mexican presidents (all of them *priistas*) removed governors almost at will. With the arrival of democracy in the 1990s power was dispersed and the president's influence waned. In 2000 Vicente Fox of the National Action Party became the first non-PRI president in seven decades, but faced governors who were mostly from the former ruling party. To win their co-operation he sent more money and gave them licence to behave more or less as they wished. His successors have continued that practice.

The arrests of Messrs Duarte and Yarrington suggest that tolerance is waning. A freedom-of-information law (in force since 2003), social media and more assertiveness by the press and civil society have made it harder for politicians to get away with wrongdoing. The federal government faces the most scrutiny, but the demand for accountability is spreading to the states. A new "anti-corruption system" is supposed to police all levels of government, by co-ordinating corruption-fighting agencies and strengthening the federal auditor, among other things. It has yet to make a difference. Mr Peña no doubt hopes that voters will remember his party for chasing wrongdoers rather than advancing their careers. ■

#### Argentine history

## Two shades of blue

BUENOS AIRES

**Putting the vex in vexillology**

ARGENTINA'S national colours are instantly recognisable. The flag's sky-blue stripes and golden sun adorn everything from football shirts to fridge magnets. A huge monument in Rosario, a port city, marks the site where Manuel Belgrano, a founding father, raised the first flag in 1812. On the anniversary of his death, June 20th, schoolchildren pledge to honour the "white and sky-blue" colours.

But are they saluting the right shade of blue? A study published in a recent edition of *Chemistry Select*, a peer-reviewed journal, suggests not. Researchers at Argentina's scientific research council (CONICET) and Brazil's Federal University of Juiz de Fora examined silk threads from what is thought to be the oldest surviving flag, the enormous but faded San Francisco flag. The shocking discovery: its blue was ultramarine, a much darker pigment.

This is about more than just getting the tint right. Years of civil war followed Argentina's independence from Spain in 1816. The Federalists, led by Juan Manuel de Rosas, a bloodstained autocrat, fought for decentralised government with strong provinces under dark-blue colours. The Unitarians, who wanted a strong central government in Buenos Aires, rallied to the lighter shade. The dark-hued Federalists ruled from 1831 to 1852 but were eventually defeated by the sky-blue Unitarians. The colour war has never really ended. "These two visions of the country still persist," says Francisco Gregoric, a vexillologist.

After the Unitarians' triumph, most Argentines assumed that Belgrano's flag must have been light blue, despite his reluctance to back the faction. That belief was shaken when researchers took a close look at the San Francisco flag, which they say was made in Europe in 1814. Though it has been ►

#### Standard deviation

Argentina's disputed flag colours



Sources: IRAM; CONICET/Federal University of Juiz de Fora

▶ bleached by age and by dust stirred up by decades of sugar-cane harvests, scientists used chemical analysis, x-rays and spectroscopy to determine that the pigment in its blue stripes was made from lapis lazuli, which produces the darker shade.

Carlos Della Védova, a researcher at CONICET, says the findings apply only to the San Francisco flag (which, unlike modern ones, does not bear the 32-pointed “sun of May”). Still, he thinks, Belgrano’s original was probably the same colour as that of the San Francisco flag. The newer flag was a gift to the Temple of San Francisco, a school in the northern province of Tu-

cumán, from Bernabé Aráoz, a comrade-in-arms of Belgrano. Mr Della Védova doubts the two soldiers took different views of hue. “Aráoz was aware of Belgrano’s ideas about the flag,” he says.

Some historians detect in the colour shift a sneaky attempt to rehabilitate De Rosas’s reputation. Juan Pablo Bustos Thamés, author of a book about the San Francisco flag and owner of a full-scale (sky-blue) replica, says the scientists ignored contemporary documents that attest to a lighter colour. Manuel Belgrano, a descendant of the independence hero, says it is unthinkable that his ancestor

would have favoured ultramarine. “There’s no doubt about the colour”, he told *Clarín*, a newspaper.

Whatever the truth, Argentines will not soon wave ultramarine flags. In 2002 IRAM, the national standard-setting agency, confirmed the lighter colour by specifying its co-ordinates in the Lab colour system. It also set out how thick the stripes should be and how the sun should look. A decree in 2010 by the then-president, Cristina Fernández de Kirchner, enshrined those standards in law. Argentines are not about to change their stripes, whatever the chemists say. ■

## Bello | Chile in a Spanish mirror

### Transatlantic lessons for Michelle Bachelet’s heirs

**A**LONG dictatorship ended in a negotiated transition to democracy. The centre-left took office with a moderate programme, reassured the right by pursuing pro-market economic policies, added better social provision and reconnected the country to the world. Power later switched to the right, which persuaded the country that it had become democratic. Then the centre-left returned, this time as a new generation critical of the compromises of the transition. It veered further left but faced economic difficulties.

Spain? Yes. But Chile, too. Since the dictatorships of Generals Franco and Pinochet, politics in the two countries has run along uncannily parallel tracks, with Chile lagging Spain by ten to 15 years. In Spain, Felipe González, the Socialist prime minister in 1982-96, laid the foundations of democracy, combining liberal economic reforms with a new welfare state and leading the country into Europe. When José María Aznar of the conservative People’s Party (pp) took over, he continued many of Mr González’s policies. Then the Socialists returned under José Luis Rodríguez Zapatero, who confronted the right through progressive social reforms (such as abortion and gay marriage) and by approving a Law of Historical Memory, an implicit criticism of the amnesty agreed during the transition.

Spain’s transition served as an example for democrats in Chile, where the centre-left Concertación coalition governed in the mould of Mr González from 1990 onwards (though with a more timid increase in public spending and welfare provision). In 2010, with Pinochet dead and discredited by his indictment for human-rights abuses by a Spanish judge, Sebastián Piñera, a billionaire businessman, won power for the centre-right. Like Mr Aznar, he followed policies similar to his



predecessor’s. Then in 2014 Michelle Bachelet, who in her first term governed for the Concertación as a moderate, came back determined, like Mr Zapatero, to shake up the transition settlement, though in a different way. She has tried to push through reforms of tax, education, labour, pensions and the electoral system, as well as a new constitution, with the aim of replacing “the model” bequeathed by the dictatorship. One of her allies called this deploying a “retroexcavadora” (backhoe loader) against this legacy.

In Spain, Mr Zapatero’s government was overwhelmed by the euro crisis, which spawned Podemos, a new far-left party. The crisis, and then the left’s divisions, have delivered successive election victories for Mariano Rajoy and the pp. Chile has not suffered anything as dramatic. But the economy has grown sluggishly since 2014, partly because of the uncertainty caused by Ms Bachelet’s reforms, many of which have been clumsily handled.

Does the Chilean centre-left, now called the New Majority, face a Spanish future of division and defeat? The main credential of its likely candidate in a presiden-

tial election in November, Alejandro Guillier, is his past as a television anchorman. Although a senator since 2014, he comes over as a new face who is not part of a political class that, as in Spain, has been discredited by scandals. His ideas seem vague: he has both presented himself as a moderate and called for “rupture” with the present. Some on the centre-left call him a populist. Above all, he seems to stand for a continuation of Ms Bachelet’s model-breaking approach.

That may not help him. She is unpopular. Mr Guillier may also face rivals within the New Majority: the Christian Democrats may run their own candidate. A stronger far-left, akin to Podemos, has emerged from student protests in 2011.

With seven months to go, the election is still open, but it looks like Mr Piñera’s to lose. That seems to be the view of Ricardo Lagos, the most successful of the Concertación presidents. At the age of 79, he sought the support of the Socialist Party only to be snubbed in favour of Mr Guillier. In announcing his withdrawal this month he warned of the “strategic dispersion” of progressive forces and a “conservative...restoration that could last many years”.

In Chile, as in Spain, the transition ushered in the most successful period in the country’s history, with greater prosperity and social progress. In both cases the centre-left began to go astray when it ceased to believe in its own success. That is not to deny that both countries have now moved on, and that both have new problems that need solving. Chile needs better public services and environmental regulation, less abuse by monopolies and a less unequal society. That amounts to improving “the model” rather than replacing it on ideological grounds. The job may well fall to Mr Piñera.



## Africa's slums

# The great urban racket

NAIROBI

## Making slums less exploitative may be Africa's biggest challenge

**S**TANDING on a muddy patch of grass in Mathare, a district in the eastern part of Nairobi, Kevin surveys his handiwork. From an electricity pylon, a thick bundle of crudely twisted wire hangs down into a tin-roofed shack. From there it spreads to a dozen more. Single wires run perilously at eye level over open sewers, powering bare light-bulbs, kettles and blaring speakers. In exchange for a connection, Kevin and six of his friends collect 200 shillings per month each (about \$2) from about a hundred shacks in his corner of the slum. To protect the business, the gang pays off police officers and intimidates the competition. The connections, Kevin insists, are cheaper than official ones, and safer too. The rotting body of a fried rat near one of the lines suggests otherwise.

So goes the provision of public services in Nairobi's poorest districts. These warrens of shacks and crudely built apartment blocks are home to 40% of the city's population, according to one recent World Bank survey (others put the figure even higher). As the city's population has exploded—from a third of a million at independence in 1963 to over 4m now—so too have the slums. Across Africa, they are the primary way by which hundreds of thousands of people have escaped even greater poverty in the countryside. By 2030, half of Africa's population will live in cities, up from a third in 2010. According to the UN, two-thirds of that growth will take place in slums. Between 1990 and 2014, the conti-

nent's slum population more than doubled, to some 200m people. Finding ways to improve slums will be one of the most pressing problems of the 21st century for African governments.

### There for a reason

Slums grow because they provide something poor people need: affordable housing near to work, schools and public transport. Perversely, for such a poor continent, African cities tend to be sprawling and car-

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- 40 Islam's changing fashions

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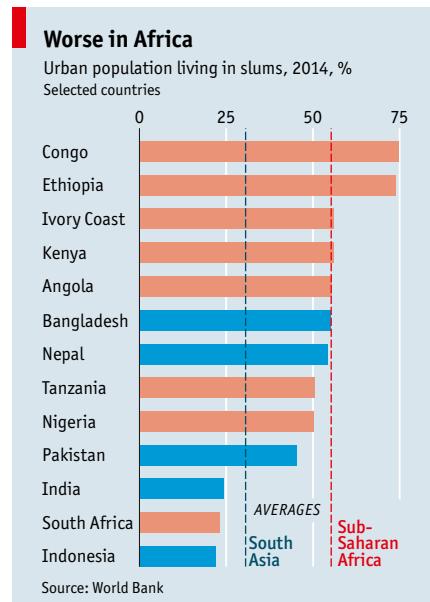
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dependent. From Lusaka to Lagos, suburban housing estates and shopping malls, seemingly transplanted from Houston or Atlanta, are springing up at the edge of cities. But the vast majority of Africans cannot afford cars. In Nairobi slums are among the very few places close to jobs where it is possible to go shopping, watch a film and get a street-side meal, all without having to get into a vehicle.

The need to be near jobs helps explain why slums often sit next to staggering wealth. In Nairobi Mathare is wedged between Eastleigh, a bustling Somali commercial hub, and Muthaiga, a luxurious country club popular with white Kenyans. Alexandra in Johannesburg, a township of tin shacks, is at the edge of Sandton, the city's poshest office district. In Lagos, a megalacity where two-thirds of people live in slums, Makoko, a collection of shacks built on stilts in the lagoon, sits under the city's Third Mainland Bridge, across from which new office buildings rent for vast sums.

Africa's slums are full of enterprising people. But they are also deeply dysfunctional places, where much of the population lives in a Hobbesian world of exploitation. It is not just electricity that is provided by violent cartels; so is water, rubbish collection and security. The state scarcely enters: in most slums, health care and education are provided privately or by charities, if at all. Diseases such as cholera and HIV are rife. There is often little in the way of a legal system to protect property rights. Instead, well-connected landlords make fortunes renting tiny patches of land to people who have nowhere else to go.

And slums are violent. In Nairobi the cartels fight vicious turf wars with each other. Some, like the Mungiki, a Kikuyu mafia, are organised on ethnic lines. In Lagos slums like Makoko are run by local chiefs called "baales", who dress like mob bosses and expect tributes from residents. ►



► Cops are unwilling to go in, except occasionally to extract bribes or to shoot a suspect. Politicians do enter: an abundance of unemployed young men are easy recruits to gangs raised to intimidate opponents.

Perversely, slums are also expensive. In Mathare options range from a shared space in a wooden shack on top of an open sewer with no water or electricity for 700 shillings per month (\$7) to a relatively clean room in a compound with a light bulb and a shared outside toilet, for 3,000. That may seem cheap, but slum landlords are doing much the same as Western consumer businesses do in Africa: packaging their product up in tiny enough bites for the poor to afford it. And just as a hundred tiny sachets of washing powder cost more than a single large box, so too with land. According to Jacqueline Klopp, a researcher at Columbia University, per square foot of land rented, Nairobi's slum residents could well pay higher rents than some of the city's wealthy expatriate workers.

Why can't slums be cleared? African governments often see slums as an eyesore and would like to do just that. In Nigeria the Lagos state government has become notorious for waking up slum-dwellers on the most valuable patches of land with bulldozers. When the government wants the land, people are simply kicked off and expected to find new homes. In Kigali, Rwanda's spotlessly clean capital, taxi drivers point out patches of neat grass where slums have been torn up. Less authoritarian governments, such as Kenya's, have tried to "upgrade" slums *in situ* by building newer, better housing.

Yet when slums are demolished, other ones become more crowded. And new housing is often too expensive or isolated from services for slum residents to benefit. In Kibera, another Nairobi slum where the government has built smart apartments nearby, they are lived in by middle-class newcomers. Those few residents who were upgraded preferred to sublet their new homes.

According to Sumila Gulyani, a World Bank researcher, slums tend to improve when their residents have an incentive and the money to invest. If people either own their property, or rent for long periods, they spend more on improvements and take care of their surroundings. Over time, that can produce better areas. The problem with many African slums, she says, is that people rarely live in one place for more than a few years. While they are there, the money they make is extracted from them by landlords and cartels, who have little incentive to invest. In many cases, improvements—such as proper piped water—brought in by well-meaning outsiders are vandalised by the cartels.

If government treated slums as real city districts they might improve. In Mathare there is some reason to be hopeful. Though

shacks still predominate, some taller buildings have been going up, with more space. In his shack, Crispin Adero, a 20-year-old construction worker, has plastered the walls with posters of Manchester City football players. Music plays from a television connection to a satellite tuner. A ladder leads to an upstairs room, which Mr Adero shares with his wife. He built it himself, having made a deal with his landlord to share the costs. Life, says Mr Adero, "is OK." But not everyone has such luck. And outside, sewage still runs in the street. ■



#### Namibia's economy

## Will it be NEEEfcapped?

WINDHOEK

#### The president mulls racial quotas and expropriation

HAGE GEINGOB is in a bind. After years of perkiness, Namibia's economic growth rate shrank from more than 5% in 2015 to a dismal 0.1% last year—and may now have stalled completely. But though President Geingob is an avowed friend of the market and seeks foreign investors, populists within his ruling South West Africa People's Organisation (SWAPO) are calling for measures that would hobble the economy still more, by implementing a draft bill known as the National Equitable Economic Empowerment Framework (NEEEF). It would knee the business class in the groin, especially the white part of it, which still drives the economy.

Under NEEEf, all businesses, however small, would have to be at least 25%-owned by "previously disadvantaged persons", broadly meaning black Namibians. No company would be allowed to "allot, issue, or register the transfer of any portion of its ownership...to a person that is not

previously disadvantaged or to a domestic or foreign enterprise owned by a person that is not previously disadvantaged". At least half of all company boards and management would have to be black, too.

If NEEEf were enacted, it would probably be abused by ruling-party bigwigs to grab stakes in other people's businesses in the name of uplifting the previously disadvantaged, as has happened in Zimbabwe and South Africa. Many white-owned businesses would close, and foreign investors would shy away. So Mr Geingob, hitherto more pragmatic and business-minded than his two presidential predecessors, seems loth to go ahead with the bill, first put forward in 2015. But a souring political mood has revived talk of NEEEf. He has also spoken recently of expropriating white-owned land, albeit with fair compensation, another recipe for clobbering productivity. His prime minister, egged on by the country's first president, Sam Nujoma, who still hankers after the socialism espoused during SWAPO's long years in exile, is said to be a NEEEfer.

Calls for black empowerment resonate because, although Namibia is deemed a middle-income country with bountiful reserves of minerals (in particular diamonds and uranium), a tiny population (2.3m) and a prosperous if small black middle class, it is also one of the world's most unequal. Poverty is rife. Some 40% of the population still live in shacks. The unemployment rate, some reckon, is at least 40%.

Mr Geingob was elected in 2014 with a whopping 87% of the vote. Yet he is sounding unusually twitchy in the run-up to a party congress later in the year, at which he is likely to be re-elected as party leader, but may find a new vice-president breathing down his neck.

Aged 75, he hails from a minority group, the Damara, numbering barely 7% of the population, whereas power in SWAPO has in the past been held mainly by the Ovambo, who account for half of Namibians. Many still look to the wily, ruthless 87-year-old Mr Nujoma, who ran the party as a fief for 45 years until his official retirement in 2005. ►

#### Tricky time

Namibia, GDP, % increase on a year earlier



► One reason for the economy's sickness is the collapse of the building industry, which relied on a string of big government-funded projects that can no longer be afforded. A class of rich black businessmen, known as "tenderpreneurs", invariably well-connected to SWAPO, has benefited hugely from NEEEF-like contracts. This is causing resentment in the densely populated slums of Windhoek, the capital.

While a chunk of the SWAPO old guard regards Mr Geingob with suspicion, another wing backs a self-styled revolutionary faction calling for "affirmative repositioning". One of its leaders, Job Amupanda, a

bearded 29-year-old university lecturer, espouses "Fanonian Marxism with Namibian characteristics", admires Julius Malema's Economic Freedom Fighters in South Africa and Robert Mugabe in Zimbabwe. He also calls for the expropriation of land. "We want urban land for our youth and if we don't get it we'll take it," he says.

Mr Geingob will probably, for the moment, fend off his rivals. But it is unclear whether, in doing so, he will feel obliged to make populist concessions along the lines of NEEEF. Most reckon he won't. If he did, he might buy himself time, yet send Namibia's economy further down the drain. ■

press has been told to ignore them. Many of the parties that do participate will probably win—or be granted—some seats, as the government hopes to gain broad political support for its austerity measures.

Algeria's economy grew by 4% last year, but it has been hit hard by the low price of oil and gas. Revenues from fuel exports, which pay for 60% of the government's budget, have fallen by nearly half since 2014. In response, the government has cut spending by 14% this year, after a 9% reduction last year. It has increased the price of subsidised fuel and electricity, raised taxes and frozen public-sector hiring. Still, the government ran a budget deficit of 12% of GDP last year, while its foreign reserves dropped to \$114bn, from \$196bn in 2014.

As the cost of living rises, Algerians are growing angry. Inflation was 7.6% in February, with subsidy cuts and import restrictions pushing up the price of staples such as food. The unemployment rate sits above 10%; young people have few prospects. The government, so accustomed to buying stability with generous handouts, has failed to prepare Algeria for the hard times.

The economy is too dependent on oil and gas and still too centralised. Foreign energy companies are keen to invest, but complain of too much red tape. Corruption is a big problem. Indeed, some of the candidates running for parliament seek immunity from prosecution, which is one of the perks of office.

Still, Algerians appear to be reluctant to challenge the government in a significant way. A more serious threat to stability may come when Mr Bouteflika dies. In recent years he and his allies have purged *le pouvoir* of independent figures and consolidated more power in the presidency. There appears to be little agreement over who should succeed him, which is perhaps another reason why he has nominally been left in charge. Algerian politics have long been murky. But for a country that prizes stability, it might help to have stronger and more transparent institutions. A capable parliament would be a start. ■

## Algeria

# Stability or stagnation?

CAIRO

## Algerians see little reason to vote in the coming general election

**T**HE secretive cabal of power brokers who run Algeria face many challenges. The economic, political and military elite, known collectively as *le pouvoir* ("the power"), must cure the ailing economy, defeat jihadists and deal with troublesome neighbours, such as Libya and Mali. At times they must also reassure the public that Abdelaziz Bouteflika, Algeria's elderly president, is still alive.

Mr Bouteflika, who is 80, has ruled Algeria—alongside *le pouvoir*—since 1999, when he was tapped by the army to be president. But he has suffered at least one stroke in recent years and looks to be in poor health. In February he cancelled a meeting with Angela Merkel, Germany's chancellor, leading to speculation that he was dead. To dispel such rumours the government releases footage of Mr Bouteflika at work. In the videos, he stares blankly at papers or the camera, while his ministers act impressed.

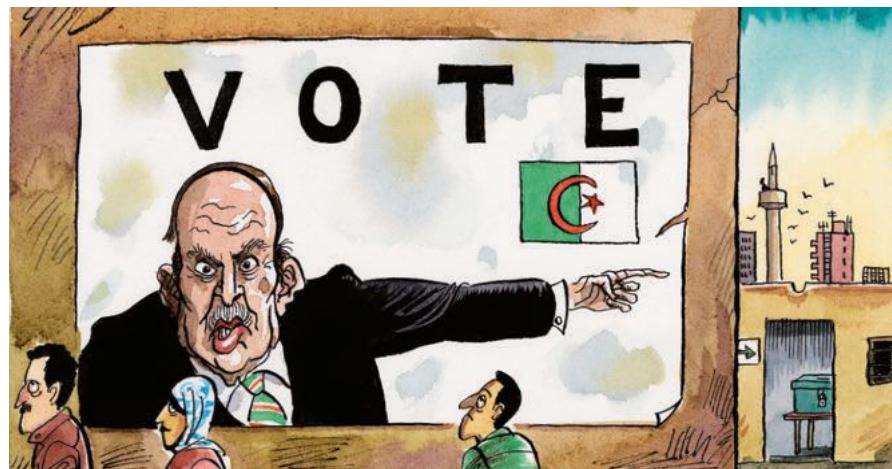
The president may no longer be of sound mind, but his continuing presence says a lot about the state of politics in Algeria, which will hold a general election on May 4th. Much of the population and, more importantly, *le pouvoir*, cling to Mr Bouteflika, who led the country out of a brutal civil war that raged for most of the 1990s. Since the fighting stopped, Algeria has avoided the turmoil that plagues its neighbours. Even in his weakened state, Mr Bouteflika is seen as a stabilising force.

To keep things steady, says the government, voters must show up for the coming poll. "We have to vote massively to reinforce political and security stability in the country and offer support for President Bouteflika," said Djamel Ould Abbas, head of the National Liberation Front (FLN), the

president's party, at a rally this month. The FLN's allies have played up the army's fight against Islamist extremists and a potential economic crisis to mobilise voters.

Despite the government's best efforts, turnout for the vote may be even lower than in 2012, when only 43% bothered to cast ballots. Some 12,000 candidates will compete for 462 seats, but many Algerians assume that the polls are fixed and that the FLN and its allies will win by a wide margin. The party has dominated parliament since Algeria gained independence from France in 1962. When Islamists won an election in 1991, the army annulled the result, leading to civil war.

Revisions to the constitution, passed in 2016, ostensibly give the legislature more power, but it has continued to act as a rubber stamp for the government's policies. Many of this year's candidates have connections to *le pouvoir*. Several opposition parties are boycotting the election. The



Gaza

# Hamas divided

GAZA CITY

**Moves to improve relations with Israel run into trouble from the hardliners**

**A**T DAWN earlier this month three men were led to the gallows in Gaza, the first executions for nearly a year. Hamas, the Islamist group that controls the strip, had earlier offered clemency to Palestinians who collaborate with Israel—promising that the “doors of repentance” would be open if they confessed. That was the carrot. The hangings were the stick.

These are tense times in Gaza, after the assassination on March 24th of Mazen Fuqaha, one of Hamas’ military commanders. A native of the West Bank, he was arrested in 2002 for his role in a suicide bombing in Israel, then freed in a prisoner swap in 2011 in return for a captured Israeli soldier, Gilad Shalit. He died in his garage after an afternoon outing with his family, shot four times with a silenced pistol. It was a professional job. The gunmen collected their shell casings and disabled a nearby security camera. Hamas was quick to blame Israel.

The men hanged as collaborators with Israel probably had nothing to do with it: all three were arrested long before Mr Fuqaha’s death. But their hasty executions, after years languishing in prison, were a sign of how badly the hit had rattled Hamas. The group imposed a partial closure at Erez, the sole pedestrian crossing with Israel. It was meant to stop accomplices from fleeing; but it also blocked sick Palestinians from travelling for medical treatment. Fishermen were barred from going out on the water, hurting an industry that supports thousands of Gazan families.

All of this comes at a difficult time. Hamas is in the middle of its first leadership change in more than a decade, with its veteran head, Khaled Meshal, expected to step down later this year. After four ruinous wars against Israel, there are signs that it wants a policy change as well. The group is debating a major revision of its founding charter of 1988. Some in the politburo want Hamas to accept a Palestinian state along the pre-1967 borders—implicitly acknowledging Israel’s existence—and dump the worst anti-Semitic language from the original. Others appear wedded to confrontation with the Jewish state.

No one expects a handshake with Benjamin Netanyahu. But Israeli officials think the changes are a sign that part of the political wing is open to a long-term truce that would avoid another conflict. “What interests me is not what they’re doing, but the fact that they feel the need to do it,” says

Islam's changing fashions

## Don't say sexy

**Muslim textile designers are pushing the boundaries of sharia compliance**

**I**SLAMIC fashion websites can be pretty drab. KhaleejAbaya.com, an outlet based in Teesside, North England, plies its selection of faceless black coverings under the somewhat overstated slogan “effortlessly elegant”. Alongside, its website carries a health warning on the “dangers of al-tabarru”, the impermissible exposure of beauty. Defying such prudishness, leading Muslim designers recently took part in London Fashion Week, a global showcase of threads, to prove that what they called “Modest Fashion” could be as sleek as a bedtime story from *A Thousand and One Nights*.

The organisers avoided the word sexy, since that would be un-Islamic, explained one. But their models on the catwalk wore make-up, nail-polish, and



**Keeping covered**

one intelligence official.

Hamas has also begun to mend its strained relationship with Egypt, which has long accused the group of aiding Islamist militants in Sinai. Cairo imposed a military blockade on the strip after Hamas seized power there in 2007: Rafah, the sole border crossing accessible to most Gazans, was open for just 48 days last year. But in February Egypt opened it to commercial traffic, allowing trucks to cross for the first time. This came after Hamas promised to stop treating wounded jihadis in Gaza.

figure-hugging costumes. Some had veils, though these tended to slip from their heads as they strutted to techno beats. Abayas were embellished with leather straps, transforming nun-like uniforms, said the publicity, into “edgy urban wear perfect for warrior princesses”. Nearby, cosmetics companies plied alcohol-free perfume and lipsticks free of animal fat, which made the products halal, though still viewed by some clerics as not sharia-compliant for being flirtatious.

Islamic fashion could be big business. Worldwide, Muslims spend close to \$300bn a year on clothes and shoes, only a bit less than America does, though only a fraction goes on fashion. In Western countries, at least, observant Muslim, Jewish or Christian women who want to cover their flesh often mix-and-match from collections which care little for modesty. That could change. Earlier this year, Debenhams, a British department store, began running an Islamic line. Tommy Hilfiger and Mango, two high-street outlets, have both launched Ramadan collections for Middle Eastern clientele. An Islamic modelling agency called Under Wraps has launched in America. Cities from Basra to Auckland host Muslim fashion shows. And since Saudi Arabia, the Muslim world’s most conservative state, began letting women add dashes of colour to their blacks abayas, design has mushroomed.

Yet as they push to enter the mainstream, Muslim fashionistas are struggling to balance the demands of Islamic law with those of a style-driven market. One Saudi woman, who leads a secular life in London, found it hypocritical. “They are wearing pyjamas, as if they are dressed for going to bed,” she sniffed. “Modesty make-up is a contradiction in terms.” Another questioned why the addition of headscarf made tight jeans “Islamic”. There is, it seems, a way to go.

Yet Hamas’s military wing depends on smuggling tunnels controlled by the same jihadis to replenish its arsenal. In the wake of Mr Fuqaha’s assassination, they have begun rattling the sabre at Israel. Billboards with his likeness have gone up around the strip: “Challenge accepted,” reads one, in Arabic and Hebrew. The group also released a video threatening to kill senior Israeli army officials. For now, their only retaliation has been against other Palestinians. But the uneasy ceasefire that ended the last war is looking fragile. ■



# Disorder under heaven



## Disorder under heaven

**After seven decades of hegemony in Asia, America now has to accommodate an increasingly powerful China, says Dominic Ziegler. How will the two countries manage that?**

THE LAST TIME China considered itself as powerful as it does today, Abraham Lincoln was in the White House. At that time, and against the mounting evidence of Western depredations, the emperor still clung to the age-old belief that China ruled all under heaven, a world order unto itself. It never had allies in the Western sense, just nations that paid tribute to it in exchange for trade. Both China and “the outside countries”, he wrote to Lincoln, constitute “one family, without any distinction”.

Today, after a century and a half that encompassed Western imperial occupation, republican turmoil, the plunder of warlords, Japanese invasion, civil war, revolutionary upheaval and, more recently, phenomenal economic growth, China has resumed its own sense of being a great power. It has done so in a very different world: one led by America. For three-quarters of a century, America has been the hegemon in East Asia, China’s historical backyard.

But now China is indisputably back. New towers have transformed the skylines of even its farthest-flung cities. An ultra-modern network of bullet trains has, in a few short years, shrunk a continent-sized country. China’s new power rests on a 20-fold increase in economic output since the late 1970s, when pragmatic leaders set in train market-led reforms. Over the same period the number of Chinese people living in extreme poverty, as defined by the World Bank, has fallen to 80m, a tenth of what it used to be. China is the world’s biggest trading nation and its second-biggest economy after America. There is hardly a country in the world to which it does not matter, either as a source of consumer goods or as a destination for commodities, capital goods and investment.

On all these counts, China wants—and deserves—a greater role in East Asia and in the global order. America has to make room for it. But the task will require wisdom and a subtle balance of firmness and finesse on both sides. A first indication of what to expect was on display at a summit between Xi Jinping and Donald Trump on April 6th and 7th at Mar-a-

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A list of sources is at  
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► Lago, the American president's Florida golfing resort. Though little of substance was discussed, Mr Trump hailed the bilateral relationship as "outstanding" and Mr Xi declared there were "a thousand reasons to get the China-US relationship right". Neither mentioned the cruise-missile strike America had just launched against a Syrian air base. Nor was there any talk of imminently imposing tariffs.

For all the superficial bonhomie at the summit, the two countries see things very differently. China's system of politics, both bureaucratic and authoritarian, has helped economic development at home, but is alien to American notions of democracy. American policymakers have traditionally seen liberal democratic values and an emphasis on human rights as factors that legitimise and strengthen the international order. Chinese policymakers see them as Western conspiracies to foster the kind of colour revolutions that brought down authoritarian former Soviet regimes, and might attempt to do the same in China.

Chinese strategists consider the country's rapidly modernising armed forces as essential for protecting the sea lanes on which its prosperity and security depend. They think a powerful navy is needed to keep potential adversaries from China's shores and stop them from grabbing Chinese-occupied islands. They also suspect that America's massive military presence in the Asia-Pacific region is designed to check China's rise.

American strategists, by contrast, say their country must keep a presence in the region because Chinese hard power unsettles America's friends in East and South-East Asia. In the past few years China has challenged Japan over the Japanese-controlled Senkaku Islands (which the Chinese call the Diaoyu Islands), and carried out extensive construction works to build bases and runways on disputed rocks and reefs in the South China Sea. Those American strategists suspect China of wanting to turn the vast sea into a Chinese lake; and, more broadly, of seeking dominance in East Asia and overturning the existing order.

#### A rock and a hard place

America has long sought to prevent any one power having hegemony in Asia, whereas China wants to keep potential adversaries far from its shores. Somehow, they have to find a way of accommodating each other's overarching goals, as Henry Kissinger explains in his classic book on statecraft, "World Order". Peace hangs on the outcome.

That peace cannot be taken for granted. In much of East Asia, history is unfinished business. Taiwan, to which the Nationalist losers in China's civil war fled in 1949, is a thriving and peaceful democracy. Yet China's Communist Party sees its sacred mission as bringing Taiwan back into the motherland's fold, and reserves the right to use force to do so. American guardianship of the island is meant to ensure that China never dares. But as Chinese might grows and American commitment appears to wane, the room for miscalculation grows. Soon after his election Mr Trump even seemed to be calling into question America's endorsement of the "one-China policy"—China's insistence on the polite fiction that Taiwan is part of China.

A potentially more imminent flashpoint in the region is the Korean peninsula, divided since the end of the second world war. North Korea, ruled by a family

mafia now in its third generation, has a broken economy and an ill-trained army. But it has poured money into nuclear programmes that threaten South Korea, unnerve Japan and before long will also pose a threat to America. North Korea exasperates China's leaders, yet they feel they must show solidarity to a former ally against America in the bloody war North Korea launched in 1950. China would rather have a nuclear North Korea under Kim Jong Un than a failed state sending millions of desperate refugees across the Chinese border. Above all, it is troubled by the idea of a unified, democratic Korea with American troops next door. At Mar-a-Lago, Mr Trump asked Mr Xi for ideas to deal with the threat from North Korea, but his missile strike in Syria made it clear that America might act alone against the North. Handling Mr Kim's belligerence—and the regime's eventual demise—will be a huge test of great-power co-operation.

Yet conflict between China and America is not inevitable. Both sides want to avoid it and can adjust accordingly. It helps that habits of co-operation have become established over four decades of Chinese market reforms, which could not have happened without American security guaranteeing China's external environment. Theirs is the world's most important bilateral economic relationship today, with combined annual trade adding up to \$600bn and investment in each other's economies totalling around \$350bn.

China has no missionary zeal or ambitions to export revolution, nor indeed any grave ideological misgivings about the current order, which it resents chiefly because it does not have a greater say in running it. Ensuring more of a role appears to be the chief mission of Mr Xi, China's paramount leader since 2012. He has accrued more authority to himself than any leader since the late Deng Xiaoping, and is now gingerly putting forward a model for greater global leadership which party theorists are starting to call the "China solution". At one level, this is about practical matters, such as investing in Central Asia to reduce poverty. At another, it is about opposing American dominance. China, Mr Xi told a conference in February, should "guide international security" towards a "more just and rational new world order". That kind of language is redolent of the old imperial Chinese virtues. But whereas China's previous experience of power was of ruling all under heaven, it now has to accept being merely one great power among several. America, for its part, has never had any experience of ceding as much influence and authority as ►

► it may have to do to China in future.

An already fraught relationship has become more so with Mr Trump's election as president. For seven decades America's grand strategy has rested upon three pillars: open trade, strong alliances and the promotion of human rights and democratic values. It is not clear to America's friends in Asia to what extent Mr Trump, with his disdain for diplomatic process, a protectionist streak and a narrow "America first" definition of the national interest, is prepared to uphold those three pillars. As Michael Fullilove, head of the Lowy Institute, a think-tank in Sydney, puts it, Mr Trump is "an unbeliever in the global liberal order and a sceptic of alliances. And he has a crush on authoritarians."

Mr Trump's victory came as a huge shock to China's leaders. They hate unpredictability and would have much preferred Hillary Clinton, the devil they knew. It also came at an inconvenient time for the Chinese. Mr Xi is focusing on a crucial five-yearly Communist Party congress later this year. He appears set on consolidating his grip on power, against a backdrop of an unsettling credit bubble and economic growth that has slowed sharply from a peak of 10% a year to just 6.5%.

For the most part, China has concealed its alarm over Mr Trump behind studied caution. "When you see 10,000 changes around you," Chinese leaders told Kevin Rudd, an Australian former prime minister and China hand, citing one of their language's countless proverbs, "ensure you yourself don't change." China's leaders have decided to wait and see. But behind the scenes they have been trying hard to influence Mr Trump, working mainly through his son-in-law, Jared Kushner, a property developer with Chinese ties.

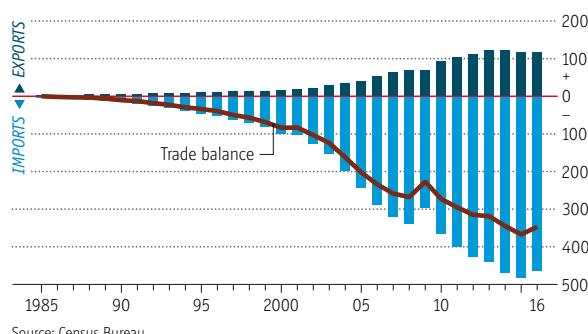
The Chinese also soon grasped the new president's transactional approach, prompting them to dispatch Jack Ma, the boss of Alibaba, an e-commerce giant, to meet him. He promised that his firm would generate 1m jobs in America. Soon afterwards trademark applications to protect the Trump brand in China that had languished in the courts for years were suddenly granted. Cause and effect are impossible to disentangle, but Mr Trump has certainly toned down his pre-election anti-China rhetoric.

### Looking into the abyss

Yet deep, abiding uncertainties about the two countries' relationship remain, not least over trade, which for three decades has underpinned relations between the two countries. Mr Trump appears to view trade not as mutually beneficial to all parties but as a zero-sum game, and gives short shrift to the post-war multilateral trading system. One of the first things he did after coming to office was to cancel the Trans-Pacific Partnership

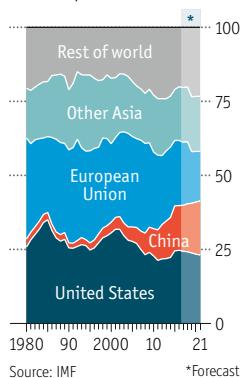
### Too open?

United States goods trade with China, \$bn



### No longer far apart

World GDP, % share of total  
At market prices



(TPP), a free-trade agreement among 12 countries in the Asia-Pacific region (though not China)—a big blow to America's economic role in Asia.

More broadly, the world view of some of Mr Trump's advisers encompasses a Manichean expectation of conflict. They claim that China is so set on strategic rivalry with America that military conflict is inevitable, and argue that the best way to protect the national interest is to spend more money on the armed forces and less on diplomacy. Such people do not have a monopoly on the internal debate about America's strategic relationship with China,

any more than they do on trade. As this special report went to press, an alternative approach to trade, involving a robust multilateralism, was gaining favour. Meanwhile James Mattis, the defence secretary, on his first trip to Asia in early February urged care when challenging Chinese construction in the South China Sea with military force, and emphasised the primacy of diplomacy over military action in resolving differences.

Mr Mattis, a well-rounded former general, is what Washington's seasoned hands call one of the administration's "grown-ups", but there are precious few of them. The secretary of state, Rex Tillerson, a former oil boss, was counted among them, though question marks have since been raised about his Asia diplomacy. And although every new administration takes time to fill vacant posts, the gaps in the Trump foreign-policy team, especially on the Asia desks, are alarming. Among other things, almost all the Republican party's seasoned Asia hands, who during the Obama years were working in think-tanks, universities or the private sector, swore before the election that they would never serve under a President Trump. Some have since swallowed their pride and moved closer to the new administration, but Mr Trump's henchmen have long memories when it comes to criticism of their boss.

Many observers still hope that, once an unusually chaotic new administration sorts itself out, it will revert to a policy that flows recognisably from America's seven decades of experience in Asia. But that is far from certain. Some of the administration's leading members hold seemingly irreconcilable views on American policy in Asia. Perhaps that reflects broader American disagreement about global roles and responsibilities. Yet the president himself seems unaware of the lack of any comprehensive strategy in Asia, and that problem may persist. A Republican Asia hand who served under both Ronald Reagan and George H.W. Bush explains that "I don't get a sense of a learning curve with Trump. So I don't expect things to get any better."

Amid all this uncertainty about Mr Trump's policy in Asia, the two chief risks for the region appear almost contradictory. The first is that, after an initial honeymoon with Chinese leaders, an increasingly aggressive stand by the new administration raises Chinese hackles while failing to reassure America's Asian friends. The second is that American policy in Asia becomes half-hearted and disengaged, again unsettling Asian friends and perhaps emboldening China. The consequences in either case might be similar—shifting power dynamics that require rapid adjustments, risking instability and even regional turmoil. Hope for the best, but prepare for disorder under heaven. ■

Pax Americana

# An archipelago of empire

## How America came to be Asia's indispensable power

THE POINT IS obvious but no less extraordinary for that: even though America is not of Asia, it has been the region's hegemon for more than seven decades. Any change in its posture under Donald Trump might not be much noticed at home, but its implications in the region would be quickly felt.

America's presence draws its justification, as Rana Mitter of Oxford university puts it, from the sacrifices made by American troops to recover the region from Japan during the second world war. Only North Korea challenges America's claim to a legitimate presence there, and even in its hate-spewing rhetoric you can detect an admiration for the Americans.

The hard element of American power is embodied in the United States Pacific Command (PACOM), based in Hawaii and watching over what it calls the Indo-Asia-Pacific: a region from the Arabian Gulf in the west to the Galapagos Islands in the east, from northern Japan to the Southern Ocean, extending to 100m square miles (260m square kilometres) and 14 time zones. Power takes the form of military bases and listening posts strung out across the Pacific and Indian Oceans, from Alaska to South Korea to Australia to Diego Garcia.

As for East Asia, the Seventh Fleet, perhaps the world's most powerful fighting unit, with over 60 ships, 140 aircraft and 40,000 sailors and marines, is based in Yokosuka, south of Tokyo. One-fifth of Okinawa, the main island of Japan's southernmost archipelago, is given over to American forces. For the

28,500 American troops in South Korea, the demilitarised zone at the border with North Korea is the world's last cold-war trip-wire: one move across it by Kim Jong Un's forces would meet with instant retribution.

Bruce Cumings of the University of Chicago refers to American power as a globe-girdling "archipelago of empire", with most of America's 800 bases in or near the Pacific. In Okinawa the American outposts have a whiff of strained cross-cultural relations about them: young, bored off-duty servicemen in customised pick-ups cruising the mall road, forlorn bars run by "Mama-san", marriage counselling promoted on the forces' television station. Yet supported by a huge and sophisticated defence industry back home, the archipelago still packs a punch. Last September the PACOM commander, Admiral Harry Harris, talking about American military hardware, boasted that "everything that's new and cool is coming to the region," including a new Zumwalt class of stealth destroyer straight out of "Star Trek"—and a Captain James Kirk as its commander to boot.

Extraordinary, too, how little changed is the structure of American power laid down for the region at the end of the war by General Douglas MacArthur, acting like an imperial viceroy. From the outset, Japan, South Korea and Taiwan—or at first, Chiang Kai-shek and his Kuomintang or Nationalists—became America's main East Asian allies. Australia and New Zealand were the staunch English-speaking friends. All remain America's key partners today. British, French, Portuguese and Dutch empires have crumbled. The Soviet Union has gone. Of the original threats in the region, only North Korea's remains, and American forces are still there to contain it. Yet not just on the Korean peninsula but across Asia, America remains the indispensable power, a linchpin for regional stability, democracy and free trade.

East Asia's stunning development path owed much to the nature of American power and of the region's structure of alliances, producing economic successes that have never been matched elsewhere. The United States not only guaranteed the security of Japan, South Korea and Taiwan, allowing them to focus on economic development; it also provided them with the incalculable advantages of technical assistance, educational exchanges and nearly unfettered access to America's vast markets. Crucially, it did not, at least initially, insist that these countries open their own markets in return.

Japan was the first to take off as its people swapped military uniforms for *sarariman* suits in pursuit of single-minded economic reconstruction. South Korea and Taiwan followed. They threw everything into building competitive export-oriented manufacturing bases, shutting foreign competitors out of their markets. Through what later came to be known as "financial repression", they used capital controls, cheap exchange rates and subsidised loans to channel money into corporate investment and state infrastructure. By 1967 Japan was the world's second-biggest economy. Only then did Japan's partially closed markets become a growing bone of contention in America.

Arthur Kroeber, an expert on the Chinese economy (and a former contributor to *The Economist*), points out that American power profoundly shaped ►



Making a splash in Okinawa

▶ these East Asian allies in another respect: the nature of their politics. Over time, the need for their patron's approval forced them to adopt democratically accountable political systems. Japan's was foisted on it by its American occupiers. On Taiwan, Chiang Kai-shek's son, Chiang Ching-kuo, started moving the island towards representative politics in the 1980s in response to the shock of America normalising its relations with Communist China. In South Korea, America put up with military dictatorship during the cold war, but probably would not have tolerated it after the fall of the Berlin Wall. As it happened, protests leading up to the 1988 Olympics in Seoul ushered in the restoration of civil liberties and direct presidential elections. Today all three countries are among Asia's staunchest democracies.

### The Chinese policeman

What was not expected at the outset was China's withdrawal from the post-war Asian order. During the war Chiang Kai-shek's Kuomintang forces had not defeated the Japanese, but for eight long years they had bravely tied down Japanese armies in China, at the cost of 14m Chinese dead. That made China an American ally and a victor. Franklin Roosevelt wanted it to take its place as a sovereign power, one of the world's "four policemen", as he put it. He, Chiang Kai-shek and Winston Churchill

had met in Cairo in 1943 to make this happen. What no one had counted on was that China's Communists under Mao Zedong would use the Nationalists' war exhaustion and growing popular disenchantment to rekindle a smouldering civil war in which they swept to victory in 1949. The following year, far from being an ally, China was fighting against America on the Korean peninsula (where Mao's own son was killed in battle). It took two decades for China to come out of its shell when America's then president, Richard Nixon, paid a visit to Beijing.

The ground for China's opening to America was prepared by a rupture in its relations with the Soviet Union in 1960. For over four decades it has been an unambiguous beneficiary of the American order. Without America to keep its neighbourhood secure and underpin open markets, China could not have reaped such gains from the market-led reforms it launched in the late 1970s. It benefited from being geographically close to the economic dynamism and the distribution networks of the East Asian tigers. Lacking the American allies' access to Western markets, management and technology, China threw itself open to foreign investment—a remarkably pragmatic surrender of economic sovereignty. But now that China has become richer and more powerful, its aspirations to regional leadership and even hegemony are growing stronger. After all, it, too, won the war. ■

## The American lake

### A brief history of how Manifest Destiny came to reside in the Pacific

FOR MOST OF its history, America has been isolationist. Those who now worry about it turning away from its ideals of free trade and an internationalist outlook may forget how recent they are, born out of cold-war necessity. By contrast, America's much older sense of its own exceptionalism was nurtured by turning consciously west, away from European monarchy, class and conflict. It was a "westering" people to whom the *novus ordo seclorum* imprinted on every dollar bill applied. They first crossed the vast North American continent, and when they ran out of land, Manifest Destiny took to the sea, unrolling an expanding American frontier across the Pacific.

The discovery of gold in California in 1848 changed everything. Not only was the gold rush the first of California's many booms; it shifted global perspectives, spurring Karl Marx to start work on "Das Kapital" and rekindling hopes of long-distance commerce across the Pacific. American traders set off by sea, accompanied by missionaries, guano miners, planters and expeditionary forces. By the end of the 19th century the theories of Alfred Thayer Mahan, a great naval strategist who argued for decisive American sea power, had taken hold. Colonies, protectorates and incorporated territories soon followed.

Hawaii, with its superb port, Pearl Harbour, was the first Pacific territory to

come under American sway; the kingdom was eventually annexed in 1898. That same year American forces seized the Philippines as part of a jingoistic war with Spain that had begun in Havana. After an easy victory over the Spanish in Manila, the Americans found themselves fighting a counter-insurgency against Filipinos seeking their own republic. The president of the day, William McKinley, was at a loss to know what to do with the new Philippine territories. But while praying for guidance one sleepless night, it came to him that America's mission was to "uplift and civilise and Christianise".

McKinley had stumbled into empire with "no more backbone than a chocolate éclair", as Theodore Roosevelt, a fan of muscular imperialism, put it. The muscular school soon took charge. "Benevolent assimilation" would supposedly raise Filipinos to a higher plane. The generals in the Philippine campaign had nearly all earned their spurs fighting native Americans. In the tropics they applied the same genocidal techniques of terror, atrocities and native reservations. In three years of fighting, between 200,000 and 700,000 men, women and children died as a consequence of American brutality.

After early victories, the campaign turned into quicksand (with haunting echoes in Vietnam, Afghanistan and Iraq). In the southern Philippines, American troops

were fighting Muslim insurgents long after the rest of the archipelago had been pacified—and American special forces are still in Mindanao today.

The American violence, and decades of condescending racism that followed, go some way towards explaining a vein of anti-Americanism that resurfaces from time to time in a country that also admires America. The two emotions live in the same Philippine breast, says Malcolm Cook of the Institute of Southeast Asian Studies in Singapore. The ill-feeling was evident in the early 1990s, when the senate voted to eject American forces from Philippine bases; and, more recently, in President Rodrigo Duterte's sudden pivot to China last year, and in his labelling of President Barack Obama as a "son of a bitch".

Most Americans are blithely unaware of the back story, viewing Mr Duterte's behaviour as astonishing ingratitude towards an ally that, until Philippine independence in 1946, had tried to pour its protégé's society into an American mould, and that had remained a close friend since. But near-ignorance about the essentially imperialising mission that brought America to the region in the first place hardly helps an understanding of its position in Asia today. One lesson is that the case for a continued American presence in Asia has to be constantly remade.

Pax Sinica

# The travails of a regional hegemon

**China's status among its neighbours is not keeping up with its growing power**

ONCE, HAINAN WAS an alien, pestilential land, beyond the edge of civilisation, to which mandarins who had fallen foul of the emperor were banished. Today China's island province in the far south is being rebranded as the country's own tropical paradise. Hainan can also be viewed as emblematic of much of what "China's rise", a much-used if often ill-defined phrase, actually means.

A decade ago, when this correspondent first visited the place, cars crept along muddy, potholed roads. Today an expressway whisks travellers from the top to the bottom of the 33,900-square-kilometre island in under four hours—or 82 minutes by bullet train. In the old days the town of Wenchang in Hainan's north-east was famous for its poached chicken. Today it is famous for a state-of-the-art satellite and spacecraft launch site.

Down the coast, in the middle of a manicured plain, is a convention complex in which China's leaders each spring host the Boao Forum, often described as Asia's Davos. The talk is all about "mutual respect", "win-win" relationships and "common destiny" in Asia. But the billions of dollars for initiatives in the region, including for much-needed infrastructure, come predominantly from China. And the staging of the forum seems designed to convey a sense that Asian leaders and foreign dignitaries are paying tribute to the rulers of a benign imperium.

It is meant to inspire awe, and so too are the luxury hotels going up along the huge half-moon beach outside Sanya in Hainan's far south. The scale of these resorts dwarfs those in Hawaii or Florida. The subliminal message from Hainan is that "anything you can do, China can do better—and bigger."

But Hainan also reveals a harder side to Chinese power. Hidden around a headland in Sanya is the Yulin naval base. Enormous caverns have been cut, Bond-style, into the mountainside, big enough to hide 20 ballistic-missile submarines. The harbour is deep enough for aircraft-carriers (at present China has only one of those, but plans to build more).

Sanya is the point in China closest to the edge of the continental shelf and the deeps of the South China Sea. Its strategic

***China wants to be viewed with wonder and respect but, as it grows stronger and more powerful, it as often unsettles as it reassures***

importance is obvious. More than half the world's merchant tonnage passes through the South China Sea. The Malacca Strait takes three times as much tanker traffic as the Suez Canal and 15 times as much as the Panama Canal. China's sweeping maritime claims—though based on no recognised legal norms, and disputed by neighbours—encompass almost the entire sea.

Over the past three years China has used a rapidly expanding navy and coastguard to enforce its claims to reefs and rocks far out at sea. It has employed dredging fleets to build artificial islands and runways on them. This official policy is backed by unofficial force. In Tanmen, a gritty harbour next to Boao, large



**The other side of Hainan**

trawlers act as a "people's maritime militia". They have chased Philippine and Vietnamese fishermen from disputed grounds, poached in neighbours' exclusive economic zones and, with officialdom turning a blind eye, ravaged the South China Sea's reefs, destroying the coral to get at rare, slow-growing giant clams for which China's *nouveaux riches* pay fortunes.

All this unnerves China's neighbours (of which more later). Hainan is a microcosm of a wider problem: China wants to be viewed with wonder and respect but, as it grows stronger and more powerful, it as often unsettles as it reassures.

## No one said for ever

When Deng Xiaoping counselled his compatriots to "lie low and bide your time", none of them thought he meant for ever. Indeed, it was not long after his death in 1997 that China's presence increasingly made itself felt abroad. First, the government began to encourage state companies to invest around the world, especially in the mineral resources needed for the country's growing industrial surge. After a slow start, such investment now runs at about \$80bn a year.

A sharp turn in foreign-policy activism, however, came with Mr Xi's rise to power five years ago. The new territorial assertiveness is part of it. But so, too, is a charm offensive, using economic power as a tool of reassurance.

In 2014 Mr Xi brought together several regional infrastructure initiatives under the rubric of "One Belt, One Road". The "belt", confusingly, is a "New Silk Road": a set of roads, railways and power projects aiming to tie China's western regions more closely to Central Asia and eventually to Europe. In January, with much fanfare, a Chinese freight service travelled this route all the way from Yiwu, in Zhejiang province, to London. (It took 18 days, with the freight having to change train several times because of different rail gauges, laying bare how much of a work in progress the belt is.) The "road" part of the rubric, equally confusingly, is a ➤

► “Maritime Silk Road” intended to link China’s landlocked southwest to South-East Asia, the Indian Ocean and beyond.

Part of the idea is to drum up business for Chinese engineering firms that are facing a sharp slowdown and overcapacity at home. But in the main the Silk Road strategies are presented as Mr Xi’s gift to a region in need of infrastructure—the foreign dimension of his “China dream” of a rise to pre-eminence. To finance these projects, a “Silk Road Fund” under the central bank was set up, along with the New Development Bank and Mr Xi’s new multilateral institution, the Asian Infrastructure Investment Bank (AIIB), with a combined authorised capital of \$240bn.

“One Belt, One Road” resonates with the historical notion of bringing barbarians under the Chinese heaven. But to many Americans, the Silk Road initiatives, and the AIIB in particular, smack of a powerful new order in the making in which China rather than the United States will call the shots. Barack Obama’s administration urged allies not to join the AIIB. Japan heeded the call; Australia, Britain and South Korea ignored it.

It is easy to overstate the importance of such Chinese initiatives. Arthur Kroeber, in his book “China’s Economy: What Everyone Needs to Know”, reckons that the headline figures for the authorised capital of China’s new financial institutions greatly exaggerate their firepower. The actual combined capital base may be just \$40bn-50bn by the early 2020s. That is, admittedly, about the size of the World Bank. But the value of that institution lies less in the money it disburses than in its deep technical and intellectual resources. China’s new institutions cannot draw on anything comparable.

The Silk Road strategy appears to involve extending China’s utilitarian domestic model for infrastructure (under which locals affected by large-scale development are barely consulted) to the wider world. That would be risky. Some Chinese experts worry about an investment frenzy, including from local-level state enterprises with little experience of operating abroad. “Provinces, cities: they all want to go abroad. There is disorder,” says Ding Yifan of the State Council’s Development Research Centre in Beijing. Other researchers in Beijing warn that little thought has been given to the political risks and security concerns involved in putting Chinese projects and workers in brittle countries in Central Asia, or in the \$50bn China-Pakistan Economic Corridor, a set of infrastructure projects in Pakistan launched by the two governments amid much publicity in 2015.

Andrew Small, an expert on China-Pakistan relations at the German Marshall Fund, in a recent article warned of the shortcomings of the approach. One of them is lack of transparency. Even Pakistan’s central-bank governor says he does not understand where all the trumpeted money is coming from and how it is being spent. Another is insufficient regard for grassroots support and for the social impact of projects. Chinese leaders do not need to pay much heed to this at home, but in a poor and insurgency-torn region such as Balochistan it could be explosive. “Chinese officials still lack the instinct to take measures of this sort,” Mr Small concludes.

### Searching for soft power

In their open-handed approach to China’s periphery, Mr Xi and his fellow leaders have America in mind. They hope that countries brought into China’s developmental embrace will feel less willing to remain part of the American-led order of regional security. Yet buying power is not that simple. Closeness to local elites can stir popular hostility. In Myanmar in 2011 resentment of China’s outsized commercial activities, and the small number of generals benefiting from them, influenced even the military regime, leading the president, Thein Sein, to halt construction of a huge dam the Chinese were building. A weakened junta subse-

quently ceded much of its power to a democratically elected government. Chinese influence in the country has not recovered.

In Sri Lanka, from the mid-2000s China bet everything on the then president, Mahinda Rajapaksa, and his family. But murky Chinese loans and investments contributed to Mr Rajapaksa’s unexpected failure to be re-elected in early 2015, which came as a shock to China. In Malaysia, China recently helped with a multi-billion-dollar bail-out of a heavily indebted state investment vehicle, 1MDB. That got the prime minister, Najib Razak, out of a pickle, but many Malaysians do not want to see their country in hock to China, and Mr Najib’s troubles may not be over yet.

Evelyn Goh of the Australian National University says China has two blind spots in its dealings with smaller neighbours. The first is that it struggles to recognise what she calls their “autonomous agency”, ascribing any behaviour it dislikes to malign American influence. The second, more broadly, is its failure to understand that its aggressive behaviour, such as in the South China Sea, undermines its development diplomacy. That dissonance between its growing power and its lagging status risks adding to the sum of Chinese dissatisfactions. ■

### Asian neighbours

## When elephants fight

### Smaller Asian countries are adept at being everyone’s friend, but the job is getting harder

FOUR YEARS AGO, after Xi Jinping and Barack Obama had embarked on a “new type of great-power relationship” at a Californian ranch called Sunnylands, the world was soon speculating about a new “G2” or a “Chimerica”; after all, the two leaders’ economies were joined at the hip. Yet China’s Asian neighbours felt uncomfortable. “When elephants mate,” says a South-East Asian diplomat, “we ants get trampled.” “But when elephants fight,” an Australian strategist retorts, “the ants get trampled even more.”

Outside China, every Asian country bar North Korea welcomes America’s presence in the region and wants it to remain. Asians value American security, along with the clear rules underpinning post-war prosperity that the security has allowed to be upheld. Asians also value their economic relations with China, but they fear that the alternative to an open American order is a hierarchical Chinese one. Given China’s open ambitions, and its closed authoritarian political system at home, it would be a very different world.

Countries in the region, a Singaporean ambassador explains, “don’t want to choose: it gives you more room to play.” Preserving maximum sovereignty is an overarching goal for most of them. But it is getting harder for them to hedge their bets. Chinese counterparts, says the ambassador, insist that the Asian bifurcation, of relying on America for security and China for prosperity, should not be allowed to persist.

Japan, the region’s second-biggest power, is least troubled by any need to choose: under its prime minister, Shinzo Abe, it has thrown itself firmly into its alliance with America. That is partly because of the growing threat to Japan posed by a nuclear, warlike North Korea under Kim Jong Un. But Mr Abe has also helped convince his people that both the economic and the security threats from China are existential. In words and actions, Chi- ►



▶ na has frequently been hostile towards his country (whose incomplete acknowledgment of its second-world-war record has not helped). Mr Abe's political dominance in Japan owes much to his willingness to articulate the China challenge. In his view, this has to be countered with strong regional military, diplomatic and economic alliances, led by America.

It was an immense disappointment to Mr Abe that almost as soon as Mr Trump took office, he dumped the Trans-Pacific Partnership (TPP), a 12-country grouping including Australia, Japan, Malaysia, New Zealand, Singapore and Vietnam that had over several years put together a "gold-standard" free-trade pact for the Asia-Pacific region. Mr Trump claimed that the deal sold American businesses and workers down the river. Its partners retort that America got everything it asked for in the negotiations, such as longer patent protection for drugs and stronger intellectual-property rights. All the painful adjustments that TPP entailed were to be made by smaller members.

Given that Mr Trump was so willing to abandon the economic dimension of America's commitment to the region, Mr Abe was acutely aware of the risk that he might dump the military dimension too. After all, during the presidential campaign Mr Trump had lambasted Japan and South Korea for supposedly free-riding on America's security commitment to them. Some 54,000 American servicemen and their families are stationed in Japan and 28,500 in South Korea. Mr Trump had said both countries should do more for their own defence and contribute more to the upkeep of American forces. He even threatened withdrawal. He also suggested that Japan and South Korea could develop their own nuclear weapons. Considering the implications for those countries, and for the febrile region as a whole, it was an astounding proposal.

Mr Abe, in a nimble bit of diplomacy, made sure he was the first foreign leader to go to America to congratulate the president-elect on his victory. Mr Trump visibly warmed to him, and later invited him back to his Florida golf resort, Mar-a-Lago, for a weekend of man-hugs and an unsettling 19-second power handshake.

Mr Abe is a nationalist with dreams of a Japan unshackled from American tutelage, but right now he needs a strong alliance. He pressed all the right buttons with Mr Trump, talking up the potential for Japanese investment in America and pointing out that his government is stretching the country's pacifist constitu-

tion (which the Americans imposed after the second world war) to allow more scope for Japan's Self-Defence Forces to come to the aid of allies. He also made clear that Japan already bears much of America's defence burden, paying for about 75% of the American military presence in Japan—any more, a regional diplomat jokes, and Japan would be shelling out for American soldiers' wages, almost turning them into mercenaries.

Mr Abe's efforts did not stop Mr Trump from pulling the plug on the TPP, but Japanese officials are still pleased with their recent diplomacy. Even North Korea's test launch of a missile that landed in the Sea of Japan while Mr Abe was in Florida worked to his advantage: Mr Trump declared that Japan and America were standing shoulder to shoulder. The Japanese diplomats also came away with insights about how to tutor an American president unfamiliar with Asian priorities. They say that he can concentrate on only one thing at a time, and reckon that educating him will be an open-ended pursuit.

### When luck runs out

The neighbour most troubled by Mr Trump's presidency may be Australia, a long-standing, staunch American ally. The first telephone call after the American election between the Australian prime minister, Malcolm Turnbull, and Mr Trump (the contents of which were leaked by someone in the White House) was a disaster.

Australia had struck a deal with the previous American administration under which America would resettle a small number of asylum-seekers currently in dismal camps in Nauru and Papua New Guinea. But this was news to Mr Trump, who accused Australia of wanting to export the "next Boston bombers" and told Mr Turnbull (himself no shrinking violet) that his was "the worst call by far" of all the conversations he had had with world leaders that day. He then hung up.

The incident has set Australian policymakers and strategists talking about re-examining the relationship with America. The two countries have had their disagreements before, says James Curran, a historian at the University of Sydney, but they have not been aired in public like this since Richard Nixon. When that president got cross with Gough Whitlam, the independent-minded Australian prime minister at the time, he put Australia on his "shit list".

Policymakers reckon that Australia now faces the biggest shift in its strategic position since the end of the second world war. Its economy is heavily dependent on Chinese purchases of iron ore and coal, but it has "subcontracted its entire strategic role to Washington", says Hugh White of the Australian National University. Many strategists want Australia to be less slavish in its relations with America, while praying that Mr Trump will prove a more reliable partner.

Mr White goes further, arguing that Australia must prepare for a China-led future. Yet that argument meets resistance at a time when China appears increasingly bent on driving a wedge between Australia and America. On a visit to Australia in March, the prime minister, Li Keqiang, dangled the prospect of closer economic ties, but also warned Australia against a "cold-war mentality" and taking sides between China and America.

Given Australia's strategic position between the Indian and Pacific Oceans, the country's strategists expect its waters to be increasingly frequented, and even contested, by the Chinese navy. The chief debate in foreign and defence policy now revolves around not allowing China to push Australia around. But the central paradox remains: to maintain a strong defence policy, Australia needs a strong economy—and for that it needs strong trade ties with its chief potential adversary.

South-East Asia's people have lived close to big powers for ➤

centuries and learned to hedge their bets. In sum, such hedging denies China an entirely free hand to act as it wishes. Japan's growing investment and diplomatic activities in South-East Asia, for example, increase smaller countries' options. Indeed, the balance of power in Asia is determined not just by the struggle for primacy between America and China but also by the interplay of lesser powers: Japan and South Korea in North-East Asia; and Vietnam, Singapore, Indonesia and even India (increasingly looking eastwards) in South-East Asia. But America still needs to be part of the picture.

President Rodrigo Duterte of the Philippines on a state visit to Beijing last October tried to mend relations damaged by a case the Philippines had brought before an international tribunal at The Hague, contesting China's South China Sea claims. "I announce my separation from the United States," he told his delighted hosts. "America has lost now. I've realigned myself in your ideological flow." Mr Duterte loudly called for American troops to leave the Philippines and for joint military exercises to end. China rewarded him with new markets and lavish dollops of aid. Oddly, though, it turns out that the Philippines' annual bilateral drills with America are due to take place as usual this year. There is even talk that Japan might join them.

### China big, Vietnam small

Danang airport, a big American base during the Vietnam war, mainly serves Chinese tourists these days. Many of them are shuttled to the Crowne Plaza, a hulking hotel on the city's crescent-shaped beach flanking the South China Sea. They like to play blackjack in the casino, where the croupiers conduct their games in Mandarin.

About a quarter of Vietnam's 10m or so visitors a year are Chinese, more than any other nationality. Though locals in Danang grumble about the rudeness of Chinese gamblers, "we welcome everyone," says a Danang official, with a stiff smile. Many Vietnamese regard China with wariness. Even the state-controlled media run critical stories about Chinese investors buying up large quantities of land near Danang. They also carry reports of fishermen from Danang and nearby central provinces being detained by Chinese patrol vessels when they fish near disputed reefs and islands in the South China Sea. The Vietnamese are still indignant over China's seizure in 1974 of the Paracel islands, which contain the largest of the sea's disputed islands and rocks.

Yet they are also well aware that China is their country's largest trading partner, as well as overwhelmingly more power-

ful than little Vietnam. That became painfully evident in 2014 when, in a provocative gesture, a state-owned Chinese company towed an oil-exploration rig to a point south of the Paracels and about 120 nautical miles (220km) from central Vietnam's coast—well within the country's exclusive economic zone. Some Vietnamese fishing vessels steamed out to the rig in protest, only to be rammed, and in one case sunk, by a far larger Chinese fleet. The incident sparked riots in industrial zones in Vietnam in which protesters targeted foreign businesses and Chinese workers. Several people died. When China issued a travel warning to its citizens, tourism in Danang collapsed.

The Vietnamese respond to such vexations the way they have always done: they strike compromises. Le Khai, who has fished in the South China Sea for four decades, runs a gnarled finger through the sand to make two circles of vastly different sizes. "China is very big, Vietnam very small," he says. So he does not take his fishing boat too far into disputed waters, although he insists that the Paracels are Vietnamese. Farther down the coastal road, the owner of a souvenir shop says that nine-tenths of his customers are Chinese tourists. For him, Vietnam's maritime claims are indisputable, but they do not pay the bills. ■

### The risk of conflict

## Avoiding the trap

### The best hope is a balance of restraint, force and legitimacy

A MUCH-DISCUSSED recent study led by Graham Allison of Harvard university highlighted the dangers looming when a rising power challenges a ruling one, as when Athens challenged Sparta in ancient Greece. A rising power gains a growing sense of its entitlement and importance, often fed by past grievances and slights. This makes the established power feel insecure and all the more determined to defend the status quo. "When a rising power is threatening to displace a ruling power," Mr Allison writes, "standard crises that would otherwise be contained, like the assassination of an archduke in 1914, can initiate a cascade of reactions that, in turn, produce outcomes none of the parties would otherwise have chosen." This is the Thucydides Trap, named after the Athenian historian who first pointed to it. The Harvard study concluded that in 12 out of the 16 historical cases in the past 500 years that it examined, the outcome was war.

It may be a consolation that both Xi Jinping and Shinzo Abe have mentioned the Thucydides Trap as a cautionary comment on Chinese-American rivalry. But the leader of the status-quo power in Asia, Donald Trump, almost boasts about his ignorance of history. Besides, even when the protagonists are forewarned, there is still great scope for getting it wrong. It is a feature of the trap that defensive behaviour by one party—such as China's building airstrips and the like on reefs in the South China Sea—is seen as aggression by the other.

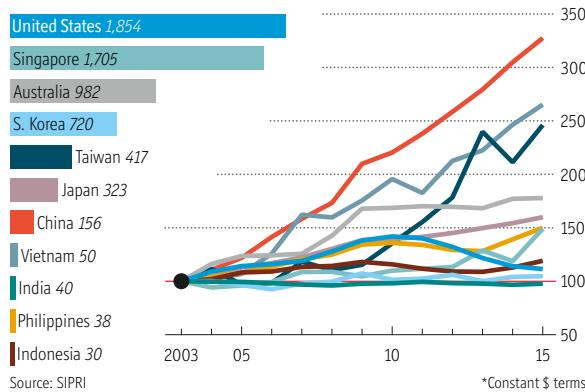
In the Harvard study, when war was avoided it was thanks only to "huge, painful adjustments in attitudes and actions on the part not just of the challenger but also the challenged". At the heart of this must be efforts to establish durable patterns of co-operation. For America and China, two areas are likely to be key: trade and North Korea.

Trade and the problems of access to China's vast market ►

### Still hegemonic

Defence spending, selected countries

Per person, 2015, \$





North Korean rocket science

▶ cause the West understandable frustration. Two decades ago foreign businesses were cheerleaders for China to become part of the world economy (it eventually joined the World Trade Organisation in 2001). Today the mood among foreign businesses in China has turned to disenchantment.

Tariffs on China's imports of goods are low, but in an economy dominated by state giants, outsiders are shut out of too many sectors, including government procurement. In industries which the Chinese government considers sensitive, the obstacles are written or unwritten rules. In other areas, such as cloud computing, Western companies fear to tread, because they are worried about the safety of proprietary technology or data. China's latest initiative, "Made in China 2025", is a blueprint for creating national champions in advanced manufacturing, promising government subsidies and investment in ten "strategic" industries. Other countries have similar plans. The difference is that foreign companies are not so shut out of them.

These are legitimate grievances, but the best hope of dealing with them is for America to pursue them vigorously within the multilateral system. If the United States were to go outside the framework of the WTO, or even shut access to its own markets, it would risk immense harm both to the bilateral relationship and to the global trading order.

North Korea raises even bigger challenges. The pace of its missile and nuclear development appears to be quickening. Last year Kim Jong Un's regime launched a missile from a submarine, a first. In early March it test-fired a cluster of rockets in preparation, it said, for attacking American bases in Japan. Later that

month, in another first, it conducted a comprehensive test of a first-stage rocket for an intercontinental ballistic missile. A sixth nuclear test is thought to be in the works.

China, like America, wants North Korea to abandon its nuclear programme. At the UN it has signed up to an American-led sanctions regime against the North. It has a tangled history with its small, snarling neighbour. Officially the two countries are still allies, but China is furious about the North's truculence. Still, it displays an astonishing inability to see things from anyone else's

point of view. In particular, it has thundered against South Korea's plans to install an American anti-missile system, Terminal High Altitude Area Defence (THAAD), designed to shoot down attacking North Korean missiles, claiming that the system's radar will allow America to look deep into its own defences. It has organised consumer boycotts of South Korean goods and entertainment to punish its neighbour. That sends an unnerving message to the region: that its relatively petty issues trump real concerns over the North Korean threat.

A better approach would be to share concerns over North Korea and work together on contingency plans. That requires wisdom and patience. The same goes for the broader relationship between China and America, which in Henry Kissinger's words requires "a subtle balance of restraint, force and legitimacy". A balance of power defined primarily in military terms will, he insists, "shade into confrontation". If the Thucydides Trap is to be avoided, the search for partnership has to begin. The meeting between Mr Trump and Mr Xi at Mar-a-Lago earlier this month was a start. But it will come to nothing unless co-operation is put at the heart of relations between the two countries.

### Something to build on

A rich basis for such co-operation is already in place (see chart), and perhaps widely underappreciated. Almost half of all foreign buyers of American property are Chinese, as are one-third of the nearly 1m foreign students in America. China can trace one-third of its GDP to foreign investment, much of it American. And Starbucks opens a new branch in China every 15 hours. A large part of the world wants America's president both to understand and care about such things.

Yet China's likely trajectory in the coming years will make co-operation harder, not easier. Mr Xi's rule is proving more authoritarian than that of his predecessors, resources continue to be poured into military spending, and a slowdown in China's debt-fuelled economy may render politics more brittle and make an ugly jingoism a tempting diversion.

Many Americans will question why their country should cede ground. It would certainly be wrong to retreat in the face of threats of force. In other areas, however, if China seems willing to shoulder responsibilities, America should respond. For instance, rather than allow China to nurture resentment at being shut out of running Western-led institutions such as the IMF and the World Bank, why not offer to incorporate China's new Asian Infrastructure Investment Bank into the global institutional order?

That is where the wisdom comes in. China must show it too, by acknowledging that Asia wants the American presence to continue, and that its own security and prosperity also depend on it. Above all, both America and China need to remember that the alternative to co-operation is confrontation. ■

### Deeply engaged

China and United States  
Selected comparisons, 2016 or latest

	China to US	US to China
Exports, \$bn	382.5*	115.8†
FDI stock, \$bn	109.4	240.9
Foreign residents, '000	2,148‡	71.5
University students, '000	304	22
Visitor arrivals, m	2.6	2.1

Sources: Census \*As reported by China Bureau; Rhodium †As reported by US Group; IEE; NBS; NTTO ‡Foreign-born



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Turkey's constitutional referendum

## Erdogan the maleficent

ISTANBUL

### The president gets his long-cherished constitution amid allegations of vote-rigging

IT WAS a vote that turned out to be as controversial as it was hotly contested. Even before all of the ballots had been counted, Recep Tayyip Erdogan, Turkey's president, stepped in front of a crowd of supporters in Istanbul and proclaimed victory. "My nation stood upright and undivided," he said, referring to the referendum on a constitution that will give him new, virtually unchecked powers. "April 16th was a victory for all of Turkey."

Yet it was hardly the win Mr Erdogan had expected. The Yes camp, which the president headed, limped away with just 51.4% of the vote. The opposition accused the country's electoral authority of foul play. Outside observers charged the government with stacking the odds in its favour. Anti-government demonstrations broke out in a number of Turkish cities. The country awoke the following morning more divided than ever.

The new constitution will bring about the most radical overhaul of the state since 1923, when it went from being an imperial Islamic power to a secular republic under Kemal Ataturk, the founder of modern Turkey. After fresh elections in 2015, Mr Erdogan will rule uncontested, appointing senior officials, judges and members of his own cabinet, with little oversight by an expanded but weakened parliament. The office of prime minister will cease to exist.

Yet the constitution is already mired in

controversy. The main opposition, the secular Republican People's party (CHP), has asked for the referendum results to be annulled. A last-minute decision by the country's electoral board to accept unstamped ballot papers created the risk of mass fraud, the CHP said. Claims of vote-rigging, especially in the Kurdish southeast, have been pouring in. In a scathing assessment, observers from the Organisation for Security and Co-operation in Europe (OSCE), an intergovernmental body, said the board's move had "undermined an important safeguard and contradicted the law". A state of emergency imposed shortly after an attempted coup in July, accompanied by nearly 50,000 arrests and a climate of intimidation and nationalist hysteria, was hardly the proper setting for a referendum on systemic changes. "Voters were not provided with impartial information about key aspects of the reform and limitations on fundamental freedoms had a negative effect," the OSCE said.

There is next to no chance of a recount. The electoral board rejected the opposition's appeal on April 19th, but promised to look into individual allegations of fraud. (Official results are expected towards the end of April.) Mr Erdogan asked foreign observers to keep their concerns to themselves. "We don't care about the opinions of 'Hans' or 'George,'" he said. His prime minister added: "The people's decision is

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clear and the result is a Yes."

The allegations will haunt Mr Erdogan for years, leaving the country even more polarised than before. Mr Erdogan might be "the most unassailable Turkish leader since Ataturk but this legitimacy issue will hang over his head," says Soner Cagaptay, a fellow at the Washington Institute.

International reaction has been muted. Other than Donald Trump's America, which joined model democracies such as Russia, Sudan, Hungary and Djibouti in congratulating Mr Erdogan, no leader of a big Western country has welcomed the vote. Britain, Germany and the EU called instead for dialogue and an impartial inquiry. Mr Erdogan did not appear particularly keen to rebuild bridges with Europe: on the day of the vote, he pledged once again to do his part to reinstate the death penalty, which would threaten the membership of Turkey in the Council of Europe and torpedo its already comatose accession talks with the EU.

### One-man show

Supporters of the new constitution say it will improve decision-making by concentrating power in Mr Erdogan's hands, precluding unwieldy political coalitions and neutralising powerful unelected officials. "From now on, it's the people who are going to rule Turkey," says Ufuk, a young Yes voter relaxing outside a polling booth.

Opponents say it will transform the government, already dominated by Mr Erdogan, into an authoritarian regime. "This is the beginning of one-man rule," says Ali Bayramoglu, a columnist who used to be sympathetic to the ruling Justice and Development (AK) party. After he said earlier this month that he would oppose the new constitution, Mr Bayramoglu was assaulted by AK supporters at a polling station on ►

► the day of the vote.

Some of the changes will come into effect immediately. An impartiality clause that required the president to sever links with any political party (which he flouted) will expire. Mr Erdogan is expected formally to rejoin AK as soon as official results are announced this week. Within a month, the country's most influential judicial body, the council of judges and prosecutors, will shrink and move from a system of election by peers to one of appointment by parliament and the president.

Mr Erdogan's initial comments suggest he will disregard the slim margin of victory and portray the referendum as a sign of support for his crackdown. The day after the vote, his government extended the state of emergency until July 19th. Two days after that, police arrested some 38 people accused of participating in protests.

Turkey is saddled with a constitution opposed by nearly half of all voters in a referendum tainted by fraud claims and held under conditions that made open debate impossible. Mr Erdogan has the powers he has long coveted. They come at the cost of tension at home and isolation abroad. ■

#### Protests in French Guiana

## Failure to launch

CAYENNE, FRENCH GUIANA

#### The second-poorest department in France demands more autonomy

**O**F ALL the voters fuming about neglect by out-of-touch politicians in distant Paris, the people of French Guiana have perhaps the strongest case. It is the second-poorest of France's five overseas departments (DOMS). The unemployment rate, at over 20%, is more than double that of the mainland. Some 40% live in poverty. The murder rate is the highest in France.

The department is entering its fifth week of a general strike. Thousands of Guianese have taken to the streets to protest against high living costs, lack of jobs and crime. The demonstrations started on March 20th, when workers from Endel-Engie, an engineering firm, and EDF, the local energy utility, blocked roads outside the coastal city of Kourou to prevent the launch of a rocket from the Guiana Space Centre, which is based near the city.

The space centre is the main launching pad for the European Space Agency, owing to Guiana's location close to the equator (to take advantage of the earth's spin) and by an ocean (to reduce the chances that a botched launch will rain debris on people's heads). It is also a symbol of the mainland's apathy: a few miles down the road from Kourou "some people still have no

running water or electricity," says Antoine Louis-Alexandre, a protester.

Guiana's troubles are not new. A former slave and penal colony, it was designated as an overseas department in 1946, giving it the same political status as mainland departments. But inequalities have persisted between the DOMS and mainland France.

Guiana is rich in natural resources, including gold, offshore oil and France's largest forest. But its economy is moribund. It is dependent on imports from mainland France and Europe. In 2015 it exported €138.6m (\$148.4m) worth of goods, compared with €1.2bn of imports. Even wood is imported, despite a lush rainforest in its back yard, which is a protected green zone that allows France to offset its carbon emissions. A high import tax on anything that arrives by sea means Guianese people pay higher prices. Food products are 45% more expensive than on the mainland.

The department's infrastructure is appalling. Two main roads connect the principal towns along the coast but in the interior people travel by canoe. Its schools are in crisis, with dilapidated buildings and over-sized classes. One in two Guianese leave school with no diploma.

Moreover, its population has tripled since 1985. Partly this is to do with migration. Guiana is better off than its South American neighbours. Unguarded Amazonian borders led to a surge of newcomers from Brazil and Suriname in the 1980s and 1990s. The birth rate has also soared. Today, 43% of the population is under 20. Almost half of those under 25 have no jobs.

Its status as part of the European Union also makes it a convenient transit zone for traffickers moving cocaine from South America into Europe. The number of Guianese caught with drugs in Cayenne's airport doubled between 2014 and 2016, to 371. Crime rates are correspondingly high.

The government in Paris has taken note,



Not quite Le Marais

offering €1bn in emergency funds to pay for policing and improvements to hospitals and schools. Protest leaders demanded a further €2.1bn. They also want immunity for those involved in road blockades. But most of all they want change: "The DOMS need greater autonomy and a system that is adapted to local conditions," says Gabriel Serville, one of Guiana's deputies. Otherwise, protesters are clear: standing in front of a crowd in Cayenne and pointing at the French flag this month, one declared, "If they can't treat us like French citizens, like they treat French citizens elsewhere, we'll tear it down." ■

#### McJobs

## The tempest

ATHENS, MADRID AND NAPLES

#### Segmented labour markets have scarred southern Europe

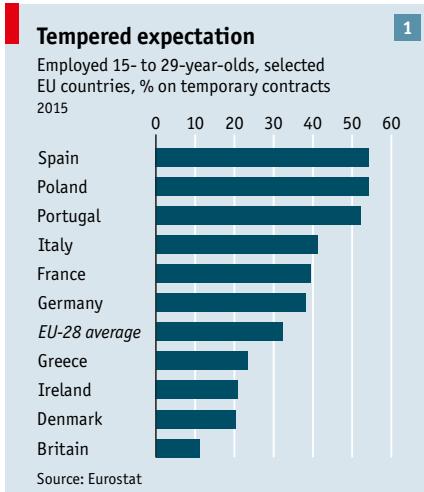
**E**MA ZELIKOVITCH, a 24-year-old philosophy graduate in Madrid, takes a deep breath before listing the jobs she has held over the past few years. While at university she worked as a dance teacher, waitress, street fund-raiser for NGOs, call-centre operator and greeter at political conferences for Podemos, a far-left party. Since graduating she has juggled jobs at two restaurants, but one recently sacked her. Every job was on a temporary, or "fixed-term", contract. And while some paid her a living wage, none came with a path to promotion.

Dead-end, fixed-term jobs have haunted southern Europe for decades. In 2015 over half of employed 15-to-29 year olds in Spain were on temporary contracts, compared to two-fifths in Italy and just under a quarter in Greece; the average across the European Union is 14% (see chart).

More flexible northern countries tend to protect the worker rather than the job, allowing their economies to adjust more quickly to shocks and technological change. In the south, half-baked attempts at labour reforms contributed to the problem: governments made it easier to hire and fire new workers, but were wary of touching highly protected "insiders". This created a two-tier labour market, with the lower tier populated by a young precariat.

Such segmentation means that the most vulnerable workers before the crisis were hit hardest during it. In Spain, as the crash hit the construction sector, temporary contracts as a share of the total fell, from 32% in 2007 to 25% in 2009. Those with the fewest employment rights were the first to go.

Now, while unemployment in the euro zone is edging downwards, southern European labour markets are lopsided. Youth ►



unemployment is still painfully high, at 35% in Italy, and over 40% in Spain and Greece. And employers seem no more keen to make permanent hires. In Spain, Italy and Greece, the share of employees on temporary contracts between the ages of 15 and 29 rose by at least three percentage points between 2012 and 2015.

These economies' inability to increase the number of permanent contracts has stored up problems. The churn of temporary workers crimps productivity growth. In Spain, the cost of making an employee permanent is so large that firms "rotate people instead", says Marcel Jansen of the Autonomous University of Madrid. A quarter of temporary contracts in Spain last for one month or less. Employers have little incentive to train up a worker they think will leave soon anyway. And such short spells hardly give workers time to develop skills on the job.

Faced with the lower wages that tend to accompany temporary work, many young people turn to the black market, either working cash-in-hand or not declaring freelance work commissioned by firms abroad. In Naples, 30-year-old Giuseppe is officially unemployed but occasionally works for cash in a factory. He dreams of going abroad, perhaps to England; currently he lives at home with his mother.



## Energy in Ireland

# Bog down, wind up

CONNEMARA

### Ireland is ditching peat for energy from wind

**P**EAT has a lot to recommend it. It imparts a delicious flavour to whiskey. It emits an agreeable aroma when burned. It is a cheap source of energy; at its simplest it involves no more than digging by hand. Ireland, which has bogs full of the stuff, uses it for 6% of its energy.

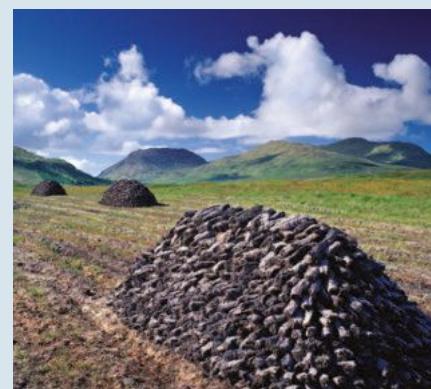
But peat is also one of the dirtiest fuels available, emitting 23% more carbon dioxide than coal. Ireland is unusual among developed countries in burning it for energy on an industrial scale. A geological precursor to coal, it has been used on the island for at least 1,000 years. But it may at last be on its way out as Ireland turns to another energy source of which it has unlimited quantities: wind.

Galway Wind Park, in the remote, soggy hills of Connemara facing the Atlantic Ocean, will be Ireland's largest wind farm when it is completed this summer, generating 169MW of power at peak capacity, or about 3% of Ireland's average needs. Some turbines are already generating electricity. It is only the latest development in Irish wind power, which has tripled in the last decade to more than 3GW of capacity. The renewable resource now provides a quarter of the electricity Ireland consumes every year. Eirgrid, a state-owned company which manages the grid in both Northern Ireland and the Republic, says much more wind capacity is in the planning stages.

Wind is difficult to manage because it is unpredictable, even on the blustery shores of western Ireland. Since wind turbines do not turn consistently, the grid

must be carefully tuned to keep it stable. One way around this is to export excess power that takes the grid beyond the point of stability. This is the trick used by Denmark, amongst others, whose grid is linked to those of Germany, Sweden and Norway.

Ireland already has two connections to Britain. At night, these cables provide hundreds of megawatts of Irish wind power to its neighbour. Eirgrid is planning a cable to continental Europe. A report from SEAI, Ireland's energy authority, suggests that the island could generate enough wind electricity to match domestic demand by 2030, with more left over to export. That would be good timing. Bord na Móna, the body responsible for developing Ireland's peatlands, has said it will stop extracting peat for electricity by the same year.



Air above, Éire below

Others are doing more than dreaming: between 350,000 and 420,000 Greeks have left the country since 2008, from newly qualified doctors to hairdressers. "We've gone back to the 1950s when my grandparents left to work in a German factory," says Aristotelis, a 28-year-old Greek doctor who is planning to move to Hamburg to become a surgeon. In the southern Spanish region of Andalusia, where unemployment rates are among the highest in Europe at 30%, many young people wish they could stay. "It's a really good place to live, with nice people and close to the sea," says Miguel, a 19-year-old studying business management. But he sees no future in Spain.

To their credit, policymakers have been trying to tug the tiers of employment together. In 2012 Spain introduced a labour reform which, along with introducing more wage flexibility, cut severance pay-

ments for permanent employees and introduced subsidies for companies hiring new full-time workers. In Greece attempts have been made since 2010 to loosen collective-bargaining agreements. In Italy, after much wrangling, the former prime minister, Matteo Renzi, passed a "Jobs Act" in 2014 which attempts to increase the number of permanent workers with temporary tax breaks while also making it easier to fire full-time workers.

So far, the reforms have not altered the trend towards temporary contracts, though caution by employers amid a weak recovery makes this unsurprising.

Many politicians lack ambition to go further. In Spain only one party—Ciudadanos (Citizens), a new liberal party—is pushing for further labour reform to reduce the number of temporary contracts. Without more progress, the young will vote with their feet. ■

# Charlemagne | In the shadow of Willy Brandt

Martin Schulz wants to emulate his political hero. He faces an uphill struggle



**W**HEN Martin Schulz entered the village hall in Nunkirchen on March 24th, in the hilly German state of Saarland, the cheer nearly blew the roof off. To a beery crowd of villagers and party activists, the candidate for Germany's centre-left Social Democrats (SPD), who hopes to replace Angela Merkel as chancellor, was introduced as a near-messiah: "the man who made politics in Germany interesting again, who has reinstated the SPD's self-belief, who has put social justice back on the agenda, who will be our next chancellor!" As he ascended the stage a hush fell. The bells of the church next door began to peal: "I didn't ask for that!", he insisted.

His speech quickly transcended the borders of Saarland, which was about to elect a new government. Mr Schulz ruminated on Europe; cracked folksy jokes; solemnly intoned about Germany's historical burden; cast his family, neighbours and acquaintances from the campaign trail as characters in a compendium of parables about the country. He lingered on Willy Brandt, the SPD chancellor of West Germany from 1969 to 1974, who had once spoken in the very same hall. In reverential tones Mr Schulz recalled his 20-year-old self receiving a book as a prize from the great man. "I still have that book," he said, eyes a-glisten.

This was the peak of what Germans call the *Schulz-Effekt*. It started on January 24th, when Sigmar Gabriel, then-leader of the SPD, unexpectedly handed the reins to his charismatic comrade, the outgoing president of the European Parliament. The new face worked wonders. Having long languished in the polls, the SPD suddenly shot up by ten points. It drew level with Mrs Merkel's centre-right alliance of the Christian Democratic Union (CDU) and its Bavarian sister party, the Christian Social Union (CSU), with which the SPD rules in coalition. Euphoria gripped the party. Then, two days after Mr Schulz's speech, the SPD returned a mediocre result in the Saarland election. It has since fallen back in national polls; Mrs Merkel is once again the most popular prospective chancellor. Can the *Schulz-Effekt* be revived?

In trying to answer that question, it helps to contemplate the man Mr Schulz calls his "idol". A half-metre-high bronze statue of Brandt stands in his office. He has described the 1972 election, the first in which the SPD won more seats than the CDU/CSU alliance, as "the moment of my politicisation". He quotes Brandt reli-

giously and encourages comparisons.

There are indeed similarities. Like Brandt in 1969, Mr Schulz leads an SPD that is tired of being the junior partner in a grand coalition, yet struggling, at a time of economic boom, to usurp a long-dominant CDU/CSU. Like Brandt, a one-time mayor of isolated West Berlin, the former European Parliament president is an outsider in German federal politics. And like Brandt he is blunt, approachable, emotional, idealistically European in outlook and palpably hungry for power.

Their political strategies are alike, too. Brandt's campaign was hyper-personal, known as the "Willy Election"; Mr Schulz orates under banners proclaiming "Time for Martin" and in front of crowds chanting his first name. By focusing on things like schools (saying that he will offer voters "fee-free education from nursery to university") he wants to emulate his idol's path to power: an alliance spanning the working-class SPD, the liberal Free Democratic Party (FDP) and the intellectual left (in Brandt's day the peace movement, today the Green Party). In 1969 the laboratory of this coalition was the new SPD-FDP government in the state of North Rhine-Westphalia. Today the equivalent is the SPD-FDP-Green coalition in Rhineland-Palatinate, which has already introduced free-free education.

So far, so *Schulz-Effekt*. But his problems have to do with the differences between then and now. Brandt had the benefit of three years as vice-chancellor in the lead-up to 1969. Mr Schulz, by contrast, is unfamiliar with Germany, having been away since 1994. He is frantically swotting. A recent interview in which he claimed 40%, not the correct 14%, of young Germans are on short-term contracts cost him credibility. Meanwhile, where Brandt's time in Berlin berating the communist East burnished his reputation, Mr Schulz's support for euro-zone debt-sharing is a political liability. Jens Spahn, a rising CDU/CSU star, brands him a better friend to Greek communists than to German taxpayers.

## 2017 is not 1969

The biggest difference has to do with coalitions. In Brandt's day there were just four parties in the Bundestag. He became chancellor by forming an SPD-FDP coalition, condemning the larger CDU/CSU to opposition. In the next Bundestag there will probably be seven parties, complicating the arithmetic. Mr Schulz could seek another grand coalition with Mrs Merkel's centre-right CDU/CSU. But his party has long suffered in this arrangement. Promoting yet another alliance between the two would thus only help Mrs Merkel. So Mr Schulz is going for a coalition with the FDP and the Greens. But his putative liberal partners are not keen and polls put this grouping well short of a majority.

That leaves a coalition with the Greens and the socialist Die Linke (the Left), which descends from the Communist party that ran East Germany. Unlike previous SPD candidates for chancellor, Mr Schulz refuses to rule out such a coalition. But Die Linke's anti-NATO views make it politically toxic. Talk of an SPD-Left government in Saarland, for example, appears to have raised turnout among CDU/CSU voters and contributed to the SPD's defeat.

There is a historical irony here. Brandt dreamed of reunification and as chancellor warmed relations with East Germany. In the long term his vision came true. But this ultimately created a force in Die Linke that now hoovers up social-democratic votes in the east, is electorally toxic in the west, and without which the SPD may not be able to build a left-of-centre coalition. The legacy of his hero weighs heavily on Mr Schulz. ■



### A snap election

## Back into battle

**Theresa May astonished everybody, including her own cabinet, by calling for a snap general election on June 8th**

ONE thing is certain about the British general election: Theresa May didn't call it for the reason she claimed. Standing in front of 10 Downing Street on April 18th the prime minister said she had no choice but to call a poll because "the country is coming together but Westminster is not". In fact, the country remains deeply divided—more than 40% of Britons still think that Brexit was a mistake—whereas the biggest opposition party, Labour, has sided with Mrs May in accepting "the will of the people" as expressed in the referendum.

The reason she called the election is simple: she thinks she can win big. Jeremy Corbyn, who combines ideological extremism with political incompetence, has led Labour to a near-record slump in popularity. The party is deeply divided between its pro-Brexit working-class heartlands and its anti-Brexit metropolitan annexe. The Conservatives have maintained close to a 20-point lead in opinion polls over Labour for months. Only 14% of Britons say they would choose Mr Corbyn as prime minister over Mrs May. The Tories' lead among working class "C2DE" voters is almost as great as among rich ABC1s (see chart).

The Liberal Democrats have a strong message—we're the party of the 48% who voted to Remain—but a weak leader in Tim Farron. The UK Independence Party has imploded. And the Scottish Nationalists have peaked, winning 56 of Scotland's 59 constituencies in the last election and now

suffering from the inevitable disappointments of having to run a country. On April 19th the *Times* quoted polling data suggesting that Mrs May could win the election with a majority of more than 100 seats.

That would enhance her freedom to negotiate Brexit. Her current working majority of 17 gives leverage to hardline Brexiteers who might vote against any deal that involved sacrificing control over migration or paying an exit fee to leave Europe. A bigger majority would give her the freedom to compromise with the European Union and get the deal through Parliament.

It would enhance her authority in other ways, too. It would give her a personal mandate while releasing her from the strictures of David Cameron's 2015 manifesto,

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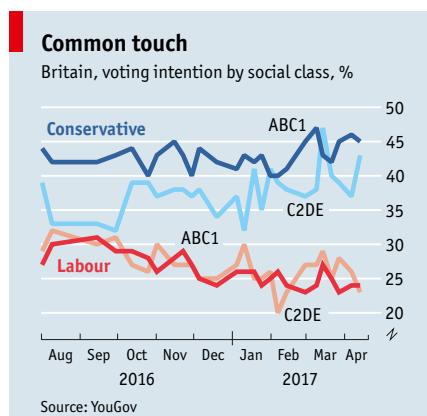
which has already caused her to retract a proposed tax increase. And the new generation of Tory MPs will have fought the election with Mrs May as the commander-in-chief and will see their futures in terms of keeping her happy (see box).

Just as important, victory would extend her time in Downing Street until 2022. The Tory high command had been increasingly worried about the fact that the Fixed-term Parliaments Act would force her to call an election in 2020. This might have given the EU a negotiating lever: Mrs May would have had to rush to reach a deal before the British election cycle started. It would also have reduced the amount of time she had to sell her Brexit deal to the country. Now she may have three years between producing a deal and facing voters.

Why did such an obvious decision take Britain by surprise? Cabinet members were reported to be "stunned" when they learned of her opinion a few minutes before she informed the country. The question had been debated for months in Tory circles. In March William Hague, a former party leader, launched a trial balloon in a newspaper article calling for an early election. Enthusiasm halted when a poll by Sir Lynton Crosby, the Tories' election guru, showed the party losing seats in the south to the Lib Dems.

There are, in fact, several reasons against calling an election. The obvious one is that Mrs May repeatedly said that she wouldn't. The second is that waiting until 2020 would bring some big advantages: the chance to keep Mr Corbyn in office longer and the likelihood of bagging 20 more seats following boundary changes.

The Tories worried about overriding the Fixed-term Parliaments Act, which requires a two-thirds majority of MPs. A wily Labour leader might have forced them to pass a vote of no confidence in their own ➤



▶ government in order to hold a general election; Mr Corbyn simply went along with her. They also worried about election fatigue. A country that is used to voting every five years will, by June 8th, have gone to the polls three times in two years.

All elections are risky. The press will want drama; the Lib Dems might provide it by picking up seats in Remain territory such as London and the south-west (see next story). John Curtice of Strathclyde University warns that Mrs May's hopes of a three-figure majority will melt if her lead is cut from 20 points to ten or below. In 2015 a seven-point lead over Labour translated to a majority of only 12. He adds that many Labour MPs have very large majorities.

Yet the Tories look like hounds baying for blood and the Labour Party like frightened foxes. Half a dozen Labour MPs have already declared that they won't fight the election and more are disassociating themselves from their leader.

The Conservatives will present the election as a chance and a choice. It will be a chance to give Mrs May the authority to negotiate in Brussels (she will talk a great

deal about the need for this authority and very little about what her negotiating position will be). And it will be a choice between Mrs May and Mr Corbyn. Hitherto the Tories have been soft on Labour's leader because they regard him as an asset. Over the next seven weeks they will unload filing cabinets full of documents about his friendly relations with the IRA, Hamas, Hugo Chávez and others who are not well thought of in middle England. The pro-Brexit press is egging them on: "Crush the saboteurs", urged the *Daily Mail's* front page after Mrs May called the election.

Yet her gamble makes a softer Brexit more likely. The pound surged to a sixth-month high on news of the election. Mrs May will talk a great deal over the coming weeks about needing the authority to negotiate with the EU. She is just as interested in getting the clout to negotiate with the 30-40 hardliners in her party who have used a succession of slim Tory majorities to exercise undue and malign influence on British politics. The saboteurs who end up being crushed might not be the ones that the *Daily Mail* is thinking of. ■

### The class of 2017

## One of us?

### The new generation of Tory MPs will not cause the prime minister much grief

**W**ITH the Conservatives far ahead in the polls, Theresa May's parliamentary party is likely to swell after the election. As well as winning seats from Labour, the Tories will need to replace a handful of their own MPs who are stepping down, such as George Osborne, a former chancellor. If the polls pan out, around 100 new Conservative MPs might soon be taking the oath of allegiance to the Crown.

Mrs May hopes that this will provide her with a cushion of moderate MPs to dilute the influence of the three-dozen or so ultra-Brexiteers on her backbenches, making it easier for her to compromise in the Brexit negotiations. But will the new MPs be hard or soft Brexiteers?

It is partly a question of which seats are up for grabs. In the 100 constituencies where the Conservatives need the smallest swing in order to win, support for Brexit is similar to that in the country as a whole. Around a third of them delivered majorities for Remain. That calls for Tory candidates who are not too hardline on Brexit. In places like the Labour marginal of Brentford and Isleworth in south-west London (fourth on the Tory hit list) local Conservatives say they consider a candidate's support for "social justice" to be as important as anything else. A Tory official in Ealing Central and Acton, another

Remain-backing London constituency that is second on the hit list, wants a "Tory with a heart".

The tight timetable should help Mrs May to choose sympathetic candidates. Normally, local Conservative associations spend months carefully choosing their parliamentary candidate. Activists tend to be to the right of the parliamentary party, and most would dearly love to choose hard-Brexit candidates. Garry Heath, a member of the Wycombe Conservative Association, wrote on the ConservativeHome blog that the Tories should "purge our party and deselect the Remainers".

Yet with the election only seven weeks away, there is little time for local parties to scour the land for suitable hardliners. Conservative Central Office is expected to step in and present local associations with a shortlist of candidates. These lists will reflect Mrs May's politics; in turn, the candidates will be loyal to her if elected.

The easiest option in many cases will be simply to reselect the candidate who stood in the 2015 election. Back then, most of the party's leadership was in favour of Remaining, albeit reluctantly. Whatever happens, it looks as if Mrs May's prospective new MPs are unlikely to give her too much trouble.

### The Liberal Democrats

## A Brexit bounce

### BRISTOL

### The Lib Dems' focus on Europe could limit the Tories' hoped-for landslide

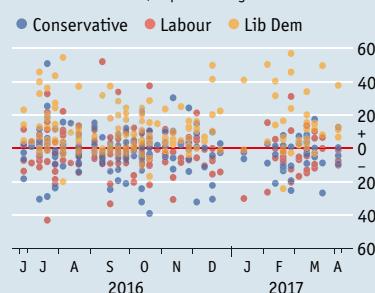
**C**AMPAIGNING as a Liberal Democrat in the 2015 general election was not a happy experience, says Stephen Williams, a former minister for local government. The party was disliked for propping up the Conservatives in a coalition government in 2010-15 and for reneging on a pledge not to raise university tuition fees. It scraped just 8% of the vote, down from 23% in 2010. "At times I felt like the most hated man in Bristol," Mr Williams sighs.

Now, though, things are looking brighter for the Lib Dems. Last year no party campaigned to remain in the European Union so vehemently. And now, none is likely to benefit so much from the vote to Leave. The party's noisy opposition to the government's proposed "hard Brexit" has helped it to notch up some spectacular swings in council and parliamentary elections since the referendum (see chart). Meanwhile, it faces only weak competition for left-leaning voters from Labour, which is under catastrophically bad management (see next story).

So the Lib Dems are optimistic about their chances on June 8th. All 48 seats they lost in 2015 will be "in play", reckons Rob Ford of the University of Manchester. A 10% swing to the Lib Dems would see them pick up 40 seats, 25 of them from the Conservatives. They are unlikely to do quite that well—partly because eight of those seats are held by the Scottish National Party, whose vote is likely to hold up, and partly because the Liberals' organisation is still relatively weak after successive local electoral drubbings. But Lib Dem watchers guess the party could pick up more than 20 new seats. Popular former MPs including Vince Cable, a former business secretary,

### Add Libs

Britain, council by-elections  
Since June 23rd 2016, % point change



▶ and Simon Hughes, a former justice minister, have said they will seek to win back their old constituencies. Nick Clegg, a former party leader and deputy prime minister, has confirmed he will stand again.

Even before the EU referendum, strategists had talked of building a reliable “core vote” among internationalist young urbanites. That job has now become a good deal easier. Advertising the Lib Dems’ support for a “soft Brexit” is an obvious way to attract the 48% who voted to Remain. In Bristol, where Mr Williams is running for the new post of mayor of the West of England, he misses few opportunities to remind voters of the Lib Dems’ position on Europe. At City Hall he tells a crowd of ethnic-minority businessfolk that Indian-British relations are “going to be even more important if we go over the Brexit cliff.” Tory pollsters fret that a Liberal raid on Remain voters might eat into the government’s expected majority, with London and the south-west of England, the Lib Dems’ historical stronghold, particularly vulnerable.

The party’s position on Brexit has also helped it to win back protest voters, who abandoned the party when it got into bed with the Conservatives in 2010. Mark Pack, a Lib Dem strategist, notes that support for close relations with the EU is now the “anti-establishment position”. According to a recent poll by Opinium, only a third of voters now think that the party was wrong to have entered into coalition with the Tories. Meanwhile, its appeal seems to go beyond Europhiles: since the referendum the party has picked up more council seats in Leave-voting areas than Remain ones.

With just nine MPs, the Lib Dems have so far struggled to gain a hearing. Some reckon that part of the reason why they have yet to see much of an uptick in the polls is because most voters pay little attention to the party until they are forced to by an election. The lacklustre leadership of Tim Farron has not helped. He recently got some attention, but only by refusing to say whether he thought gay sex was a sin (he later clarified that he thinks homosexuality is not). Polling suggests that voters think he is doing no better a job than Jeremy Corbyn, Labour’s unpopular leader.

But there is cause for optimism on both fronts. The party’s profile will rise during the campaign; the fact that it is the most strident anti-Brexit party will attract television cameras, says Mr Ford. Even if the party’s national polling does not pick up, it will pour resources into marginal seats, while other parties will have to campaign across the country. Moreover, what the Lib Dems lack in leadership, they increasingly make up for with boots on the ground. The party claims that its membership has doubled since the 2015 general election, to more than 90,000. Opposition to a “hard Brexit” provides them with a cause worth fighting for. ■



### The opposition

## Hard work for Labour

**The outlook for the Labour Party is grim—and things may get worse**

**W**HICH year will turn out to be the comparison? Will it be 1983, when Labour won just 209 seats under Michael Foot? Could it look more like 1935, when it secured 154? Or might the party confound pollsters, and the government, and improve its current tally of 229? The party trails the Conservatives by 20-odd points, so its prospects look dim.

Labour’s fate in June depends on the behaviour of its past supporters. Less than half of those who voted Labour in 2015 would still do so, according to polls by YouGov. Instead 10% would vote for the Liberal Democrats, 7% for the Conservatives and 24% say they do not know. Another 4% say they will not vote at all.

Labour has captured some support from the Green Party, youngsters and those who have not voted before. But the voters it has lost are old, working class and—crucially—dependable. In return, says Marcus Roberts of YouGov, it has gained unreliable voters with no history of supporting Labour or indeed turning out at all.

The party faces myriad threats. According to YouGov’s analysis, any constituency where Labour has a lead of less than 14% over the Tories would turn blue. Fifty-six of Labour’s 229 seats qualify. Meanwhile the Liberal Democrats will be eyeing hungrily those such as Cambridge, where Daniel Zeichner, the Labour MP, has a majority

of just 599 and which voted overwhelmingly against Brexit.

Theresa May put Brexit and the question of leadership at the centre of her call for an election, knowing that both are weaknesses for Labour. Voters still don’t know where the party stands on Brexit. That uncertainty comes from the impossibility of devising a policy that satisfies both Labour’s metropolitan Remain voters and its working-class Leavers in northern England and the Midlands. As for leadership, even among habitual Labour voters, fewer than half want to send Jeremy Corbyn to Downing Street.

Labour’s hopes rest on changing the subject from Brexit to matters on which it is stronger, such as the National Health Service, housing and schools. The NHS, in particular, is an area where it is still more trusted than the Tories. A predicted defeat for Labour in a by-election in Stoke Central in February failed to materialise, after voters seemed less interested in Brexit than in domestic matters. The collapse of the populist UK Independence Party will help Labour in its working-class heartlands.

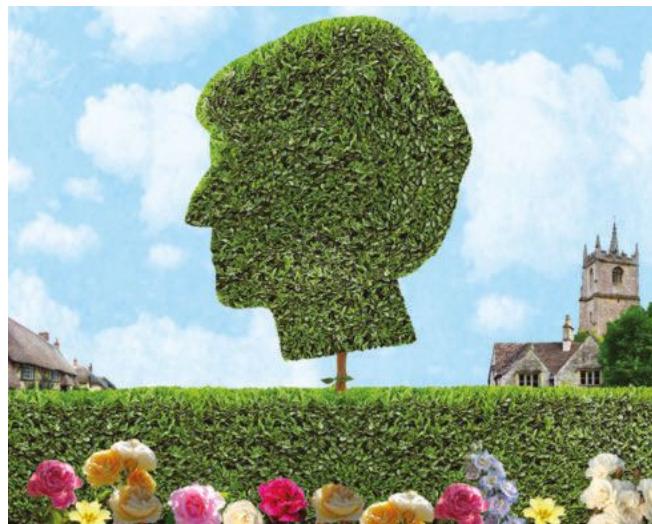
Nonetheless, many of Mr Corbyn’s own MPs are unenthusiastic. John Woodcock, who represents Barrow and Furness and has a majority of just 795, said in a video to his constituents on April 19th that although he would be seeking re-election, he could not endorse Mr Corbyn as prime minister. Others are quitting. Alan Johnson, a former Labour home secretary and Gisela Stuart are among those who have said they will not stand.

In the absence of a popular leader, Labour MPs will have to campaign locally and individually. But building personal brands takes time, and that is in short supply. Just as after the Iraq war some Labour MPs distanced themselves from Tony Blair (who may this time campaign with the Liberal Democrats against Brexit), Labour candidates may try to avoid Mr Corbyn. He might make that easy for them. Labour sources reckon he will run this election like his leadership campaign, travelling to safe seats represented by friendly MPs and holding big rallies in front of adoring crowds. He will avoid talking about the EU as far as possible, leaving the difficult work of coming up with a position on it to Sir Keir Starmer, his Brexit spokesman.

Some are already pondering what Mr Corbyn would do in the event of a defeat. Most leaders would resign, but Mr Corbyn may not. He is determined to lower the level of parliamentary support required by would-be leadership candidates before their names can go on the ballot sent to members. They currently need the signatures of 15% of MPs; Mr Corbyn would like to cut it to 5%, to ensure that a left-wing candidate can replace him when he steps down. If he clings on to push that through, Labour’s agony may be prolonged. ■

# Bagehot | Theresa May, Tory of Tories

The prime minister's vision for Britain is slowly coming into focus



**B**EFORE her bolt-from-the-blue announcement that she was calling a general election, most Britons had Theresa May down as an honest plodder: a safe pair of hands who kept her promises and did her homework. She trod water in the Home Office for six years while David Cameron's inner circle got on with the job of reforming the country. She became prime minister only because the Tory party was desperate for somebody who could unite pro- and anti-Brexit factions after Mr Cameron's resignation following the referendum. Mrs May's greatest qualification for the job was that she took a lukewarm position, as a reluctant Remainer, on the most important issue of her time—hardly Churchill on appeasement or Thatcher on the unions.

Yet Mrs May has scrambled her reputation as well as electrifying British politics. A safe pair of hands? Some pollsters had advised Tory high-command not to risk an election on the grounds 48% of the country wants to stay in the European Union and Tory voters (particularly in the south) might scatter to the winds. A promise-keeper? Mrs May had made a clear pledge not to hold a general election before her time was up. A second-division politician? Calling an election was the sort of high-risk, high-reward manoeuvre that could allow her to stamp her authority on the country and her name in the history books.

Mrs May was a more ambitious politician than the political class realised. The Tory modernisers who surrounded David Cameron had eyes only for each other: would George (Osborne) replace David or would Boris (Johnson) pip him to the post? Mrs May was too dull to be bothered with. But she always had thoughts above her station. As a sixth-former she announced that she wanted to be Britain's first woman prime minister. She trailed the idea of running for party leader when Michael Howard stood down in 2005. She spent her time in the Home Office building a reputation as a competent administrator and waiting for the shine to come off Mr Cameron's modernisation project.

Mrs May turned out to be ruthless as well as ambitious. On becoming prime minister she summoned Mr Osborne for a chat. He wanted to stay on as chancellor of the exchequer but told friends that he was willing to be foreign secretary. She sacked him with a flea in his ear about promising more than he delivered, and followed up by sacking almost all the rest of Mr Cameron's cronies.

She rules her cabinet with a rod of iron with the enthusiastic help of her longtime aides, Nick Timothy and Fiona Hill, and has happily applied that rod to two of the most senior members of the cabinet: the chancellor of the exchequer, Philip Hammond, and the foreign secretary, Mr Johnson.

Mrs May is not an ideas woman—she didn't have any interest in engaging with such Cameron-era clever clogs as Michael Gove and Mr Osborne. But she nevertheless has a sense of what sort of country she wants. Her Britain is the Britain of the provincial Tory heartlands: a Britain of solid values and rooted certainties, hard work and upward mobility, a Britain where people try to get ahead but also have time for the less fortunate.

Mr Cameron was never really at home with the Tory middle classes. In some ways he was too grand: the Old Etonian married into the aristocracy and has taken to shooting in his retirement. In other ways he was too metropolitan: he didn't want to have to apologise for his party to the liberal elites of London or New York. For Mrs May, the middling folk are her people. She was brought up in the Cotswolds, the daughter of a Church of England vicar, and still takes her Anglicanism seriously. She shinned her way up the greasy pole from her local grammar school to Oxford and from minor jobs in local politics to the highest office in the land. At Oxford, the Cameroons went to grand colleges and joined the Bullingdon, a posh, boorish dining club. Both were mainly off-limits to women; Mrs May made do with a dowdier college and relaxed by watching "The Goodies", a particularly dire comedy. The Cameroons became special advisers to ministers before being parachuted into safe seats. Mrs May didn't get her seat, albeit the plum one of Maidenhead, until she was 40. Her purge of the Cameron gang was a vicious bit of class politics: a grammar-school girl who had been patronised by a bunch of public-school toffs plunging in the knife with skill and relish.

## The emerging Mayism

Mrs May didn't come to office like Thatcher with a well-worked out ideology, or like Mr Cameron with a long-cherished "project". But her provincial prejudices are beginning to cohere into a political doctrine: an updated version of the one-nation Toryism which dominated the party before Thatcher pulverised it. Mrs May is much more willing to contemplate intervention in the market than her predecessors: she wants to make takeovers more difficult and has even talked about putting workers on boards. Mr Timothy, her guru, is an admirer of Joseph Chamberlain, a Victorian "people's Tory" who led the campaign against free trade. Mrs May is also much more worried about social atomisation than has been the fashion in her party. Whereas Thatcher championed liberal markets and Mr Cameron championed liberal morals, Mrs May wants to rebuild communities that have been battered by social change. Her disdain for "citizens of nowhere" is not just a political ploy: she seriously thinks that Britain needs more provincial certainties as an antidote to rootless cosmopolitanism.

The winds are blowing strongly in Mrs May's direction. Labour is in chaos. The Liberal Democrats are hampered by weak leadership. The Scottish National Party is losing momentum: Mrs May would relish the chance of heading off Scottish independence by picking up a few seats north of the border. But these are uncertain and volatile times: just look at the French election. And even if Mrs May enhances her majority in June, as looks likely, this apostle of one-nation Toryism will still be presiding over a deeply divided country. ■



### Neglected tropical diseases

## Winning the endgame

GENEVA

### The remarkable tale of the global offensive against a variety of ancient plagues

**T**HE story begins with a mosquito bite. As the bloodsucker feeds on a human, in some parts of the world there is the chance it will transmit the larvae of worms which cause a disease called lymphatic filariasis (sometimes known as elephantiasis). After many such bites, the larvae develop into thin microscopic worms which invade the host's lymphatic system, where they grow into adult worms. During their seven-year lives these worms damage the lymphatic system, and cause infections that lead to blockages, swelling and fevers.

Upendo Mwingira, a programme manager at the ministry of health in Tanzania, sees patients with grossly swollen legs that are painful and disabling. Male victims can develop scrotums so large that they can descend to the knees. Their enlarged limbs may smell foul, as they become prone to infections. They may be shunned by their communities and often believe that their sickness is a punishment for some past misdeed. "Imagine how stigmatising it is," says Ms Mwingira.

Globally, about 120m people are infected with lymphatic filariasis, of whom about a third are disfigured or incapacitated. And this terrifying condition is just one

of a Pandora's box of horrors that have long afflicted humans in the warm, wet places of the world. Evidence of some of them is found in mummified Egyptians; others are recorded in the Bible and the Talmud, and the writings of ancient scholars such as Hippocrates. Modern science has established that they are transmitted by parasitic worms, bacteria, viruses, protozoans and fungi.

Some have names that may be unfamiliar. Buruli ulcer, Chagas disease, guinea-worm disease, leishmaniasis, river blindness, trachoma and yaws are some of the 18 now collectively referred to as "neglected tropical diseases" (NTDs). Between them they affect more than a billion people, most of them poor, with blindness, immobility, disfigurement and often great pain. The resulting disabilities keep sufferers mired in poverty; that poverty is also what allows the diseases to thrive.

Yet for some decades a remarkable and mostly unsung assault on NTDs has been gathering pace. In the past five years it has coalesced into a well-organised and well-funded plan that is cutting transmission and pushing the number of new infections to previously unimaginable lows. There is

more than Pandora's hope at the bottom of the box: humanity is now capable of driving many NTDs out of existence by 2030. The question is whether it will.

David Molyneux, a parasitologist with the Liverpool School of Tropical Medicine, has been working on tropical diseases since 1965. What struck him in those early days was that it was possible to do great good with simple remedies that were already available. In the 1950s and 1960s, China eliminated lymphatic filariasis by adding an anti-parasitic drug to table salt. For sleeping sickness, surveillance and "vector control" (such as spraying with insecticide and setting insect traps) were highly effective. Insecticides were also known to work against other diseases.

The benefits went far beyond the direct elimination of the suffering caused by these conditions' symptoms. As fewer people were rendered disabled, more could work. Dr Molyneux says it is now thought that one of the reasons Japan and South Korea developed so fast after the second world war is that both ran major deworming programmes in schools.

### Using the tools to hand

The turning-point for NTDs came with the discovery of the drug ivermectin in the 1970s. Merck, a pharmaceutical firm that is known as MSD outside America, developed it for parasitic infections in animals. William Campbell, one of the firm's parasitologists, thought it might be effective against the parasite that caused river blindness, which is endemic in parts of Africa and Latin America, and in Yemen. In its ➤

► early stages river blindness causes rashes and severe itching; later, it progressively damages the retina. Mr Campbell urged his bosses to see if the drug would work.

The first human trial of ivermectin for river blindness was in Senegal in 1981, in patients who had the early stages of the disease but no damage to their eyes. Together with several more trials, it showed that ivermectin was safe in humans and highly effective at killing the disease vector in its larval state. But Merck had a problem: there was no market for it. Those who needed ivermectin were too poor to buy it. So the firm did something remarkable: it made an open-ended commitment to give away as much of the drug as necessary, starting in 1987, with the ultimate goal of eliminating river blindness entirely. In the following decade it donated 100m doses.

Yet a miracle cure was not enough. The biggest obstacle to tackling river blindness, and other NTDs, turned out to be getting the drug to those who needed it. That was too complicated for any one company on its own. Painstaking and costly logistical efforts were required to get treatments to remote areas. Prevalences had to be mapped, and, for some of the diseases, individual patients diagnosed. Since most of the affected areas lacked health-care workers, some had to be trained. The stigma and disability faced by sufferers meant that many were hidden within their communities; they had to be found and persuaded to accept treatment. And after all that, surveillance and follow-ups were required to stop diseases making a comeback.

### Troubles shared

Partnerships started to emerge between countries where NTDs were endemic. International institutions such as the World Bank and World Health Organisation (WHO) teamed up with donor governments and charities. By 1999 the Gates Foundation, a charity set up by Bill and Melinda Gates, was funding work in lymphatic filariasis and schistosomiasis, a debilitating ailment caused by a parasitic worm transmitted by freshwater snails.

By then the long-running effort to eradicate guinea worm led by the Carter Centre, a foundation set up by Jimmy Carter in 1982, had gained pace. The worm's larvae are ingested in dirty water and grow internally to as long as a metre; they emerge, agonisingly, through the skin over several weeks. The only treatment for an established case, even now, is to speed up this expulsion by gradually winding the worm's emerging body on a stick. But public-information campaigns about the need to filter drinking water and keep sufferers away from water sources, where they might pass on the infection, have brought new cases down from an estimated 3.5m a year globally in 1986, when eradication efforts started, to 25 last year.

Other drug firms, including GSK, Pfizer and Novartis, started to donate medicines on a large scale for other conditions. These included albendazole, another anti-parasitic for lymphatic filariasis; azithromycin, an antibiotic that works against trachoma (a bacterial infection that can cause blindness); and a combination of drugs for leprosy (another bacterial infection, which leads to skin lesions and nerve damage). Yet these disjointed initiatives added up to less than what was needed. In an article in 2004 in the *Lancet*, a medical journal, Dr Molyneux argued that these diseases were unfairly neglected in comparison with tuberculosis, malaria and HIV/AIDS, which were the subject of well-funded global programmes. Experience in a range of countries showed that these diseases could be controlled, he reminded his readers—and doing so brought dividends besides the relief of great suffering.

For example, the control of river blindness in west Africa has been described by the World Bank as one of the most cost-effective ways to reduce premature death and disability in poor countries. Each dollar spent on the control of lymphatic filariasis in China, or Chagas disease in Brazil, has been estimated to produce benefits of \$15 and \$17 respectively, by reducing spending on treatment and cutting the number of prematurely curtailed working lives. Some disease-control programmes had built logistics for distributing drugs from scratch, which could be used for other public-health efforts, and had strengthened national health systems more broadly.

By the turn of the millennium the common features of a group of tropical diseases were increasingly recognised by public-health experts, donors and the WHO. They were diseases of poverty but also causes of poverty. They caused disability and made it harder to absorb nutrients in food; reduced school attendance, thus condemning children to a life of grunt work; and trapped families in poverty when breadwinners were too sick to work or farm. Though prevention and treatment

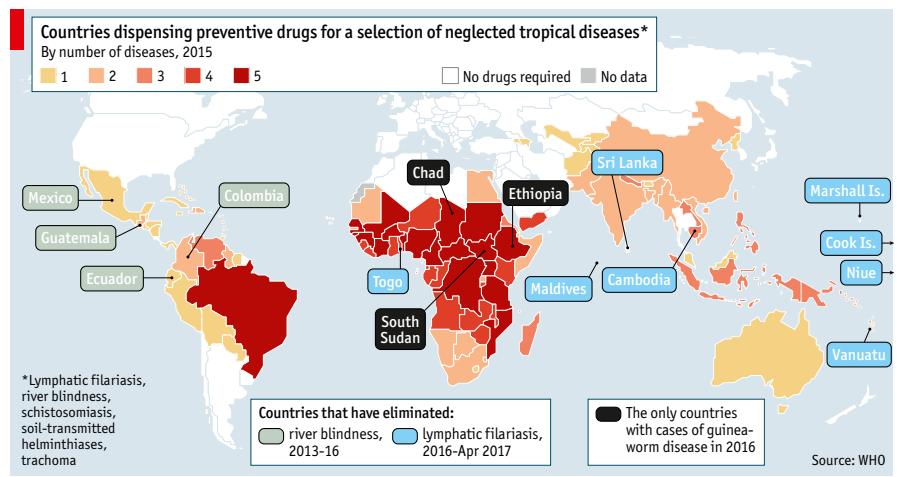
methods varied, there was clear potential for combining attempts to control or even eradicate them. Some required the suppression of vectors such as flies and mosquitoes, for example by spraying insecticides or distributing bednets. Some could be tackled by dosing entire communities with cheap, safe drugs; others by identifying and managing individual cases over extended periods. And most could be greatly reduced by providing safe drinking water, sanitation and information about hygiene.

### Gateway to success

The Gates Foundation has helped a lot. In 2010 Mr Gates and Tachi Yamada, who leads the foundation's global health programme, invited the bosses of a group of drug companies to tell them what could be done to tackle the field's greatest challenges. The firms said that they wanted help to deliver the free drugs that they were offering. At around the same time the WHO created a detailed plan for controlling each of the NTDs.

Finally, the stage was set for an ambitious global coalition. Margaret Chan, the director-general of the WHO, and Mr Gates were able to rally charities, NGOs, big donors (such as the governments of America, Britain and the United Arab Emirates) and, crucially, 13 drug firms. Many, including Merck KGaA, Johnson & Johnson and Gilead, had been donating treatments for years. Others, including Eisai, a Japanese firm, were new to the fight. Together, they declared themselves ready to give away drugs worth billions of dollars each year. In 2012 the group signed the "London Declaration" which promised to control, eliminate or eradicate ten NTDs by the end of the decade.

Five would be controlled with mass drug administration: lymphatic filariasis, river blindness, schistosomiasis, trachoma and diseases caused by helminths (parasitic worms such as hookworm and roundworm) that spend part of their lifecycles in soil. Tackling the rest, including sleeping sickness and Chagas disease—both parasit-



► ic diseases transmitted by insect bites—would require the identification and treatment of infected individuals.

Since the signing of the London declaration, the alliance against NTDs has developed into the largest and most successful public-health initiative in history. The number of people at risk globally from NTDs has fallen by 20%. Most of Latin America has eliminated river blindness. The number of new cases of leprosy has declined in eight of the past nine years. In the past year eight countries eliminated lymphatic filariasis. The number of cases of sleeping sickness is at its lowest in 75 years, and eradication is now thought possible. In 2015, 1.5bn treatment doses were donated by drug firms, and almost a billion people received them—an increase of more than a third since 2012.

Critics of foreign aid often charge that it weakens the countries that receive it, by undermining their economies and governance. But support for tackling NTDs, and other health problems, has shown quite the opposite effect. It removes an obstacle that stops abjectly poor people bettering themselves. And, like efforts to control malaria, tuberculosis and HIV/AIDS, it improves public-health systems and disease surveillance. As countries become more organised they can often combine their programmes. The excellent results are persuading some recipient countries to chip in: a quarter of programmes on NTDs in the Democratic Republic of Congo, for example, are now locally funded, up from none in 2011. Aid given to set up the infrastructure needed to tackle polio in Nigeria meant that the country was better placed to fight Ebola when that disease emerged.

### To elimination and beyond

It is tempting to extrapolate, and predict that all 18 NTDs will be consigned to history. Progress might even speed up: new diagnostic tools and treatments are on their way. The Gates Foundation is paying for final trials of a triple-drug therapy for lymphatic filariasis that clears the parasite from infected people's bodies far more effectively than current treatments. When they are completed later this year, India might be able to get rid of the disease in just a couple of years, and other countries could quickly follow.

Mr Gates thinks that it should also be possible to get visceral leishmaniasis, a parasitic disease that destroys the internal organs, down to tiny numbers of new infections in Asia. (To public-health aficionados, "eliminating" a disease means making it rare, rather than completely eradicating it.) By 2030 he hopes to see just 170m people globally at risk of NTDs, down from 1.7bn now. For that to happen drug companies will need to remain strongly committed; that means making sure they receive "well-deserved" credit, he says.



Lymphatic filariasis, soon to be history

But what worries some, including the authors of the WHO's latest report on NTDs, published on April 19th at a summit in Geneva to evaluate progress and gather new donations, is the endgame. "Sometimes the last mile is the hardest," says Ken Gustavsen, who runs corporate responsibility for Merck. As efforts to control a disease are successful, the sense of urgency fades, making it hard to maintain the political momentum. Tackling some of the NTDs requires long-term commitment. Chagas will have to be tracked into the remote reaches of the Amazon basin; diminished concern about canine rabies is already weakening attempts to eradicate it in Latin America. A campaign in 1952-64 against yaws, a bacterial infection that attacks skin, bone and cartilage, provides an object lesson. As cases became fewer, funding and attention shifted away, and in the 1970s the disease rebounded.

There are fears that something similar could happen with guinea-worm disease. Its imminent demise has been declared prematurely several times in recent years. Last year's tally of 25 reported cases was slightly higher than the figure for 2015. Fortunately, it can be transmitted only if an infected person enters drinking water around the time when a worm is leaving the body, meaning the disease would be slow to bounce back, unlike, say, polio, which is passed on through fecal matter and could quickly return from near-extinction if eradication efforts were to slacken.

But wiping out guinea-worm disease, as the London declaration envisages, and controlling or eliminating the other NTDs, will take continued focus—and plenty more money. A big worry is whether the governments that fund much drug distribution, chief among them America's and Britain's, will continue to do so. This week the British government said it would double spending on NTDs over the next five years, to £360m (\$460m). But the depart-

ment responsible for aid was reluctant to provide a spokesman to discuss the programme. And a turn to insularity in many rich countries means foreign aid is increasingly criticised. British newspapers have become strikingly hostile towards it, arguing that most is squandered, and that even if it were not, the money is needed to cut poverty at home. The *Daily Mail*, one of the most spleenetic, frequently splashes stories of wasted aid on its front page (often blaming the European Union). It is campaigning for Britain's government to abandon a pledge, passed into law in 2015, to earmark 0.7% of GDP for foreign aid.

In America Donald Trump's administration has said it wants to slash the budget of the state department, the part of government responsible for most foreign-aid spending. Mr Gates, who recently met Mr Trump, remarks that it is unlikely Congress will allow drastic cuts. But even a modest trimming of American spending on NTDs would be worrisome, if it discouraged spending by other governments.

Private donors could fill part of the gap, but not all. Plenty find the cause appealing, says Ellen Agler of the END Fund, which co-ordinates philanthropy for NTDs with those of governments and international organisations: "The clear return on investment is so powerful, and the timeline is so short." Since the fund was set up in 2012 it has treated more than 140m people at risk in 26 countries, and raised more than \$75m from individuals, corporate foundations and philanthropic groups. Its donors bring more than their money, says Ms Agler: they strengthen oversight, and provide private-sector problem-solving skills—and sometimes local contacts and logistical support.

The effort to defeat NTDs produces plenty of heart-warming stories. In Tanzania Ms Mwingira talks about men with lymphatic filariasis who have received surgery to reduce the size of their genitals and can return to normal life, marry and have children. Kofi Nyarko, a former leprosy patient who lives in Ghana, says he would be dead without treatment. It came too late to save his hands from deformity; they are twisted and rigid. But he has been able to achieve his dream of becoming a special-needs teacher.

### Where charity begins

It is worth recalling the motivation for Merck's original decision, back in 1987, to donate ivermectin for river blindness, says Mr Gustavsen. There was no economic rationale: the firm's scientists simply felt it was the right thing to do. Having discovered the drug, and established that it worked against a disease that caused awful suffering, neglecting to use it would have been "incredibly demoralising", he says. That sense of moral purpose must not weaken if the global coalition against NTDs is finally to prevail. ■



### China's internet giants

## Three kingdoms, two empires

SHANGHAI

### China's internet giants battle at home and abroad

**T**HREE years ago, when China's big internet companies were dismissed by investors in Silicon Valley as marginal firms with a tendency to copy Western products. Not any more. Today they are monsters with increasingly hefty international ambitions.

Alibaba, China's biggest e-commerce group, handles more transactions each year than do eBay and Amazon combined. Jack Ma, its chairman, pledges to serve 2bn consumers around the world within 20 years. Tencent, which specialises in online games and social media, is now the world's tenth most valuable public firm, worth some \$275bn. Pony Ma (no relation), its chairman, wants China to "preside over the global tech revolution of the future". But as the two firms become global forces, the third member of China's "BAT" trio of internet giants, Baidu, an online-search firm that came to dominate the mainland market after Google left the country to avoid censorship, is lagging behind.

All three firms differ from their Western peers in important ways. First, Western companies usually prefer to focus on a few core areas, whereas Chinese internet firms typically try to do everything from cloud computing to digital payments. When this works, as with Tencent's wildly successful app, WeChat, the results can be impressive.

Second, with the exception of political censorship, the internet sector in China is

lightly regulated. Facebook, Apple and Google, in contrast, face increasing scrutiny. Chinese internet firms can achieve market domination of a sort that would attract close attention in other markets.

The third difference is that they can succeed on a rapid and massive scale because the state-dominated economy is so inefficient. Often there is not even a physical infrastructure to leapfrog—so-called third-tier cities, for example, often lack big retail centres. Nationwide there is one shopping mall per 1.2m people.

A huge home market has not stopped the trio from fighting bloody turf wars among each other. The outcome to this bat-

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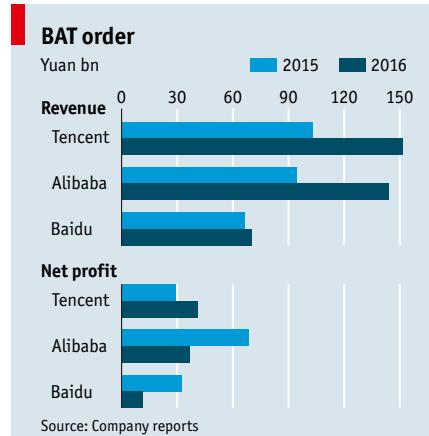
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[Economist.com/business-finance](http://Economist.com/business-finance)

tle is rapidly becoming clear. Tencent and Alibaba are surging ahead; a series of own goals has left Baidu far behind. The common jibe about Baidu among local experts is that it is becoming the Yahoo of China, a once-dominant search giant that sank owing to a lack of innovation and a series of management blunders.

Its revenue growth fell to 6.3% in 2016, down from 35% in 2015 and 54% in 2014. The firm gets some nine-tenths of its revenues from online ads, but this income is plunging as marketers redirect spending from search ads on Baidu to social-media networks like WeChat and mobile-commerce platforms run by Alibaba. Meanwhile, Baidu is burning cash trying to keep its various big bets on artificial intelligence (AI), online video, virtual and augmented-reality technologies, and "online to offline" (O2O) services going. One of China's most respected business consultants is pessimistic about its future: "There is very little chance they'll be relevant in five years."

Of the other two giants, Tencent is probably the most fearsome. It already has higher revenues and profits than Alibaba (see chart). Its value is set to climb as it ramps up advertising on WeChat (provided that does not provoke a backlash from users). Its main weapon against Alibaba is its stake in JD.com, the country's second-biggest e-commerce firm, led by Richard Liu, one of China's most aggressive and successful serial entrepreneurs.

JD.com has adopted an expensive "asset-heavy" business model akin to Amazon's in America. Thus far, its vast investments in warehouses, logistics and couriers have not come anywhere near toppling Alibaba. But last year the company saw its revenues rise to \$37.5bn, up from \$28bn the previous year. Its share of China's business-to-consumer market rose ➤



**Game of dragons**

Selected investments over \$1bn, since Jan 2016  
By groups led by major Chinese internet firms

Target company	Sector	Amount, \$bn
Intime	Retail	2.6
Didi Chuxing	Transport	4.5
Ele.com	Food delivery	1.2
Lazada	E-commerce	1.0
Lyft	Transport	1.0
iQiyi	Online video	1.5
Uber China	Transport	2.0
Flipkart	E-commerce	1.4
Tesla	Automobiles	1.8
China Music Corp	Online music	2.7*
Didi Chuxing	Transport	4.5
Supercell	Online gaming	8.6*
Meituan-Dianping	Ticket booking/ restaurant reviews	3.3
Lufax	Financial	1.2

Sources: ITJUZI; Crunchbase

\*Estimate

► to 25% in 2016, up from 18% at the end of 2014. If Mr Liu's investments in infrastructure start to pay off, much of Alibaba's future domestic growth could be at risk.

That threat may explain why Mr Ma is not content with Alibaba's overall 70% share of the local e-commerce market. In 2016 it spent \$1bn to win control of Lazada, South-East Asia's biggest e-commerce firm. In March Lazada launched a new service for Singaporeans directly to shop on Taobao, one of Alibaba's two domestic e-commerce platforms (the other is Tmall).

Mr Ma last year persuaded the G20 summit of leading countries to endorse his proposal for an "electronic world trade platform" (ewtp), to make it easier for small businesses to trade across borders. Last month Alibaba launched a "digital free-trade zone" as part of the initiative, in Malaysia. This public-private partnership, which involves simplifying both logistics and payments, will help small merchants.

Mr Ma's chief weapon for going global, however, is Ant Financial, which was spun out of Alibaba before the latter's \$25bn flotation in 2014 in New York. In China the unit offers services ranging from online banking to investment products; it even runs the mainland's first proper consumer credit-scoring agency, Sesame Credit, which uses big data to work out the credit-worthiness of punters. Ant already has more than 450m customers in China and is going overseas with gusto.

It has investments in local online-payments firms in Thailand, the Philippines, Singapore and South Korea. In America Ant is in a frenzied bidding and lobbying war with Euronet, an American rival, to buy MoneyGram International, a money-transfer firm. On April 17th Ant raised its initial offer for MoneyGram by over a third to \$1.2bn, topping Euronet's bid.

Tencent is also making bold acquisitions abroad. A consortium that it led spent \$8.6bn to acquire Finland's Supercell last year, a deal that turned Tencent into the world's biggest purveyor of online games. Together with Taiwan's Foxconn, a contract-manufacturing giant, the firm invested \$175m last year into Hike Messenger, an Indian messaging app akin to America's WhatsApp. It was also an early investor in America's Snapchat, another popular messaging app, whose parent company Snap went public in March.

One reason for these purchases is that Tencent's earlier efforts to promote WeChat abroad (including a splashy advertising campaign in Europe featuring Lionel Messi, a footballer) flopped. Established social networks such as Facebook and WhatsApp proved too entrenched to dislodge. They also did some copying of their own: once they adopted some of WeChat's innovations, Western consumers had little reason to switch to the Chinese network.

Such investments have been in Tencent's core areas, away from turf occupied by Alibaba and Baidu. Sometimes, the trio end up co-operating, if not by design. All three BAT firms are backers of Didi Chuxing, a ride-hailing firm with global pretensions of its own. But in other ways their domestic war is spilling into foreign markets.

India is one such battleground. This month, together with eBay and Microsoft, Tencent invested \$1.4bn into Flipkart, a leading Indian online retailer. Alibaba and Ant together are reported to have invested nearly \$900m in Paytm, India's top online-payments firm; in February, Paytm launched an e-commerce portal akin to Alibaba's Tmall to take on Flipkart and Amazon in India.

Elsewhere, Tencent unveiled a service last month that will allow firms in Europe to use WeChat to sell on the mainland. This will let them sell directly into China, avoiding red tape. Tencent also recently invested \$1.8bn in America's Tesla, a pioneer in electric and autonomous vehicles. That is a particular challenge to Baidu, which is betting its future on machine learning and AI.

Baidu's push abroad is mainly a way to get access to talent in these fields. The firm has just started its first recruiting campaign at top American universities, including Stanford University and the Massachusetts Institute of Technology. It has a respected AI laboratory in Silicon Valley, despite the recent departure of Andrew Ng, an AI expert. But Baidu does not have the same firepower as Alibaba and Tencent. It tried but has failed to conquer foreign markets such as Japan with its search engine. This week it opened up its self-driving technology to rivals, as Tesla did in 2014, but it has a long way to go before it makes an impact in autonomous driving.

Grandiose BAT statements about global aims should be taken with a pinch of salt. It

would be an error to neglect the profitable domestic market. Goldman Sachs, an investment bank, reckons that China's online retail market will more than double in size by 2020, to \$1.7trn. As Duncan Clark, author of a recent book on Alibaba, points out, whatever headlines Mr Ma and other internet bosses make with their overseas ventures, "it takes a lot to get away from the sheer gravity of China." But at home and abroad, one thing is clear: China's internet titans cannot be ignored. ■

**AkzoNobel****The varnished truth**

PARIS

**A Dutch firm's awkward efforts to resist a \$24bn American takeover**

THE future for AkzoNobel is dazzling—if you believe Ton Büchner, its chief executive. The boss of the Dutch paint-and-coatings firm reported a solid set of quarterly earnings on April 19th, then promised a new era of rapid growth and investments. Shareholders are to get lavish dividends this year. The firm will break up its ungainly conglomerate structure. A specialty-chemicals part of the business will be sold or listed separately next year.

Mr Büchner has no choice but to talk things up, if he is to justify rebuffing two recent takeover offers from a similar-sized American rival, PPG. Its latest bid, of €22.5bn (\$24bn) in cash and shares, represented a 40% premium over Akzo's market value before the first bid. An activist fund, Elliott Management, which has a 3% stake in Akzo, is pushing other shareholders to demand discussion of the bid. ►



He's not Dutch either

Akzo's promises were welcome. But like a newly opened tin of paint, they made some heads spin. After years of eking out smallish gains mostly through cost-cutting, the firm is suddenly to boom. Akzo had previously forecast that returns on sales would be 11% by 2018, already well over its average of less than 9% since 2008; now the CEO promises a rate of 14% by 2020. The firm, which had revenues of €14.2bn in 2016, has emerged from a difficult period. It bought Britain's Imperial Chemical Industries (ICI), the owner of Dulux paint and other products, a decade ago, absorbing it as Europe fell into a slump. The group's recovery since looks solid, but not of the sort to match Mr Büchner's bold targets. "It is a huge stretch, it looks really tough," is the verdict of Jeremy Redenius of Sanford C. Bernstein, a research firm.

PPG's chief executive, Michael McGarry, this week wrote an open letter explaining that merging the two strongest firms in many markets for paints and coatings makes sense, given consolidation in the wider chemicals sector. The European Commission cleared the merger of Dow Chemical and DuPont in March, to create a firm worth \$130bn. Though Akzo and PPG have some overlapping businesses, notably in Britain and France, antitrust risks should be manageable.

A third PPG offer is likely in the near future. That Mr Büchner is now talking about numbers is an improvement on his initial talk of "cultural" differences between firms and his complaints that Mr McGarry's approach, during the recent Dutch election, was tactless. But rising nationalism among Dutch politicians and voters could indeed help with fending off a takeover, says Ron Meyer of TIAS business school in Tilburg. A political outcry helped to scotch Kraft Heinz's recent pursuit of Unilever, a bigger part-Dutch conglomerate. A foreign bid for the privatised Dutch postal service was also repelled last year.

PPG has talked of doing a deal by June. So far relations have been cordial, but Akzo's managers dislike Elliott's aggression, such as its call for the sacking of the chairman of the supervisory board. Elliott this week dismissed the strategic review as "incomplete" and threatened to use the Dutch courts if Akzo turned down its request for a special shareholder meeting to oust the chairman. Akzo has some protection if things turn hostile, notably an independent foundation that appoints board directors, which may mean a legal battle.

If so, Mr Büchner might well appeal to Dutch nationalist sentiment. Yet doing so is risky. Akzo brags of a swashbuckling history, back to 1792, of growing with acquisitions, many abroad. Shunning foreigners now would look hypocritical and short-sighted. Mr Büchner seems painted into a corner: either he will be held to unrealistic promises, or he will give way to PPG. ■

## Donald Trump and tourism

# Keep out

NEW YORK

### New security measures menace inbound tourism to America

**T**RUMP Tower, in midtown Manhattan, has become a modern-day Mount Vernon. Tourists have long visited George Washington's homestead. Now they venture through Trump Tower's brass doors to ogle the decor—"it's so gold," said a German teenager standing near the lobby's waterfall on a recent afternoon—or buy souvenirs. The Choi family, visiting from South Korea, wandered the marble expanse with their new "Make America Great" hats (three for \$50).

The question for America's hoteliers and airlines is whether such visitors are just anomalies. A strong dollar is one reason for foreigners to avoid visiting America. Donald Trump may prove another, suggests a growing collection of data. Yet measuring the precise impact of Mr Trump's presidency on travel is difficult. In addition to the currency effect, many trips currently being taken to America were booked before his election. Marriott, a big hotel company, reported an overall increase, compared with a year earlier, in foreign bookings in America in February.

But Arne Sorenson, Marriott's boss, has voiced concern about a potential slump in tourism. In February, ForwardKeys, a travel-data firm, reported that in the week after Mr Trump first tried to ban travel from seven Muslim-majority countries, international bookings dropped by 6.5% against the same period in 2016. Hopper, a travel app, found that average daily searches for flights to America have declined in 99 countries since Mr Trump tried to issue his

travel ban, compared with the last weeks of Barack Obama's term. Russia is one of the few places where demand has risen (see chart). Tourism Economics, a forecaster, expects 2m fewer foreign visits to America this year, a 1% drop from 2016. Without Mr Trump it had expected a 3% jump.

Some sort of fall-off would be unsurprising. On March 6th Mr Trump issued a new, revised travel ban from six Muslim-majority countries. The measure is mired in litigation, but that does not give visitors from the affected countries much comfort. On March 17th Rex Tillerson, the secretary of state, gave broad instructions for consular officials to identify "populations warranting increased scrutiny" and adjust visa-processing accordingly. Such vetting would cover a much broader swathe of the globe than the ban. Then officials barred on-board laptops for travellers from some airports in the Middle East and north Africa. (Britain issued a similar prohibition.)

The laptop ban has simply prompted some business travellers who work in the Middle East to book flights with a layover in Europe so that they can use laptops on-board, says Greeley Koch of the Association of Corporate Travel Executives. But closer scrutiny of visa applications will probably lead to delays and fewer visas. Tourists who oppose Mr Trump's policies may go elsewhere. This week Emirates, an airline based in Dubai, said it would reduce flights to five American cities from May, owing to lower demand.

The industry has been here before. International tourism in America slumped by around 3% each year from 2000 to 2006. Most analysts blame not only the attacks of 2001 but stricter visa rules and anti-American sentiment abroad. Countries that had the dimmest view of America, according to surveys during that period, tended to see drops in travellers there, says Adam Sacks of Tourism Economics. "We are facing a potential rerun," he says. Dara Khosrowshahi, head of Expedia, an online booking site, has noted that American hotels and airlines are already cutting prices in an attempt to lure travellers.

America's main tourism lobby group is now urging Mr Trump, who presumably has some sympathy with other hoteliers, to emphasise that the country continues to welcome foreign visitors despite all the new security measures. The tourism agency for New York city, NYC & Company, is trying to counteract negative rhetoric from Washington, DC with advertisements in Britain, Germany, Mexico and Spain.

In the capital itself, any loss of visitors from abroad may be offset by a surge in angry American ones. After dates were finalised for a women's march to protest Mr Trump's inauguration, hotel bookings spiked. Elliott Ferguson, head of the city's tourism group, expects a similar surge for this year's Pride Parade, on June 10th. ■

### Search and stop

Daily average search volume for flights to US  
Change from before Donald Trump's inauguration\*  
to after news of the first travel ban†, %





### Recreational vehicles

## On the road

NEW YORK

### An all-American product finds new takers

**E**ARLY spring is the main selling season for recreational vehicles (rvs) and the phone on Tom Troiano's desk has been ringing incessantly. The owner of Continental RV, a dealership in Farmingdale, a village on Long Island, Mr Troiano is on track to sell more rvs this year than in any other since the early 2000s. Buoyed by cheap financing, rising wages and inexpensive gas, travellers are once again splurging on big-ticket camper vans.

RVs are a quintessentially American invention: more than two-thirds are made in the United States. Nationally, sales surged to 430,000 units last year, a 40-year high. At the inexpensive end they sell for as little as \$5,000 for a caravan; deluxe versions cost up to \$1m and are typically equipped with a bedroom, kitchen and bathroom that are bigger than in many European flats. The share prices of Thor Industries, the biggest RV-manufacturer in America, and Winnebago, the third-largest, have risen by 43% and 17%, respectively, in the past year.

That is a big change. During the 2008-09 recession, notes Mr Troiano, RV dealerships everywhere closed down, leaving his shop among the very few left serving the New York metropolitan area. The current rebound is mostly owing to the economy's recovery, but it also springs from the fact that new types of customer are embracing the lifestyle.

A decade ago the average age of an RV-owner was 49, and over 90% were white, says Kevin Broom of the Recre-

tional Vehicle Industry Association (RVIA), an industry body. That didn't bode well for the future. But stereotypes are being dented. Anecdotal reports suggest that ethnic minorities now make up around a sixth of all new customers, says Mr Broom. The fastest-growing customer demographic is 35- to 44-year-olds. Another boost comes from affluent immigrants, who are keen to experience long, self-planned road trips in America. Mr Troiano's most recent big sale was to a rich Asian family.

The industry hopes that its poor record with foreign sales—last year less than 1% of rvs produced domestically were shipped to foreign markets (excluding Canada)—may improve, too. China's government, for example, has pledged to build 2,000 campgrounds by 2020, up from an estimated 300 today, in a bid to promote domestic tourism, particularly to remote rural regions. Chinese firms such as Yutong Bus make rvs, but not of the quality that many Chinese want. The country imported 1,000 vehicles last year, over half of them American.

RV manufacturers are also marketing the notion that their motor homes can be commercial as well as leisure vehicles. They can allow travelling salesmen, businessmen and university-admissions officers to save on food and hotel costs, for example, when they hit the road trying to recruit prospective new clients and students. The office, as well as home, can be wherever you park it.

### Fast food in Japan

## Feeling sandwiched

TOKYO

### Burger and buckwheat-noodle joints alike are searching for extra sizzle

**S**HIMMERING spreads of raw fish sashimi, succulent beef from massaged cows, and, for a decade, the capital with the most Michelin-starred restaurants: few nations rival Japan for fine dining. Its fast-food scene has also thrived for centuries. From the 1700s bowls of cold soba noodles, made from buckwheat, were cycled to wealthy clients on towering trays. Sushi began to glide past customers in 1958, when the first conveyor belt was installed. In 1970 its first homegrown hamburger chain opened, a year before McDonald's entered the market.

Fast-food chains continued to be a rare bright spot for Japan during its two-decade-long economic slump. Since 2008 the size of the market has increased from \$35bn to \$45bn (those figures include convenience stores, or *konbini*); that of restaurants has declined every year in that period. But fast food is now being squeezed: by a combination of higher wages and still-tepid consumption, and by foreign rivals winning over more Japanese stomachs.

Tomoaki Ikeda, president of Yudetaro, a soba chain in the greater Tokyo metropolitan area, says that after a decade of budget dining, Japanese expect everyday food to be cheap. Once, plumping for their cheapest bowl of noodles, priced at ¥320 (\$3), was considered a little shameful, he says; now it is their best-selling dish. It is having to pay staff more: a wage increase last year ►



Three-star service

► of 0.5% was the biggest since 2010. Yet a survey by Shinsei Bank, a lender, suggests salarymen still spent on average only ¥587 on a workday lunch last year. Yudetaro's healthiest options, which appeal to its mostly middle-aged male customers, are usually also its cheapest (like most fast-food joints in Japan, Yudetaro lists the kilocalorie count for each dish).

Many in the industry fret that a hike in Japan's consumption, or value-added tax, planned for 2019, which may not apply to food sold at *konbini*, will make chains even less attractive as they try to raise prices. *Konbini* offer everything from cheap egg-salad sandwiches to rice lunch-boxes that can be reheated and eaten in-store. According to Euromonitor, a market-research firm, 7-Eleven, one of Japan's three biggest *konbini*, accounts for over a third of the fast-food market alone by value.

To lure back customers, chains are homing in on service. Yudetaro now fries its *tempura* to order at its standing stalls, often in train stations; at outlets, it has replaced bar counters with tables and seats. MOS Burger, a local chain that opened in the 1970s, has sent staff new quality guidelines, from how to slice tomatoes to the temperature of the water in which the lettuce is dipped before serving (4°C).

MOS Burger's winning recipe has been to offer healthy, localised versions of the American hamburger: it serves, for example, thick slices of tomato and heaps of lettuce in its burgers. Since 1987 it has sold a rice-burger variant that swaps out bread halves for seared rice cakes, and since 2004 a lettuce-burger (lettuce-for-buns). It also lets franchisees around the country pitch ideas for new burgers, adding a couple a year to its nationwide menu from the few hundred suggested (in 2016, one was a lotus-root-and-chicken burger).

Recently foreign rivals have been beefing up their offerings too, including MOS's arch-rival, *Makku*—McDonald's Japan. It had been buffeted by food-safety scandals, but had its first sales increase in 2015 after six years of decline. Takao Shigemori, a food analyst in Tokyo, says the American chain—now with 3,000 outlets—has been revamping its menu to appeal to Japanese customers. This month it introduced three new beef burgers, on Asian-style steamed buns, one with teriyaki sauce.

Still, foreign firms remain laggards in other ways, says Mr Shigemori. Since 1997 MOS Burger has displayed on boards in each outlet the names of the farmers who grew the lettuce or tomatoes being served in the store that day. At Yudetaro outlets, customers can watch the *soba* noodles being cut and boiled. Unlike at other chains, the firm does not do deliveries as it did in its early days, because it wants its noodles always to be eaten at their very freshest. Its hope is that this way, the company will keep delivering. ■



### Internet regulation

## Reload

### America is gearing up for another debate over network neutrality

THE details around network neutrality, the principle that internet-service providers (ISPs) must treat all sorts of web traffic equally, can be mind-numbingly abstruse. But they fuel passion, nonetheless. After Tom Wheeler, a former chairman of America's Federal Communications Commission (FCC), proposed unpopular net-neutrality rules in late 2014, for instance, protesters blocked his driveway, forcing him to walk to work. Their action was meant to illustrate the threat of big ISPs erecting toll-booths and other chokepoints that would relegate less well-off consumers to digital slow lanes.

Now it is the turn of Ajit Pai (pictured), Mr Wheeler's successor, to stir the hornets' nest. In the coming days Mr Pai is expected to unveil a proposal for new rules on net neutrality. His plan is anticipated to be a testament both to his deregulatory agenda and to the big ISPs' lobbying power. It would essentially take the FCC out of the equation when it comes to policing the smooth running of the internet.

Because of the protests in 2014 and because of a court decision that year suggesting that the FCC needed the jurisdiction to be able to mandate net-neutrality rules, Mr Wheeler reclassified internet access as a "telecommunications service" to be under Title II of the Telecommunications Act, meaning that ISPs are regulated as utilities. It is this change that Mr Pai has vowed to undo: he considers the FCC's new dominion over ISPs as regulatory overkill.

Mr Pai does support general rules to

protect net neutrality. Like other advocates of the principle, he credits these for the internet's innovativeness. But he believes that light-touch regulation is enough. Once ISPs are no longer classed as telecommunications services he wants them to commit to net neutrality in their terms of service. This commitment would (in theory) be enforced by a different agency, the Federal Trade Commission (FTC), which has the authority to go after firms if they fail to live up to promises they make to customers.

Yet the ISPs' commitments would, at bottom, be voluntary, as critics such as Chris Lewis of Public Knowledge, an advocacy group, note. ISPs could refuse to make promises on net neutrality, or abandon them down the line. If they did break promises, it is unclear how vigorously the FTC would go after them. It has less expertise in network engineering, for example, so is much less well equipped to enforce the rules. And Mr Pai may risk going too far even for his own comfort on net neutrality. If he reclassifies internet access, he finds himself in the same situation Mr Wheeler was in: the FCC then has limited authority to intervene should things go wrong.

The logical answer to this legal conundrum would be for Congress to add a statute on net neutrality to the Telecommunications Act, which predates the rise of the internet. That is unlikely, given other legislative priorities such as health care and corporate tax, but in a less partisan universe, Republicans and Democrats would have little problem finding common ground on the subject, says Kevin Werbach of Wharton, a business school at the University of Pennsylvania.

Such a compromise would also be in tune with how the debate about net neutrality has evolved. Although they oppose internet access being regulated under Title II, most ISPs, including big ones such as AT&T and Verizon, have made their peace with net neutrality. The current rules have had no discernible negative impact on the companies, notes Mr Werbach. Investment in broadband networks may have fallen, as critics of the strict net-neutrality rules predicted, but such swings are common in the telecoms industry and there is no conclusive evidence that net neutrality is to blame for the fall.

Will Mr Pai's plans trigger widespread protests similar to those in 2014? Mr Lewis of Public Knowledge expects that resistance will be stronger still, but others are not so sure. Although big internet firms such as Google, Netflix, Amazon and others have come out against his expected proposals, their opposition seems less determined than it was three years ago. Netflix, one of the fiercest defenders of net neutrality, says it is now big enough to stand up for itself. Activists, for their part, may already be weary from fighting Mr Trump's government on other fronts. ■

# Schumpeter | Life in the public eye

**Why America should worry about the shrinking number of listed firms**



LAST month Schumpeter attended an event at the New York Stock Exchange held in honour of Brian Chesky, the co-founder of Airbnb, a room-sharing website that private investors value at \$31bn. Glittering tables were laid out not far from where George Washington was inaugurated in 1789. The well-heeled members of the Economic Club of New York watched as Thomas Farley, the NYSE's president, hailed Airbnb as an exemplar of American enterprise. Mr Chesky recounted his journey from sleeping on couches in San Francisco to being a billionaire. His mum, a former social worker, looked on. Only one thing was missing. When Mr Chesky was asked if he would list Airbnb on the NYSE, he hesitated. He said there was no pressing need.

Airbnb is not alone. A big trend in American business is the collapse in the number of listed companies. There were 7,322 in 1996; today there are 3,671. It is important not to confuse this with a shrinking of the stockmarket: the value of listed firms has risen from 105% of GDP in 1996 to 136% now. But a smaller number of older, bigger firms dominate bourses. The average listed firm has a lifespan of 18 years, up from 12 years two decades ago, and is worth four times more. The number of companies doing initial public offerings (IPOS), meanwhile, has fallen from 300 a year on average in the two decades to 2000 to about 100 a year since. Many highly-valued startups, including Lyft, a ride-sharing firm, and Pinterest, a photo-sharing site, stay private for longer.

A new paper by Michael Mauboussin, who works for Credit Suisse, a bank, and teaches at Columbia Business School in New York, explains why this matters. Consider the first reason behind the slump in the number of listed firms: the IPO drought. Although the total population of companies in America has been steady, their propensity to list their shares has roughly halved. Fear of red tape is one reason (although the decline predates the Sarbanes-Oxley Act of 2002, which tightened disclosure rules and which bosses hate). Many founders also believe that private markets are better at allowing them a long-term perspective.

As for companies' hunger for capital, many need less to spend on assets such as plant and equipment as the economy becomes more technology-intensive. Private markets, meanwhile, have become more sophisticated at supplying the funds they do require. Many big, mainstream fund managers, such as Fidelity and

T. Rowe Price, are investing in unicorns, meaning private firms that are worth over \$1bn, of which there are now roughly 100.

Airbnb exemplifies the trend. It is almost a decade old but unlisted. Amazon was three years old in 1997 when it floated. Airbnb has raised billions from private markets and has 26 external investors. It will make gross operating profits of \$450m this year, according to a new book, "The Airbnb Story" by Leigh Gallagher, so doesn't need piles of new cash. At its fund-raising round last autumn, employees were able to sell around \$200m of shares, which does away with another reason for firms to do an IPO.

Exits from the stockmarket by established firms—the second factor behind listed firms' shrinking ranks—are growing in number. About a third of departures are involuntary, as companies get too small to qualify for public markets or go bust. The rest are due to takeovers. Some firms get bought by private-equity funds but most get taken over by other corporations, usually listed ones. Decades of lax antitrust enforcement mean that most industries have grown more concentrated. Bosses and consultants often argue that takeovers are evidence that capitalism has become more competitive. In fact it is evidence of the opposite: that more of the economy is controlled by large firms.

Perhaps the number of listed firms will stop falling. This year several trendy companies have floated, including Snap, a social-media firm, and Canada Goose, a maker of expensive winter coats beloved of Manhattanites. If the euphoria over tech firms fades somewhat it may become harder for unicorns to raise money privately. Continued decline in the number of listed firms would be bad news. It would be a symptom of the oligopolisation of the economy, which will harm growth in the long run.

Fewer listed firms also undermines the notion of shareholder democracy. Mr Mauboussin notes that 40 years ago a pension fund could get full exposure to the economy by owning the S&P 500 index and betting on a venture-capital fund to capture returns from startups. Now a fund needs to make lots of investments in private firms and in opaque vehicles that generate fees for bankers and advisers. Ordinary Americans without connections are meanwhile unable directly to own shares in new companies that are active in the fastest-growing parts of the economy.

Unicorns don't have to meet public-company standards on accounting and disclosure, so it is expensive to monitor them properly. Some money managers don't bother. There has already been one blow-up among the unicorns, Theranos, a blood-testing company whose products didn't work. And without the close scrutiny that comes with being public, other firms appear trapped in a permanent adolescence of erratic management. Uber, a transport firm that is losing money and whose boss, Travis Kalanick, is scandal-prone, is a case in point.

## Time to grow up

The fact that fewer companies control the economy is a question for antitrust regulators. Whether young firms list their shares is entirely up to their owners. Some tech tycoons including Elon Musk, the boss of Tesla, an electric-car company and Jeff Bezos of Amazon have mastered the art of running public firms on long-term horizons. Mr Chesky says that Mr Bezos has pointed out to him that a company must be "robust" to survive once it is public. Achieving that might be seen as a chore. But it can also be an incentive to improve performance and corporate culture. The hope is that Mr Chesky is up to the task, and that the next time he visits the NYSE, he'll be there to ring the bell. ■



### Corporate-bond markets

## Click to trade

### Corporate-bond markets are being revamped by digitisation

**J**UST a few decades ago, an asset manager wanting to trade shares, bonds or derivatives almost always had to call up the trading desk at a big investment bank. Today shares and many derivatives can be traded with a few simple clicks (or even in fully automated fashion, using algorithms). But buying and selling bonds, especially corporate bonds, is still an old-fashioned business. Over four-fifths of trading in American corporate bonds still takes place with a dealer, usually over the phone. Yet digitisation is at last beginning to change the structure of bond markets: witness the announcement on April 11th by Tradeweb, an electronic-trading platform, that it is to offer “all-to-all” trading in European corporate bonds, ie, a system in which any market participant can trade with any other.

Electronic bond-trading is not in itself new. Tradeweb's platform, initially limited to trading of American Treasuries, was unveiled in 1998. Around half of Treasuries, and nearly 60% of European government bonds, are now traded electronically, reckons Greenwich Associates, a consultancy. But for corporate bonds, progress has been slower: only 25% of global trading volume in investment-grade bonds, and merely 13% of that in high-yield ones, is electronic. The market is huge—with over \$50trn out-

standing globally, and over \$1.5trn-worth issued last year in America alone. But corporate bonds vary in maturity, issue date and in where they stand in the issuer's hierarchy of debt. Unlike, say, most sovereign debt, it is traded only rarely; 90% of all corporate bonds change hands fewer than five times a year. The shares of a company, by contrast, usually come in at most two types (common and preferred), and are traded frequently on centralised exchanges.

The traditional way of matching buyers and sellers has been for dealers to take on the risk. They name a price, buy bonds and hold them in their inventory until a buyer emerges. This explains why personal relationships still matter so much in the bond market. The model is deeply entrenched: even most electronic platforms have adopted it, in the form of “request for quote” (RFQ) systems, where dealers have the exclusive right to quote prices. But when dealers are unwilling to hold onto bonds, as many have been since the financial crisis, because of tighter capital requirements, then such systems offer no more help than phone trading. Some bonds trade so rarely that a sell- or buy-query may elicit no responses at all.

One new source of liquidity has come from exchange-traded funds (ETFs). Shares in bond ETFs, like those composed of equi-

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ties, track indices, allowing investors access to a basket of bonds. But the impact for bonds is more significant, because bonds are otherwise traded so rarely. Indeed, bond ETFs are more liquid than the assets the funds own. But ETFs still need dealers: the institutional investors that create and redeem ETF shares have so far had to rely either on voice-trading or RFQ systems.

All-to-all trading, by contrast, has the potential to change bond-market dynamics more fundamentally. Pioneered in 2012 by MarketAxess, the second-largest bond-trading platform after Bloomberg, it allows any user of a network to trade with another directly, whether asset manager or dealer. Asset managers, who provide 39% of the liquidity in MarketAxess's all-to-all system, are thus in direct competition with dealers (who provide 29%). As Richard Schiffman of MarketAxess puts it, all-to-all makes it possible for asset managers to move from being price-takers (having to accept dealer quotes) towards being price-makers (setting their own prices).

### We're all dealers now

Momentum is gathering as all-to-all catches on with other platforms, too. Smaller ones, such as Liquidnet and Trumid, already offer it. But Tradeweb's announcement this month carries particular weight because it is a sizeable force—the third-largest in the market, thus leaving only Bloomberg, the market leader, with no all-to-all offering as yet. At MarketAxess, the new system already represents 16% of trading volume in American investment-grade corporate bonds, and fully 34% of that in American high-yield bonds.

Some argue that even all-to-all systems, let alone RFQ, do not tackle one big difficul- ►

ty: that buyers and sellers are not always present at the same time. Algomi, a bond-market data firm, seeks to match buyers and sellers across time. Its interface for dealers allows traders easily to keep track of inquiries into a particular bond; it also suggests similar bonds if that one is not available. For investors, the company provides data on trading activity in particular bonds. And for trades where a dealer cannot match buyers and sellers, it has, in partnership with Euronext, an exchange provider, set up a trading venue for corporate bonds that will link up dealers in its network. So dealers should be able to gradu-

ate from risk-taking to matchmaking.

Another factor that will change the structure of the bond market is regulation. From January 2018 MiFID 2, a wide-ranging European financial-market regulation, will require market participants to report the prices and approximate volumes of all completed bond transactions—an unprecedented level of detail (earlier American rules required more limited price disclosure). Such transparency is expected to weaken dealers' market power. The sheer complexity of this undertaking will also push more trading onto electronic platforms, which are busy embedding auto-

matic reporting.

Amid all this change are tantalising hints of another potentially transformative trend: full automation. Tradeweb has already introduced a number of protocols that allow the preprogramming of a series of trades: eg, selling one bond and buying another with the proceeds; or arranging currency hedging. MarketAxess has even seen expressions of interest from hedge funds wishing to trade bonds using algorithms. Such moves have brought a lot more liquidity (and volatility) to other markets. In the sleepier world of corporate bonds, the impact could be far-reaching. ■

## Buttonwood | Voting with their wallets

### Investors don't always like democracy

**T**HE VICTORY of Recep Tayyip Erdogan, Turkey's president, in a referendum on April 16th is seen by many observers as a worrying step on the road to autocracy. The vote handed Mr Erdogan far-reaching new powers. But the Turkish lira, government bonds and stockmarket all gained ground as the results came in.

It was a reminder that the relationship between markets and democracy is not rock-solid. Like an errant husband, investors may proclaim their fidelity to democracy but are not averse to seeing someone else on the side.

In Turkey investors may have feared turmoil if Mr Erdogan's proposal had been defeated. It is an old, but fairly reliable, rule that investors dislike uncertainty. And the early years of Mr Erdogan's tenure, when he was seen as a liberalising democrat, saw rapid economic growth; his transformation into an emerging autocrat has not put investors off. Since he took office, the Istanbul market has gained 760% (see chart).

An authoritarian government can provide certainty, at least in the short term. In 1922, when Mussolini took power in Italy, its equity market returned 29% and its government bonds 18%, according to Mike Staunton of the London Business School. Hitler's accession in 1933 saw German shares return 14% and bonds 15%. True, Wall Street did even better that year under Franklin Roosevelt but still—even then, Hitler was clearly a dangerous extremist.

The world's most developed economies tend to be democracies, and to be more open to trade and foreign investment. But as China has demonstrated, it is certainly possible to generate rapid economic growth without a democratic system. China's stockmarket (along with Hong Kong's) has been among the best-performing bourses this millennium.

Go back in time 100 years and investors would have been pretty suspicious of democratic governments. The pre-1914 world was dominated by governments with restricted voter franchises, in which currencies were tied to the gold standard, in part to protect the creditor classes from the ravages of inflation. The arrival of mass democracy after 1918 was followed by a boom in the 1920s but then by the Depression, stockmarket collapse and abandonment of the gold standard.

Democracies can enact policies that are not market-friendly; the interests of ordinary voters and international investors are not always aligned. If voters support trade tariffs, nationalisation or higher taxes on firms and top earners, then both stockmarkets and currencies are likely to suffer.

The great bull market of the 1980s and 1990s, on the other hand, coincided with political moves to reduce regulations, lower taxes and let capital flow freely across borders. After the fall of the Berlin Wall, many former Communist countries privatised state-owned companies and opened domestic stockmarkets. In many countries, investors could be relatively relaxed about

which party took office; economic reforms were pushed through by Bill Clinton, Gerhard Schröder and Tony Blair, all politicians from the centre-left.

But the background has changed again. There are remarkable similarities between the election in America and the referendums in Britain and Turkey. In all three, the electorate was bitterly divided and the margin of victory was narrow (Donald Trump lost the popular vote but won the electoral college). In all three, the victorious side drew its support from rural areas and small towns, and was opposed by voters in the big cities. And in all three cases, it has ignored the narrowness of the majority and has argued it has a mandate for radical policy change.

Democracies work best when there is a modicum of consensus and voters are willing to accept defeat for their own side as legitimate. But that is harder when the ideological divisions are sharp and electoral systems produce "winner takes all" results. In France, for example, voters may yet be faced with a choice in the second round between a candidate from the extreme right and one from the extreme left.

This is likely to result in more radical political changes, of the type that markets do find unsettling. The general drift is towards more authoritarian, more nationalistic policies that appeal to voters whose living standards have stagnated. That process can create a chain reaction; nationalist policies in one country can provoke an adverse reaction in its neighbours and trading partners. Investors may believe that some of these authoritarian leaders will deliver policies they like in the short run—tax cuts, for example. But in the long run, this is a development that ought to concern them greatly.

### Investors' delight

Borsa Istanbul 100 index  
Mar 14th 2003=100



## Sugar in the EU

# A sweet deal

The EU is liberalising its sugar regime, but its beet producers retain the edge

**I**N A rickety warehouse on the banks of London's Thames sit mountains of caramel-coloured raw cane-sugar. For centuries the sweet stuff has come across the seas to Tate & Lyle Sugars' dockside factory, to be refined into the white stuff. Cane accounts for four-fifths of global sugar production, but only one-fifth of Europe's. Most of the continent's sugar is made from beet, thanks to a technique developed in the Napoleonic wars, when an English blockade hit French cane-sugar imports.

No surprise, then, that the sugar-beet industry has been well guarded by Europe's Common Agricultural Policy. But in recent years the EU has reformed its system of quotas and subsidies to lower food prices and enhance its farmers' competitiveness; production quotas for milk were dismantled in 2015, for example. Now it is sugar's turn. From October this year, the EU will abolish its minimum price and production quota for beet. Its complex restrictions on sugar imports will remain, however, as will its income support for farmers.

The beet sector has already been restructured in anticipation. EU compensation schemes have facilitated the closure of factories and a decline in the number of beet growers propped up by state support. Thanks to improved seeding technology, beet yields have been rising, says Kona Haque from ED&F Man, a commodities-trading house. This is particularly true of the "beet belt", which runs through parts of Britain, France and Germany. Ms Haque expects production to rise by over 17% this year, barring unfavourable weather.

The abolition of support for beet also means that the EU may well become a net exporter of sugar for the first time in over ten years. (Once processed, sugar from beet is indistinguishable from white cane-sugar.) A cap on exports was imposed in 2005, when the World Trade Organisation ruled in favour of a complaint from Brazil, Australia and Thailand that EU support gave its exports an unfair advantage. Refined white-sugar exports could nearly double to 2.6m tonnes a year once support is removed, says Claudiu Covrig from S&P Global Platts, a provider of commodity-market information. But they are unlikely to return soon to the peak of 7m tonnes seen before the WTO ruling, since that would require big investment in export infrastructure. European exporters will face more competition, too: former customers in places such as the Middle East and



## Can cane be beet?

northern Africa set up their own cane-sugar refineries when EU exports dried up.

How much production and exports increase will depend on world prices. As the beet industry restructured, the EU sugar price fell from more than €700 (\$742) a tonne in 2013 to around €500 in early 2017, close to the world sugar price. As the sector becomes less protected, it seems likely that Europe's prices will more closely track the volatile world sugar price. That could affect farmers' decisions to grow beet. Sharp price falls would deter them from sowing beet altogether.

The deregulation does not mean that cane and beet are on an even footing in Europe, says Gerald Mason at Tate & Lyle Sugars. Cane continues to be hamstrung by import restrictions. A system of tariffs and quotas makes trade with the most efficient low-cost producers, such as Brazil and Mexico, prohibitively expensive.

African, Caribbean and Pacific cane producers will continue to receive preferential access to the European market. But many are inefficient, high-cost producers and are uncompetitive now that European sugar prices have fallen. The solution is for them to diversify. Some countries will cope better than others. Mauritius and Belize, for example, are using cane to produce speciality sugars, ethanol and electricity. African producers, such as Zambia and Malawi, could export to regional markets. But a recent report for the European Commission found that some Caribbean producers such as Guyana and Jamaica have diversified little, even though exports to Europe are expected to fall drastically.

Nine EU members have cane refineries, which will find their margins squeezed as white-sugar prices fall but imported raw-sugar costs stay high. Tate & Lyle Sugars ran a €25m loss in the year to September 2015, for which it blames import restrictions.

This is why the company came out in favour of a British departure from the EU: Mr Mason views Brexit as a "golden opportunity" to establish rules that treat cane and beet as equals in the British market. Beet producers have a different notion of fairness: for them, a level playing-field is one that takes into account the state support other producers receive. Precisely how the British government will keep both sides sweet is anyone's guess. ■

## American banks

# Happy returns

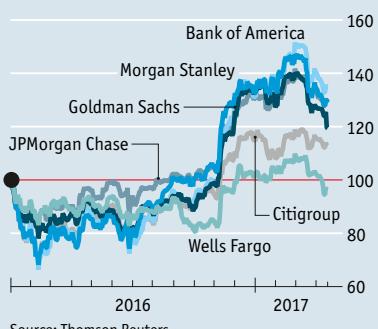
After an encouraging first quarter, questions over regulation remain

**W**HAT a difference a year makes. When America's big banks reported first-quarter earnings for 2016, the mood was glum. The Federal Reserve was proving tardier than hoped in raising interest rates, which held down lending margins. Jitters about the world economy meant rotten results for investment-banking units, in what is usually their best season of the year. Regulators added to the misery: last April the Fed rejected the "living wills"—plans for liquidating lenders that get into trouble—of five of the six largest banks.

This spring bankers are happier. Business perked up last year after that dismal start. Donald Trump's election in November, accompanied by promises to ginger up the American economy, cut corporate taxes and roll back regulation of finance, gave banks' shares a lift (see chart on next page). The Fed raised rates in December and again in March and is likely to keep increas- ►

**Streetwise**

United States, banks' share prices  
January 1st 2016=100



Source: Thomson Reuters

ing them. And 2017's first-quarter results have, mostly, seen an improvement—though the cheer was not evenly shared.

"Wall Street activities have performed better than Main Street ones," says Mike Mayo, an independent bank analyst. Revenues from capital-market businesses at the five biggest Wall Street firms, Mr Mayo calculates, rose by an average of one-fifth in the first quarter of the year, compared with a year earlier.

Underwriting and fixed-income trading were buoyant; equity trading and advice were flattish. Morgan Stanley, the last big bank to report, was arguably the star turn. On April 19th it said its fixed-income revenues had almost doubled, to \$1.7bn, apparently vindicating a thorough overhaul of the division early last year. The firm's net income rose by 70%, to \$1.9bn.

The previous day Goldman Sachs had disappointed analysts, although its net income was twice as high as a year before. Its fixed-income, currency and commodities revenues were flat, also at \$1.7bn. It also lagged behind the field in equities. Volatility in the foreign-exchange, crude-oil and equity markets was subdued: hedge funds (on which Goldman's trading business is more reliant than its rivals) were consequently less active. Even so, admitted Goldman's Martin Chavez, "we didn't navigate the market well".

Business on Main Street was more sluggish. Bank loans grew in the first quarter by just 0.7% at an annualised rate, according to the Fed, the slowest for almost six years. Commercial and industrial lending shrank for the first time since late 2010. Residential-mortgage lending also declined. But widening interest margins helped some banks, as loan rates went up faster than funding costs: Bank of America's spread rose by 18 basis points from the previous quarter and JPMorgan Chase's by ten.

In such a quarter Wells Fargo, the least dependent of the big six on investment banking, was perhaps the least likely to shine. Its net income, at \$5.5bn, was virtually unchanged from a year before and a shade up from the fourth quarter. A quar-

**World Economic Outlook**

# Hope springs

**The IMF believes that economic growth is picking up. Sound familiar?**

**A**PRIl is the cruellest month, breeding lilacs out of the dead land, and, in Washington, chirpy forecasts from the IMF that often prove a bit too chirpy. On April 18th the fund released its semi-annual World Economic Outlook (WEO), raising its forecast for global growth in 2017 to 3.5%.

Growth forecasts for the emerging world have not changed. The IMF's global optimism is based instead on hopes of increased growth in the rich world. The fund takes a rosy view of the American economy, citing both high levels of consumer confidence and Donald Trump's plans for more government spending. In Britain the IMF now reckons GDP will grow by 2.0% in 2017, up from earlier estimates of 1.5% (issued in January) and 1.1% (last October). The IMF has also raised its forecasts for Japan and the euro area.

Snipers point out that IMF forecasts have been far from perfect. Some glitches are excusable. In the spring of 1990, it predicted that Kuwait's economy would grow by 0.8% that year. It actually fell by 26%. The IMF's model did not allow for an Iraqi invasion. But other errors are less easily explained: between 1990 and 2007, the IMF's spring forecasts underestimated global growth in 13 of the 18 years, in large part because it failed to foresee the spectacular rise of China.

Since the financial crisis, however, the IMF has had to revise down its forecasts over time every year since 2010 (see chart). The fund's spring forecasts for the coming year have turned out to be over-

optimistic in the past three years.

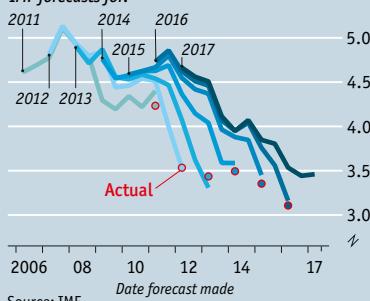
Christine Lagarde, the IMF's boss, recently conceded that economic growth in the past six years has been "disappointing", but held firm in her belief that the world economy was turning. Hence the positive revision to its global GDP forecast—albeit by just a tenth of a percentage point.

The global economy may still falter for a number of reasons. Ms Lagarde worries the rich world will suffer "self-inflicted wounds" from poor policy choices, notably on trade. Political uncertainty abounds. Just hours before the IMF released the WEO came the surprising news of an imminent election in Britain. The known unknowns hardly help, either. Mr Trump's fiscal policies, for example, are far from firm plans—Maurice Obstfeld, the IMF's chief economist, calls them "a work in progress".

**Not so great expectations**

World GDP, % increase on a year earlier

IMF forecasts for:



Source: IMF

terly increase in commercial lending was outweighed by a decline in consumer loans, mainly mortgages.

But Wells has other worries. It is still recovering from last September's revelation that it had opened more than 2m ghost accounts. It hopes that a scathing report this month by outside consultants, the dismissal of several executives and the clawing back from them of \$180m in pay and shares will help it to recover customers' trust. It has some way to go: the number of current (checking) accounts opened in March was up by 7% from February, but 35% lower than a year before. Institutional Shareholder Services, a firm which advises investors, has recommended voting to replace most of Wells's board at the annual meeting on April 25th.

Wells's woes notwithstanding, banks ought to be able to look ahead in good

heart. Rates are likely to rise further, America's economy is in good shape and Wall Street firms stand to gain as Europe picks up too. But a cheerful year is by no means assured. Mr Trump's tax-cutting plans are not yet formed and the future of bank regulation is still unclear. Hence the stalling, in recent weeks, of the rally in banks' shares.

Bankers have argued that it is high time red tape was cut: lending, they say, is being held back. Mr Trump is due to appoint several regulators who may lift their burden. But his chief economic adviser, Gary Cohn, formerly at Goldman Sachs, has mused vaguely about a "21st-century version" of the Glass-Steagall act, the Depression-era law that separated commercial and investment banking, repealed only in 1999. With no details, bank bosses were coy in earnings calls with analysts, but "Glass" and "Steagall" are not soothing words. ■



### Paying for infrastructure

## Private matters

### How and when to use private capital in infrastructure projects

**W**HEN the Indiana Toll Road was opened in 1956, there were eight pairs of travel plazas, or rest stops, along the 156-mile (250km) stretch linking Chicago to Ohio and points eastward. As cars became faster and less thirsty, travellers had less reason to stop regularly for petrol or snacks. Three of the travel plazas closed in the 1970s. Restaurants shuttered, even if offered free rent. The remaining plazas, dwindling in number, fell into disrepair. The abiding memory some road users had of Indiana was of grubby toilets along the toll road.

Those rest-stops are at last getting a makeover. IFM, an Australian infrastructure fund, is investing \$34m in the toll-road's plazas, part of a \$200m-plus upgrade. Half of the road's length, with 57 bridges, is being resurfaced, using a treatment known as "crack-and-feed", which lasts longer than simply patching the top. IFM, which acquired a 66-year lease on the road in a \$5.8bn deal in 2015, says a private-sector operator has the right incentives to invest for the long term. Fewer tyre blow-outs mean less gridlock, more road users and more revenue.

Politicians across the spectrum agree on the need to upgrade America's crumbling roads and bridges. President Donald Trump has promised a \$1tn infrastructure package. His commerce secretary, Wilbur Ross, is keen to involve the private sector.

His vice-president, Mike Pence, was governor of Indiana when the toll-road upgrade was announced. It was not a smooth ride. The 2006 legislation to sell the road barely passed: concerns had been raised that a private owner would cut corners on maintenance and service. Then a plan to levy tolls on a new road built with the privatisation proceeds failed. The debt-heavy consortium which first acquired the Indiana toll road went bust (IFM subsequently bought it). The tale shows the promise of private-public partnership, or PPP, in infrastructure—but also the perils.

Linking public-sector need with private-sector capital ought to be a perfect match. Around \$2.5trn is spent worldwide each year on roads, railways, ports, sewers, telecoms systems and other infrastructure, but that is still short of the roughly \$3.3trn required each year from now until 2030, according to McKinsey Global Institute, a think-tank. The average national shortfall is 0.4% of GDP (see chart). When public finances start to creak, capital spending is often the first thing to go.

Meanwhile, the pitiful yields on government bonds, plus longer lifespans, mean pension funds are desperate for fairly safe assets that offer a stable, inflation-plus return to provide the income they have promised to the retired. The steady, fee-based revenue generated by airports, toll roads, seaports and utilities seems ide-

al. Asset managers, such as the Ottawa Teachers Pension Fund, have built up know-how in infrastructure investment. Others put money to work through specialist fund managers, such as IFM. These have raised more than \$260bn over the past decade, including \$47bn last year (see chart on next page).

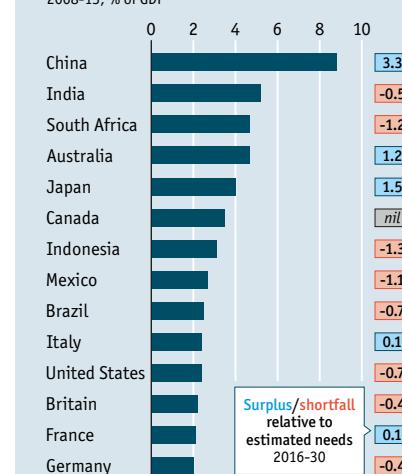
PPP thus promises to deal with a host of shortages: of infrastructure; of fiscal space; of long-lived and safe securities; and of aggregate demand and jobs. If it is done correctly, the public users of infrastructure gain from the innovation and efficiency of private-sector firms. But the shortish history of PPP is littered with examples where private provision did not live up to its promises. Problems fall broadly into three categories: the behavioural barriers that turn off consumers; political interests that often turn projects sour; and the difficulty of finding financial and incentive structures that align the interests of all parties.

Start with public opposition. Anxieties about privatising essential services are present in all countries but tellingly are not always consistent. Britain seems fairly relaxed about private water companies but is cool on privately run toll roads. In contrast, private toll roads are a feature of Australian life but water privatisation remains controversial. A lot depends on what the public has become used to. It is typically more comfortable with the private ownership of telecoms and electricity assets, which is established, than with highways. Yet cable and power networks are at least as critical as roads, perhaps more so.

Whatever the logic, a touchy public makes for jumpy politicians. A change of administration can often kill a project or drain public support for it. For instance, last year legislators in North Carolina voted down a PPP toll-road project agreed in 2014. It is now under independent review. The ►►

### Building blocks

Annual infrastructure spending  
2008-13, % of GDP



Source: McKinsey Global Institute

► East-West link, a PPP toll way in Melbourne, Australia, was cancelled after public opposition. Politicians' desire for quick results is also at odds with the detailed preparation and long gestation period needed for good infrastructure projects. "Everyone wants to cut the ribbon," says Kyle Mangini of IFM. "But the political cycle is four to five years while the infrastructure cycle is five to ten years." Public support for private infrastructure can, however, be built up. Industry experts rave about the "Australian model", for instance, in which proceeds from privatisations of ports and roads go towards new hospitals, schools and so on.

That leaves the third substantial difficulty, of getting the financial structure of PPP deals right, so that taxpayers, politicians, banks and fund managers are all content. The first need is to work out whether, and how, private capital will provide benefits that public finance cannot. Too often, the main reason for a government to bring in private capital is a bad one: to follow fiscal rules that cap public borrowing or debt. "If the starting-point is to keep a commitment off the public-sector balance-sheet, it's hard to negotiate a good deal," says Andy Rose of the Global Infrastructure Investor Association.

The right way is to allocate risk where it can best be managed. Governments can borrow cheaply. The cost of private capital is higher. Commercial incentives often make private companies better at pushing construction and operating costs down while keeping users happy with the service. PPP typically works best when there is a stream of revenue from fees, road tolls, airport charges or utility bills. It works less well where returns need to be enhanced by a public subsidy, the terms of which are liable to change. And it works badly wherever there are risks that private capital cannot gauge or reasonably bear, such as cost overruns due to delays in regulatory clearance or to "tail risks" which the state simply cannot lay off, such as nuclear decommissioning. Politicians might see PPP as a way of pushing all risks onto private contractors. But the wise ones shun such deals.

### Projects needed

Global infrastructure investment funds

Aggregate value, \$bn



### Crossrail

## The skeleton crew

### Lessons on risk management from Europe's biggest infrastructure project

THE eastbound platform on the Elizabeth line at Farringdon Station in central London is 30 metres below ground. Its length is as striking as its depth. At more than 200 metres, it is almost twice as long as the typical platform on the Tube. When service begins in December 2018, it will increase rail capacity in central London by 10%, thanks to the longer trains. Travellers nearest to the terminal stations at Reading and Heathrow, to the west of the city, and Shenfield and Abbey Wood, to the east, have a shot at the acme of commuter luxury: a seat.

Crossrail, as the £14.8bn (\$19bn) infrastructure project is known, is on track to deliver other small miracles. With 85% of the work completed, the project is on-budget and on-time, in spite of its size and complexity. The programme required ten new stations, some with passenger tunnels linking them to existing Tube lines. The Elizabeth line itself will snake through 13 miles (21km) of twinned tunnels, including a section under the Thames. Tunnelling is a risky business. You never can tell if you'll run into a hold-up. The Crossrail dig has yielded 10,000 items of interest to archaeologists. At Farringdon the diggers found 25 skeletons, the remains of victims of the 14th-century Black Death. But there were no immovable objects.

In fact, big surprises were rare. For a project this complex, a lot of preparation

("de-risking" in the jargon) is needed before private contractors can be confident they won't encounter big obstacles, and can price a bid sensibly. Once contracts were awarded, it was up to project managers to keep to the timetable. Unexpected delays, such as slow delivery of fittings, are managed in three ways, says Mujahid Khalid, who is in charge at Farringdon. A "float" of unallocated time can be drawn upon; other tasks can be brought forward; and, as a last resort, the number of shifts can be increased.

The ground has to be prepared for the six floors of offices and shops to be built over the new station. Such "over-site" developments are part of the project's financing. Indeed London's businesses are stumping up £4.1bn in a variety of ways for Crossrail. With hindsight, the sponsors might have considered charging for tours of the Farringdon site by visitors from cities seeking lessons for their own metro systems.

It would not be the only unorthodox initiative. The tunnels needed eight bespoke boring machines. Four dug their way back to surface and were sold back to Herrenknecht, the German manufacturer. Four (two running eastward and two westward) reached the ends of their lines beneath Farringdon. Stripped of valuable kit for recycling, the remains were left there: strange skeletons for 28th-century archaeologists to pore over.

There is a spectrum of procurement options. At one end are projects financed from taxes. For instance, last year Los Angeles voted to raise its local sales tax by 0.5% to pay for infrastructure. At the other end are private projects, such as London Gateway, a deepwater port on the Thames built by DP World, a Dubai-based port operator. In between lie privatised utilities that are subject to public regulation; or concessions where a private operator is asked to build, say, a hospital or airport terminal and then operate or manage it for a fixed period in return for the revenue it generates or an agreed fee. Crossrail, a massive project in London (pictured on previous page), is an example of another sort of hybrid, where the asset is built by the private sector, but ownership remains public (see box). The right procurement model depends on the individual project, says Mr Rose. Ultimately, however, the taxpayer pays, whether in taxes, fares, tolls or bills.

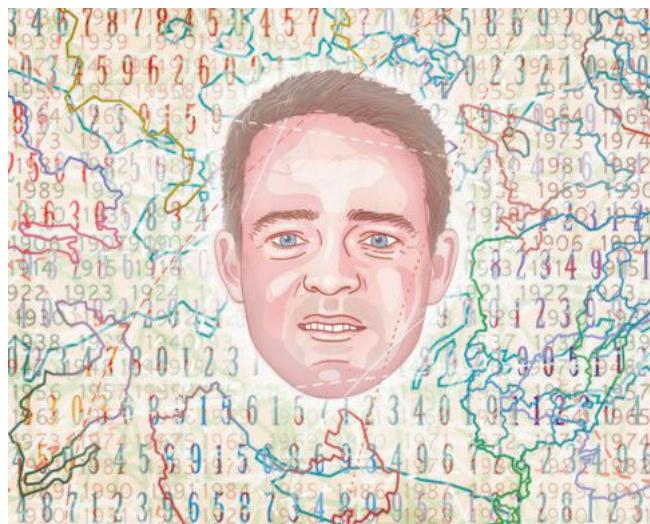
The PPP model, though more established in Australia, Britain and Canada, is

slowly gaining adherents in America. One example is the new terminal at La Guardia airport in New York. Will Mr Trump's infrastructure plans give PPP a big push? The only specific detail that seems to be agreed on is a tax credit for equity investors. But a shortfall of private capital is not the main bottleneck, says the head of the PPP infrastructure business at a big construction firm. Rather, pots of money are chasing a paucity of projects that are ready and fit for private-sector participation.

A lot of groundwork, such as environmental studies and detailed risk-assessments, are needed before a private company will bid on a project. One reason Canada and Australia have a good record on infrastructure is that they have agencies dedicated to grooming projects. It is far harder to get projects going in America, where contractors must deal with a plethora of regulators in different departments, both federal and local. Streamlining planning and permits is painstaking work. Does Mr Trump have the patience for it? ■

# Free exchange | Donaldson's difficult idea

The law of comparative advantage at 200: still winning prizes



**I**N 1853 the government of India, then directed by Britain's East India Company, began construction of a vast rail network, continued by the British Raj, established in 1858. At the time, most inland transport in India was hauled by draught animals: with carts where roads existed and were passable; packed on animals' backs when they were not, which was often. Moving goods across the great expanse of the subcontinent was costly and painfully slow. That changed with the arrival of the railway. Between 1853 and 1930 more than 67,000km (42,000 miles) of rail was laid across India, providing transport that was fast, cheap and reliable. A bullock could carry a pack 30km a day; an engine could haul freight 600km over the rails in the same time.

Working out the impact of this took Dave Donaldson (a PhD candidate at the London School of Economics when he started trying) nearly a decade. He dug through mountains of yellowed colonial-era records that had never before been collated and digitised. He found that eight different kinds of salt were sold across India, each sourced from just one region: this quirk allowed him to use local differences in the price of salt to calculate transport costs. He painstakingly plotted water, road and rail routes to work out how to ship from any place in India to any other most cheaply. He found that the introduction of the railway dramatically reduced costs and increased trade. Connecting to it led to significant increases in real local annual incomes: of about 16%. That compares with an increase in real income across India as a whole of just 22% between 1870 and 1930. The railway was a big deal.

This month the American Economic Association (AEA) chose to honour Mr Donaldson, now at Stanford University, with the John Bates Clark medal, which is awarded annually to a leading economist under the age of 40. He is a deserving winner: his paper on the railroads of the Raj is a particular marvel. But the AEA's decision is particularly apt given Mr Donaldson's focus on trade and, more narrowly, on comparative advantage. This counter-intuitive idea was first set out by David Ricardo, a great British political economist, in a book published on April 19th 1817: 200 years ago this week. It is fundamental to Ricardo's argument that trade is not a zero-sum affair but creates opportunities for mutual gain. Mr Donaldson's work provides an opportunity to reflect on precisely what that means.

An isolated community has to do everything for itself. It must grow whatever cotton it wants, however poorly suited the local land and climate. But, as it comes into contact with other places, it can stop doing the things it is especially bad at relative to people elsewhere. Instead, it can focus on things where it is comparatively more productive, and trade some of what it is good at making for whatever else it needs. This process can make everyone better off, even when one community is worse at doing everything than its trading partners. By specialising in the task at which it is least bad, the unlucky community frees other places to focus on what they are best at. Through trade everyone can obtain more of everything than they could produce for themselves.

Economists labour to explain comparative advantage—"Ricardo's difficult idea", as Paul Krugman, an American economist, once put it. They often use simplified examples, such as the classroom staple of a desert island with only two inhabitants, who can either both gather coconuts and fish or specialise in one pursuit and then trade. Ricardo himself used an example with just two goods: English cloth and Portuguese wine.

Mr Donaldson, in another paper, written with Arnaud Costinot of the Massachusetts Institute of Technology, is more ambitious. At a very fine level of geographic detail, the UN's Food and Agriculture Organisation produces estimates of how productive different kinds of land are at producing different crops. That allows the authors to work out patterns of comparative advantage in agriculture across American counties. Using historical data on what counties produced and when, and on wholesale crop prices, the authors calculate the benefits of economic integration. They are big. Between 1880 and 1920, for instance, their work suggests that integration lifted real output per worker by 79%. Between 1880 and 1997, integration added as much to American agricultural output as did growth in its productivity.

After two centuries, the theory of comparative advantage can seem lacking in relevance. It relies on bedrock economic assumptions, like flexible labour markets, which look increasingly questionable. Economists have theoretical windows other than comparative advantage through which to examine trade. And most people are no longer engaged in the production of basic commodities; trade increasingly involves parts and components rather than finished goods. The age in which one person weaves cloth and the other makes wine is long past.

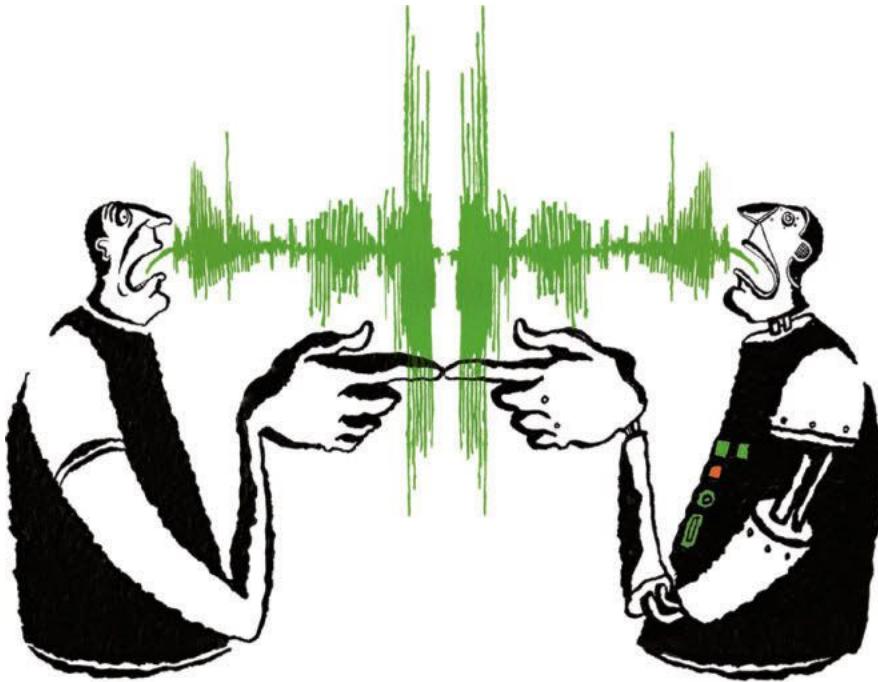
## All together now

Yet Mr Donaldson's work is a refreshing reminder of important truths. Trade is not just something countries do, but is the product of increased interaction between communities of all sorts: be they American counties or Indian provinces or neighbourhoods in a great metropolis. Expanding the possibilities for trade need not take messy corporatist agreements; new technologies can do it, too. Investments—in railways, say, or shared industrial standards or new housing in big cities—that lower barriers to trade increase the size of the market within which exchanges take place.

Finally, the promise of expanded trade is that people can stop doing things at which they are comparatively hopeless: sparing them frustration or indeed privation. Markets cannot always deliver this possibility on their own, any more than India's railways were the work of an invisible hand. But they have a (comparative) advantage over isolationism. ■

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**Cloning voices**

## You took the words right out of my mouth

**It is now possible to imitate people's speech patterns easily and precisely. That could bring trouble**

UTTER 160 or so French or English phrases into a phone app developed by CandyVoice, a new Parisian company, and the app's software will reassemble tiny slices of those sounds to enunciate, in a plausible simulacrum of your own dulcet tones, whatever typed words it is subsequently fed. In effect, the app has cloned your voice. The result still sounds a little synthetic but CandyVoice's boss, Jean-Luc Crébouw, reckons advances in the firm's algorithms will render it increasingly natural. Similar software for English and four widely spoken Indian languages, developed under the name of Festvox, by Carnegie Mellon University's Language Technologies Institute, is also available. And Baidu, a Chinese internet giant, says it has software that needs only 50 sentences to simulate a person's voice.

Until recently, voice cloning—or voice banking, as it was then known—was a bespoke industry which served those at risk of losing the power of speech to cancer or surgery. Creating a synthetic copy of a voice was a lengthy and pricey process. It meant recording many phrases, each spoken many times, with different emotional emphases and in different contexts (statement, question, command and so forth), in order to cover all possible pronunciations.

Acapela Group, a Belgian voice-banking company, charges €3,000 (\$3,200) for a process that requires eight hours of recording. Other firms charge more and require a speaker to spend days in a sound studio.

Not any more. Software exists that can store slivers of recorded speech a mere five milliseconds long, each annotated with a precise pitch. These can be shuffled together to make new words, and tweaked individually so that they fit harmoniously into their new sonic homes. This is much cheaper than conventional voice banking, and permits novel uses to be developed. With little effort, a wife can lend her voice to her blind husband's screen-reading software. A boss can give his to workplace robots. A Facebook user can listen to a post apparently read aloud by its author. Parents often away on business can personalise their children's wirelessly connected talking toys. And so on. At least, that is the vision of Gershon Silbert, boss of VivoText, a voice-cloning firm in Tel Aviv.

**Words to the wise**

Next year VivoText plans to release an app that lets users select the emphasis, speed and level of happiness or sadness with which individual words and phrases are produced. Mr Silbert refers to the emotive

quality of the human voice as "the ultimate instrument". Yet this power also troubles him. VivoText licenses its software to Hasbro, an American toymaker keen to sell increasingly interactive playthings. Hasbro is aware, Mr Silbert notes, that without safeguards a prankster might, for example, type curses on his mother's smartphone in order to see a younger sibling burst into tears on hearing them spoken by a toy using mum's voice.

More troubling, any voice—including that of a stranger—can be cloned if decent recordings are available on YouTube or elsewhere. Researchers at the University of Alabama, Birmingham, led by Nitesh Saxena, were able to use Festvox to clone voices based on only five minutes of speech retrieved online. When tested against voice-biometrics software like that used by many banks to block unauthorised access to accounts, more than 80% of the fake voices tricked the computer. Alan Black, one of Festvox's developers, reckons systems that rely on voice-ID software are now "deeply fundamentally insecure".

And, lest people get smug about the inferiority of machines, humans have proved only a little harder to fool than software is. Dr Saxena and his colleagues asked volunteers if a voice sample belonged to a person whose real speech they had just listened to for about 90 seconds. The volunteers recognised cloned speech as such only half the time (ie, no better than chance). The upshot, according to George Papcun, an expert witness paid to detect faked recordings produced as evidence in court, is the emergence of a technology with "enormous potential value for disinformation". Dr Papcun, who previ-

ously worked as a speech-synthesis scientist at Los Alamos National Laboratory, a weapons establishment in New Mexico, ponders on things like the ability to clone an enemy leader's voice in wartime.

As might be expected, countermeasures to sniff out such deception are being developed. Nuance Communications, a maker of voice-activated software, is working on algorithms that detect tiny skips in frequency at the points where slices of speech are stuck together. Adobe, best known as the maker of Photoshop, an image-editing software suite, says that it may encode digital watermarks into speech fabricated by a voice-cloning feature called VoCo it is developing. Such wizardry may help computers flag up suspicious speech. Even so, it is easy to imagine the mayhem that might be created in a world which makes it easy to put authentic-sounding words into the mouths of adversaries—be they colleagues or heads of state. ■

#### Clearing landmines

## Illuminating the target

#### Genetically engineered fluorescent bacteria can hunt for mines

BATTLEFIELDS strewn with mines are one of the nastiest legacies of war. They ensure that, long after a conflict has ceased, people continue to be killed and maimed by its aftermath. In 1999, the year the Ottawa Mine Ban Treaty came into force, there were more than 9,000 such casualties, most of them civilians. Though this number had fallen below 4,000 by 2014 it is, according to the Landmine and Cluster Munition Monitor, an international research group, rising again as a consequence of conflicts in Libya, Syria, Ukraine and Yemen.

These days most mines have cases made from plastic. Only the firing mechanisms include any metal. That means mines are hard to find with metal detectors. Many ingenious ways to locate and destroy them have been developed, ranging from armour-plated machines that flail the land, via robots equipped with ground-penetrating radar, to specially trained rats that can smell the explosives a mine contains. Such methods have, though, met with mixed success—and can also be expensive. Flails, for instance, scatter shrapnel and explosive residue around a minefield, making it hard to confirm that no undetonated devices remain. Mine-hunting rats, meanwhile, cost around \$8,000 each to train. Often, therefore, mine detection boils down to rows of nervous people wearing blast-resistant clothing

and creeping laboriously across a field, prodding the ground ahead to check for buried objects.

Shimshon Belkin, Aharon Agranat and Amos Nussinovitch of the Hebrew University of Jerusalem reckon they have a better approach. They have created a form of *Escherichia coli*, a bacterium widely studied by geneticists, that synthesises a fluorescent protein in response to traces of vapour given off by a mine's explosives. As they report in *Nature Biotechnology*, they have now tested their invention's effectiveness as a mine-hunter.

To turn their bacteria into a mine-detection system, they encapsulated them in beads of alginate, a material derived from seaweed that is permeable to vapours from explosives. They then scattered the beads across an area in which real mines had been buried and left them for a day, to give the vapours from the mines time to stimulate fluorescent-protein production in those beads that had landed above mines. That done, they used a laser to scan the field from a distance. The laser beam stimulated any fluorescent protein it hit to light up, indicating the location of a mine.

The result was a qualified success. The mines being sought had been buried either in one of two sorts of sand or in garden soil. The bugs detected all six sand-covered mines, and also places where flakes of explosive had been buried uncased, but were not fooled by an explosive-free dummy buried in the same material. They did not, though, detect either of the mines buried in garden soil, or flakes of explosive so buried. Whether this was because the researchers had not allowed enough time for vapour evaporating from the explosives to penetrate the soil (they had buried the targets only five days before the tests) or because those vapours cannot penetrate such soil well enough for the bacteria to detect them is a subject for a further test.

Even if it can be used only in sand, though, the approach Drs Belkin, Agranat and Nussinovitch have come up with may be useful. They hope to turn it into a working mine-detection system within three years. They think they can improve the bugs' sensitivity to vapours from explosives and plan to test other ways of encapsulating and dispersing them. For safety's sake, the *E. coli* they use are engineered not to be pathogenic. They also require a special nutrient, contained within the bead. Once this is exhausted the bugs die rapidly.

Besides improving their bacteria, the group would also like to speed up the laser-scanning system, so that it can cover the ground faster. What they use at the moment could be operated from a vehicle, but if it were made compact and light enough, it might also be mounted on a light aircraft or drone. If all that can be done, the world may, at last, have a cheap and effective mine-detection system. ■

#### The price of secrecy

## Weighing heavy on the soul

**Having secrets is not a problem, but thinking about them is**

KEEPING a secret is hard work, as both common sense and past studies confirm. Omitting pertinent information from a conversation, or even intentionally misleading an interlocutor, requires nimble thinking. How much of a burden, though, is merely possessing a secret, rather than trying to defend it against a nosy questioner? The catharsis that often accompanies confessing guilty secrets suggests it may be quite large. But, until now, no one has examined the matter scientifically.

In a study just published in the *Journal of Personality and Social Psychology*, Michael Slepian of Columbia University, in New York, attempts to correct that omission. He and his colleagues presented a set of volunteers with a list of 38 sorts of things surveys suggest people commonly keep secret about themselves. Examples included infidelity, theft, poor performance at work, sexual orientation, having undergone an abortion and drug taking. Some of Dr Slepian's volunteers participated over the internet. Some, recruited in New York's biggest public space, Central Park, participated face to face. All remained anonymous—and, within statistical limits, both groups responded identically.

Dr Slepian and his team asked the volunteers whether, for each item on the list of ►



You did what?!

► potential secrets, they had never had the experience in question (and therefore had nothing to hide); had had it, but had not kept it secret; had had it, kept it secret for a while, but then let it out; had had it and kept it secret from some people but not from others; or had had it, kept it secret from everyone, and continued to do so.

For each secret that a participant currently kept, the researchers asked how often that participant found himself actively having to conceal it during conversations, and also how often he thought about it when not in the presence of someone from whom he was keeping it. They also asked participants to choose, on a 13-point scale of well-being, whether keeping a given secret had made life better or worse, with a “+6” indicating very much better, a “-6” indicating very much worse and a zero indicating that keeping the secret had no effect. They also asked a series of questions that let them construct an index of a volunteer’s health.

All told, the team found that 97% of participants kept at least one of the 38 types of secret in question, that the average person kept 13 secrets and that it was typical for people to have five that they had never disclosed to anyone else. The secret most often sequestered from the whole world was having sexual thoughts about someone other than an established romantic partner. This was followed closely by actual sexual relations with such a person. The researchers also discovered that people reported pondering their secrets privately about twice as often as they chose to conceal them from others—though there was much variation.

It was this private pondering, rather than the actual possession of a secret, that seemed crucial to health and well-being. People who reported thinking about their secrets less often than once a week over the course of the previous month had an average health index of 66 out of 100, compared with 49 for those who thought about their secrets every day. Similarly, those who thought little about their secrets had well-being scores close to zero, while those who thought about them a lot scored -2.

The types and numbers of secrets kept by members of these two contrasting groups, those who thought regularly about their secrets and those who did not, were not materially different. That their reactions to those secrets differed is therefore puzzling. Dr Slepian favours psychological explanations for the damage secrets do, such as the idea that they sometimes concern unresolved issues, which thus intrude on thinking. But that neither explains the different responses nor gets to the heart of the matter. If keeping secrets is beneficial—which, presumably, it often is—evolution might have been expected to have weeded out those who suffer as a consequence of doing so.

Perhaps such weeding is a work in progress, for deep secrecy of the sort people engage in becomes both possible and necessary only once language has come into being, and language is, itself, a recent evolutionary phenomenon. In the meantime, at least one human organisation has worked out how to benefit from the burden imposed by secrecy. The Roman Catholic sacrament of penance and reconciliation, commonly called confession, is a perfect response. It offers to lift that burden in a procedure that, though not cost free to the confessor is, itself, completely secret. ■

### Inebriation

## Frat-boy crayfish

### Crustaceans may help researchers understand drunkenness

**H**UMANS are not the only species to enjoy a snifter. Myriad experiments on other animals, from rats and monkeys to bees and fruit flies, show that they also get drunk, will seek out alcohol given the opportunity and may even develop a dependence on the stuff. But alcohol promotes conviviality as well as drunkenness, and that relationship is less well explored. In particular, there are few studies of whether the link is reciprocal—whether conviviality, or at least a sociable environment, affects susceptibility to alcohol. This question has, however, now been looked into. In a paper just published in *Experimental Biology*, Matthew Swierzbinski, Andrew Lazarchik and Jens Herberholz of the University of Maryland have shown that a sociable upbringing does indeed increase sensitivity to alcohol. At least, it does if you are a crayfish.

The three researchers’ purpose in studying drunken crayfish is to understand better how alcohol induces behavioural changes. Most recreational drugs, from cocaine and heroin to nicotine and caffeine, have well-understood effects on known receptor molecules in brain cells. That is not, though, true of ethanol, as the type of alcohol which gets people drunk is known to chemists. Ethanol’s underlying molecular mechanisms are poorly understood. But one thing which is known is that crayfish are affected by the same concentrations of the stuff as those that affect humans. Since crayfish also have large, easy-to-study nerve cells that can be examined for clues as to ethanol’s molecular mechanisms, Mr Swierzbinski, Mr Lazarchik and Dr Herberholz are using them to try to track those mechanisms down.

Their latest experiment involved 102 of the crustaceans that had each been kept for

between seven and ten days in the company of several dozen others, and a further 63 that had been raised in isolation for similar amounts of time. Each crayfish was then transferred individually to a tank containing a solution of ethanol in water, and videoed for three hours to record what happened next.

As might be expected, those animals put into the most concentrated solution, 5.8% by volume, the strength of a potent beer, got pretty drunk. First, they started walking around on tiptoes. Then, they began flicking their tails and doing somersaults (see picture). Finally, the most inebriated ended up lying on their backs, kicking their legs in the air—or, rather, in the water.

Crayfish put in weaker solutions, a half or a tenth as concentrated, behaved similarly, but got there more slowly—and, in the case of those in the weakest solution, often managed to avoid the leg-kicking stage altogether. Crayfish, in other words, behave much like a bunch of roisterers out on the town of a Saturday night.

Crucially, though, when the researchers examined the videos in detail, to record what happened when, they found that, regardless of alcohol concentration, animals that had spent the previous few days in company got drunk about 25% faster than those that had been kept in solitary confinement. They therefore suspect that society makes whatever receptor molecules it is that interact with ethanol more plentiful in crayfish nervous systems than they otherwise would be. The next stage is to compare nerve cells from social and solitary animals, to try to work out what those receptor molecules might be—and then, if they can be so identified, to see if what is true in crayfish is also true in people. ■



I’m not as thunk as drinkle peep I am



## New fiction

### Cleaning up

Too much political exposition can be the death of fiction. In his fifth and finest novel, Nadeem Aslam shows how to make great literature out of despotism

HERE are two versions of how Pakistan got its name, both true. The original is the more prosaic. Choudhary Rahmat Ali, a Punjabi Muslim nationalist, invented it from the putative state's component parts: the first letters of Punjab, Afghan province (now Khyber Pakhtunkhwa), Kashmir, Sindh and the final letters of Balochistan. The second, more beloved version, is that it is the product of two words in Urdu and Persian: *stan* and *pak*, which together mean "land of the pure".

Pakistan has been trying to live up to the latter version from its birth. At partition it was cleansed of most Sikhs and Hindus. Starting in the 1950s, its increasingly strident constitutions swept away the secularism imagined by the nation's founder, Muhammad Ali Jinnah. In the 1980s blasphemy laws were dusted off and spruced up. They are now shiny with overuse. The most recent campaign of decontamination comes from the jihadists who would purge Pakistan of its Shias and Sufis. In a remarkable new novel Nadeem Aslam pours cold water over these efforts, dousing the very notion of purity itself.

Set in Zamana (Lahore in all but name) the novel begins on the Grand Trunk Road. Nargis and her husband Massud, both architects, form part of a human chain carefully transferring books containing the

**The Golden Legend.** By Nadeem Aslam. Knopf; 319 pages; \$27.95. Faber & Faber; £16.99

names of Allah or Muhammad within them from a library to new premises. The process is inefficient, but any other mode of transport, it is thought, might risk contact with uncleanliness. Massud handles books from the Abbasid period, from Moorish Spain and 17th-century Holland. A car stops at a traffic light in front of him. A motorbike pulls up alongside. A gun is drawn. Shots ring out. Massud is killed in the crossfire. The book in Massud's hands as he dies is a work by his father, a 987-page meditation on the mingling of civilisations, which until then had disappeared.

In the very first chapter, Mr Aslam lays out, as in a manifesto, his pervading themes: intercultural exchange, piety, purity, violence. Mr Aslam, whose family fled persecution in Pakistan when he was 14 and settled in Britain, has returned to these themes repeatedly in his previous works. In "The Golden Legend", which came out in Britain in January and is now being published in America, he distils them into a work of quiet rage and searing beauty.

The man who fired the gun turns out to be an American diplomat. After Massud's

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death an officer from Pakistan's military intelligence agency visits Nargis. She is persuaded, eventually, to forgive the foreigner, which under Sharia law would allow him to go free. The persuasion takes the form of requests, then commands, then violence, inflicted both upon her and her precious copy of Massud's father's book. The intelligence man cuts it to shreds.

Nargis is supported during this period by Helen, the teenage daughter of a Christian couple who worked as housekeepers for the architects. Helen's father, Lily, a widower, is having an affair with Aysha, the daughter of the neighbourhood's Muslim cleric, who also happens to be widowed. The pair try to keep their relationship secret; they know that Christians in Pakistan are jailed "for drinking water from a Muslim's glass". But news of it is broadcast over the mosque's loudspeakers. A dozen Christians are killed in the massacre that follows. Lily disappears. Nargis, Helen, and a young Kashmiri man, Imran, who had been visiting them, flee to an abandoned mosque on an uninhabited island in the river that runs by the city.

"The Golden Legend" is extravagant with imagery and elaborate with metaphor, but it is never in danger of collapsing under the weight of its prose; it is held up by the solidity of real life. The shooting at the start of the novel is a direct reference to an incident in 2011 involving a CIA contractor in Lahore. An account of an attack at a Sufi shrine includes details of how policemen carried away the heads of the suicide bombers from an attack in 2010. A chapter about a Catholic bishop is inspired by a scarcely remembered event from 1998. Even the description of graffiti on Kashmiri walls—"Indian dogs go home"—is accurate. ►

▶ Offsetting the hatred and bleakness are the luminous main characters: Nargis, Helen and Imran, for whom history, culture and religion are not circumscribed by hard boundaries. Painstakingly, they restore Massud's father's book, now thicker by half thanks to the golden thread they use to stitch it back together. Yet it is telling that they must go to an island to escape Zamana, which translates as "the world" or "the era". The setting of "The Golden Legend" may be Pakistan, but the closing of minds and hearts it laments is universal.

It is on the island that Helen reflects on everything that has passed through their land over the centuries: "And so it was that there was no absolute purity anywhere on the planet. The Land of the Pure did not exist." It is a lesson lost on those who would aspire to make one. ■

#### Dos Passos and Hemingway

## The winds of war

**The Ambulance Drivers: Hemingway, Dos Passos, and a Friendship Made and Lost in War.** By James McGrath Morris. *Da Capo Press*; 312 pages; \$27

ERNEST HEMINGWAY liked chasing after death. Given the chance to drive an ambulance in the first world war, he exulted: "Oh, Boy!!! I'm glad I'm in it." Not everyone was so eager. John Dos Passos, a fellow writer, was also an ambulance driver in the Great War. But he called it "slavery", a "tragic digression". If the two men held opposing views on war, they were both also made by it. Conflict sculpted their relationship—and their writing.

In "The Ambulance Drivers" James McGrath Morris pairs the two writers and their wars. The combination makes sense. Hemingway and Dos Passos "held front-row seats...on the killing fields of Europe," the author explains. War bound these two very different men together. Dos Passos was "shy and bookish". Hemingway anything but that: he swore and womanised his way from Paris to Havana. Dos Passos "grew up" in the trenches, and although he was the older by just three years, he admired Hemingway. Mr Morris follows their friendship through the 1920s and 1930s: from bohemian Paris to languid days off the Florida coast.

War shaped their politics, too. Dos Passos was jolted by the "tragedy" of what he witnessed in France and Italy. "Three Soldiers", the war novel he published in 1921, saw off any idea that war was glorious. Dos Passos was a stern socialist who "wanted to write about war to end it," explains Mr Morris. Hemingway was un-

moved. War made him a cynic. For him, "literature could capture the experience, not change it," says Mr Morris.

This difference came out in their prose. Hemingway jabbed out phrases, to pen "the truest sentence that you know". Dos Passos experimented with modernism instead. He stuck words together ("rainseeth-ing" was one) and quoted song lyrics. The result is a howl against the "decadence" of modern capitalism. These passages of literary analysis do not impede the pleasure of the book. They float, as Mr Morris tugs the reader into the boozy, bitchy world of his protagonists. Famous friends bustle in and out. Zelda and F. Scott Fitzgerald host Dos Passos for lunch, then get drunk and insult an estate agent. A hoard of private letters illuminate the characters' inner lives.

If "The Ambulance Drivers" is as readable as a novel, there is also the occasional slip. Mr Morris alludes to things without explaining them. Who are the Bersagli? What is a thobe? The author does not say. Dos Passos's Madeiran-Portuguese heritage is first mentioned casually deep into the book. A few mistakes jar, too. "A Farewell to Arms" features the Battle of Caporetto, not "Caporetta".

But these are niggles. Mr Morris does a fine job of conjuring his characters. Their second conflict, the Spanish civil war, would be their last. By the mid-1930s, Hemingway felt "envy and growing resentment" towards his friend, Mr Morris writes. Dos Passos, though poor, was loved by critics. Spain broke Hemingway. He disowned his friend, and accused him of fascism. This was typical of his cruel type of selfishness. "Hemingway destroyed every friendship, every love affair," concludes Mr Morris. They died without reconciling, which is a pity. As this sad, vivid book shows, they had much in common. ■



A friendship forged in the fight

#### Studying wine

## Learn how to smell

**Cork Dork.** By Bianca Bosker. *Penguin*; 329 pages; \$17

FOR a subject that purports to be an arcane niche, the milieu of obsessive sommeliers has attracted much media attention recently. First came "Somm", a documentary released in 2012 about four students preparing for the gruelling Master Sommelier (MS) exam. Its success spawned both "Uncorked", a reality-television show that shadows a new crop of budding MS candidates, and a feature-length sequel called "Into the Bottle", profiling winemakers. Now this select fraternity of (mostly male) service professionals has come in for literary star treatment as well. In "Cork Dork" Bianca Bosker, a technology journalist by trade, chronicles her immersive year-long quest to join the club, and the transformation it wrought on her senses and psyche.

Readers who have yet to watch any instalment of the "Somm" or "Uncorked" series will find Ms Bosker a skilled guide as she escorts them on her journey through many of the weirder crannies of the wine-consumption world. (Farmers and wine-makers, save for the industrial "masstige" producers in California, are conspicuously absent.)

Her tale duly features fermented grape juice lofting her protagonists into manic ecstasy or plunging them into the depths of despair. One sommelier compares Pinotage to the torture technique in which "you get a tyre, douse it in gasoline, stick it around someone's neck, and light it on fire". It profiles scientists who study the physiology of taste and smell, including a German who conducts regular experiments on human bodies and occasionally needs to transport them. He recalls one cadaver he had to dissect with a "Black and Decker" saw. It recounts horror stories of unruly diners, such as the one about the man who told a black waitress in New York to calm down because her president was in office, and of arrogant judges at sommelier competitions: one sought to unsettle a candidate by using his finger to probe the depths of his right nostril while ordering.

However, even such grand cru-quality anecdotes are unlikely to surprise the portion of Ms Bosker's audience that has already been indoctrinated into sommelier subculture. (Morgan Harris, the author's "wine fairy godmother" and the book's main character, is also featured in "Uncorked".) Although the author is a lively portraitist, "Cork Dork" is essentially structured as a travelogue: she would very

► much like to qualify as a certified sommelier (and ultimately does), but the fate of her career hardly hangs in the balance. That leaves it bereft of the plot, suspense and occasional conflict that made the original "Somm" so gripping.

In lieu of drama, "Cork Dork" offers two notable virtues. First, it is an outstanding beginner's primer on wine. Shoehorned into the narrative are comprehensive profiles of the flavours and aromas of the most prevalent grape varieties and how they vary by region and maturity. It also gives a breakdown of the principal components of a wine and a guide to recognising and distinguishing them. Ms Bosker intersperses her vignettes with these lessons so deftly that you are likely to miss them if you fail to take notes. But a diligent reader will emerge with the same degree of

knowledge that you would expect from an introductory wine course.

Second, Ms Bosker offers a payload for knowledgeable and passionate wine lovers—the "cork dorks" of the title. Its concluding chapters constitute an extended ode to oenological mastery as a path to heightened consciousness: once you learn how to smell, it doesn't stop at wine.

Ms Bosker now regularly complements her visual perception of the world with an olfactory one: on a road trip through California, "San Rafael smelled like sweet-and-sour chicken; Larkspur like potatoes cooking with rosemary...I smelled the salty brine of sea air mixed with a thick, soapy perfume of detergent and garlic even before I saw the signs for San Francisco. It was then that I realised I'd driven the whole way without turning on the radio." ■

#### New fiction

## Argentinian eco-horror

**Fever Dream.** By Samanta Schweblin. Translated by Megan McDowell. Riverhead Books; 192 pages; \$25. Oneworld; £12.99

THIS small debut novel packs a mighty, and lingering, punch. In "Fever Dream" Samanta Schweblin (pictured), an Argentinian short-story writer based in Berlin, wraps contemporary nightmares, both private and public, into a compact, but explosive, package. Ms Schweblin delivers a skin-prickling masterclass in dread and suspense. Sentence by sinister sentence, she instils and then intensifies "a terrifying feeling of doom".

In rural Argentina, a frightened holidaymaker named Amanda lies dying in a clinic. David, the son of a local woman called Carla, interrogates the delirious patient about the events that have led her into this place of "danger and madness". Amanda, in turn, recounts conversations with Carla that reveal, in fragments, a terrible tale. And what has become of Nina, Amanda's daughter, whom her mother so fearfully kept within "rescue distance"? Convulsed by doubt and pain, she torments herself: "Was I a bad mother? Is it something I caused?"

In whispered snatches, the reader is told of poisonings and contaminations, of children hideously harmed, a blighted community and "something small and invisible that has ruined everything". Around this double dialogue, perspectives shift and blur. Reality shimmers like the summer haze over the chemically enhanced green of the surrounding soya fields. No "rescue distance", the reader learns, can ever be small enough for



A great start

safety. As David says (or, perhaps, as Amanda hallucinates him saying): "Whatever has cursed this town for the past ten years is now inside me."

With virtuoso skill, well served in Megan McDowell's finely textured translation, Ms Schweblin fuses a study in maternal anxiety with an ecological horror story. She refracts both strands through the eerie prism of her narrative, almost as if Henry James had scripted a disaster movie about toxic agribusiness. The author has linked her "motionless scourge" to the pesticide-blasted prairies of Argentina. And then there is the abyss of a mother's anguish. "My head", Carla recalls, "was a tangled mess of guilt and terror." As Ms Schweblin lands her punch, so will the reader's be.

#### "The Handmaid's Tale"

## Under his eye

A television series breathes new life into Margaret Atwood's novel

THE most nightmarish dystopian worlds are both familiar and incongruous, existing on the peripheries of possibility. A prime example is "The Handmaid's Tale", written in 1985 and now a ten-part television series which will be released on Hulu from April 26th.

In it an American society is ruled by a theocratic dictatorship. Women are stripped of their jobs—bank accounts and property are handed over to their husbands or male next-of-kin—and forbidden from reading. They are recategorised under the new regime: women who can bear children become "handmaids", made to conceive the babies of high-ranking military personnel whose wives are barren. Infertile women, dissidents and lesbians are sent to die farming toxic land.

Ms Atwood's book is brought terrifyingly to life by a star-studded cast, which includes Elisabeth Moss (of "Mad Men"), Samira Wiley ("Orange is the New Black"), Alexis Bledel ("Gilmore Girls") and Joseph Fiennes ("Shakespeare in Love"). Most alterations to the plot, such as making the regime more brutal—the command "if thine right eye offends thee, pluck it out" is literally enforced upon one rebellious handmaiden—make the mood more tense and the characters' quiet obedience more understandable. The decision to open with June (later known as Offred, played with muted horror by Ms Moss) attempting to flee the country with her husband and young daughter pays off: the viewer is immediately concerned with her plight. Jumping between her life before and after the regime, the series slowly pieces together the person June once was and the freedoms she used to enjoy.

With women's reproductive rights at the centre of its narrative, the series has been praised for its timeliness. Ms Moss has said that the cast and crew "never wanted to show to be this relevant". But as the Trump administration continues to cut funding and roll back family-planning services, it is easy to hear echoes of its rhetoric on the screen.

Yet "The Handmaid's Tale" is searing because so many women have no more control over their own bodies today than they did in 1985. What rights they have earned are subject to the whims and political persuasions of men in power. If Ms Atwood's tale feels nightmarish it is precisely because it is enduringly, and maddeningly, familiar. ■

**Economic data**

% change on year ago

	Gross domestic product			Industrial production		Consumer prices		Unemployment rate, %		Current-account balance			Budget balance	Interest rates, %		Currency units, per \$			
	latest	qtr*	2017†	latest	latest	2017†	latest	2017†	latest	2017†	months, \$bn	% of GDP 2017†	% of GDP 2017†	10-year gov't bonds, latest	Apr 19th	year ago			
<b>United States</b>	+2.0	0.4	+2.1	+2.3	+1.5	Mar	+2.4	Mar	+2.4	4.5	Mar	-481.2	Q4	-2.8	-3.5	2.23	-	-	
<b>China</b>	+6.9	Q1	+5.3	+6.5	+7.6	Mar	+0.9	Mar	+2.3	4.0	Q4 <sup>\$</sup>	+196.4	Q4	+1.7	-4.0	3.29 <sup>§§</sup>	6.89	6.47	
<b>Japan</b>	+1.6	0.4	+1.2	+1.2	+4.7	Feb	+0.2	Feb	+0.7	2.8	Feb	+187.8	Feb	+3.5	-5.3	nil	109	109	
<b>Britain</b>	+1.9	0.4	+2.7	+1.7	+2.8	Feb	+2.3	Mar	+2.7	4.7	Jan <sup>††</sup>	-115.7	Q4	-4.0	-4.0	1.06	0.78	0.69	
<b>Canada</b>	+1.9	0.4	+2.6	+2.0	+3.5	Jan	+2.0	Feb	+1.9	6.7	Mar	-51.2	Q4	-2.7	-2.6	1.47	1.34	1.27	
<b>Euro area</b>	+1.8	0.4	+1.9	+1.6	+1.2	Feb	+1.5	Mar	+1.6	9.5	Feb	+387.3	Jan	+3.0	-1.6	0.20	0.93	0.88	
<b>Austria</b>	+1.7	0.4	+2.0	+1.6	-1.1	Jan	+2.0	Mar	+1.7	5.7	Feb	+6.6	Q4	+2.4	-1.1	0.51	0.93	0.88	
<b>Belgium</b>	+1.2	0.4	+2.0	+1.4	-1.6	Jan	+2.3	Mar	+2.0	7.0	Feb	-2.0	Dec	+1.1	-2.7	0.72	0.93	0.88	
<b>France</b>	+1.1	0.4	+1.7	+1.3	-0.7	Feb	+1.1	Mar	+1.3	10.0	Feb	-28.5	Feb	-1.0	-3.1	1.00	0.93	0.88	
<b>Germany</b>	+1.8	0.4	+1.7	+1.6	+2.3	Feb	+1.6	Mar	+1.8	3.9	Feb <sup>†</sup>	+287.3	Feb	+8.2	+0.5	0.20	0.93	0.88	
<b>Greece</b>	-1.4	0.4	-4.8	+1.2	+10.7	Feb	+1.7	Mar	+0.8	23.5	Jan	-0.6	Jan	-1.2	-6.4	6.69	0.93	0.88	
<b>Italy</b>	+1.0	0.4	+0.7	+0.9	+1.9	Feb	+1.4	Mar	+1.4	11.5	Feb	+47.5	Jan	+2.5	-2.4	2.28	0.93	0.88	
<b>Netherlands</b>	+2.5	0.4	+2.5	+2.0	+5.1	Feb	+1.1	Mar	+1.2	6.1	Mar	+64.8	Q4	+8.5	+0.6	0.44	0.93	0.88	
<b>Spain</b>	+3.0	0.4	+2.8	+2.6	-1.7	Feb	+2.3	Mar	+2.2	18.0	Feb	+24.9	Jan	+1.5	-3.3	1.67	0.93	0.88	
<b>Czech Republic</b>	+2.0	0.4	+1.6	+2.5	+2.7	Feb	+2.6	Mar	+2.4	3.5	Feb <sup>†</sup>	+2.3	Q4	+0.7	-0.5	1.01	25.1	23.8	
<b>Denmark</b>	+2.3	0.4	+1.9	+1.4	+2.3	Feb	+1.0	Mar	+1.2	4.3	Feb	+24.9	Feb	+7.1	-1.4	0.52	6.94	6.54	
<b>Norway</b>	+1.8	0.4	+4.5	+1.8	-4.0	Feb	+2.4	Mar	+2.4	4.2	Jan <sup>††</sup>	+18.1	Q4	+5.3	+2.8	1.55	8.56	8.11	
<b>Poland</b>	+3.2	0.4	+7.0	+3.2	+1.2	Feb	+2.0	Mar	+2.0	8.2	Mar <sup>\$</sup>	+0.4	Feb	-1.2	-3.2	3.38	3.97	3.78	
<b>Russia</b>	+0.3	0.4	na	+1.4	+0.8	Mar	+4.2	Mar	+4.5	5.4	Mar <sup>\$</sup>	+34.9	Q1	+2.8	-2.9	8.13	56.3	65.5	
<b>Sweden</b>	+2.3	0.4	+4.2	+2.6	+4.1	Feb	+1.3	Mar	+1.6	7.4	Feb <sup>\$</sup>	+23.7	Q4	+4.8	-0.4	0.53	8.98	8.08	
<b>Switzerland</b>	+0.6	0.4	+0.3	+1.4	-1.2	Feb	+0.6	Mar	+0.5	3.3	Mar	+70.6	Q4	+9.7	+0.2	-0.20	1.00	0.96	
<b>Turkey</b>	+3.5	0.4	na	+2.6	-1.7	Feb	+11.3	Mar	+9.7	13.0	Jan <sup>\$</sup>	-33.7	Feb	-4.4	-2.1	10.89	3.67	2.83	
<b>Australia</b>	+2.4	0.4	+4.4	+2.7	+1.0	Q4	+1.5	Q4	+2.1	5.9	Mar	-33.1	Q4	-1.3	-1.8	2.46	1.33	1.28	
<b>Hong Kong</b>	+3.1	0.4	+4.8	+2.6	-0.7	Q4	-0.1	Feb	+1.7	3.3	Feb <sup>††</sup>	+14.5	Q4	+5.9	+1.5	1.41	7.77	7.76	
<b>India</b>	+7.0	0.4	+5.1	+7.2	-1.2	Feb	+3.8	Mar	+4.6	5.0	2015	-11.9	Q4	-1.0	-3.2	6.85	64.6	66.6	
<b>Indonesia</b>	+4.9	0.4	na	+5.2	+3.3	Feb	+3.6	Mar	+4.3	5.6	Q3 <sup>\$</sup>	-16.3	Q4	-2.0	-2.2	7.00	13,297	13,148	
<b>Malaysia</b>	+4.5	0.4	na	+4.3	+4.7	Feb	+5.1	Mar	+4.0	3.5	Feb <sup>\$</sup>	+6.0	Q4	+2.8	-3.1	4.11	4.40	3.89	
<b>Pakistan</b>	+5.7	2016**	na	+5.4	+8.1	Feb	+4.9	Mar	+4.6	5.9	2015	-7.1	Q1	-2.6	-4.8	7.97 <sup>†††</sup>	105	105	
<b>Philippines</b>	+6.6	0.4	+7.0	+6.6	+10.8	Feb	+3.4	Mar	+3.3	6.6	Q1 <sup>\$</sup>	+0.6	Dec	+0.3	-2.4	5.32	49.7	46.1	
<b>Singapore</b>	+2.9	0.4	-1.9	+2.1	+12.6	Feb	+0.7	Feb	+1.3	2.2	Q4	+56.7	Q4	+19.2	-1.0	2.09	1.40	1.34	
<b>South Korea</b>	+2.4	0.4	+2.0	+2.5	+6.6	Feb	+2.2	Mar	+1.8	4.2	Mar <sup>\$</sup>	+97.6	Feb	+6.4	-1.0	2.14	1,140	1,136	
<b>Taiwan</b>	+2.9	0.4	+1.8	+1.8	+10.6	Feb	+0.2	Mar	+2.1	3.8	Feb	+70.9	Q4	+12.1	-0.7	1.03	30.4	32.3	
<b>Thailand</b>	+3.0	0.4	+1.7	+3.5	-1.5	Feb	+0.8	Mar	+1.3	1.1	Feb <sup>†</sup>	+46.8	Q4	+11.7	-2.3	2.50	34.4	34.9	
<b>Argentina</b>	-2.1	0.4	+1.9	+2.7	-2.5	Oct	—	***	—	7.6	Q4 <sup>\$</sup>	-15.0	Q4	-2.7	-4.1	na	15.4	14.1	
<b>Brazil</b>	-2.5	0.4	-3.4	+0.6	-0.8	Feb	+4.6	Mar	+4.5	13.2	Feb <sup>\$</sup>	-22.8	Feb	-1.6	-7.7	9.88	3.14	3.55	
<b>Chile</b>	+0.5	0.4	-1.4	+1.8	-7.6	Feb	+2.7	Mar	+3.0	6.4	Feb <sup>††</sup>	-3.6	Q4	-1.3	-2.2	3.79	649	657	
<b>Colombia</b>	+1.6	0.4	+4.0	+2.4	-3.2	Feb	+4.7	Mar	+4.0	10.5	Feb <sup>\$</sup>	-12.5	Q4	-3.6	-2.8	6.40	2,847	2,914	
<b>Mexico</b>	+2.4	0.4	+2.9	+1.5	-1.7	Feb	+5.4	Mar	+5.0	3.5	Feb	-27.9	Q4	-2.6	-2.5	7.17	18.8	17.3	
<b>Venezuela</b>	-8.8	0.4~	-6.2	-5.5	na	na	+562	7.3	Apr <sup>\$</sup>	-17.8	Q3~	-1.5	-19.6	10.43	10.1	9.99			
<b>Egypt</b>	+3.4	0.3	na	+3.9	+23.9	Feb	+30.9	Mar	+19.2	12.4	Q4 <sup>\$</sup>	-20.1	Q4	-6.2	-10.8	na	18.2	8.88	
<b>Israel</b>	+4.3	0.4	+6.5	+3.9	+3.2	Jan	+0.9	Mar	+0.6	4.3	Feb	+12.4	Q4	+4.4	-2.3	2.17	3.67	3.76	
<b>Saudi Arabia</b>	+1.4	2016	na	+0.8	na	-0.4	Mar	+2.0	5.6	2015	-24.9	Q4	-2.1	-7.3	3.68	3.75	3.75		
<b>South Africa</b>	+0.7	0.4	-0.3	+1.1	-2.4	Feb	+6.1	Mar	+5.7	26.5	Q4 <sup>\$</sup>	-9.5	Q4	-3.6	-3.1	8.79	13.3	14.3	

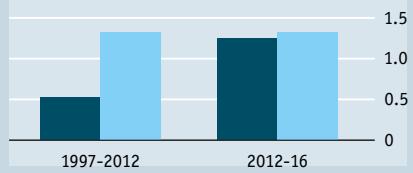
Source: Haver Analytics. \*% change on previous quarter, annual rate. †The Economist poll or Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. ~2014 \*\*Year ending June. ††Latest 3 months. †††3-month moving average. §§5-year yield. \*\*\*Official number not yet proved to be reliable; The State Street PriceStats Inflation Index, Jan 29.53%; year ago 30.79% †††Dollar-denominated bonds.

**Markets**

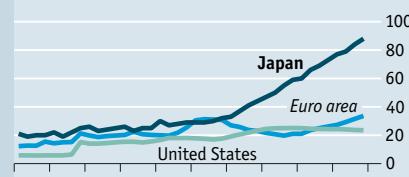
	% change on			
	Index Apr 19th	one week	Dec 30th 2016 in local currency terms	in \$
United States (DJIA)	20,404.5	-0.9	+3.2	+3.2
China (SSEA)	3,320.2	-3.2	+2.2	+3.1
Japan (Nikkei 225)	18,432.2	-0.6	-3.6	+3.2
Britain (FTSE 100)	7,114.4	-3.2	-0.4	+3.3
Canada (S&P TSX)	15,552.9	-0.6	+1.7	+1.5
Euro area (FTSE Euro 100)	1,162.0	-1.2	+4.5	+6.1
Euro area (EURO STOXX 50)	3,421.0	-1.4	+4.0	+5.6
Austria (ATX)	2,838.9	-1.4	+8.4	+10.1
Belgium (Bel 20)	3,770.4	-1.0	+4.5	+6.2
France (CAC 40)	5,003.7	-1.9	+2.9	+4.5
Germany (DAX)*	12,016.5	-1.1	+4.7	+6.3
Greece (Athex Comp)	679.0	-0.9	+5.5	+7.2
Italy (FTSE/MIB)	19,824.6	-0.9	+3.1	+4.7
Netherlands (AEX)	511.3	-1.3	+5.8	+7.5
Spain (Madrid SE)	1,042.3	+0.1	+10.5	+12.2
Czech Republic (PX)	967.5	-1.6	+5.0	+7.4
Denmark (OMXCB)	840.7	-0.5	+5.3	+6.9
Hungary (BUX)	32,688.1	+0.9	+2.1	+2.2
Norway (OSEAX)	750.6	-2.2	-1.8	-1.3
Poland (WIG)	59,515.2	+1.9	+15.0	+21.0
Russia (RTS, \$ terms)	1,068.6	-0.9	-7.3	-7.3
Sweden (OMX30)	1,565.7	-0.6	+3.2	+4.4
Switzerland (SMI)	8,532.3	-1.5	+3.8	+5.7
Turkey (BIST)	90,804.1	-0.2	+16.2	+11.5
Australia (All Ord.)	5,839.9	-2.2	+2.1	+6.1
Hong Kong (Hang Seng)	23,825.9	-2.0	+8.3	+8.0
India (BSE)	29,336.6	-1.0	+10.2	+15.8
Indonesia (JSX)	5,606.5	-0.7	+5.8	+7.3
Malaysia (KLCSE)	1,739.0	-0.3	+5.9	+8.0
Pakistan (KSE)	47,603.5	-1.8	-0.4	-0.9
Singapore (STI)	3,126.3	-1.9	+8.5	+12.2
South Korea (KOSPI)	2,138.4	+0.4	+5.5	+11.8
Taiwan (TWI)	9,639.9	-1.8	+4.2	+10.4
Thailand (SET)	1,567.2	-1.4	+1.6	+5.7
Argentina (MERV)	20,513.2	-1.4	+21.3	+24.7
Brazil (BVSP)	63,407.0	-0.8	+5.3	+9.2
Chile (IGPA)	24,281.1	-0.4	+17.1	+20.8
Colombia (IGBC)	10,123.1	-1.2	+0.2	+5.6
Mexico (IPC)	48,873.8	-0.2	+7.1	+17.4
Venezuela (IBC)	47,561.2	+1.1	+50.0	na
Egypt (EGX 30)	12,895.3	-0.7	+4.5	+4.5
Israel (TA-100)	1,255.4	-0.2	-1.7	+3.1
Saudi Arabia (Tadawul)	6,948.1	-2.1	-4.0	-4.0
South Africa (JSE AS)	52,545.1	-1.9	+3.7	+6.8

**Japan**

GDP per person, annual average  
% increase on a year earlier



Central-bank balance-sheets, % of GDP

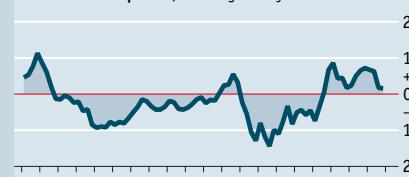


Gross government debt, % of GDP



Source: OECD

Core consumer prices, % change on a year earlier\*



\*Excludes impact of consumption-tax rises in 1997 and 2014

**Other markets**

	% change on			
	Index Apr 19th	one week	Dec 30th 2016 in local currency terms	in \$
United States (S&P 500)	2,338.2	-0.3	+4.4	+4.4
United States (NAScomp)	5,863.0	+0.5	+8.9	+8.9
China (SSEB, \$ terms)	336.7	-2.1	-1.5	-1.5
Japan (Topix)	1,471.4	-0.5	-3.1	+3.7
Europe (FTSEurofirst 300)	1,481.1	-1.5	+3.7	+5.3
World, dev'd (MSCI)	1,835.0	-0.4	+4.8	+4.8
Emerging markets (MSCI)	952.9	-0.6	+10.5	+10.5
World, all (MSCI)	444.6	-0.4	+5.4	+5.4
World bonds (Citigroup)	910.9	+0.8	+3.1	+3.1
EMBI+ (JP Morgan)	813.5	+0.7	+5.4	+5.4
Hedge funds (HFRX)	1,221.9 <sup>§</sup>	nil	+1.5	+1.5
Volatility, US (VIX)	14.9	+15.8	+14.0 (levels)	
CDSs, Eur (iTRAXX) <sup>†</sup>	77.1	+0.4	+6.9	+8.6
CDSs, N Am (CDX) <sup>†</sup>	68.8	+3.4	+1.5	+1.5
Carbon trading (EU ETS) €	4.8	-2.4	-26.4	-25.3

Sources: IHS Markit; Thomson Reuters. \*Total return index.

†Credit-default-swap spreads, basis points. <sup>§</sup>Apr 18th.

**Indicators** for more countries and additional series, go to: [Economist.com/indicators](http://Economist.com/indicators)

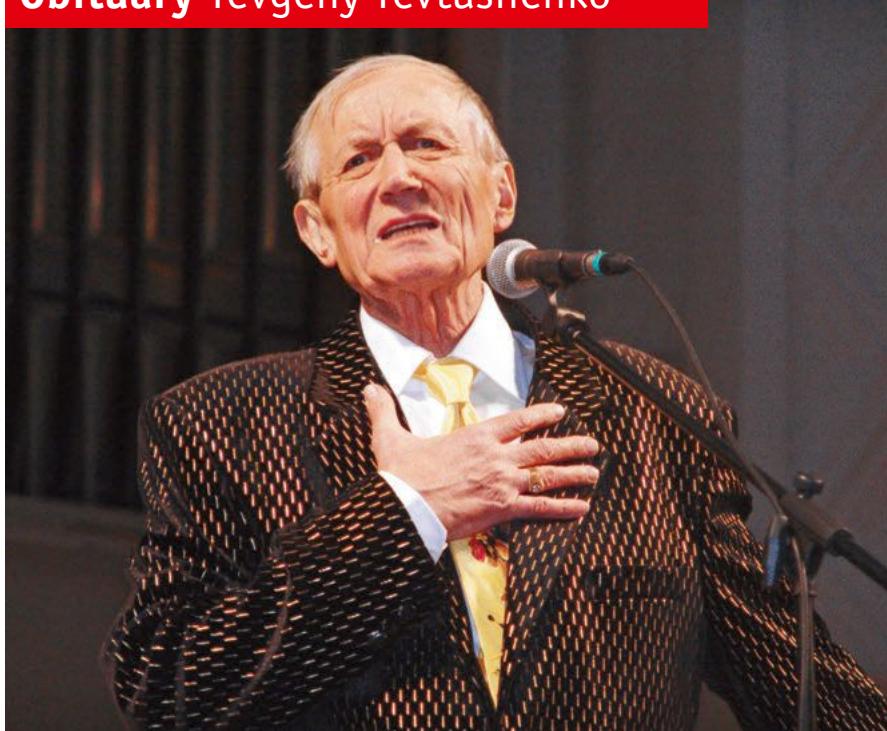
**The Economist commodity-price index**

2005=100

	% change on		
	Apr 11th	Apr 18th*	one month
Dollar Index			
All Items	142.3	141.3	-3.4
Food	151.4	151.0	-3.1
Industrials			
All	132.9	131.2	-3.8
Nfa <sup>†</sup>	138.1	136.3	-6.1
Metals	130.7	129.0	-2.8
Sterling Index			
All items	207.3	201.4	-5.6
Euro Index			
All items	166.5	164.2	-2.4
Gold			
\$ per oz	1,272.2	1,287.5	+3.6
West Texas Intermediate			
\$ per barrel	53.4	52.4	+10.7

Sources: Bloomberg; CME Group; Cotlook; Darmenn & Curl; FT; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Thomson Reuters; Urner Barry; WSJ. \*Provisional

<sup>†</sup>Non-food agriculturals.



## More than a poet

**Yevgeny Yevtushenko, a Russian poet, died on April 1st, aged 83**

**B**ABI YAR was the site of the most notorious massacre of the Holocaust. But when Yevgeny Yevtushenko visited the ravine outside Kiev in 1961, he found no monument there to the nearly 34,000 victims, just lorries dumping piles of stinking rubbish. He hurried away and wrote a poem, decrying not only the Nazi executioners but also Soviet anti-Semitism and the amnesia it fostered.

The leaders of the tavern mob are raging  
And they stink of vodka and onions.  
Kicked aside by a boot, I lie helpless.  
In vain I plead with the brutes  
As voices roar:  
"Kill the Jews! Save Russia!"

It was brave, heartfelt—and well-timed. Nikita Khrushchev's thaw was breaking over the Soviet Union, and the previously unsayable was being said. Dmitri Shostakovich set "Babi Yar" to the opening movement of his 13th Symphony. Shamefaced Soviet Ukrainian bureaucrats closed the tip and put up a modest memorial.

To his fans, the episode epitomised the Yevtushenko they adored: an idealist who spoke for his generation, a man whose humanism transcended the cold war. They flocked in their tens of thousands to his readings of his own and other writers' work, making him the rock-star poet of his age; "Babi Yar", declaimed with elaborate

intonation and vigorous hand gestures, was a particular hit. His output was prodigious. His poetry books sold in their millions, a privilege few Russian poets enjoyed. There were novels and films too.

His technique was honed and immaculate; as a teenager, he searched for an unused rhyme for every Russian word. The results might lack subtlety, but never impact. Even his critic Joseph Brodsky, a great Russian poet forced into exile, said he knew hundreds of Mr Yevtushenko's lines by heart. They were simple, even staccato, dealing with fresh, forthright ideas—love and longing, memory and forgetting, pride and shame—delivered with utter self-confidence and transparent enjoyment. The secret, he said, was "in bridging the gap/Between the word and our hearts".

### Performance poet

Charming (notably and insistently to women), inquisitive and quick-tongued, he seemed a world away from the grey, stolid Soviet cultural establishment. He was no golden child of the literary nomenklatura, but rather a genuine product of communist meritocracy, born in Siberia in a family savaged by Stalinist purges, who scrabbled his way to stardom by penning verses for a sports newspaper.

The cultural commissars preferred to

keep such popular, restless talents in a gilded cage, rather than banishing or jailing them. Only the greatest resisted that embrace. He was not one of them.

It helped that his style fitted unproblematically into the Soviet poetical canon. Its content reflected the lively, even troublesome, spirit of the post-Stalinist 1950s and 1960s, but even that could be tolerated, within limits, especially as that toleration proved that the Soviet system was not as monolithic as its critics claimed.

It all made him an easy target for those who thought his real-world stances should match the lofty ideals of his poetry. In 1987 Brodsky resigned from the American Academy in protest at Mr Yevtushenko's honorary membership, complaining: "He throws stones only in directions that are officially sanctioned and approved." Two decades earlier, a campaign in Britain stymied his election to the Oxford poetry professorship.

The critics had a point. He bemoaned the Soviet system's imperfections while mounting rose-tinted defences of its achievements and wince-making attacks on the West. He baffled students in New York when he defended a scandalous prosecution by asking: "How would you react if one of your writers published a book in Europe under an assumed name?"

His celebrity gave him clout, when he chose to use it. He chided Khrushchev for his u-turn against cultural freedom and defended some victims of persecution, including, in the 1960s, Brodsky—but not Boris Pasternak, whose "Dr Zhivago", he said, was not worth publishing. He lamented the Soviet-led invasion of Czechoslovakia in 1968. But these protests were within the system, not against it. Other writers, such as Alexander Solzhenitsyn, focused discontent; he acted as its safety valve. His worst punishments were expulsion from university for praising an anti-Stalinist novel, or media scoldings by hardliners. After publishing an unsanctioned autobiography abroad, he apologised grovelingly for his "irreparable mistake". While he was enjoying the fruits of fame, political prisoners were dying in labour camps.

Despite his peacock dress sense and penchant for self-promotion, he was a self-deprecating man who claimed no great bravery, let alone genius. One of his novels dismissed his own work as a phase to be grown out of. His admirers might overstate his merits; he did not.

After 1991 his star waned. Post-Soviet Russia lost its taste for performance poetry. He spent much of his time teaching, in the congenial but unglamorous University of Tulsa, Oklahoma. One of his later poems mourned the Czech philosopher-playwright Vaclav Havel, ending: "Who will tell us what to do next?" Some of his counterparts needed nobody to tell them. ■