# The Economist

Should Jerusalem be Israel's capital?

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DECEMBER 9TH–15TH 2017

# The corruption of South Africa

# The Economist

2017-12-10

# The world this week

## Politics this week


Dec 7th 2017

Donald Trump announced that America would recognise **Jerusalem** as Israel's capital, the only country in the world to do so. He said moving America's embassy from Tel Aviv was a matter of when, not if. Regional Arab and Muslim leaders, and America's allies in Europe, were virtually united in dismay at the decision. See article.

**Yemen's** former dictator, Ali Abdullah Saleh, was killed near Sana'a, the capital. He had broken from his Houthi rebel allies and embraced talks with the Saudi-led coalition fighting them. The Houthis quickly repaid what they saw as a betrayal, and gained territory in Sana'a, where crowds celebrated Saleh's death. See article.

The Gulf Co-operation Council summit in Kuwait, scheduled for two days, lasted hardly 15 minutes before breaking up in acrimony. The isolation of **Qatar** by its neighbours is said to have been the main cause. Saudi Arabia and the United Arab Emirates had previously announced a new alliance, potentially rendering the GCC superfluous. See article.

Saad Hariri officially withdrew his resignation as **Lebanon's** prime minister. He had announced that he was stepping down in a speech made from Saudi Arabia on November 4th, starting a guessing game about how much influence the Saudis were wielding.

**Zimbabwe's** new president, Emmerson Mnangagwa, unveiled a new cabinet in the wake of Robert Mugabe's downfall. He kept most of his predecessor's worst ministers, appointed generals to the foreign and agriculture ministries, and brought no technocrats or opposition figures into government as had been mooted. Opposition politicians and human-rights organisations were aghast.

**A plea bargain**

**Michael Flynn**, Donald Trump's first national-security adviser, pleaded guilty to lying to the FBI about his contacts with Russian officials. Mr Trump said he was not concerned about what Mr Flynn might reveal to Robert Mueller, the special counsel investigating the whole affair. See article.

Al Franken was told by his Democratic colleagues in the Senate, including Charles Schumer, the party's leader in the chamber, to resign over claims of **sexual misconduct**. John Conyers, meanwhile, resigned from the seat in the House that he has held for the Democrats since 1965 amid claims of sexual harassment. See article.

The Supreme Court permitted the latest version of the Trump administration's **travel ban** to come fully into force while its constitutional merits are argued in the lower courts, rescinding a decision six months ago that allowed for only a partial ban. The latest restrictions apply differently to travellers from eight countries. See article.

**Values voters**


The aftermath of **Honduras's** contested presidential election turned violent. President Juan Orlando Hernández led Salvador Nasralla by 1.6 percentage points when the vote count ended ten days after the election. Opposition supporters cried foul and want a full recount. Clashes with police left several people dead. The two sides agreed to negotiate. See article.

**Colombia's** "fast-track" year for passing laws to implement the peace process ended with mixed results. Congress approved a transitional justice plan for former guerrillas, but failed to approve political reforms and laws to help coca farmers switch to other crops.

Andrés Manuel López Obrador of the left-wing Morena party, the early front-runner in **Mexico's** presidential election, sparked fury by proposing amnesty for drug kingpins who agree to abandon violence. His comments came as legislators prepared a law to formalise the role of the armed forces in the drug war.

President Nicolás Maduro's socialist government in **Venezuela** threatened to suspend presidential elections next year if America does not withdraw its "rude" economic sanctions. He also announced plans to create an oil-backed digital currency: the petro.

**Bright tsar**

Vladimir Putin launched his bid for re-election as **Russia's** president. His main rival, Aleksei Navalny, is not allowed to run.

Russia was banned by the International Olympic Committee from participating in the **Winter Olympics** because of the "systematic manipulation" of procedures to uncover doping. Athletes who can prove they are clean will be allowed to compete at the games, to be held in South Korea, but under a neutral flag. See article.

Horst Seehofer decided to step down as premier of Bavaria, amid a power struggle in his Christian Social Union party (CSU). The CSU only operates in Bavaria, but is allied in **Germany's** parliament with Angela Merkel's Christian Democrats and is trying to help her form a government.

A judge in **Spain** revoked the arrest warrants issued for Carles Puigdemont, the president of the Catalonia region, and four Catalan ministers, because they showed a willingness to return to Spain from Belgium, where they fled after declaring Catalonia's independence in October. But the judge said they could still face charges of sedition.

**Falling out**

The government of **Australia** proposed a series of laws to curb foreign interference in politics, in response to a series of scandals involving firms or people linked to the Chinese government. **China** has denied that it was meddling and accuses Australian media of "anti-China hysteria".

Australia's parliament legalised **gay marriage**, less than a month after Australians signalled strong support for same-sex weddings in a non-binding vote.

**Taiwan's** parliament voted to remove all memorials around the country to Chiang Kai-shek, the strongman who ruled China before fleeing to Taiwan after losing the civil war to the Communists.


An agreement creating the world's largest **marine protected area** came into force. Covering 2m square kilometres in the Ross Sea off the coast of Antarctica, the agreement establishes a "no-take" zone that prevents minerals or animals from being removed from the area. New Zealand and the United States brokered the deal, which was supported by the 25 member countries of the commission for the conservation of Antarctic life.

The first Michelin dining guide for **Bangkok** accorded a coveted star to a street stall serving crab omelette.

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## Business this week

Dec 7th 2017

In a deal with the potential to reshape America's health-care industry, **CVS Health** formally offered $69bn for **Aetna**. CVS is America's largest chain of pharmacies and also the country's biggest pharmacy-benefit manager, negotiating on behalf of companies and insurers with pharmaceutical firms to lower their costs. Aetna provides health insurance. See article.

**UnitedHealth**, America's biggest insurer, said it was buying **DaVita Medical** for $4.9bn. UnitedHealth will gain a further 300 clinics in a deal that steps up its drive to administer medical services directly.

**Nestlé** agreed to buy **Atrium Innovations**, a maker of vitamins, for $2.3bn. It is a confident move by the Swiss group into consumer health care, a business it is pivoting towards as sales of its better-known food brands stagnate.

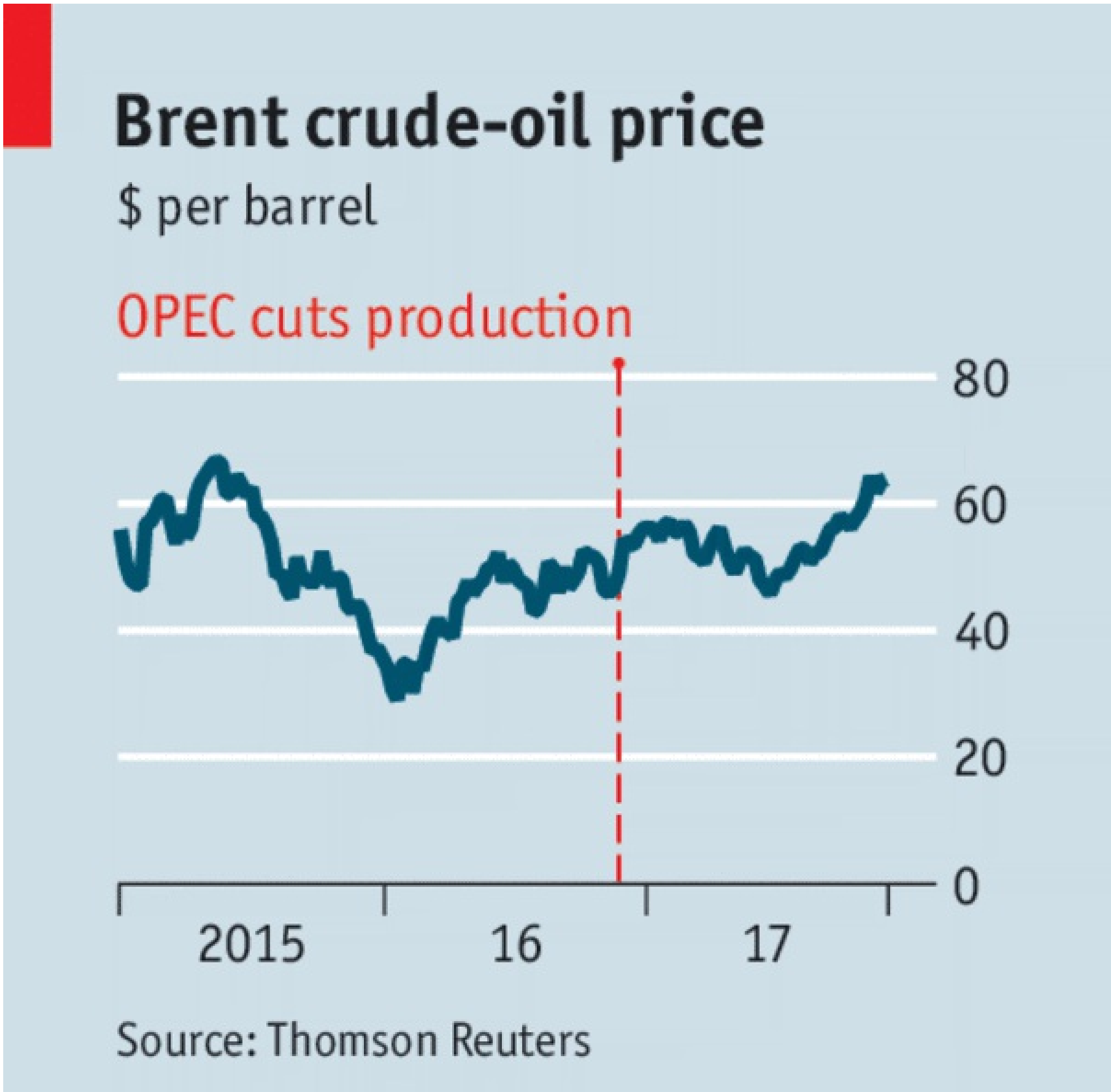
### Tech titans tit-for-tat

A squabble between two of America's tech giants was seen as a possible harbinger of bigger disputes to come. **Google** said it would block access to its YouTube site across some of **Amazon's** devices in retaliation for Amazon not selling Google's smartspeaker or Chromecast, Google's internet-streaming plug-in for TVs, on its website. Amazon retorted that Google was "setting a disappointing precedent".

**Broadcom** went hostile in its $130bn proposal to take over **Qualcomm**, nominating a slate of 11 new directors to the board of its larger chipmaking rival. Qualcomm has so far refused to countenance Broadcom's offer.

The manager in charge of **Volkswagen's** engineering office in America was sentenced to seven years in prison for his part in covering up the carmaker's deception in emissions tests. Oliver Schmidt pleaded guilty in August to the charge. He is the second VW employee to be sentenced in America over the scandal.

**Ping An**, a big Chinese insurer, lifted its stake in **HSBC** to 5%, describing it as a purely financial investment. The bank makes most of its profit in Asia. Its new chairman, Mark Tucker, used to run a rival insurance company to Ping An in Asia.

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Saudi Arabia's energy minister said he expects that OPEC's cuts to **oil output** will stay in place until the end of 2018. He was speaking a few days after a meeting between OPEC and Russia, where it was agreed to extend curbs on production, but to review the situation in June. Oil prices have risen this year; Brent crude traded consistently above $60 a barrel throughout November.

Portugal’s finance minister, Mário Centeno, was chosen to be the next president of the **Eurogroup**. Mr Centeno is the first head of the policymaking body for the euro zone’s finance ministries to come from a country that was bailed out during the debt crisis. His biggest task next year will be steering discussions over debt relief for Greece at the end of its bail-out programme.

## Gone shopping at Christmas

**Hammerson**, a property developer responsible for some of Britain’s best-known shopping centres, including Brent Cross in London and the Bullring in Birmingham, spent £3.4bn ($4.6bn) to buy **Intu**, which operates Lakeside in Essex and other arcades. The deal creates Britain’s biggest property firm.

**Deutsche Bank** reportedly received a subpoena from Robert Mueller, the special counsel in America investigating alleged links between Donald Trump’s campaign and Russia, to hand over documents related to its dealings with people and entities associated with Mr Trump. The bank did not comment directly about the news but said it took its “legal obligations seriously and remains committed to co-operating with authorised investigations into this matter”.

The Irish government opened an account into which **Apple** can start paying €13bn ($15.4bn) in unpaid taxes. Last year the European Commission ruled that Ireland was owed the sum, after finding that tax advantages offered to Apple broke laws on state aid. Ireland was taken to court for failing to recover the money, which will sit in the account until an appeal against the ruling, lodged by Apple and Ireland, has been resolved.

## Planning for your retirement?

A report from the OECD placed Britain at the bottom of the heap for **pension provisions**. For average earners, the future net-replacement rate for incomes is 63% across the OECD, but for Britain it is just 29%. Germans can expect pensions worth half their pre-retirement salary on average and the French almost three-quarters. Average earners in the Netherlands do the best in the

EU, with a net-replacement rate of over 100%, but Turkey comes out on top in the survey at 102%. For low earners (those on half the average wage), Britain does slightly better, moving above Chile, Poland and Mexico.

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# KAL's cartoon


Dec 7th 2017

# Leaders

South Africa

## The choice that could save South Africa, or wreck it

To avoid a dire, two-decade dynasty of dysfunction, South Africa's ruling ANC should ditch the Zumas


Dec 9th 2017

SOUTH AFRICA'S Constitutional Court may be the world's most emotionally powerful building. The courtroom is built with the bricks of the Old Fort prison, where both Nelson Mandela and Mahatma Gandhi were held. A glass strip around the courtroom, allowing passers-by to see in, represents transparency. Above the entrance, the values of the constitution are set in concrete in the handwriting of the first constitutional judges after apartheid—including the childlike script of Albie Sachs, who had to learn to write with his left hand after the white regime's security services blew off his right arm. In painful contrast with its uplifting setting, a recent conversation between an *Economist* journalist and an official working in the building was, at the official's request, conducted outside and, as a further precaution against surveillance by today's security services, the journalist was asked to leave her phone inside. It is a measure of how far South Africa has fallen from the ideals it embraced when it was reborn after apartheid.

Under President Jacob Zuma, the state is failing. Contracts are awarded through bribes and connections; ruling-party members murder each other over lucrative government jobs; crooks operate with impunity.

Next week comes a moment that may determine whether South Africa slides further into this mire or starts to recover. At a conference that starts on December 16th the ruling African National Congress (ANC) is due to choose the successor to Mr Zuma as its leader, and thus its candidate for presidency of the country. The front-runners are Mr Zuma's ex-wife and preferred candidate, Nkosazana Dlamini-Zuma, and the deputy president, Cyril Ramaphosa. For South Africa and for the whole African continent, Mr Ramaphosa needs to win.

**Mandela weeps**

South Africa is no longer in the forefront of the world's consciousness, as it was in the 1990s when it made its miraculously peaceful transition from a racist regime to a modern democracy. But it still matters, and not just to its 57m people. With its superior financial and physical infrastructure, it is Africa's economic hub. Its diplomatic and moral authority shapes southern Africa, for worse as well as better: without its support, Robert Mugabe would have lost power in Zimbabwe long ago. And, at the moment, it is the site of the most visible battle in the world between good and bad government.

Alarmed South Africans have watched the progress of "state capture", whereby private actors subvert the state to steal public money (see article). In a report in 2016 the former public protector detailed allegations that the Guptas, business associates of Mr Zuma's family, offered the finance ministry to a politician they hoped would be pliable and used political influence to loot state-owned enterprises. She called for a judicial inquiry. Mr Zuma says he has no knowledge of the job offer, and will establish an inquiry, but he claims that the public protector's demand that the judge in charge must be appointed by the chief justice is unconstitutional. He did not comment on the matter of looting from state-owned enterprises.

What is unusual about South Africa is not that corruption thrives, but that it does so in plain sight. Thanks to a history of civic activism, a free press and a robust judiciary, South Africans are aware of the wholesale theft. Investigative journalists have catalogued corruption at all levels of government. Week after week, activists and opposition parties challenge the government in court. A former finance minister estimates that 150bn-200bn ($11bn-15bn) rand, 5% of GDP, has been filched.

The ANC leadership election offers what ought to be an easy choice. Ms Dlamini-Zuma is expected to protect her ex-husband, who faces 783 counts of corruption. She, like him, espouses “radical economic transformation”, which involves fiscal indiscipline and expropriation. She, like him, employs racially charged rhetoric to deflect criticism. A victory for her would undermine the economy, jeopardise social harmony—fragile, in a country with the fifth highest murder rate in the world—and entrench state capture.

**Cyril v cynicism**

Mr Ramaphosa’s election would not on its own ensure a swift return to clean government. Corruption runs deep, at all levels of the party. It did not help that a pre-Zuma ANC policy of “empowering ” black tycoons by encouraging the transfer of large stakes in white-owned firms to them made a handful of ANC bigwigs effortlessly rich. This set a precedent that politics in the new South Africa can be a shortcut to vast wealth. One of the biggest beneficiaries was Mr Ramaphosa himself, which complicates his campaign to purge the party of rent-seeking. Nonetheless, there is no suggestion that he broke the law, and he is outspoken in his condemnation of those who now brazenly do so. He is also pragmatic in his plans to boost economic growth and provide South Africans with jobs and education.

The numbers suggest Mr Ramaphosa is in the lead, yet he is not a shoo-in. The stakes are high for Mr Zuma and his political skills are consummate. Those who bet against him tend to lose. His compatriots await the result nervously.

Some well-intentioned South Africans think it would be better if Ms Dlamini-Zuma won, because the country has become too much like a one-party state, and an ANC run by her would be more likely to lose the election in 2019. That is a dangerous argument. The multiracial, centrist Democratic Alliance would indeed be better than the ANC, and is gaining in popularity: it now governs the country's three most important cities. But the hard-left Economic Freedom Fighters, who might be worse than the ANC, are gaining ground, too. And the ANC, with its liberationist credentials, might win in 2019 even under Ms Dlamini-Zuma, who as president would cement the Zuma clan's grip on the levers of power. South Africa would start to look uncomfortably like a hereditary kleptocracy.

Its people deserve better. The rainbow nation still has the potential to be a beacon of prosperity and good governance in Africa, but memories of its hopeful birth are a melancholy counterpoint to its dark present. The best chance for recovering that optimism is a victory for Mr Ramaphosa.

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**Lay off the pay-offs**

# Ukraine is a mess; the West should press it harder to fight graft

Drama in the streets is a sign of worsening corruption. Ukraine must not be allowed to fail


Dec 7th 2017

AFTER the Maidan revolution and the start of the Russian war against Ukraine in 2014, Western policy had two aims: to halt and punish Russian aggression and to help Ukraine become a democratic state governed by the rule of law. America imposed sanctions on Russia, ordered the president, Petro Poroshenko, to establish an anti-corruption force and sent Joe Biden, then vice-president, on repeated visits to insist on fighting graft. The EU imposed sanctions on Russia, and made support for civil-society and the rule of law a linchpin of the association agreement it signed with Ukraine in 2014.

In that light, the news out of Ukraine over the past few weeks has been dire. The country's prosecutor-general has disrupted investigations by its National Anti-corruption Bureau, with the apparent consent of Mr Poroshenko. The interior minister has intervened to protect his son from similar scrutiny.

Officers in the security service, the SBU, have tried to arrest Mikheil Saakashvili, the former Georgian president turned Ukrainian corruption-fighter, only to be driven back by protesters. Prosecutors are targeting anti-corruption activists; the army, interior-ministry troops and private militias work at cross-purposes, answering to different politicians or oligarchs. Mr Poroshenko's government has been seriously weakened.

To some Europeans and Americans, this picture suggests that their efforts to persuade Ukraine to turn over a new leaf were always doomed to fail. That is a misreading. In fact, the recent chaos in Ukraine comes in part because in the past year, especially since the inauguration of President Donald Trump, Europe and America have eased the pressure. If they do not restore their commitment to defending anti-corruption reforms, Ukraine risks sinking back into the morass from which it tried to extricate itself with Maidan.

Ukraine's grubby politicians and oligarchs have tried to frustrate Western aims without openly defying them (see article). Partly as a result, policy under Mr Trump has lost its focus on fighting graft. Kurt Volker, the American envoy to Ukraine, works on external security; America may soon sell the country lethal weapons for the first time. But when the State Department complains about corruption, it is ignored—because (unlike Mr Biden) the White House offers it no support. As for the EU, few believe it would jeopardise its association agreement with Ukraine for the sake of the rule of law. So, the country's elite no longer fears attacking investigators and activists.

**Lay off the pay-offs**

If they succeed in ending the attempts to fight graft, it will be a disaster for Ukraine—and a step back for Europe and America, too. The country is the focal point of the West's conflict with Russia. Weak and divided, it is vulnerable to Russian encroachment, especially if Vladimir Putin decides he needs to fire up patriotic Russian voters. Chaos would also buttress Mr Putin's claim that the West's aims in Ukraine are purely anti-Russian and have nothing to do with democracy or the rule of law. All this would undermine the rules-based global order, with consequences in the South China Sea and elsewhere.

Now that Ukraine is defying complaints by America's State Department and the EU's foreign-policy arm, it is vital that America and Europe use every tool at their disposal to support corruption-fighters in Kiev. The EU should make plain that the benefits of the association pact depend on progress against graft; America should attach the same conditions to arms sales. Prosecutors in Western capitals should investigate the laundering of ill-gotten Ukrainian wealth. Support for Ukraine's territorial integrity should not involve tolerance for the lack of integrity among its politicians.

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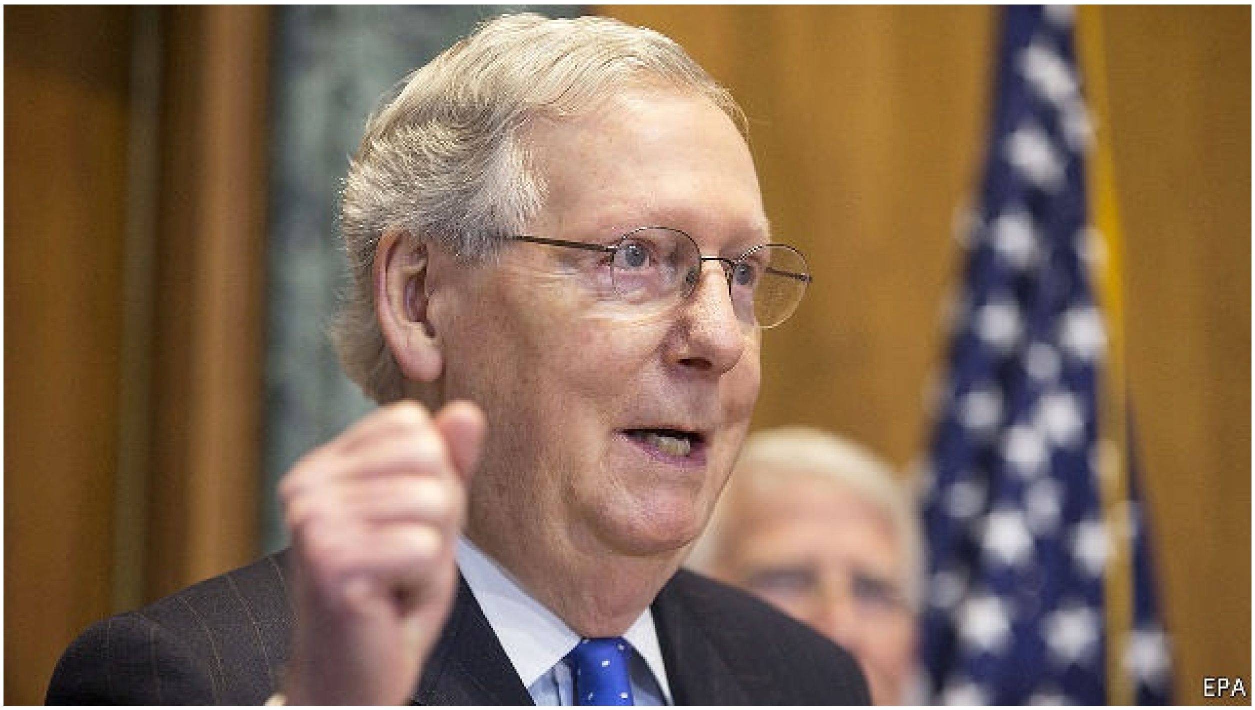
American tax reform

## Worry about the Republicans' tax bill—and how it was passed

If politicians sever their arguments from reality, economic policy will only get worse




Dec 7th 2017

SOME political theorists argue that the law draws legitimacy not just from voting, but also from public debate before legislation is passed. In voting through a tax-reform bill on December 2nd, Republicans in Congress have tested this principle to destruction. The bill, like most, has its strengths and its weaknesses, but Republicans have rushed it through disregarding the value of consistency and evidence. Their success will weigh on the quality of American government.

The Senate's bill is broadly similar to one that passed in the House of Representatives in November. It would slash the corporate tax rate from 35% to 20% (albeit a year later than the House bill). Taxes for unincorporated businesses and individuals would fall substantially. The personal exemption, which reduces a household's taxable income in accordance with its size, would be replaced with a much higher standard deduction, the flat amount that can be earned tax-free. The child tax credit would also rise. To raise money, the bill curbs some deductions, such as those for debt interest and state levies.

Lawmakers reconciling the bills confront three main differences. First, the Senate proposal leaves the deduction for mortgage interest mostly intact; the House wisely wants to curb it. Second, whereas the House would abolish the estate (inheritance) tax entirely, the Senate would keep it. It is right to do so, though it would double the threshold at which the tax kicks in, from $22.4m (for couples). Third, the Senate has tacked on a repeal of Obamacare's individual mandate, a fine for Americans who do not buy health insurance even if they can afford it.

One test of the final bill is its effect on the economy. On the one hand it would limit deductions in favour of cuts to marginal tax rates—a worthwhile reform. On the other it will increase inequality, largely because business-owners tend to be rich, and it will add a trillion dollars in public borrowing by 2027, according to an official projection for the Senate's bill.

But there is another test, which is the effect on governance. The Republicans have argued that their bill is aimed at helping middle-class Americans and that it will spark enough economic growth to pay for itself. This is belied by experience—witness the rise in deficits after the tax cuts of 1981 and the early 2000s (see article). Not even economists in sympathetic think-tanks believe that the Republican claims will be borne out. Steve Mnuchin, the treasury secretary, has failed to produce any analysis justifying his predictions of much higher growth (his department's inspector-general is investigating why not). The Treasury did, however, delete a study from its website that was unhelpful to the administration's argument.

All politicians exaggerate the benefits of their policies, and some Republicans have made unconvincing claims about the rewards of tax cuts for decades. However, in the 1980s the party undertook a robust debate over the merits of supply-side economics, and in the 2000s George W. Bush's own economists cautioned against over-rosy growth forecasts. This time, most Republican senators simply brushed off the official projection that the bill's effects would contradict their sunny promises. In addition, they attacked the independent forecasters whom they have previously championed as a valuable restraint on self-serving politicians. And to minimise scrutiny, they rushed the bill through barely a day after the forecast was released. Perhaps, after the failure of health-care reform, they were desperate for a significant legislative achievement.

A lack of consistency makes Republicans seem unprincipled. They have spent the past decade claiming that the national debt is among their main concerns. In 2009 they opposed President Barack Obama's fiscal stimulus, arguing that it was unaffordable. Yet it cost less than today's tax bill would. It passed when unemployment was over 8% and interest rates were stuck near zero. Today unemployment is 4.1% and rates have started rising because the Federal Reserve is worried about inflation. The Fed will probably raise rates faster after the tax bill, limiting the boost to economic growth.

The whiff of self-enrichment does not help. President Donald Trump assures Americans that the bill will be "not good" for his bank balance. Without seeing his tax returns, that is impossible to know. But he holds interests in around 500 "pass-through" businesses, which are among the main beneficiaries of the tax bill. As a property developer, he is almost uniquely fortunate in being allowed to keep most of his tax exemptions.

**Talking is good**

When Democrats cried foul after the bill passed, Mitch McConnell, the Senate leader, retorted that: "You complain about process when you are losing." Nonsense. A robust and factual debate is essential to good policymaking. The erosion of standards will feed on itself. Already, some voices on the left are saying that deficits should never again stop Democrats from spending freely when they are in power. In a country facing a huge long-term fiscal shortfall, that is a worrying thought.

Democracy requires deliberation, and deliberation requires honesty. After this bill, a great fear of the Founding Fathers—a politics of warring factions and interests, scrapping over the public purse—looks closer than ever.

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reality-economic-policy-will-only-get-worse-worry/print

**Peace in the Middle East**

# The recognition of Jerusalem as Israel’s capital is reckless

If he must shake things up, he should open two embassies in the holy city, not one


Dec 7th 2017

JERUSALEM is both heavenly and earthly, holy and sinful. “Ten measures of beauty God gave to the world, nine to Jerusalem and one to the rest,” says the Talmud. Sometimes, however, it seems as if ten measures of suffering God gave to the world, nine to Jerusalem and one to the rest. The medieval Arab geographer, al-Muqaddasi, called the holy city “a golden bowl full of scorpions”.

In announcing this week that America recognised Jerusalem as the capital of Israel, and would start the process of moving the American embassy there from Tel Aviv (see article), President Donald Trump claimed to be honouring Israel’s democracy. He was, he said, simply acknowledging reality; he still sought peace between the Palestinians and the Israelis. In fact, his move has the nasty sting of a scorpion.

Israel is unusual in having a capital that is not recognised by the rest of the world. No country keeps an embassy in Jerusalem. This oddity is a product of history. After 1947, when the UN voted to partition the then-British mandate of Palestine, Jerusalem was declared an international city, part neither of the future Jewish state nor of the Arab one. But in the subsequent war Israel and Jordan divided the city and two decades later, in the war of 1967, Israel captured and annexed East Jerusalem. Arab residents were given a special status, but building projects, population policies and, latterly, the security barrier all served to strengthen the Jews in their "eternal and undivided capital". The Oslo accords of 1993, which created an autonomous Palestinian Authority, left the status of Jerusalem as one of several "final status issues" to be settled in a permanent peace between Israel and the Palestinians.

Congress called for the American embassy to be moved to Jerusalem, and presidential candidates often promised to do so. In office, though, they always found reasons to delay. Now Mr Trump claims to be bringing "very fresh thinking" to the Middle East: "I've judged this course of action to be in the best interests of the United States of America and the pursuit of peace between Israel and the Palestinians." It will help neither.

To begin with, it is an admission of failure. Mr Trump is prejudging the outcome of the "ultimate deal" of Israeli-Palestinian peace that he claims to be pursuing. He has given Israel the prize of recognition without extracting anything in return, and does not mention Palestinians' right to statehood. That has both weakened his own influence in any peace talks and America's claim to be a fair mediator between the Israelis and the Palestinians. Second, Mr Trump has further discredited the already feeble Palestinian president, Mahmoud Abbas, and all those who argue that Palestinian aspirations can be met by negotiation rather than violence. Third, he has embarrassed Arab allies, and made it harder for them to move towards a de facto alliance with Israel to counteract the expansion of Iran's influence in the Middle East.

Mr Trump perhaps calculates that Arab regimes are too concerned with other crises to bother with Palestine, and that the Palestinians are too divided and dispirited to do much about it. Yet even if the prospect of Palestinian unrest is muted, Mr Trump pointlessly risks stoking violence.

Mr Trump is at pains to say that America will accept any future deal on

Jerusalem that Israel and the Palestinians can agree on. In practice the United States, like most other countries, already treats Jerusalem as Israel's capital. Its diplomats and politicians—including presidents—routinely meet Israeli ministers in Jerusalem. Yet if recognition makes little practical difference, why did Mr Trump bother?

The answer has nothing to do with American policy in the Middle East and everything to do with domestic politics. At home Mr Trump has struggled to enact his promises because of resistance in Congress and the courts. Abroad, though, he has now honoured a radical promise—one his predecessors were too feckless to keep. It helps, too, that his electoral base admires Israel and dislikes Arabs; and that many evangelicals think the ingathering of the Jews will hasten the end of days.

Mr Trump would have been best advised not to touch Jerusalem at all. It should have been left as the crown in a final peace agreement. But if he must shake things up, then he should double down on his radicalism: open not one embassy in Jerusalem but two. One would manage ties with Israel and the other in East Jerusalem would deal with the Palestinian state, which he should also recognise. Two embassies for two states for two peoples: that would be truly fresh thinking.

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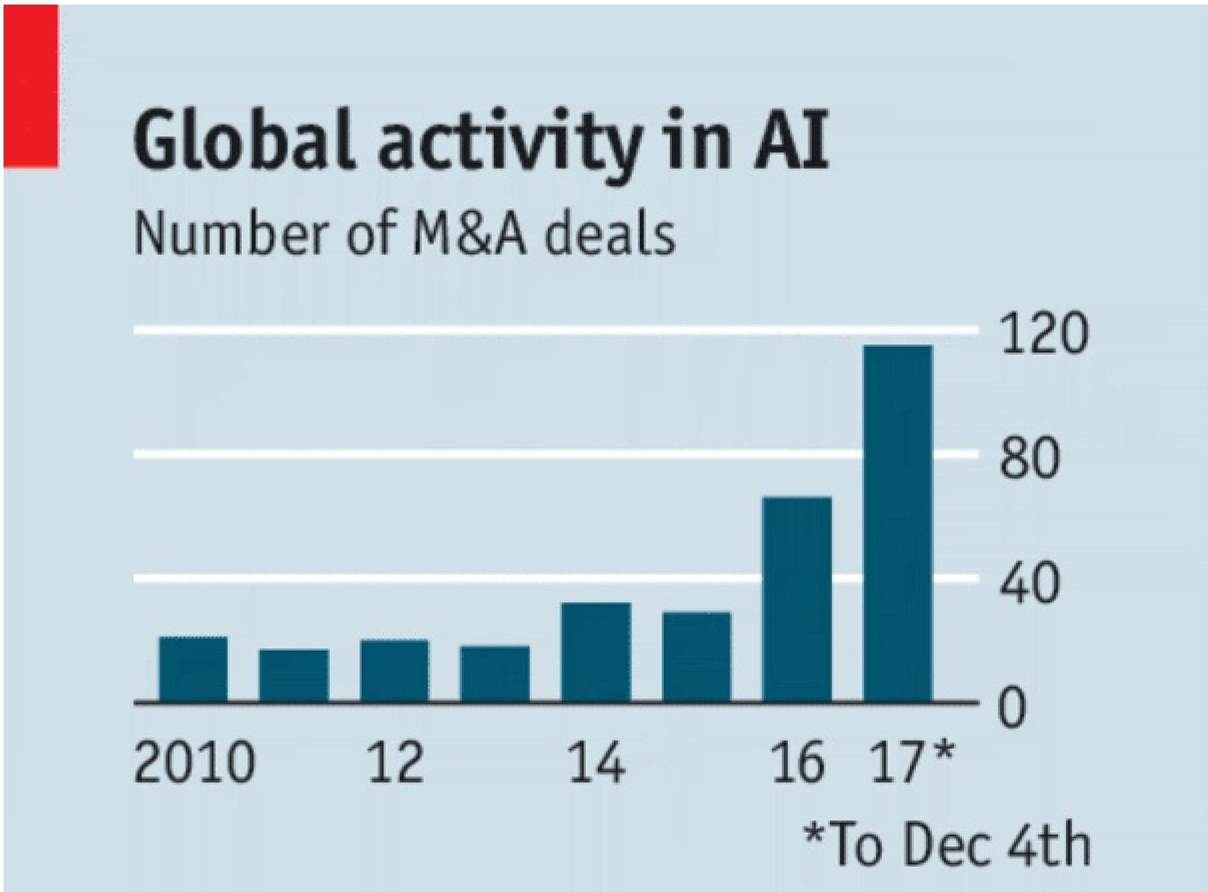
**Coding competition**

## The battle in AI

Artificial intelligence looks tailor-made for incumbent tech giants. Is that a worry?

Dec 7th 2017




Economist.com

TWO letters can add up to a lot of money. No area of technology is hotter than AI, or artificial intelligence. Venture-capital investment in AI in the first nine months of 2017 totalled $7.6bn, according to PitchBook, a data provider; that compares with full-year figures of $5.4bn in 2016. In the year to date there have been $21.3bn in AI-related M&A; deals, around 26 times more than in 2015. In earnings calls public companies now mention AI far more often than “big data”.

At the heart of the frenzy are some familiar names: the likes of Alphabet, Amazon, Apple, Facebook and Microsoft. A similar, though less transparent, battle is under way in China among firms like Alibaba and Baidu. Several have put AI at the centre of their strategies. All are enthusiastic acquirers of AI firms, often in order to snap up the people they employ. They see AI as a way to improve their existing services, from cloud computing to logistics, and to push into new areas, from autonomous cars to augmented reality (see article). Many observers fear that, by cementing and extending the power of a handful of giants, AI will hurt competition. That will depend on three open questions, involving one magic ingredient.

**AlphaGone**

The tech giants certainly have big advantages in the battle to develop AI. They have tonnes of data, oodles of computing power and boffins aplenty—especially in China, which expects to charge ahead. Imagine a future, some warn, in which you are transported everywhere in a Waymo autonomous car (owner: Alphabet, parent of Google), pay for everything with an Android phone (developer: Google), watch YouTube (owner: Google) to relax, and search the web using—you can guess. Markets with just a handful of firms can be fiercely competitive. A world in which the same few names duke it out in several industries could still be a good one for consumers. But if people rely on one firm's services like this, and if AI enables that firm to predict their needs and customise its offering ever more precisely, it will be burdensome to switch to a rival.

That future is still a long way off. AI programs remain narrowly focused. Moreover, the ability of the incumbents to perpetuate their advantages is made uncertain by three questions.

The most important is whether AI will always depend on vast amounts of data. Machines today are usually trained on huge datasets, from which they can recognise useful patterns such as fraudulent financial transactions. If real-world data remain essential to AI, the tech superstars are in clover. They have vast amounts of the stuff, and are gaining more as they push into fresh areas such as health care.

A competing vision of AI stresses simulations, in which machines teach themselves using synthetic data or in virtual environments. Early versions of a program developed to play Go, an Asian board game, by DeepMind, a unit of Alphabet, were trained using data from actual games; the latest was simply given the rules and started playing Go against itself. Within three days it had surpassed its predecessor, which had itself beaten the best player humanity could muster. If this approach is widely applicable, or if future AI systems can be trained using sparser amounts of data, the tech giants' edge is blunted.

But some applications will always require data. How much of the world's stock of it the tech giants will end up controlling is the second question. They have clout in the consumer realm, and they keep pushing into new areas, from Amazon's interest in medicine to Microsoft's purchase of LinkedIn, a professional-networking site. But data in the corporate realm are harder to get at, and their value is increasingly well understood. Autonomous cars will be a good test. Alphabet's Waymo has done more real-world testing of self-driving cars than any other firm: over 4m miles (6.5m kilometres) on public roads. But established carmakers, and startups like Tesla, can generate more data from their existing fleets; other firms, like Mobileye, a driverless-tech firm owned by Intel, are also in the race.

The third question is how openly knowledge will be shared. The tech giants' ability to recruit AI expertise from universities is helped by their willingness to publish research; Google and Facebook have opened software libraries to outside developers. But their incentives to share valuable data and algorithms are weak. Much will depend on whether regulations prise open their grip. Europe's impending data-protection rules, for example, require firms to get explicit consent for how they use data and to make it easier for customers to transfer their information to other providers. China may try to help its firms by having negligible regulation.

The battle in AI is fiercest among the tech giants. It is too early to know how good that will be for competition, but not to anticipate the magic ingredient that will determine the outcome: the importance, accessibility and openness of data.

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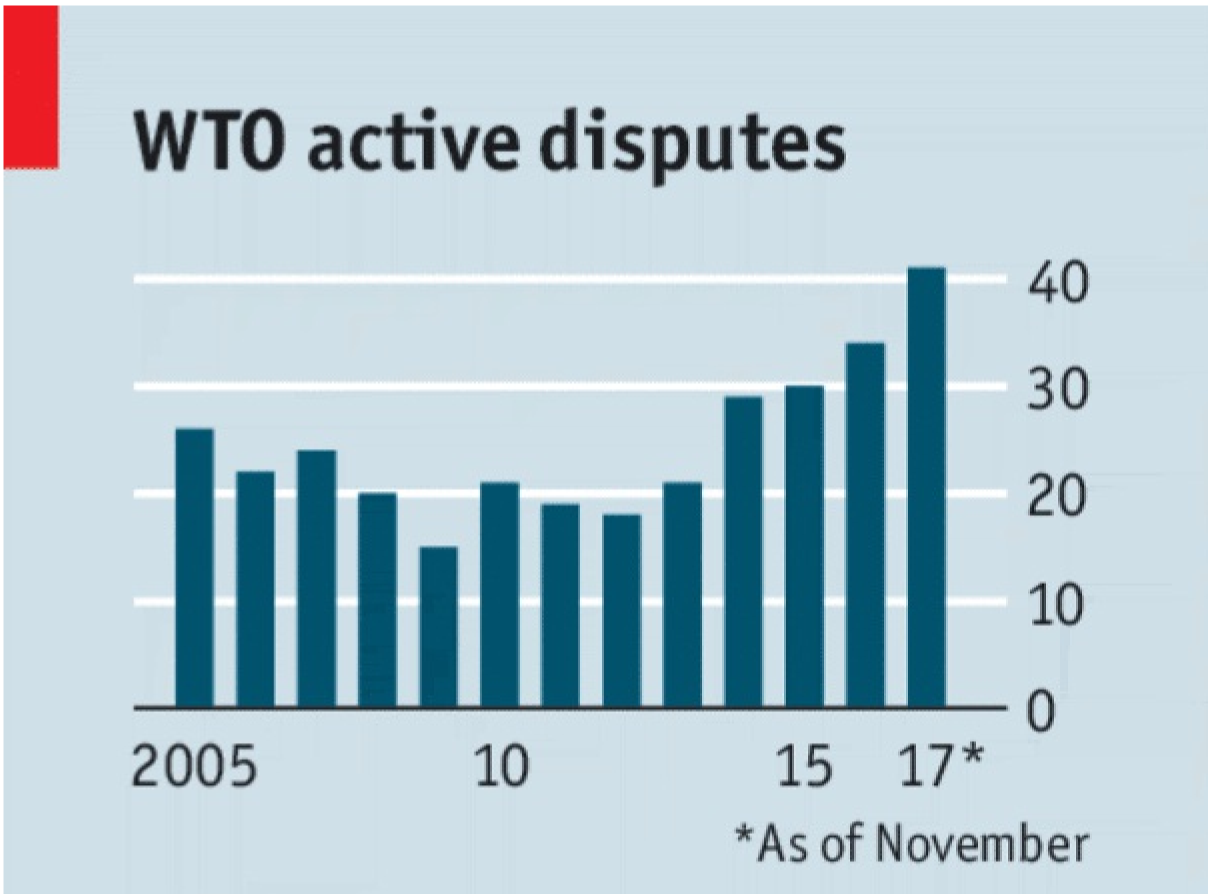
**Disaster management**

## The WTO is under threat from the Trump administration

America is increasingly resorting to bilateral trade measures

Dec 7th 2017




Economist.com

FOR Roberto Azevêdo, its director-general, the WTO is a “hostage of its own success”. For President Donald Trump it is “a disaster”. Mr Trump would not be alone in balking at Mr Azevêdo’s formulation, meant to manage down expectations for the WTO’s two-yearly ministerial meeting in Argentina later this month (see article). The WTO has not achieved a big breakthrough in its mission of trade liberalisation for more than two decades. Its last big round of trade talks, the Doha Development Agenda, became the *Jarndyce v Jarndyce* of trade diplomacy; in 2015 it was quietly put out of its misery.

If only a disappointing record were the biggest problem for the WTO. America has had fraught relations with it for years; under Mr Trump, frustration has turned to aggression. America feels that China, the world's biggest exporter, has used the WTO to provide legal cover for a policy of mercantilism. Rather than help the WTO find solutions, the administration has preferred to undermine it, through a mixture of policy unilateralism, rhetorical criticism and bureaucratic sabotage. That approach is wrong. The WTO is easy to criticise and take for granted. But it is vital for the world economy—and for America.

**You'll miss me when I'm gone**

So far, Mr Trump has not carried out the most drastic of the trade threats he made so loudly on the campaign trail: across the board, 45% tariffs on imports from China, plus withdrawal from the WTO and North American Free-Trade Agreement (NAFTA). But he still sees trade as a zero-sum game that America has been losing, in which imports are bad, exports are good and a bilateral trade balance is the scoresheet. Because of its heft, the thinking goes, America will always win in bilateral trade deals where it can bully the country on the other side of the table. If only it could exploit its advantages, it argues, it would force open foreign markets or use trade as a bargaining chip to pursue its wider interests—securing Chinese help, say, to rein in North Korea's nuclear ambitions.

And so Mr Trump's officials have, directly and by neglect, taken aim at the multilateral trading system. They have openly criticised the WTO. They have sidestepped it, resorting to dusty American laws to investigate unilaterally imports of such products as steel and aluminium goods, solar cells and washing-machines. The investigations into steel and aluminium were instigated under a law from 1962 that had not been used since 2001. Whereas the use of the WTO quarantines disputes, by turning them into dry, technocratic affairs, "self-initiated" actions politicise even routine complaints.

A third form of attack is more insidious. America has failed to appoint its own permanent representative to the WTO. And, citing arcane procedural concerns, it has kept open vacancies for judges on the WTO's appeals court. The court already has a backlog of cases. If the gaps are not filled, the system for settling disputes is at risk of collapse. If countries then take retaliation into their own hands, the WTO itself may follow.

It is unclear if the administration really wants that. It is supporting the European Union in a case brought at the WTO by China, which wants "market-economy" status. This would make it harder to impose stiff anti-dumping duties on Chinese exports. America seems to recognise the WTO's continued usefulness here. Perhaps, then, America hopes the pressure will spur reform of the body. Yet that line looks optimistic, since America has not spelled out what it wants to change.

Instead, the administration seems to want the best of all worlds; using the WTO when it suits it, while putting its energy into bilateral strong-arm tactics. Yet that would not be good for America, either. The tariffs it keeps threatening would raise prices for its own consumers. Exports that rely on imported components would become less competitive: the American car industry says tariffs on parts from Mexico would increase its costs by $16bn-27bn a year. Partners would be likelier to retaliate directly rather than seek redress through the WTO.

If the WTO were shunned by the world's biggest economy it might not collapse, but it would wither. That would indeed be a disaster. The WTO is rooted in the vision of a liberal world order America has led since the second world war. It links nearly all the world's countries in an agreed rules-based framework. Some Americans argue that it has failed in its most ambitious venture: binding the state-dominated Chinese economy, admitted in 2001, into a fair trading system. China's market reforms have indeed disappointed. But viewed another way, the WTO has smoothed the disruption caused by the reintegration into the world of what is now its second-largest economy. It remains the best way of trying to make China play by the rules. In a trade war, no country would win.

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# Letters

- **On Zimbabwe, Northern Ireland, carbon-dioxide emissions, bank robbers: Letters to the editor** [Fri, 08 Dec 17:10]

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Letters

# Letters to the editor

On Zimbabwe, Northern Ireland, carbon-dioxide emissions, bank robbers

Dec 7th 2017

Letters are welcome and should be addressed to the Editor at letters@economist.com

## Democracy in Zimbabwe

Thank you for finding a "sliver of hope" in the prospects for Zimbabwe ("Fall of the dictator", November 18th). As Zimbabwean citizens and democracy campaigners, we are also permitting ourselves a moment of optimism. Where we differ from *The Economist* is in the imperative to hold an election based on the current timetable or at the earliest opportunity. There is more to having a free and fair election than holding a ballot.

Before an election in Zimbabwe can pass as free and fair, substantial reforms are required to align electoral law properly with the constitution; scrub the voters' roll of political bias; make the Electoral Commission truly independent; develop a conducive politics free from violence, intimidation, patronage, propaganda and hate speech, backed by a strengthened Human Rights Commission; and to involve a wider range of election observers.

The path to the next election in Zimbabwe should be defined by the time required to implement and embed the reforms necessary to make it credible. It does not help our democratic renewal to have a quick but failed ballot.

TAWANDA CHIMHINI
Executive director
Election Resource Centre

RINDAI CHIPFUNDE
Executive director
Zimbabwe Election Support Network
*Harare*

**Border disputes**

As a soldier, I served, like many thousands before and after me, in Northern Ireland. We had no illusions that there was a military solution; our role was to hold the line to create the space (and time) for a political solution. The Good Friday Agreement was therefore welcomed with relief and some sense perhaps, that a lasting, peaceful solution for Ireland might justify all the suffering.

To have all of that thrown away, with almost callous indifference, by Brexit fills me with horror and some despair ("The siren song of no deal", December 2nd). It is absolutely clear that, as the Irish prime minister has pointed-out, the Brexit clique never once considered the impact on Ireland in their decade of plotting. But then they don't seem to have considered any of the other consequences, so we should not be too surprised.

We are therefore left with an act of Grand Strategic folly, that will take a

Barbara Tuchman to untangle in due course, but in their insouciant arrogance to the effect on Ireland, the Brexiteers have shown their truest colours.

SIMON DIGGINS, COLONEL (RET'D)
*Rickmansworth, Hertfordshire*

If Northern Ireland were to remain in the EU after Brexit with a customs border in the Irish Sea, would this allow Britain to keep its financial-services passport by locating such services to Belfast?

NEIL LUTTON
*Belfast*

**Negative emissions**

Under no circumstance should a government offer rewards for the extraction and storage of a by-product, especially carbon dioxide ("Sucking up carbon", November 18th). The incentive for firms to produce more of the stuff would outweigh the good intentions. In public policy we call this the cobra effect. As an analogy to paying-per-tonne of captured carbon, consider a pay-per-rat programme. Let's say the mayor of New York wanted to put a dent in the city's rat problem (and believe me, there is one) by offering a sum for each rat killed. Any enterprising New Yorker would start a rat farm. The rat problem would get significantly worse.

IZIAH THOMPSON
Policy analyst
Daily Clout
*New York*

I was surprised to see no mention of biochar in your article. This is a finely powdered charcoal, made from biomass and in effect immune to biodegradation, which can be spread on fields to help retain water and nutrients and support a healthier soil ecosystem. Because it stores carbon as a solid, rather than a gas, it overcomes many of the difficulties associated with injecting carbon dioxide underground. It also requires a much lower capital cost. A number of companies already produce biochar, marketing its ability to raise crop yields. Biochar that was buried in the Amazon basin (*terra preta*) many centuries ago is still sequestering carbon and boosting crop yields.

PHIL WAGNER
*Golden, Colorado*

You put forward two options for limiting emissions: tax and subsidies. There is a third way: rationing. Governments are able in principle to limit the wholesale supply of fossil-carbon fuels at the macro level. They should do so, setting a ceiling with a progressive annual taper. They could then leave the market through innovative pricing, including capacity constraints, rising block tariffs and other scarcity-pricing mechanisms, to allocate supplies at the retail level.

VILNIS VESMA
*Newent, Gloucestershire*

Trees can play a big role in getting us towards negative emissions. Sustainable forestry has a double benefit because wood is both carbon-negative and a replacement for carbon-positive building materials such as concrete and steel. Meeting much of the demand for new buildings in countries with booming populations, wood significantly reduces the amount of carbon we need to scrub from the atmosphere using more contentious technologies, and also raises the economic value of forest products to encourage further afforestation.

ROBERT FOSTER
Senior lecturer
School of Civil Engineering
University of Queensland
*Brisbane, Australia*


Trees on farms can substantially increase crop yields while also providing other benefits, such as improved adaptation to climate change. This can be clearly seen on small farms in Africa, which produce the bulk of food on that continent. It would be better to put food and nutrition security first in Africa and to think of climate effects as secondary benefits. There is enough evidence from successful local community action regreening the Sahelian zone to show that rushing to plant trees in the Sahara, which an oil company in Finland seems to be willing to do to offset its carbon emissions, is not a good idea.

OLAVI LUUKKANEN

Professor emeritus of tropical silviculture
*University of Helsinki/em>*

**Dr Robot**

* Your commentary on robots replacing much of what radiologists do today was right on ("Why scan-reading artificial intelligence is bad news for radiologists", November 29th). Scan-reading technology is good for patients, good for docs, and a great challenge for medical schools. It is time to stop selecting and training doctors to be better robots than a robot.

For too long, we've picked medical students based on organic chemistry grades, scores on standardised tests and the ability to memorise. And then we've been shocked when doctors haven't been more communicative, empathetic and creative.

Instead we need doctors, including radiologists, to be the humans in the equation. We should use robots to remove the mind-numbing tasks of batch reading routine X-rays. We should expect doctors to be excited about multidimensional interactions between diagnosis and treatment, patient and society, innovation and change.

STEPHEN KLASKO
President and CEO
Thomas Jefferson University and Jefferson Health
Philadelphia

**A not-so-petty criminal**

He was a successful thief for 40 years, but Willie Sutton isn't even recognised for his memorable response when asked why he robbed banks: "because that's where the money is." He had a far longer and more prosperous career than John Dillinger, to whom the quote was wrongly attributed in "Disjointed" (November 18th). But robbing banks is no longer favoured by the most enterprising robber. Times change, technology marches on, and the old ways of plundering go out of fashion. There are just too many ways for clever thieves to steal today.

TODD LANDAU
Fairhope, Alabama

* Letter appears online only

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# Briefing

Mandela weeps

## How Jacob Zuma captured South Africa, and how he might lose control

The ruling African National Congress ponders a choice between dynasty and reform


Dec 9th 2017 | NELSPRUIT

“GIVE us back our money!” shouts Cyril Ramaphosa, deputy president of South Africa. A 5,000-strong crowd at the Communist Party rally at Nelspruit Rugby Club in Mpumalanga, South Africa’s north-eastern province, picks up the chant. Mr Ramaphosa is campaigning to be elected leader of the ruling African National Congress (ANC) and thus the party’s candidate for the presidency in 2019 at a conference that starts on December 16th. He and Nkosazana Dlamini-Zuma, ex-wife and protégée of Jacob Zuma, the current president, are joint favourites. The central issue in the leadership contest is corruption.

“December represents a binary moment for South Africa,” says Colin Coleman, head of Goldman Sachs’s South Africa office. Mr Coleman supports Mr Ramaphosa, as do COSATU (the trade-union movement, from which Mr Ramaphosa hails) and the South African Communist Party. Goldman Sachs, unions and the Communist Party rarely find themselves on the same side, but hostility to Mr Zuma has made for strange—and numerous—bedfellows. During his second term in power, the president has alienated almost all of big business, civil-society organisations, the churches and the union movement, along with much of his party.

The principal charge against Mr Zuma is of "state capture". Unfamiliar elsewhere in the world, the term is in widespread use in South Africa, especially since the publication in October 2016 of "State of Capture", a report by Thuli Madonsela, the former public protector—an ombudsman whose powers are guaranteed by the constitution. It investigated claims that the three Gupta brothers, business associates of Mr Zuma's son, Duduzane, had excessive influence over South African politics, from which they profited. Ms Madonsela concluded that there were many questions to answer, and called for a judicial inquiry.

**Captive audience**

The nub of the "state capture" argument is that Mr Zuma and his friends are putting state-owned enterprises and other governmental institutions in the hands of people who are allowing them to loot public funds. The result, according to Pravin Gordhan, twice Mr Zuma's finance minister, fired most recently in March this year, is that "150bn-200bn rand ($11bn-15bn) has been looted." Some global companies are implicated (see article).

The most egregious example of interference in political appointments concerns the finance ministry. In 2015, according to evidence that Mcebisi Jonas, a former deputy finance minister, gave the public protector, Mr Zuma's son Duduzane drove them both to the Guptas' house, where Ajay Gupta told Mr Jonas that they were going to make him finance minister. When he rejected the proposal, Mr Gupta offered him 600m rand, asking if he had a bag in which he could take 600,000 rand at once. Two months later Nhlanhla Nene, the widely respected finance minister, was fired and replaced by an unimpressive backbencher. That was on a Wednesday. The rand lost 9% of its value over the next couple of days. The new man, known as the "weekend special", was removed after four days. Mr Gordhan was back in the job by the following Monday.

Firing principled individuals undermines institutions, as the experience of the South African Revenue Service (SARS) shows. When the post-apartheid government came to power, the state was deeply in debt. “The key in any society is the compliance culture. In the apartheid era, it wasn’t there, because of sanctions-busting. That infected everything,” says Mr Gordhan, who became commissioner of SARS in 1999. Ivan Pillay, a former exile and member of the ANC’s guerrilla wing, Umkhonto we Sizwe, became head of enforcement. In the next decade the tax take on banks’ profits rose from 1% to 21% and the number of individuals paying tax from 2.6m to 4.1m. Princeton University wrote a case study on its achievement.

A “research and investigations” unit was set up to take on difficult cases, among them tobacco smuggling. Edward Zuma, the president’s son, was a director of one of the firms under investigation. The unit was successful—too successful, according to Mr Pillay. “When we really started to do well on combating tax evasion in the cigarette and tobacco business, we started bumping heads.” Around that time stories began to appear in South Africa’s *Sunday Times* newspaper about a “rogue unit” in SARS which it alleged had, among other things, spied on the president and run a brothel.

Soon afterwards, SARS got a new boss, Mr Pillay was suspended and KPMG was commissioned to produce a report on the matter. In 2016, after the delivery of the report, Mr Gordhan and Mr Pillay were charged with fraud. The charges were soon dropped. The *Sunday Times* and KPMG apologised to Mr Gordhan, but the damage was done: the research-and-investigations unit had been dismantled and 55 senior managers had left the service. SARS, which had been beating targets, is expected to have a revenue shortfall of 51bn rand this year, and more in the next two years.

## Highly charged

The National Prosecuting Authority, which laid the charges against Mr Gordhan, is crucial. Whoever controls it can ensure that their enemies are prosecuted and their friends are not. There are 783 counts of corruption against Mr Zuma relating to an arms deal but no charges have been pressed. Nor, despite the evidence against them in the public protector’s report, has any action been taken against the Guptas. “All you need to know about the NPA is that the only high-profile corruption charge they’ve brought is against

Pravin Gordhan," says Anton van Dalsen of the Helen Suzman Foundation, a think-tank. "If you're a friend of the president, nobody will lift a finger against you."

"State capture" is spreading. "You can see the…process extending through law enforcement, the state-owned enterprises, the revenue service, the Treasury and now the central bank," says Mr Gordhan, referring to a report by Ms Madonsela's replacement as public protector, which called for parliament to amend the Reserve Bank's mandate to protect the currency to a vague one to promote citizens' well-being. Mr Zuma's opponents regard it as an attack on the bank's independence, prompted by its role in the closure of Gupta-linked bank accounts by the commercial banks. The Reserve Bank hit back swiftly, taking the public protector to court and winning.

The courts seem robust, and there are good reasons to believe that they will remain so. The Judicial Services Commission, which appoints judges, has 23 members, only four of whom are appointed by the president. There are concerns about the competence of some judges but not their independence. And appointees sometimes exceed expectations, perhaps because of a powerful culture of independence within the judiciary. When Mogoeng Mogoeng, the chief justice, got the job, there were fears that he would be a pushover but, according to Edwin Cameron, a Constitutional Court judge: "He proved us all wrong. He's phenomenal."

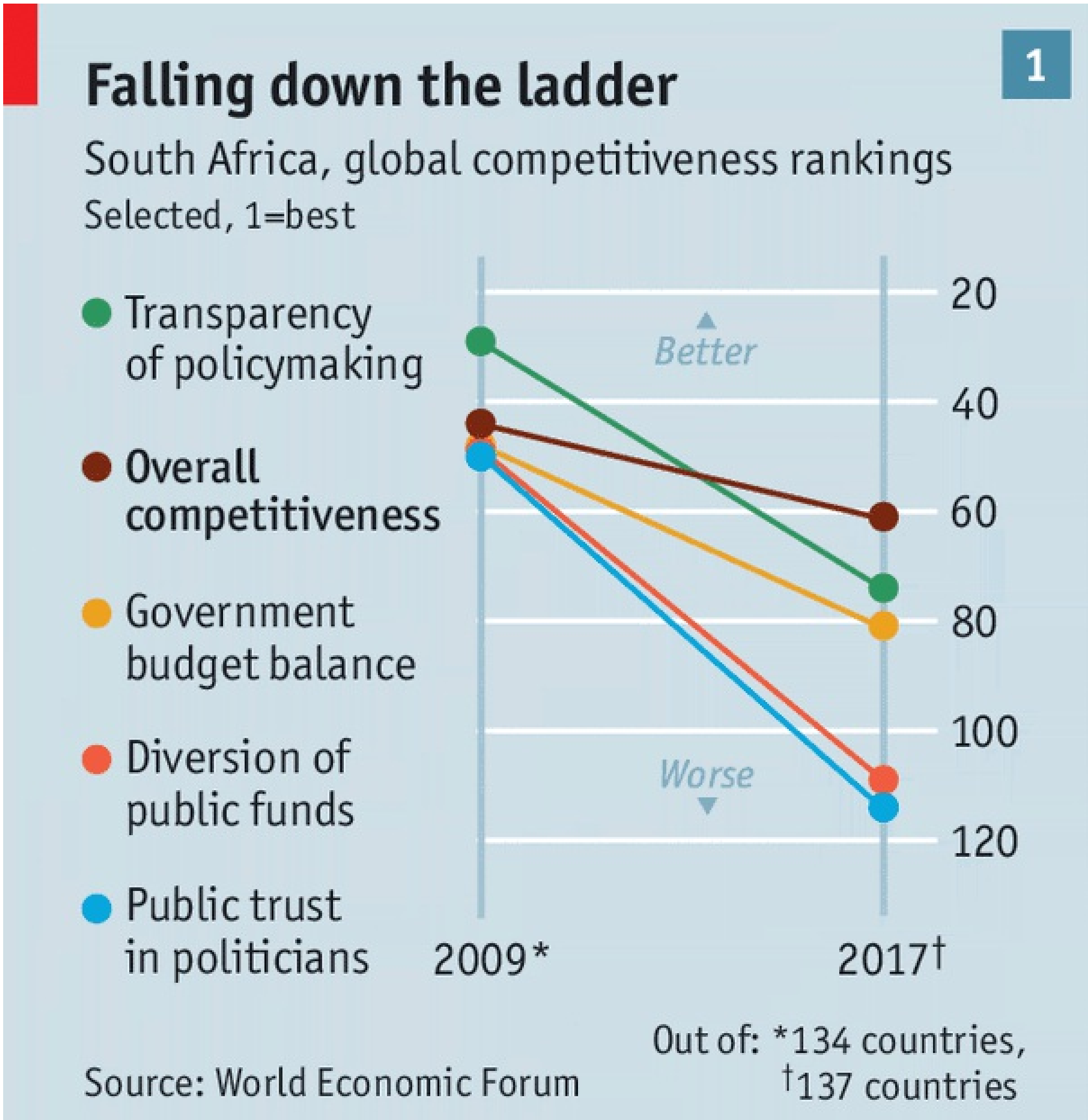
As other institutions of state cave to pressure, the courts are fielding more big political cases. Last year, for example, two opposition parties, the Democratic Alliance (DA) and the Economic Freedom Fighters (EFF), brought a case to get Mr Zuma to follow the recommendation of a report by Ms Madonsela that he should pay back state money spent on his private residence. The Constitutional Court found against Mr Zuma. In October the Supreme Court of Appeal upheld a ruling in favour of the DA that the charges against Mr Zuma in the arms deal case should be reinstated.

Many such cases are brought by concerned citizens. South Africa has a long tradition of civic activism, a result of the struggle against apartheid. Notable figures on the scene, such as Francis Antonie of the Helen Suzman Foundation and David Lewis of Corruption Watch, are veterans of the apartheid era; others are newcomers, slightly surprised to find that they have become political activists.

Wayne Duvenage, former CEO of Avis South Africa, founded the Opposition to Urban Tolling Alliance, now repurposed as the Organisation Undoing Tax Abuse. In September it got a court to freeze 1.75bn rand in accounts owned by rehabilitation trusts of Gupta-owned mines, pending a court decision on its application for new trustees to be appointed. It maintained that there were reasonable grounds for believing the money, meant for mitigating environmental damage, would be removed from South Africa. Mr Duvenage is full of beans. “I’m not getting rich, but I work in an organisation where there’s no shortage of business and you make people happy with your work. I’m having a great time.”

The press is also on the front line. “When history is written about the Zuma years, the media will have a very big space,” says Sipho Pityana, chairman of AngloGold Ashanti, a mining company, and founder of Save South Africa, an anti-state-capture group. Some old warriors have returned to the fray. Jacques Pauw, a star of *Vrye Weekblad*, an Afrikaans anti-apartheid paper, was tempted back onto the beat from a new career as a chef by sources with explosive revelations. His book, “The President’s Keepers”, detailing the capture of the security and intelligence services has sold 85,000 copies in a month. Two new digital papers, the *Daily Maverick* and *amaBhungane* (Dung Beetle)—motto: “we shovel dung to fertilise society”—were jointly responsible for the biggest scoop of the Zuma years, getting hold of around 200,000 e-mails supposedly to and from the Guptas about their business dealings. #Guptaleaks is now online.

**Firms speak up**

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Now even business is protesting. It took a while, partly because—as is usual in resource-intensive countries—the state owns and regulates much of the economy, and also because white South Africa's history of using the state to impoverish and disenfranchise black people makes it hard for white businesspeople to oppose an elected black government. But the firing of Mr Nene provoked businesspeople to act. The replacement of his successor showed that they could effect change. And the damage that politics is doing to the economy has given them courage.

Investment has flopped thanks to chaotic policymaking and rising costs: electricity tariffs have risen nearly fivefold over the past decade. The government’s critics blame inflated contracts given to cronies by Eskom, the state-owned power utility. Since Mr Zuma came to power in 2009, South Africa has become less competitive (see chart 1). The economy has underperformed and GDP per head is falling (see chart 2). Unemployment is running at 28%. Standard & Poor’s recently downgraded government debt to below junk; one more downgrade by Moody’s will tip South African bonds out of benchmark indices, which would further inflate a deficit already widened by the revenue service’s problems. Leading businessmen like Mr Pityana, Jabu Mabuza, chairman of Telkom SA, and Bonang Mohale, chairman of Shell South Africa, have become outspoken critics of Mr Zuma’s.

Economist.com

None of which means that Mr Zuma is losing his grip on power. Certainly, he is unpopular. A poll by Ipsos in May found that 65% of voters and 54% of ANC members thought he should resign. And soundings among ANC delegates give Mr Ramaphosa a sizeable lead. But betting against Mr Zuma has proved unwise in the past, and there are many ways in which he could turn things to his advantage.

He could succeed in tipping the vote his way. He might, perceiving his ex-wife's unpopularity, change horses. He could cancel the conference, on the grounds that there are already several legal challenges to the legitimacy of ANC members and delegates. Or the conference could collapse without choosing a successor. Mathews Phosa, a member of the ANC executive who is himself a candidate for the presidency, points to the Eastern Cape provincial ANC conference in September, which degenerated into a chair-throwing fest: “It will be worse than that,” he says.

Whatever happens, more drama will follow. The ANC’s popularity is sliding. Its share of the vote fell from 62% in the national election in 2014 to 54% in local elections in 2016, against the DA’s 27% and the EFF’s 8%. The best way for the next leader to boost the party’s chances in 2019 would be to put Mr Zuma on trial. That raises the stakes for the president. To avoid that outcome, he needs to do his utmost to make sure things go his way next week.

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**Firms under fire**

## The big companies caught up in South Africa's "state capture" scandal

Doing business with the Guptas can seriously damage your reputation


Dec 9th 2017 | JOHANNESBURG

SEVERAL global firms have had their reputations damaged in South Africa—and worse. **Bell Pottinger**, a British public relations company, was destroyed by its work for the Guptas. It had branded attacks on the Guptas as motivated by "white monopoly capital" rather than concern for probity. Abandoned by clients, the firm has gone into administration.

According to a speech in the House of Lords by Peter Hain, a British peer, an 84m rand ($8m) grant from the Free State, designated for investment in a dairy farm, was transferred into the **Standard Chartered** account of a Gulf-based Gupta firm called Gateway, then into the account of another Gulf-based Gupta company called Accurate Investments (both accounts have since been closed); $2.6m of the money went back to South Africa, into a firm called Linkway Trading which used it to pay for a Gupta wedding. The money was written off as a business expense. Linkway's auditor was

KPMG.The firm has since said its audit work in the Linkway case “fell well short of the quality expected”.

A report by KPMG also gave credence to claims that the research-and-investigations unit of the South African Revenue Service (SARS) had “gone rogue”, which led to charges being laid against Pravin Gordhan, a former finance minister. KPMG has since said that the evidence did not support the conclusion that Mr Gordhan knew about the existence of a “rogue” unit, and that it regretted the impact of its report. Mr Gordhan is not mollified. The apology, he wrote in a newspaper article, did not go far enough. “The witting and over-enthusiastic collaboration of senior KPMG personnel…and their collusion with nefarious characters in SARS, in fact directly contributed to ‘state capture’ and gave legitimacy to the victimisation of good, honest professionals and managers.”

As a result of this debacle, the chairman, chief executive and chief operating officer in South Africa and five partners have left the firm; KPMG is repaying its 23m rand fee for the SARS report, and donating 40m rand, all the money it says it has earned from Gupta-connected firms, to education and anti-corruption NGOs. It has lost several clients in South Africa.

**McKinsey** got a contract to provide Eskom, the state power utility, with consultancy services, along with Trillian, a firm at the time majority-owned by Salim Essa, a business associate of the Guptas. The deal fell apart after six months, after which Eskom paid McKinsey 1bn rand and Trillian 564m rand. McKinsey says its work justified the fees; but the main question is not whether it should have been paid so much money, but whether or not Trillian was a subcontractor for McKinsey under the “supplier development programme” (SDP) which requires big companies to engage local firms; and if so, whether Trillian was doing real work. If it was not, its fee looks like a kickback.

Trillian’s former chairman asked Geoff Budlender, a South African lawyer, to produce a report on the matter. McKinsey told Mr Budlender that Trillian was not a subcontractor. But a (since departed) McKinsey partner wrote in a letter to Eskom’s CEO that “McKinsey has subcontracted a portion of the services to be performed under the agreement to Trillian.”

David Fine, McKinsey's global head of public and social sectors, told a South African parliamentary committee investigating state capture at Eskom that the letter saying that Trillian was a subcontractor was inaccurate. But Mr Budlender concluded "that the denial of McKinsey [that Trillian was a subcontractor] is false. Why they made a false denial is for them to explain."

On the question of whether Trillian was doing any real work or not, a former CEO of Trillian Management Consulting (TMC) who turned whistleblower says she raised concerns that McKinsey's people were not engaging with TMC as the SDP required. She says she was told by a senior McKinsey employee that "regardless of TMC resources allocated to projects, TMC will still get their 30%."

Corruption Watch, an NGO, will soon refer the case to America's Department of Justice. Its complaint is that "the act whereby McKinsey agreed to partner with Trillian solely for purposes of obtaining the Eskom contract, under what was disguised as a development plan, amounts to an act of corruption under the [Foreign Corrupt Practices] Act (FCPA)." McKinsey rejects "any claims that [we] engaged in bribery or corruption related to our work at Eskom".

According to Lord Hain, **HSBC** failed to close Gupta-linked accounts although staff in South Africa warned of suspicious transactions. HSBC says that it "has closed the accounts of Gupta-associated front companies wherever [it has] found them". The issue has particular salience in America, where a five-year deferred-prosecution deal resulting from accusations that it failed to prevent money-laundering and sanctions-busting runs out this month; if it had broken American law again, it would face a renewed threat of prosecution.

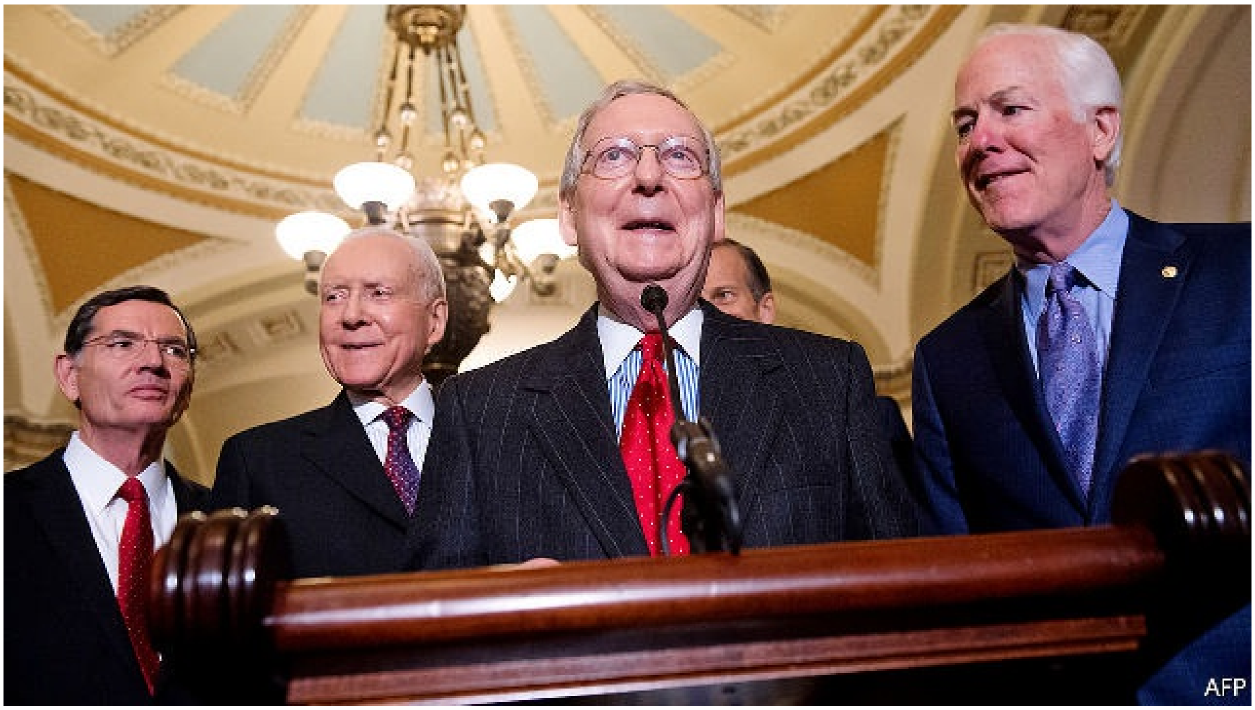
After revelations in #Guptaleaks, **SAP**, a German software firm, launched an internal inquiry and found that it had paid $6.6m in commissions to Gupta-linked companies for contracts with state-owned enterprises. It reported itself to America's Department of Justice and the Securities and Exchange Commission for possible breaches of the FCPA, has disciplined three employees, and will no longer pay commissions to employees who secure contracts in countries that score badly on Transparency International's Corruption Perceptions Index.

# United States

**Tax reform**

## How the Republican tax bill compares with previous reforms

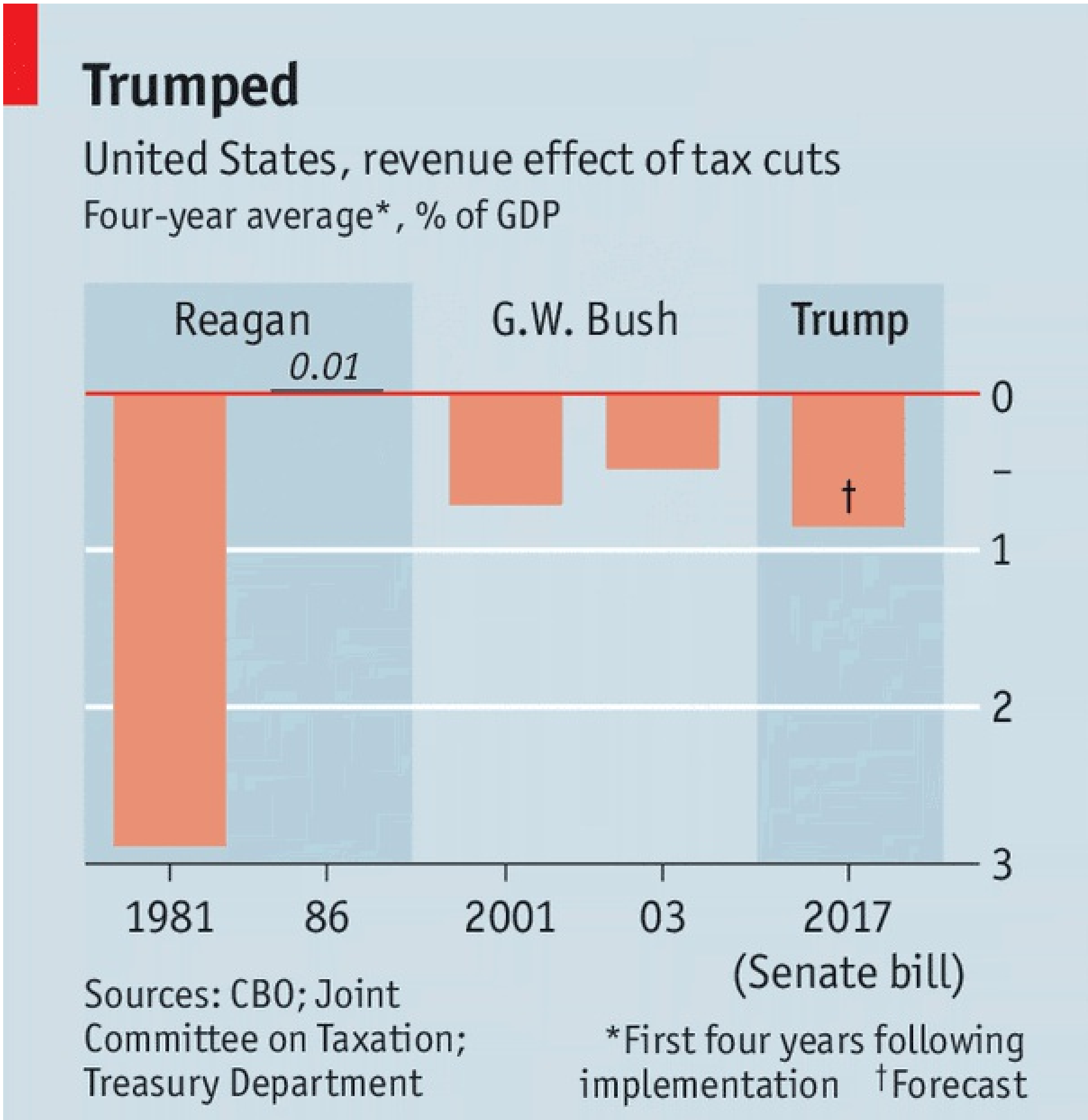
Today's bill does not much resemble the 1986 tax overhaul




Dec 9th 2017 | WASHINGTON, DC

REPUBLICANS like to say that their tax bill, which passed the Senate on December 2nd, is the first tax reform since 1986. President Donald Trump likes to call it the biggest tax cut in history. Mr Trump's claim is easily disproved (see chart). Yet the comparison with the law of 1986, passed under Ronald Reagan, is more curious. There is no doubt today's bill, like the older one, contains significant reforms. But the differences between the two efforts stand out more than the similarities. They are not quite mirror images of each other—but they are not far off.

There are three main differences between then and now. First, the centrepiece of today's bill is a cut in the corporate tax rate, from 35% to 20%. At first glance, this seems comparable to the change to the levy in 1986, when it fell from 46% to—after a brief delay—34%. Yet such was the volume of deductions that the 1986 reform swept away, that it in fact raised average taxes on businesses. Notably, investment incentives were sharply curtailed. Today's bill expands them, allowing businesses to deduct the full cost of investments in the year they are made (until 2023). Many economists see these investment incentives as a powerful stimulus for the economy. Because the reform of 1986 weakened them, and also raised capital gains taxes, the Tax Foundation, a right-leaning think-tank, reckons it might have reduced economic growth—a remarkable possibility, given the esteem in which it is held.




Economist.com

Second, the reform of 1986 was more egalitarian. Again, this is not easy to spot. Reagan's reform slashed the top rate of personal income tax almost in half, from 50% to 28%. By most accounts, this was the number Reagan cared about most. But a loss of deductions, and the rise in overall business and capital gains taxes, were countervailing forces. And lower earners got income-tax cuts, too. According to the Centre for American Progress, a left-leaning think-tank, the tax system as a whole reduced the Gini index, a measure of inequality, by 5% before the reform, but by 7% after it.

Today’s bill is sharply regressive, despite the fact that it barely touches the top rate of tax. That is partly because Mr Trump’s priority has been tax cuts for businesses, whose owners tend to be rich. True, the bill curbs some corporate deductions, such as a tax break for manufacturers, and another for debt interest. But these changes do not come close to paying for the size of the tax cut that Republicans propose. A look at the stockmarket, which soared as the bill passed the Senate, shows that most businesses can expect to do well.

The third difference between the bills is their cost. The reform of 1986 was revenue neutral. Today’s effort will cost $1.4trn in forgone revenue by 2027, or $1trn, once its likely effect on economic growth is taken into account, according to an official score of the Senate’s bill.

For that reason, the better comparison is to Reagan’s tax cut in 1981, which really does have a claim to be the biggest in post-war history. That bill, much like today’s, was sold on the basis that tax cuts pay for themselves. It contained big across-the-board income-tax cuts, and investment incentives for businesses. Over its first four years, it cost a mammoth 2.9% of GDP—or rather, it would have done, had lawmakers not spent the next few years reversing it in an attempt to get deficits under control. Between 1982 and 1985 lawmakers passed tax rises worth 1.7% of GDP, according to the Treasury Department.

Such an about-turn is very unlikely on this occasion. That said, the Senate bill’s cuts to individual income taxes are to be phased out after 2025, to keep the costs down. What is initially a tax cut for most lower-and middle-earners will turn into a tax increase, because of changes to how tax brackets will be adjusted for inflation.

Republicans last passed temporary tax cuts under George W. Bush in 2001 and 2003. Like the law of 1981, these contributed to growing deficits. However, they were not reversed. In 2013, under Barack Obama, they were mostly made permanent by a bipartisan deal, although taxes on top earners went back up. It is possible that, come 2025, Congress will implement a similar extension of the Trump tax cuts. If it does, their long-term costs will be greater. If it does not, the effect on inequality of today's bill will be worse, because its business tax cuts are permanent.

The tax bill could yet change as the House and the Senate negotiate. For example, one part of today's tax reform is its abolition of the deduction, from federally taxable income, of money used to pay state and local income taxes. Republicans tried and failed to eliminate this deduction in 1986, but it was spared by the efforts of representatives of high-tax states such as California and New York. Both the House and the Senate bills scrap it (while keeping a deduction for local property taxes in place). Republican representatives from California are mounting a last-ditch attempt to preserve the deduction, up to a limit. "There's a lot of things that Californians are working on," said Kevin McCarthy, the House majority leader. In November, 11 of the 14 House Republicans from California supported the tax bill. If they switched sides, they could potentially block it in the final vote.

That remains unlikely, because Republicans are desperate for a legislative achievement. But the threat demonstrates how difficult it is to take away tax deductions once they are granted. Reagan's reform managed it in part because of bipartisanship: the bill was introduced in the House Ways & Means Committee by a Democratic chairman, and ended up passing the Senate with 74 votes. If Republicans succeed in passing a tax bill by Christmas, as Mr Trump wants, and without any Democratic votes, it will at least be an act of impressive political discipline.

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**Shrinking ears, smaller stairs**

## The biggest undoing of federal land protection in American history

Having discovered a taste for undoing monuments, Donald Trump may do more of it


Dec 7th 2017 | WASHINGTON, DC

IN THE sere wilderness of southern Utah, green highlands retain and filter water from storms, providing sustenance for plants, animals and people. The Navajo, who lived in the region long before Europeans set foot on the continent, refer to such areas as *nahodishgish*—places to be left alone. They sit at the centre of Bears Ears—a 1.35m-acre reserve teeming with archaeological, paleontological, and natural wonders that Barack Obama designated as a national monument on December 28th 2016.

On December 4th President Donald Trump shrunk Bears Ears by 85%, splitting the remaining roughly 200,000 acres into two separate, discontiguous monuments. He also shrunk the nearby 1.9m acre Grand Staircase National Monument, created by Bill Clinton in 1996, and split its remaining roughly 1m acres into three separate monuments. It was the single biggest undoing of federal land protections in American history.

The move delighted conservative lawmakers, particularly Utah's, who virulently opposed the creation of Bears Ears. The Antiquities Act, passed in 1906, gives presidents the power to declare parcels of federal land containing "objects of historic or scientific interest" national monuments. Presidents have used it to create more than 150 national monuments, most out West, where the federal government owns nearly half the land. Many Republicans feel presidents have overused that power; Rob Bishop, a Republican congressman from Utah, introduced a bill this autumn that would dramatically curtail it.

Some see the president's action as a particular gift to Orrin Hatch, Utah's 83-year-old senior senator, who is considering retirement. Mr Trump wants him to run again next year. If he were to leave the Senate he would probably be succeeded by Mitt Romney who, like Mr Hatch, is a Mormon Republican deeply popular in Utah, but, unlike him, is no fan of the president.

Conservationists immediately sued, arguing that the Antiquities Act and subsequent legislation authorise a president to declare national monuments, but not to undo previous declarations. They fear new drilling and mining, which is permitted on federally owned land but not in national monuments. They also fear economic harm: jobs, personal income and population have all grown in the Grand Staircase region since 2001, thanks to tourists and businesses that serve them. Opponents argue that national-monument declarations are no more binding on future presidents than other executive orders.

This will not be an isolated fight. Ryan Zinke, Mr Trump's interior secretary, issued a report examining 27 national monuments created since 1996. It recommends boundary revisions to two more monuments—Cascade-Siskiyou on the Oregon-California border and Gold Butte in Nevada—and management changes that could allow more fishing, tree-cutting and vehicles in six more.

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**Less is Moore**

## Roy Moore’s Senate race is almost impossible to poll accurately

The result will hinge on white turnout, and there are no good ways to predict that


Dec 6th 2017 | WASHINGTON, DC

ALABAMA has seldom been of much interest to pollsters. No Democrat has held statewide office since 2010, or been elected to the Senate since 1990. Expecting another snoozer, pollsters largely ignored the special election to replace Jeff Sessions, now the attorney-general, to be held on December 12th. That changed after the Republican nominee, Roy Moore, a Bible-thumping former judge, was accused of offences ranging from sexual harassment to assault decades ago by eight women (many of whom were teenagers at the time). Mr Moore, who has strenuously denied the allegations, saw his polling numbers plummet as prominent Republicans withdrew their endorsements and optimistic Democrats sent a flood of money to his opponent. Since then Mr Moore’s numbers have stabilised. Nearly 90% of Republicans in the state approve of the president, and support for Mr Moore in the primaries in Alabama’s 67 counties was strongly correlated with the Trump vote in 2016.

Still, Doug Jones, the Democratic candidate, has a chance of victory. An average of publicly available polls gives Mr Moore a lead of only 2.3 percentage points. But this estimate suffers from three big sources of uncertainty. The first is that polling for Senate races is especially unreliable: *The Economist*'s review of historic polling for such races from 1998 to 2014 suggests an average error of six percentage points. Second, many pollsters do not construct rigorously representative samples in Alabama, relying instead on lower-quality methodologies (like focusing on voters with landlines and ignoring those with mobiles). Third, all polls implicitly forecast which voters will show up on election day—something especially hard to do in a low-turnout special election.

According to conventional wisdom, Mr Jones needs a high turnout among black voters in order to win. They typically make up a quarter of the electorate and heavily tilt towards the Democrats. He is spending the last days of the campaign attending fish fries at black churches, emphasising his prosecution of two KKK members who bombed a church in Birmingham and appearing with John Lewis, a civil-rights icon. The effectiveness of such efforts remains uncertain: after decades in the political doldrums, the Democrats in Alabama are no longer good at mobilising voters in statewide contests. According to a knowledgeable source, the campaign hopes to push black turnout to 27% of the total to be in with a chance. Evidence from special elections earlier this year is not encouraging: black voters have made up a smaller percentage of voters than usual, according to numbers crunched at *The Economist*'s request by 0ptimus, a Republican-leaning data firm.

Instead, the key to a Jones victory is turnout among whites, which itself depends on whether the scandals around Mr Moore keep people away from the polls. Among white voters, who favour him by a whopping 35 points, roughly one-third seem to be persuadable by Mr Jones. A recent survey showed that 71% of Republicans believed the allegations against him to be false (compared with 37% of Republicans nationally). The same poll shows the mind-addling effects of partisanship: nearly one-quarter of white evangelicals in Alabama believe it is legitimate to defend sex with minors on Biblical grounds. The Jones campaign is running advertisements encouraging voters to spoil their ballots, as Richard Shelby, Alabama's senior Republican senator, has already declared he will. Faced with the choice between a

Democrat and someone accused of sexually assaulting teenagers, some might at least compromise by staying at home.

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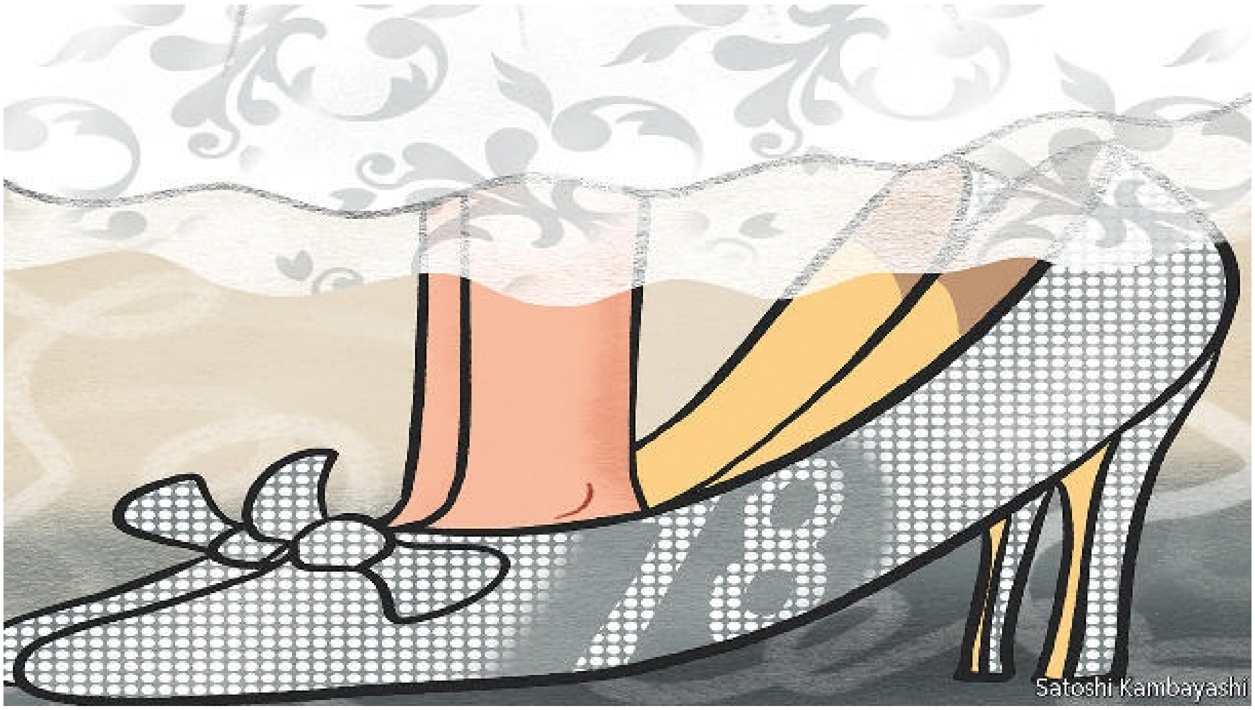
Laws and mores

## Child marriage has become less common in America. But it still exists

Defenders of the right of a minor to marry can be found in surprising places




Dec 7th 2017 | CHICAGO

SEXUAL mores change faster than the law does. This has been the case with child marriage, which is generally defined as involving those under 18 but also includes girls (for almost all of them are girls) younger than 16. Depending on the law in different states, older men are allowed to marry minors if they get parental consent, a judge's approval, or even just the nod of a clerk. Stories about the Republican candidate for the vacant Alabama senate seat, Roy Moore, and his pursuit of teenage girls when he was more than double their age have caused disgust, at least among those who believe the accusers. Legally, though, Mr Moore could almost certainly have married even his 14-year-old accuser had he wished to do so, since at the time 14 was the minimum age for marriage under Alabama state law (it is now 16).

America has always allowed such child marriages, which happen mostly in conservative religious communities and rural areas. Yet, as in the rest of the world, the practice has become much less common. Whereas 23,500 minors got married in 2000, by 2010 the number had dropped to a little over 9,000, reflecting changing social norms, higher rates of school attendance for girls and a decline in marriage more generally. Virginia, Texas and New York have introduced laws in the past couple of years that restrict marriage to legal adults. Connecticut has banned marriage before the age of 16. In 11 other states legislation restricting child marriage is in the pipeline; six of these (Arizona, Florida, Maryland, Massachusetts, New Jersey and Pennsylvania) are considering a law to ban marriage under 18 with no exceptions.

Still, it remains startling that between 2000 and 2015 more than 207,000 minors got married, according to an investigation by Frontline, a public television programme. More than two-thirds of them were 17, but 985 were only 14 and ten were just 12. Human Rights Watch and other activists are campaigning for a simple solution for all states, which would end the patchwork of rules and loopholes: changing the age of marriage to 18, with no exception granted. Jeanne Smoot of the Tahirih Justice Centre, an advocacy group, concedes that there is a big difference between a girl of 14 and a girl of 17, but she points out that both have similar legal status. Neither bride could stay in any kind of shelter, for instance, if she wanted to escape. And neither could file for divorce, work legally or sign a rental lease.

Surprisingly, opponents of a ban on child marriage can be found across the political spectrum. On the right some libertarians and religious conservatives argue that marriage should be a choice made apart from the state; that married minors can reduce the number of single mothers on welfare; and that religious customs and practices need to be protected. On the left, the American Civil Liberties Union and Planned Parenthood have also defended the practice in the past because banning it would intrude on the right to marry.

Despite these arguments against a federal law, the federal government has been a staunch campaigner against child brides in the developing world. In 2012, Hillary Clinton, then secretary of state, went on an 11-day tour of Africa. After meeting Graça Machel, Nelson Mandela’s wife, a campaigner against child marriage, Mrs Clinton affirmed America’s commitment to ending the practice. Marriage before the age of 18, she said, means girls are less likely to get an education and “more likely to encounter life-threatening health problems, which short-changes and short-cuts them and sometimes their lives.”

Africa has made progress since Mrs Clinton’s visit. This year Malawi banned marriage under 18. Gambia and Tanzania both outlawed it in 2016. For good or ill, developing countries see America as a role model. When Heather Barr of Human Rights Watch researched a report on child marriage in Nepal, several Nepalese asked her why they should abolish child marriage when it was allowed in America.

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**Relative moralism**

# Donald Trump’s administration is promoting democracy and human rights

Fortunately, he has yet to notice


Dec 6th 2017 | WASHINGTON, DC

IF DENIZENS of political Washington recall the commotion, way back on February 24th, when President Donald Trump’s press team excluded CNN, the *New York Times* and others from a White House briefing, most probably shrug at the memory. Editors lodged formal complaints at the time, not least because the snub came hours after Mr Trump told cheering conservative activists that the “fake news media” are “the enemy of the people”. But there have been many commotions since, and worse snubs.

Yet there are places where that kerfuffle in a White House corridor left a mark. Take Cambodia, the South-East Asian country whose autocratic government charged two ex-reporters in November with “espionage”, citing their previous work for Radio Free Asia (RFA), a news outlet funded by the American government. There is a direct connection between the detention of

Yeang Sothearin and Uon Chhin, who face up to 15 years in prison, and that moment of early Trumpian bombast. Hun Sen, Cambodia's prime minister, pounced on the humbling of reporters by the White House, declaring with approval on February 27th that Mr Trump, like him, sees the press causing "anarchy". The gloating did not stop there. Denouncing a CNN report on sex trafficking in Cambodia in August, Mr Hun Sen grumbled that "President Trump is right: US media is very tricky." Cambodian officials expelled the National Democratic Institute, a Washington-based outfit that promotes free and fair elections with funding from the American and other Western governments, and ordered radio stations to stop carrying broadcasts by RFA and the Voice of America.

Escalating the fight, the government accused the main opposition party of being involved in an American-backed plot to overthrow Mr Hun Sen, offering as evidence images of opposition activists meeting diplomats and Senator John McCain of Arizona. Livid at being rebuked by the American embassy in Cambodia, Mr Hun Sen took his complaints to the top. Using a summit of Asian leaders in Manila on November 13th to praise Mr Trump face-to-face, Mr Hun Sen called him "a great person" wisely uninterested in human rights. "I don't know if you are like me, or I am like you," he swooned. He had just one gripe. Mr Trump should "admonish" diplomats at the American embassy who were working against his "great principle" of non-interference in the politics of foreign lands.

**Phnom-enal**

A summit photograph of Mr Hun Sen with Mr Trump, thumbs-up, beaming, was hailed by Cambodia's former foreign minister as proof that it is better to "meet with the boss" than talk to "slaves". It was a remarkable moment, and a misjudgment. Mr Hun Sen, along with other despots and autocrats, saw a soulmate in an American president who campaigned by attacking the free press and the judiciary, who threatened to lock up his opponent once elected, who kept secret his tax returns, who suggested that the presidential election might be rigged, and who scorned the idea that his country is a democratic model, growling: "The world sees how bad the United States is." That led the Cambodian leader to a gamble which, from outside the country, seems highly confusing: to try to recruit America's president as an ally in a purge built around an anti-American conspiracy theory. It failed. On November 16th the White House issued a statement expressing "grave concern" after Cambodia's highest court dissolved the main opposition party, declaring that next year's elections, on current course, "will not be legitimate, free or fair" and warning of "concrete steps" in response.

Cambodia's story is instructive. Mr Trump has flouted norms upheld—at least in theory—by all modern holders of his office. He has scorned the very idea of American exceptionalism, telling Arab and Muslim leaders in Riyadh in May: "America is a sovereign nation and our first priority is always the safety and security of our citizens. We are not here to lecture, we are not here to tell other people how to live." A forthcoming national-security strategy is set to mark a step back from global leadership, towards a narrower, more zero-sum view of American interests. Nonetheless, some foreign rulers who felt emboldened to repress domestic enemies with impunity have been startled to find that no Trump doctrine reliably protects them.

The Trump White House is far too chaotic, riven by infighting and buffeted by the impulses of the president, to have clear doctrines about democracy promotion, or many other weighty questions of geopolitics, says a senior administration official. A position may earn signs of support from Mr Trump, but "you can take that to the bank for as long as you are talking to him", says the official—before a presidential tweet says the opposite minutes later. Mr Hun Sen's blunder, the official says, was to project his own absolutism onto America. "He seems to think that now we have this rich old guy in charge of the United States, [Mr Trump] can snap his fingers and everything will change." American government is messier than that. With a small country like Cambodia, policy remains broadly set by career foreign service officers (among them the American ambassador), by staff in the National Security Council and by members of Congress sincerely aggrieved by Mr Hun Sen's assaults on democracy and news outlets. That group includes Mr McCain and his Republican colleagues Senator Ted Cruz of Texas and Congressman Ed Royce of California, chairman of the House Foreign Affairs Committee.

A second telling case may be found in Hungary, a European ally and NATO member state whose increasingly autocratic government greeted Mr Trump's election with glee, only to overreach in its turn. Relations between President

Barack Obama and the Hungarian government led by Viktor Orban were icy, chilled by the passage of laws curbing the independence of the press, the civil service and the courts. They were made worse by official attempts to rehabilitate anti-Semitic Hungarian leaders from the second world war, and by Mr Orban's admiration for Vladimir Putin's Russia. At one point in 2014, the State Department banned six Hungarian officials from entering America on suspicion of corruption—a dramatic step against a NATO ally. One of them tried to sue America's top diplomat in Budapest for defamation.

Mr Orban is proud of being the first European leader to endorse Mr Trump, says the Hungarian ambassador to Washington, Laszlo Szabo. It is "very obvious" that the two leaders share similar views on defending their countries from illegal immigrants, a term which the ambassador uses to cover the vast majority of those who reached Europe during the refugee crisis of 2015. They also agree on the public's yearning for strong, sovereign governments that stand up for their national interests with what Mr Szabo calls a "healthy self-consciousness". In April the Hungarian parliament amended a higher-education law in a way that threatened to close down the Central European University (CEU), a graduate institute founded by the Hungarian-American billionaire, George Soros, a bogeyman to conservatives on both sides of the Atlantic. In June Hungary passed a law restricting foreign funding for civil-society groups, again singling out Mr Soros, and triggering legal action by the European Commission in Brussels, which believes the measure may breach EU fundamental rights. If Mr Orban expected to be thanked by the Trump administration or Republicans in Congress for this assault on Mr Soros, he was disappointed.

A bipartisan group of senators, led by Chris Murphy of Connecticut, told Mr Orban that the law against CEU threatens academic freedoms. Hungary forgot that Congress has no desire to encourage despotic attacks on the many American universities with branches overseas. The Trump-era State Department called the law on civil-society groups "another step away" from Hungarian commitments to the values of the EU and of NATO. In October the American chargé d'affaires, or acting ambassador to Hungary, David Kostelancik, delivered a blistering speech on press freedoms, decrying the growing dominance of "pro-government figures" over the media, who quash articles critical of the government. Treading a delicate path, Mr Kostelancik conceded that “My president is not shy about criticising the media when he believes reporters get it wrong or show bias,” but noted that “in the finest traditions of our free press”, the targets of Mr Trump’s wrath often point out that “not every criticism of the government is ‘fake news’.” Most pointedly, Mr Kostelancik deplored the “dangerous” decision of media outlets linked to the Hungarian government to publish the names of individual journalists deemed “threats” to the country.


A former Republican congressman who now works as a lobbyist for the Hungarian government, Connie Mack, supported a handful of members of the House of Representatives as they complained about the chargé d’affaires to Rex Tillerson, the secretary of state. Still, Mr Trump has neither sided with Mr Orban nor yet welcomed him to the Oval Office. Frustrated amid the chandeliered splendour of the Hungarian embassy in Washington, Mr Szabo calls his State Department critics “old Obama administration technocrats” who do not speak for Mr Trump. Hungary’s problems do not reach the president, he says. “Decisions about Hungary are not happening at the levels we would like.”

**Delta force**

A third and final case study involves Egypt, a large, important and problematic ally whose strongman leader, Abdel Fattah al-Sisi, has not found the new administration as easy to handle as he seemed to expect. Few modern presidents have pressed Egypt hard on human rights, placing greater emphasis on the stability of the most populous Arab country, and on co-operation with the Egyptian military, intelligence and counter-terrorist services. Relations have been sweetened with tens of billions of dollars in American aid since 1948, much of it to buy weapons.

Early expectations for Trump administration policy were not high. Mr Trump praised Mr al-Sisi as a “fantastic guy” doing a “fantastic job” under trying circumstances, even as the State Department was preparing a formal memorandum to Congress accusing Egyptian authorities of arbitrary arrests, detentions, disappearances and reported extrajudicial killings. But in an unprecedented move the State Department froze nearly $100m in military and economic aid to Egypt, citing human-rights concerns, a move that a senior figure in the Obama administration applauds and calls “a significant piece of pain to impose”. Senators of both parties applied pressure to the State Department, freezing some aid for Egypt on their own initiative.

Mr Trump also secured the release of Aya Hijazi, an American dual national jailed on charges for which the authorities offered no serious evidence, after founding a charity to help street children. Her story caught Mr Trump’s attention—this is crazy, he told aides—and he proudly invited her to the White House after her release. The president, who is often highly interested in whether he, personally, will be given credit for an action, has said nothing in public about the other 60,000 political prisoners thought to languish in Egyptian cells.

A White House official says Mr Trump’s Egypt policy is proof that the president does work to promote human rights, despite his unconventional rhetoric. The approach of President George W. Bush was “to very publicly endorse this idea of pushing democracy and freedom. You saw the Obama administration very publicly embarrass leaders and say you must address these human rights issues,” says the official. But thanks to behind-the-scenes pressure, based on strong personal relations, Mr Trump “gets the results”. This aide casts the president as a Reagan-like realist, treating radical Islam as something akin to the communism of the age and working with imperfect allies, when necessary, to advance major reforms, notably in Saudi Arabia. “Look at the speeches that Bush and Obama gave, and nothing changed.”

Hardline nationalists in the president’s inner circle, notably his senior adviser, Stephen Miller, and colleagues in the Domestic Policy Council, enjoy unusual clout during debates about refugees or UN reform, leaving them locked in what one former official calls “open warfare” with NSC staff. Despite this, democracy promotion schemes continue on autopilot in many countries, shielded by multi-year budgets.

How America projects its values has real-world effects, says Steve Pomper, who worked on human rights in the Obama-era NSC and is now at the International Crisis Group. “It’s a choice: giving people reason to hope if they are languishing in prison, or giving their jailers hope that they can act with impunity.” Mr Trump’s instincts are causing “grievous damage,” concludes a senior administration official. But foreign autocrats are also learning that America’s president does not rule alone. “The president may scorn checks and balances,” says the official, “but we still have them.”

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**Lexington**

## Was Donald Trump's campaign too chaotic to pull off a conspiracy?

Corey Lewandowski's new book points towards a messy ending for the Mueller investigation


Dec 7th 2017

AMID the spicy anecdotes, superficial insights, sycophancy, score-settling and casual loutishness displayed in a new memoir of Donald Trump's election campaign, "Let Trump be Trump", by Corey Lewandowski and David Bossie, the two essential characteristics of Trumpland shine through. One is a permanent state of confusion, and sometimes chaos, attending a campaign that initially did no opinion polling, had no detailed policies, set its communications strategy by whatever crazy thing Mr Trump had just made up, was mainly staffed by people who "wouldn't know the difference between a caucus and a cactus", and whose top logistical priority was co-ordinating the tycoon's post-rally return to his plane with the arrival of a warm Big Mac. It fell to Mr Lewandowski, as campaign manager, to perform that task, which he considers "as important as any other aspect of [Mr Trump's] march to the presidency". He had it lucky. The campaign's press secretary, Hope Hicks, who is now the White House communications director, was charged with steaming Mr Trump's trousers, while he was wearing them.

The other central ingredient of Trump world is chutzpah on an epic scale. A lifetime of cutting corners, a businessman's contempt for the political realm and an insight that voters would welcome his boorishness as straight-shooting, encouraged Mr Trump to transgress every democratic norm he encountered. His policy pronouncements were nonsense and he lied all the time. His advisers were complicit in this, either because they were enraptured greenhorns like Mr Lewandowski: "Only Donald Trump could get away with what he got away with," he coos. Or because they were Mr Trump's children (one of whom had Mr Lewandowski frogmarched out of Trump Tower, after concluding he was no good) and doubly compromised, by a sense of entitlement and filial deference to Mr Trump.

For players of Washington's favourite parlour game—predicting where Robert Mueller's investigation into alleged collusion between Mr Trump's campaign team and Russia might end up—this combination of rule-breaking and chaos looks apposite. Mr Mueller is giving nothing away. Yet even before he revealed details of a plea deal with Mike Flynn, Mr Trump's first national-security adviser, he seemed to have something on the president.

Mr Trump has lambasted the investigation as a "witch-hunt", hinted that he might shut it down, asked Republican leaders to quash three related congressional probes and helped draft an erroneous explanation of a meeting that his son, son-in-law and other senior advisers held with a Kremlin-linked Russian lawyer who is alleged to have offered them dirt on Hillary Clinton. Those are not the actions of a blameless man. Nor, especially in the light of Mr Flynn's plea deal, was Mr Trump's attempt to warn James Comey, his then FBI director, off pursuing Mr Flynn over some surreptitious conversations with a Russian diplomat—and his decision to sack him when he demurred.

At the same time, the chaos in Mr Trump's team suggests that it might have been incapable of the organised collusion with Russian spies many Democrats are willing Mr Mueller to uncover. At the least, it seems the feuding, amateurish Trump team would have struggled to keep such a plot under wraps. And the curious terms of Mr Flynn's plea deal may also point to that conclusion. The disgraced former military intelligence officer has been accused of a lot of shady activity since his sacking—including unregistered lobbying activity for the Turkish government, a kidnapping plot, a plan to flog nuclear power technology around the Middle East, as well as lying to the FBI. As Mr Trump's main foreign-policy adviser during the campaign, with pro-Russia views, he might additionally be expected to have known about whatever collusion was afoot. Yet his plea deal mentions only the lies.

That would normally imply Mr Mueller had not been able to stand up any of the other charges: prosecutors tend to cram everything they have into such deals, to show the strength of their leverage and intimidate other targets. As this does not seem to square with Mr Flynn's spicy record, or the fact that he is said to be deeply demoralised and almost bankrupted by legal bills, many have assumed Mr Mueller has additional aces up his sleeve, which he is concealing to keep Mr Trump and his advisers guessing. Maybe he has. But there is no obvious prosecutorial precedent for this. Without knowing what wrongdoing Mr Flynn has confessed to, it is meanwhile impossible to surmise how much Russia-related trouble Mr Trump is in.

**Obstructionschmuction**

There are perhaps three ways this could play out. Mr Mueller could end up exonerating the president. He could accuse him of—or conceivably, though legal experts consider it unlikely, charge him with—colluding with Russian spies. Or he could provide evidence to suggest he was guilty of the arguably lesser, or at least more explicable in a blundering political amateur, offence of obstructing justice by leaning on and sacking Mr Comey in a bid to cover up the sordid, but not treasonous, sorts of collusion between his advisers and Russians that have already come to light. Based on what is now known, the third scenario seems most likely. It is also in a sense the most troubling.

That is because there is both a clear historical precedent for ousting a president on the basis of obstruction, the charge that did for Nixon, and at the same time little prospect of a repeat performance. Mr Trump will not step aside as Richard Nixon did. Congress, though it may impeach him, looks too divided to remove him. The Republican Party, rallying behind a man campaigning for the Senate in Alabama who is accused of molesting teenage girls, looks too morally compromised and afraid for its future to turn on him. The result would be yet another Trump-sized exception for behaviour Americans used to consider unconscionable. This is what it means to let Trump be Trump.

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# The Americas

Just talking about a revolution

## Honduras's political crisis takes an unexpected turn

A dispute over the presidential election will probably be settled at the negotiating table


Dec 7th 2017 | TEGUCIGALPA

FOR a few days, Honduras felt like a country on the brink of chaos. People queued for hours at banks, supermarkets and petrol stations, as they had before a hurricane in 1998 and a coup in 2009. Shopkeepers shut early to prepare for looting. Thousands of people took to the streets in protest; some banged pots, burned tires and hurled Molotov cocktails. Security forces killed a dozen people; the government imposed a curfew. On December 4th two elite police units denounced "repression" by the government and disobeyed orders to enforce the curfew.

The trigger for the turmoil was a general election held on November 26th, and the drawn-out, erratic vote count that followed (see article). With all the votes tallied by December 5th, Juan Orlando Hernández appeared to win re-election as Honduras's president. The opposition refuses to accept that.

“There is no longer going to be democracy in Honduras,” thundered Salvador Nasralla (pictured above), a sports broadcaster who came surprisingly close to defeating Mr Hernández.

The opposition has not relented, and suspicions of fraud have not diminished. But Honduras no longer feels like a country about to spin out of control. That is partly because the candidates are starting to talk.

What is unclear is whether the negotiations, if they succeed, will lead to an electoral outcome that Hondurans will accept as a true reflection of how they voted. They could also result in a shady deal that is less about respecting voters’ wishes than about catering to the interests of Mr Hernández and Mr Nasralla. A deal of any sort would probably calm the streets. Failure could whip them up again.

**Talks within talks**

On their face, the talks are about how to arrive at an accurate election result. Mr Hernández and Mr Nasralla have spent days with representatives of the Organisation of American States (OAS), one of the foreign groups that monitored the elections. The United States, which has been all but mute in public, has also been involved: John Creamer, a senior State Department official, joined the conversations in Tegucigalpa, Honduras’s capital. The mediators are trying to broker an agreement on terms for a vote recount. In a preliminary report on the election, the OAS had called for a recount of around 5,000 of the 18,000 tally sheets, which record vote totals from across Honduras. These are the sheets whose results were reported after an interruption in vote counting, with Mr Nasralla in the lead, on November 27th. The OAS backs a demand by the Alliance, Mr Nasralla’s coalition, for a full vote recount in three states where turnout was abnormally high and for an extension of the deadline to appeal the result.

Mr Hernández has agreed to all this. His rival has so far refused. He wants an international body, not the country’s electoral commission, to recount all the votes, not just the tally sheets. Failing that, he would seek a run-off election between him and Mr Hernández, which the constitution does not provide for. Some observers think that what Mr Nasralla really wants is to return to his television career. Manuel Zelaya, who was deposed in the coup in 2009 and backs Mr Nasralla, has been more visible than the candidate since the election.

Even as they wrangle over the terms of a recount, there is speculation that the two candidates are cooking up a private deal. Mr Hernández would remain president; the Alliance would refuse to recognise his government but would not call its supporters onto the streets. In exchange, Mr Hernández would offer concessions including, perhaps, fresh elections next year or a promise to leave office after his second term. Such a deal would not be unprecedented. In 2015 Mr Zelaya condemned a decision by the pliant supreme court to allow Mr Hernández to run for re-election but did not stage protests against it. Business bosses, who say the crisis is costing the economy 1bn lempiras ($43m) a day, are urging a political ceasefire.

Deal or no deal, few Hondurans believe that their Machiavellian president will leave office soon. The police rebellion was not the beginning of a widespread mutiny. The officers went back to work after the government said they would get their Christmas bonuses plus higher salaries. Mr Hernández controls all the Honduran institutions likely to render a verdict on the election, including the electoral commission and the supreme court. He may now be looking for a way to keep Mr Nasralla and his supporters quiet. If he finds one, he will be damaged but will survive in office. Hondurans' faith in democracy will be hard to repair.

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**Reasons to disbelieve**

## What the data say about the integrity of Honduras's election

Our analysis of a disputed vote count

Dec 9th 2017

THE electoral commission of Honduras (TSE) will not declare a winner in the presidential election, held on November 26th, until after a recount of some kind. The first count suggests that Juan Orlando Hernández won re-election. He beat Salvador Nasralla, a sports broadcaster, by 42.98% to 41.38%.

Mr Nasralla charges that the result is fraudulent. A weird and chaotic vote-counting process has strengthened that suspicion. After releasing preliminary results from 57% of ballot boxes, which showed Mr Nasralla with a lead of five percentage points, the TSE stopped reporting on November 27th without explanation. After publication of results resumed on the afternoon of November 28th, Mr Nasralla's lead disappeared. That looks fishy.

*The Economist* has analysed the results to figure out whether someone falsified the count. Our findings are not conclusive, but they suggest there are reasons to worry.

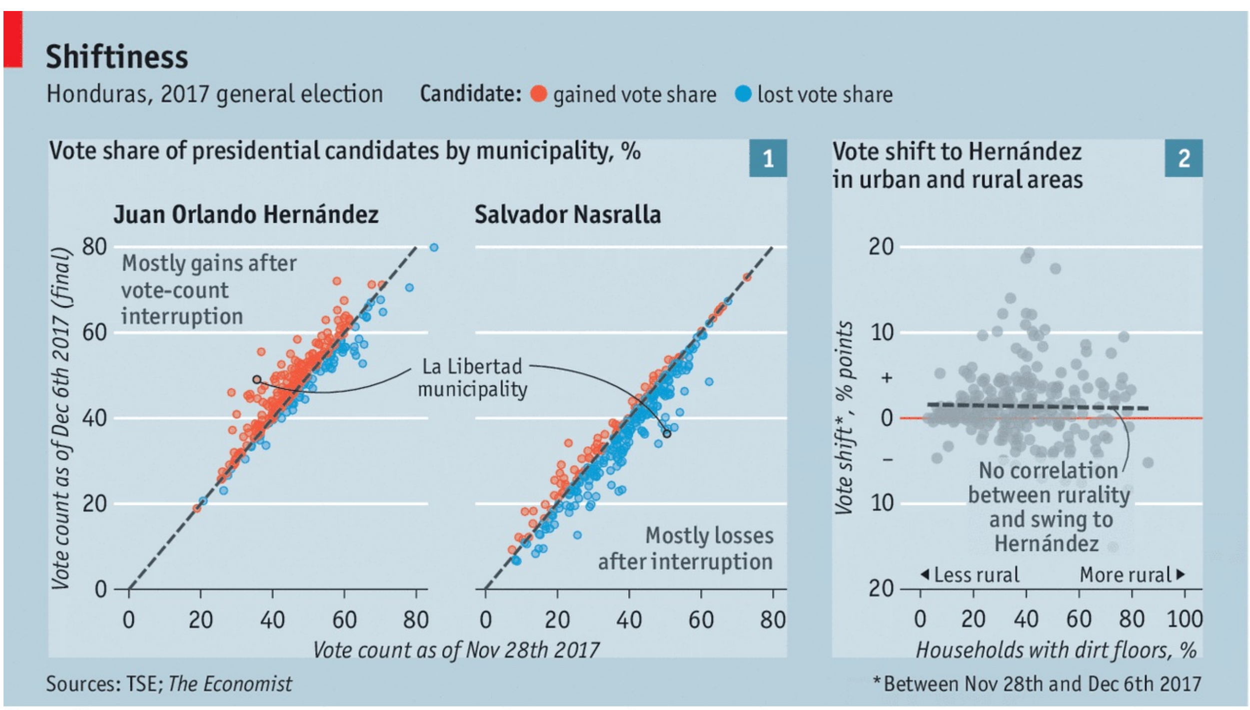
If the results released by the TSE at each stage of the count were a representative sample of the country, the odds of the shift it reported from Mr Nasralla in early results to Mr Hernández in later ones would be close to zero. Mr Hernández has explained his luck by saying that the later ballots come from rural areas, where his National Party is stronger.

To test this theory, *The Economist* compared results reported from municipalities by the afternoon of November 28th with final results from the same areas. Honduras is divided into 298 municipalities; 288 had published incomplete results before reporting was interrupted. We looked at municipalities because they are small, and tend to be mainly urban or mainly rural.

Even controlling for that, the vote count shifted systematically from Mr Nasralla to Mr Hernández between early and later results. In chart one, each dot represents a municipality. The chart shows for example that Mr Hernández got 36% of the votes in La Libertad, in central Honduras, before the TSE stopped publishing results. After it resumed, Mr Hernández got 49% in the same place. Mr Nasralla's share dropped from 51% to 36%. Our analysis shows that he lost 3.5 points on average relative to Mr Hernández within each municipality.

Proving fraud through such analysis is difficult. Statistical anomalies can have reasonable explanations. One possible objection, even though municipalities are in general fairly homogeneous, could be that those in which Mr Hernández outperformed have a large number of voters living in urban areas that reported early and many living in late-reporting rural areas.

We asked Rosemary Joyce, an anthropologist at the University of California, Berkeley who specialises in Honduras, to see if that was the case. She found that explanation for the vote shift implausible: municipalities in the departments of La Paz and Lempira, where Mr Hernández improved significantly between early and late counting, do not have large towns.

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Ms Joyce’s claim is supported by our analysis of census data from 2013. We looked at the split between rural and urban households in the 284 municipalities for which data are available, as well as the proportion of houses with dirt floors, which correlates closely with the share of rural households. We found no relationship between how rural a municipality was and how sharply its vote shifted towards Mr Hernández (see chart 2).

Another possible objection to our analysis is that the early reports were based on vote tallies that were sent electronically to the TSE; 29% of vote tallies were not, according to monitors from the EU. There might be a reason why electronically transmitted votes would favour Mr Nasralla. But the difference would have to be huge to explain the shift in the later count to Mr Hernández. If votes sent electronically favour Mr Nasralla by five percentage points, he would have had to lose by over 18 points among votes reported on paper to explain the late shift towards the president. The odds are that that didn’t happen.

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**Lonely Canada**

## Justin Trudeau searches in vain for new free-trade partners

The Canadian prime minister wants trade deals to address human rights and the environment. China doesn't

Dec 7th 2017 | OTTAWA

JUSTIN TRUDEAU, Canada's prime minister, set off for China on December 2nd amid speculation that the two countries would start free-trade talks. Canada needs new markets because the United States is turning inward. China wants to gain better access to Canada's commodities and technology and to set a precedent for talks with other G7 countries. Although they have been talking about trade for more than a year, Mr Trudeau will return with no agreement to start negotiations.

Mr Trudeau's Liberal government has suffered other recent setbacks on trade. At a meeting in Danang, Vietnam, last month, Japan blamed Canada for delaying a new version of the Trans-Pacific Partnership, an agreement from which Donald Trump withdrew the United States. The snag was Canada's request for protection of its culture. Renegotiation of the North American

Free-Trade Agreement (NAFTA) with the United States and Mexico is going badly. For a country whose trade is the equivalent of 64% of GDP, that is worrying.

Mr Trudeau thinks one way to counter a backlash in the West against globalisation would be to make trade agreements include strict standards for labour, the environment and human rights. The European Union agrees, and signed a comprehensive trade agreement with Canada last year. But other trade partners, whose standards, unlike Europe's, are very different from Canada's, want to keep trade deals simple.

China wants a plain-vanilla agreement similar to the one it concluded with Australia in 2015. "Beijing is unyielding that non-economic factors have no place in trade deals," wrote Charles Burton, a scholar of China, in an assessment of the talks. The United States is receptive to labour and environmental standards (as a way to blunt competition from Mexico), but is uninterested in Canada's ideas for incorporating indigenous rights into trade deals and making labour laws more union-friendly.

Mr Trudeau is not the first Canadian leader to deal with disappointments in trading relationships by seeking out new ones. When Britain removed preferential treatment for exports from colonies in 1846, Canada sought a deal with the United States. Mr Trudeau's father, Pierre Trudeau, who was prime minister on and off from the 1960s to the 1980s, pursued a "third option" to supplement trade with the United States, which had raised tariffs, and Britain, which had entered Europe's common market. Canada ended up doubling down on trade with the United States. A bilateral trade agreement, which took effect in 1989, was superseded by NAFTA.

Last year the United States bought three-quarters of Canada's goods exports. It will remain Canada's main trading partner, admits François-Philippe Champagne, Canada's trade minister. But, with "the most protectionist government since the 1930s" in Washington, "there has never been a better time to diversify."

Changes in Canada's economy make that more urgent. Things look good for the moment: GDP is expected to grow by 3% this year and unemployment is 5.9%, near a ten-year low. But oil and cars, which have sustained growth for more than a decade, face harder times. Mr Trump is using protectionist threats to grab jobs and investment back from Canada and Mexico. Alberta's oil, which is costly to produce, faces growing competition from gas and renewable energy. The industries of the future probably include food, hydro-electricity and artificial intelligence, but none matches the importance of cars and oil.

Freer trade would help. But Mr Trudeau finds himself chasing deals with big countries like China, which reject labour and environmental add-ons that would make such pacts acceptable to Canadians. He may remain a disappointed suitor.

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**Bello**

# Cuba’s leaders are trapped between the need for change and the fear of it

A new study shows just how weak the Castros’ economy is


Dec 7th 2017

FOR decades Cuban exiles in Miami dreamed of the day that Fidel Castro would die. They imagined that Cubans would then rise up against the communist dictatorship that he imposed. Yet when, a year ago this week, Castro’s ashes were interred in his mausoleum, it was an anticlimax. His brother, Raúl, who is now 86, has been in charge since 2006. For a while, he seemed to offer the prospect of far-reaching economic reform. Now, as he prepares to step down as Cuba’s president in February, he is bequeathing merely stability and quiescence.

Raúl’s planned retirement is not total—he will stay on as first secretary of the ruling Communist Party for a further three years. He is due to leave the presidency as Cuba is grappling with two new problems. The first is the partial reversal by Donald Trump of Barack Obama’s historic diplomatic and commercial opening to the island, which will cut tourist revenues. The second is the aftermath of Hurricane Irma, which in September devastated much of the north coast and several tourist resorts. That has prompted speculation in Miami that Raúl may stay on.

That is to misread the man. In his decade in power Raúl has striven above all to institutionalise the Cuban communist regime, replacing the wayward charisma of Fidel with orderly administration and a collective leadership. He has groomed as his successor Miguel Díaz-Canel, a 57-year-old engineer who has already assumed many public duties. Yet, as president, Mr Díaz-Canel's autonomy will be limited. He is just one of a group of party bureaucrats and generals who are the real power in Cuba, steadily replacing the *generación histórica* (those who fought in the 1959 revolution), who are dying off.

The new generation faces an acute dilemma. Despite aid from Venezuela, which has now fallen to half its peak level, Cuba remains unable to produce much of the food it consumes or pay its people more than miserable wages. That is why Raúl embraced market reforms, albeit far more timid ones than those in China or Vietnam. More than 500,000 Cubans now work in an incipient private sector of small and micro businesses or co-operatives.

But these reforms bring inequality and a loss of state control. When Mr Obama visited Cuba in 2016, offering support for entrepreneurs and calling on live television for free elections, the regime appeared to panic. Since then, the government has placed some curbs on small business to stop what Raúl called "illegalities and other transgressions". In other words, the government wants a market economy without capitalists or businesses that thrive and grow. It seems nowhere near tackling the multiple exchange rates (ranging from one peso to the dollar for official imports to 25 for most wages and prices) that ludicrously distort the economy.

Stalling may leave intact the regime's political control—its overriding priority. But this ignores a fundamental problem. Since the 1980s the Cuban economy has steadily lost ground in relation to those of other Latin American countries, as a study published last month by the Inter-American Development Bank shows. Its author, Pavel Vidal, was one of Raúl's team of reformist economic advisers and is now at the Javeriana University in Cali, Colombia. He has devised hitherto unavailable internationally comparable estimates for Cuba’s GDP since 1970 by calculating an average exchange rate which takes into account the weight of the various rates in the economy.

Mr Vidal finds that GDP per person in Cuba in 2014 was just $3,016 at the average exchange rate, barely half the officially reported figure and only a third of the Latin American average. This includes the value of free social services (such as health, education and housing) that Cubans receive. Taking into account purchasing power, GDP per person was $6,205 in 2014, or 35% below its level of 1985. Mr Vidal goes on to compare Cuba with ten other Latin American countries whose populations are similar in size. Whereas in 1970 Cuba was the second-richest, behind only Uruguay, in 2011 (the latest year for which data are available) it was in sixth place in income per person, having been overtaken by Panama, Costa Rica, the Dominican Republic and Ecuador.

Cuba’s decline is above all because of lack of investment, says Mr Vidal. But a shrinking and ageing population plays a part, too. He finds that the reforms have brought about a modest increase in income and even in productivity. They “go in the right direction but have fallen short”, he concludes.

For Mr Díaz-Canel and his reformist colleagues the message is clear: speeding up change carries political risks, but not doing so involves economic ones.

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# Asia

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**Group think**

## India’s elections still revolve around caste

But a vote in the state of Gujarat is undermining the ruling party’s reputation as the master of caste politics

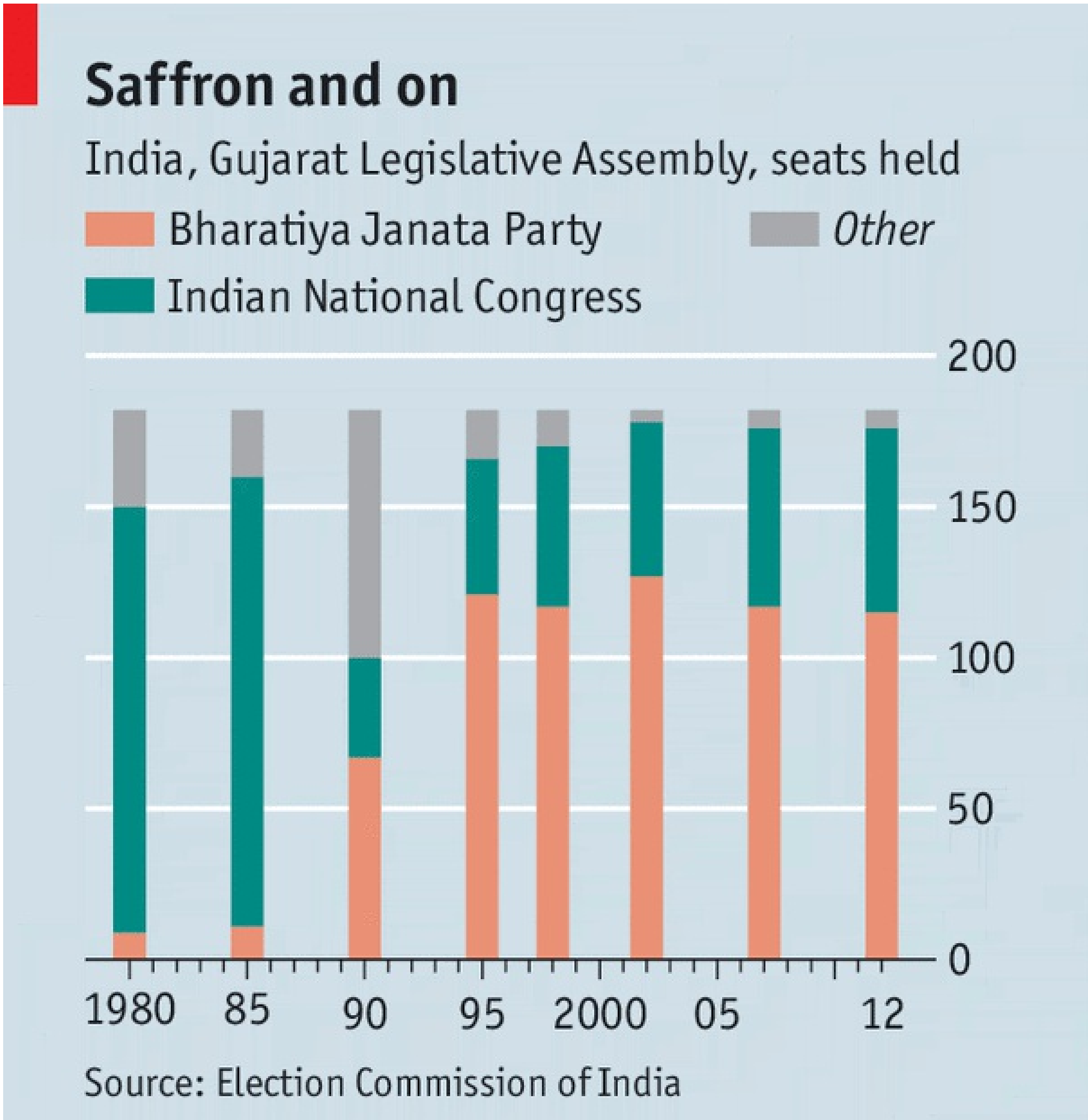

Dec 8th 2017 | Ahmedabad

INDIA’S national parliament, the Lok Sabha, sits for barely 70 days a year. The shortest of its three sessions normally starts in mid-November. This year, though, the government has given MPs an extra month’s holiday. The reason: Gujarat, a bastion of the ruling Bharatiya Janata Party (BJP) and home state of Narendra Modi, the prime minister, will hold a staggered election on December 9th and 14th for a new state legislature.

Why should Mr Modi want to delay the business of state for a whole month, just to go campaigning in a middling state of only 66m people? Party spokesmen say this is the BJP’s style; it takes every election seriously. But opponents say the party is scared of losing on its home turf.

If opinion polls are to be believed, the BJP has reason to worry. As recently as August, according to the Centre for the Study of Developing Societies, a Delhi think-tank with long polling experience, the BJP held an unassailable-looking 30-point lead over its main rival, the Congress party. By late October this had fallen to 6% and by late November to zero; in the last lap of the race, Congress and the Hindu-nationalist BJP are neck and neck.

The BJP's sudden slump is shocking. The last time it lost a major vote in Gujarat was in 1990 (see chart). Countrywide, it has lately been on a winning streak too; together with allies it now runs 18 states, accounting for roughly 60% of the population. Mr Modi has looked like a shoo-in for a second term, starting in 2019. A loss in Gujarat would blunt this momentum and, more important, tarnish the lustre of the party's star attraction. From 2001 to 2014 Mr Modi was Gujarat's chief minister, and turned his much-hyped "Gujarat Model" of business-friendly development into a springboard to national power.

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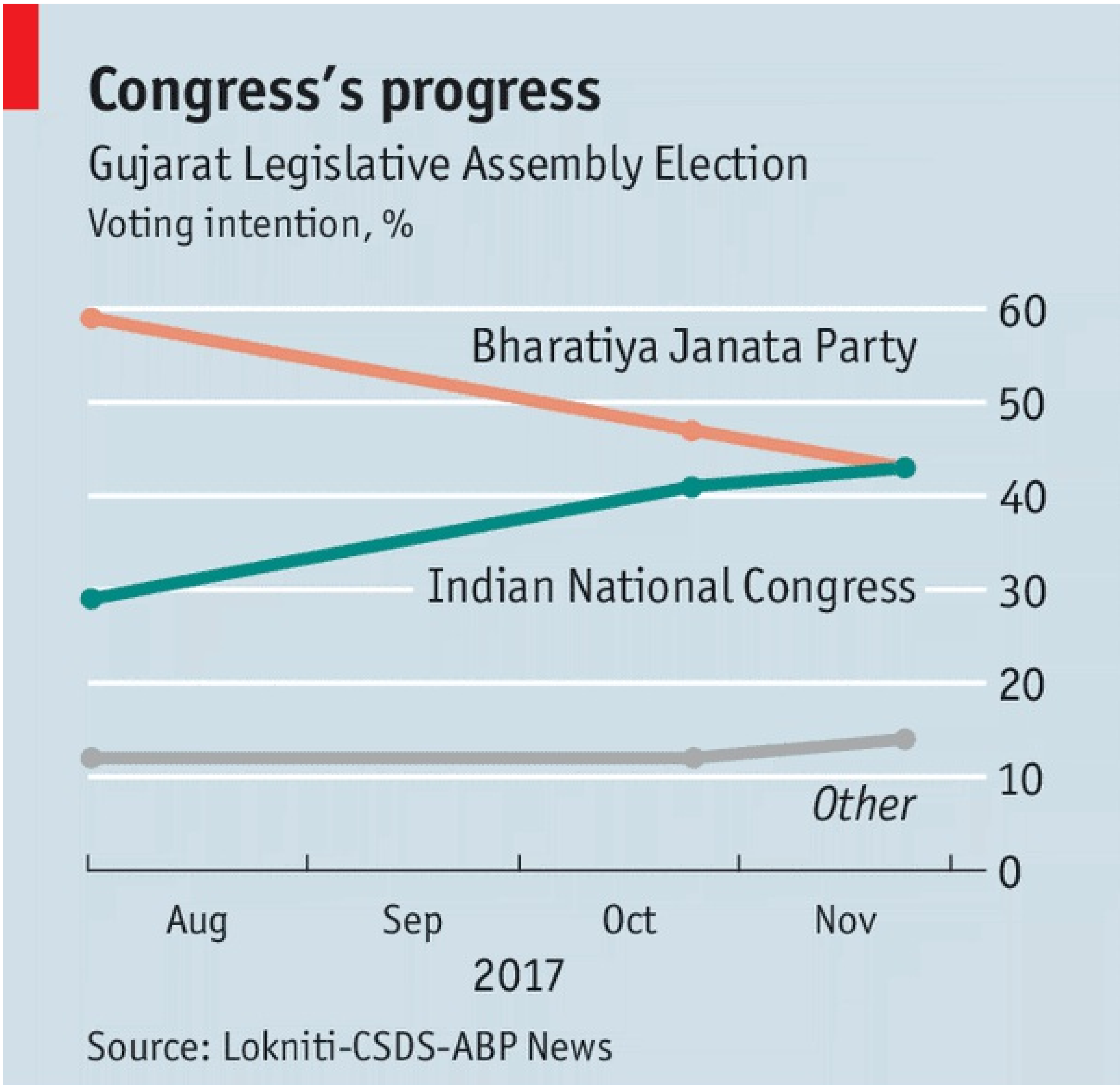
There are multiple reasons for the BJP's woes. Anti-incumbency always runs strong in India, and some of Mr Modi's policies have also angered key constituents. Last year's sudden ban on high-value currency notes hurt farmers and small businesses badly; this year's clumsy imposition of a complex sales tax has frustrated traders and manufacturers. Farm prices are low; jobs remain scarce for the upwardly mobile young, despite much-vaunted foreign investment. "This election is a contest between those who benefit from the ‘Gujarat Model’ and those many who do not,” says Jignesh Mevani, a lawyer and an outspoken leader of Gujarat’s Dalits (formerly known as Untouchables).

The accumulation of grievances is not new; what is new is Congress’s ability to exploit it. In recent times many have dismissed the once-dominant party as a wobbly collection of has-beens, lacking any message or solid base and saddled with the increasingly lacklustre hereditary leadership of the Nehru/Gandhi dynasty. Mr Modi’s BJP, in contrast, has been energetic, focused and cleverly ruthless in its exploitation of class and, especially, sectarian differences to hook voters.

Its winning formula has been to stoke Hindu fear of the Muslim minority while “uniting” Hindus by weaving a careful web of alliances with leaders of various castes, all under the general rubric of paternal rule, order and progress. The BJP in earlier times was closely associated with the higher castes, but under Mr Modi it has shed its exclusionary image. The prime minister’s own modest origins have lured in lower-ranked castes. The BJP has also tried to cultivate Dalits, greatly expanding its membership to give them a place, and honouring Dalit heroes of the past.

A tactic that has proven particularly effective in several states, notes Prashant Jha, author of a recent book on Mr Modi’s party, has been to rally both upper and lower castes against mid-ranked groups that have gained “too much” power or prestige. Earlier this year the BJP won a crushing victory in India’s most populous state, Uttar Pradesh, partly by exploiting resentment of the Yadavs, a caste widely seen as dominating the outgoing government.

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Congress is learning from these tricks, however. It has been accused in former times of "appeasing" Muslims to win their votes, so in Gujarat it is simply ignoring them, knowing they are unlikely to vote for the BJP. Meanwhile it has concocted an unlikely coalition of unhappy castes, headed by a trio of charismatic local leaders. Mr Mevani is one of these, but reckons himself small fry next to Hardik Patel, a 24-year-old agitator for the rights of Patidars, a far higher caste that includes around 12% of Gujaratis. (Dalits are 7% of the population and Muslims 10%.) Alpesh Thakor, a young leader representing mid-ranked castes, has also joined, while Congress typically enjoys the support of tribal communities who account for another 15%.

Hypocritically but perhaps unsurprisingly, the BJP has lashed out at its rival for pandering to identity politics. “Congress is once again doing what it always did in the past, divide people, be it on caste lines, communal lines, between villages and cities,” stormed Mr Modi at a recent rally. “Congress has learnt divide and rule from our colonial rulers.” Meanwhile, the BJP’s supporters circulated a tweet suggesting that while Congress supporters would be voting for HAJ (an acronym made up of the first names of Mr Patel, Mr Thakor and Mr Mevani), a vote for the BJP was a vote for RAM (an acronym derived from the names of the party’s local leaders and Mr Modi). The insinuation was that the BJP stood for the Hindu majority who count Ram as an important deity, whereas Congress is the political defender of Muslims, who go on the *haj* (pilgrimage to Mecca).

Such smear tactics have worked in the past, and may work again. The BJP has far bigger resources; the election commission’s figures show that the party has garnered some 82% of all big, official political donations in Gujarat in the past five years. Congress’s incongruous caste coalition is fragile, based partly on an unlikely promise of more state benefits for the better-off Patidars. “There are huge material contradictions between Dalits and Patidars, and even between Dalits,” admits Mr Mevani. “Our alliance will be short-lived.”

Amit Shah, the BJP’s campaign wizard, says it will capture 150 of the 182 seats in Gujarat’s assembly. He may be right, but it may also be that, like the $400m statue that Mr Modi has ordered built in his home state—a colossus twice the height of the Statue of Liberty representing Sardar Patel, an independence leader—the prime minister will find himself on an island, with water rushing round his feet.

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**Chrysanthemummification**

## A date is set for the emperor of Japan to retire

But other royal reforms have stalled


Dec 7th 2017 | Tokyo

IT WAS an understandable request. Last year an 83-year-old Japanese man, who has survived prostate cancer and heart surgery, asked to retire. Yet it took much debate and a change in the law before the government could even set a date for him to do so. When it finally did, on December 1st, it deferred the event for over a year, to April 30th, 2019. But at least the long-suffering emperor, Akihito, will be allowed to step down, even though the law previously said that the emperor rules until his death.

The throne will pass to his son, Naruhito, 57, and a new era in the Japanese calendar will begin. Scholars are busy finding a name for it. The current era, Heisei, roughly means "peace everywhere".

Japan's government has granted the emperor's wish with a manifest lack of enthusiasm. Akihito took the unusual step of revealing his desire to abdicate in a video message aired on NHK, the public broadcaster. He probably made the request public for fear that a private inquiry would have been buried by the government. In June parliament approved a law allowing him, but only him, to renounce the throne.

After the second world war, which Japan fought in the name of the emperor of the day, Hirohito (Akihito's father), the occupying American forces curbed the authority of the monarchy. The constitution they imposed restricted the emperor to a purely symbolic role. Conservatives, including Shinzo Abe, the prime minister, want to preserve what is left of the imperial mystique. The government has even restricted archaeologists' access to royal tombs, for fear, many suspect, that they might find that the imperial family's DNA does not in fact derive, unadulterated, from the sun goddess, Amaterasu, or even from pure Japanese stock, but includes traces of Korean and Chinese ancestry.

Katsuyuki Yakushiji of Toyo University in Tokyo reckons Akihito hopes his abdication will spark a debate about how to modernise the imperial family. Akihito is known for his liberal views. Since becoming emperor in 1989 he has apologised for Japan's wartime past during foreign trips. His frequent public appearances in Japan have made him seem less aloof than previous emperors. He is extremely popular.

There are three obvious reforms, all concerning imperial sexism: to allow princesses who marry commoners to remain in the imperial family and thus be able to carry out official duties; to allow the sons of princesses to inherit the throne, thus expanding the pool of potential heirs, and to allow women to inherit the throne themselves. Given the dwindling stock of royal boys—Akihito's first three grandchildren were girls—such changes might seem desirable, even to conservatives. But the arrival 11 years ago of a male grandson, the son of Naruhito's younger brother, sapped the impetus for reform.

The law that allows Akihito to step down contained a woolly resolution that seems to call for consideration of the first two reforms. The third was deemed too radical, even though women have reigned in the past. Mr Abe has appeared to question even the second idea, pointing out that the monarchy has managed to remain patrilineal for over two millennia.

Takashi Mikuriya, the deputy chair of the advisory panel on the emperor’s abdication, told a national newspaper that Akihito’s retirement “opens a sealed box”. The public seems open to change, too. In a poll earlier this month 60% supported the idea of princesses remaining in the family after they marry.

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**Purchasing powder**

## An army of Chinese shoppers dictates the fate of Australian brands

How firms Down Under came to embrace daigou


Dec 7th 2017 | Perth

THE first *daigou*, meaning someone who makes purchases on another’s behalf, were Chinese students studying abroad, who hauled desirable products home on behalf of family and friends. Adding a commission helped them pay their tuition fees. The spread of social-networking apps such as WeChat, China’s most popular, brought the business online. *Daigou* could then offer their services to friends of friends, and promote items they thought might appeal to their network. But whereas *daigou* in America and Europe procure mainly luxury goods for their customers—a function of high Chinese tariffs—in Australia they buy mainly vitamins, food and beauty products. And whereas luxury brands see *daigou* as a menace, undercutting sales in China, Australian firms have come to embrace them.

There are perhaps 50,000 *daigou*, stalking the aisles of Australian shops and periodically stripping them bare. The small fry alone post 60,000 parcels to

China every day. The biggest have grown into organised export businesses which funnel goods through China's free-trade zones. Express delivery services to China have proliferated, and some 1,500 stores in Australia cater mainly to *daigou*. One such chain, AuMake, recently listed on the Australian Securities Exchange. Its bilingual sales staff can arrange for a purchase to be posted to China as soon as it has been rung up.

The appeal for the customers is simple: the products *daigou* post are guaranteed to be genuine. After Chinese firms were found to have been selling contaminated milk powder in 2008, many anxious Chinese parents turned to foreign brands. But websites peddling foreign goods are riddled with counterfeits, while Chinese shops charge a fortune for the real thing.

The odd sales channel works for companies, too. *Daigou* allow young Australian firms to build their brands in China much more cheaply and easily than if they tried to market their products directly, argues Keong Chan, the chairman of AuMake. A firm called the a2 Milk Company doubled its profit in the year to June thanks to soaring Chinese demand. *Daigou* account for more of those sales than Chinese retailers or e-commerce sites, according to Peter Nathan, who heads its Asia-Pacific unit. Businesses fall over themselves to win the favour of the most influential *daigou*, offering discounts and Chinese marketing materials. "It's like having a 50,000-strong sales force," says Andrew Cohen, chief executive of Bellamy's, a listed manufacturer of infant formula.

Bellamy's learned the hard way. It used to worry about entrusting so important a market to squads of anonymous intermediaries. *Daigou* had earned a bad press in Australia for creating shortages of certain goods and for failing to pay tax on their commissions. Worse, the Chinese authorities began talking last year about demanding import duties on personal packages, a move that the firm feared might undermine sales through *daigou*.

So Bellamy's decided to funnel its wares to Chinese retailers and etailers, who in turn offered big discounts to customers, undercutting the *daigou*. This approach backfired completely, as *daigou* abandoned Bellamy's products. Sales plunged. The firm's share price collapsed; heads rolled. Bellamy's recently cut back sales to other distributors, restoring *daigou* to prime position once again.

**Jeep stakes**

## The Philippine government declares war on a beloved vehicle

Is the jeepney a treasure or a menace?

Dec 7th 2017 | Manila

VENETIANS have their vaporettos, Londoners their double-deckers, Japanese their bullet trains and Filipinos their jeepneys. None of those other vehicles, however, is as dirty, dangerous and uncomfortable as the jeepney, a Frankenstein's monster of a minibus that was first cobbled together some 70 years ago. Yet when the government announced plans to phase jeepneys out, opponents accused it of trying to expunge the soul of the nation.

The first jeepneys were made from surplus jeeps that American forces left behind after the second world war. Enterprising Filipinos added benches and a roof, creating affordable public transport and a host of small businessmen, who owned and sometimes drove the vehicles. In due course, jeepneys were embellished with chrome decorations, colourful streamers, fairy lights and gaudy paintings of everything from Jesus Christ to fighter jets. Many are also fitted with deafening stereo systems. The supply of surplus jeeps dried up long ago, so the builders now take superannuated diesel trucks from Japan and add bodywork vaguely reminiscent of a jeep. A short hop around Manila costs 8 pesos ($0.16).

But the passenger must crouch to climb in the back and squeeze onto an inward-facing bench, hunched under the low roof and crammed up against the passengers on either side and opposite. Air-conditioning to take the edge off the tropical heat and humidity is rare. The cramped space and single exit make the work of pickpockets and armed robbers easy. Breakdowns are frequent. The old engines spew smoke into the already filthy air of Philippine cities. Drivers pick up and set down customers anywhere they like, often without pulling over, imperilling the passengers and blocking the road.

No wonder, then, that the government has decided to ban jeepneys that are more than 15 years old, starting next month. It wants drivers to use electric replacements instead, or at least vehicles with cleaner engines. Manufacturers have proposed new models that look less like jeepneys and more like—whisper it—minibuses, with such frills as side entrances, individual forward-facing seats, air-conditioning, automated fare collection and security cameras. The government says it will provide cheap loans to buyers.

Angry jeepney operators drove in convoy through Manila on December 4th to protest against the plan. They say that most operators will not be able to afford the new models, which cost around 1.5m pesos. Such expensive vehicles, they maintain, will drive up the minimum fare to 20 pesos. And then there is the fact that the clapped-out, smoke-belching jeepney is a national treasure and an expression of collective genius.

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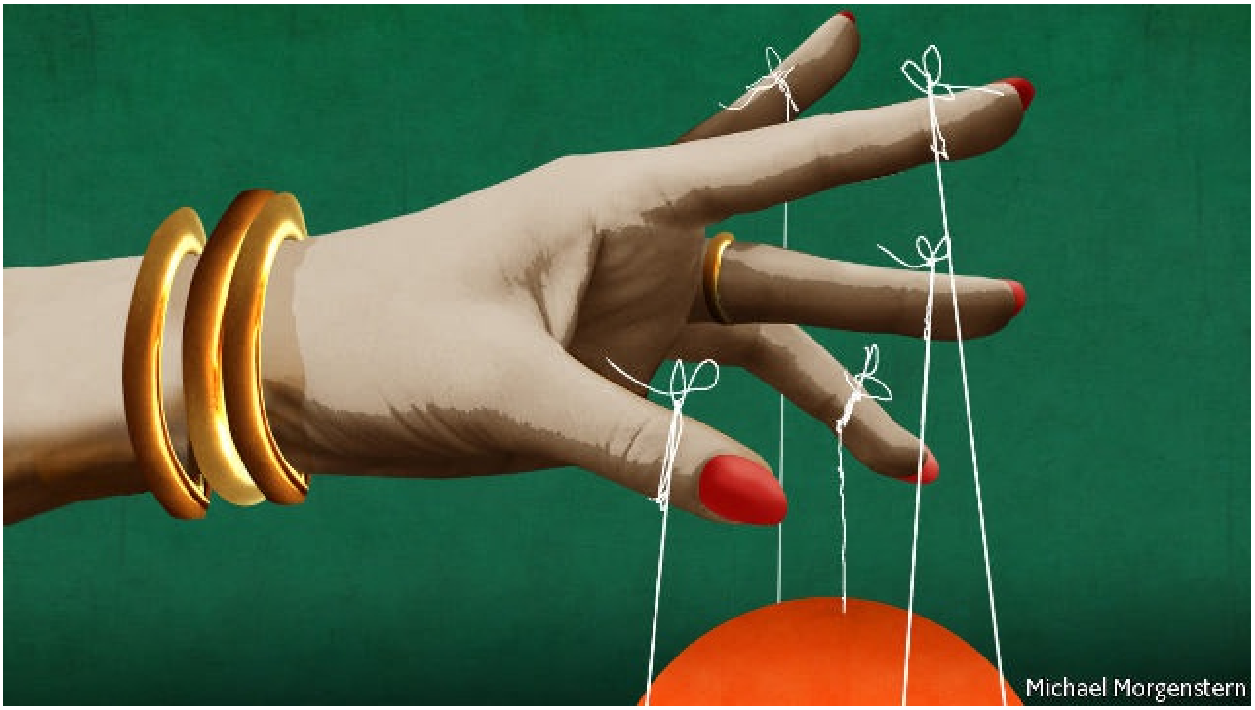
**Banyan**

## The battle between Bangladesh's two begums is over

But under Sheikh Hasina, the country is growing more authoritarian




Dec 7th 2017

THE battling begums, Sheikh Hasina Wajed and Khaleda Zia, used to alternate in power with metronomic regularity. Both laid claim to aspects of Bangladesh's founding myth. Sheikh Hasina is the daughter of the "father of Bangladesh", Sheikh Mujibur Rahman, the first president. Mrs Zia is widow to Ziaur Rahman, to whom, as an army officer under Mujib, fell the honour of declaring Bangladesh's independence from Pakistan in 1971. He may have known of the coup that lead to Mujib's death, in 1975. Either way, in the ensuing chaos, he rose to power before being murdered by renegade officers himself in 1981. Both men grew dictatorial in power, resorted to violence to settle scores and, in Zia's case, embraced Islamism in an avowedly secular state. Yet the memory of each is burnished by their respective parties, now run as fiefs by the two begums: Sheikh Hasina's Awami League (AL) and Mrs Zia's Bangladesh Nationalist Party (BNP).

Between 1991 and 2006 the metronome gave Mrs Zia two turns in power and Sheikh Hasina one, thanks in part to caretaker governments installed before each election. This competition helped avoid some of the worst abuses of power. Not before or since has Bangladesh's press been so vibrant and free. Yet it was no golden era. In opposition both the AL and the BNP did all they could to frustrate government, walking out of parliament and shutting down the economy with *hartals*, general strikes. In power, both parties stuck their snouts in the trough—though the BNP's second term in office was especially egregious.

**Smashing the metronome**

When Sheikh Hasina came to power for the second time, in 2009, she took a more aggressive approach, going after her enemies and settling scores, some of which dated back to the war of independence from Pakistan. In particular, she set up a (domestic) International Crimes Tribunal to prosecute atrocities committed during the war. A reckoning was needed, but the tribunal was deeply flawed, violating defendants' rights and open to political meddling. The tribunal has hanged half a dozen defendants, including a close adviser to Mrs Zia. The leadership of the BNP's Islamist former coalition partner, Jamaat-e-Islami, was destroyed.

In other ways, too, Sheikh Hasina has outsmarted Mrs Zia, who shows signs of frailty and whose son and political heir, Tarique Rahman, cannot return from exile in London because of corruption charges awaiting him in Bangladesh. When Sheikh Hasina refused to give way to a caretaker government before the general election of 2014, the BNP played into her hands by boycotting the poll and encouraging violence. With no MPs in Parliament, Mrs Zia's powers of patronage have ebbed, though she retains rural support. With the government hounding her, she seems a spent force.

The Awami League and its friends abroad, including the Indian government of Narendra Modi, celebrate a new era. With the metronome and the *hartals* a thing of the past, policymaking has become more consistent and the investment climate more stable. The government is building lots of power plants and roads. Economic growth has averaged 6% a year for the past decade and is forecast to canter on at almost 7% in the coming years. Some indicators of development, such as child mortality, are markedly better than in India. Bangladesh is no longer a “basket case”, as Henry Kissinger once declared.

Yet if Sheikh Hasina has abolished politics, it comes at a price. Partisanship has been replaced by brutal infighting within the ruling party itself. Corruption remains appalling. That allows well-connected industries, such as the tanneries of Hazaribagh, a residential area of Dhaka, to flout environmental laws, causing grave health problems for locals.

The press publishes little criticism of Sheikh Hasina or the AL. Publications that step out of line are hounded. The editor of the *Daily Star*, the biggest English-language newspaper, has been charged 84 times with defamation and other crimes. Draconian new laws on cyber-security threaten online media. It is even a crime to debate the official version of the war of independence.

The chief justice until recently, Surendra Kumar Sinha, was one of the few still holding the government to account. In October, while he was out of the country, he was charged with corruption and “moral turpitude”, among other things; under pressure, he resigned. Darker still is creeping state violence. Parts of the security services, such as the Rapid Action Battalion, a counter-terror unit, act with near impunity. Since 2014 hundreds of opposition politicians, activists and journalists have been arrested or abducted—more than 80 this year alone. Many have ended up dead. Meanwhile, the security services have failed to protect liberal and secular voices from violence by Islamist extremists, although a spate of lethal attacks in 2013-16 has slowed this year.

A general election is due by early 2019 at the latest. As it approaches, the notion that pesky politics has been abolished will look increasingly strained. Not least, deals of convenience that the AL has struck with unsavoury groups carry costs. In 2013 Hefazat-e-Islam, a radical movement financed by doctrinaire Islamists in Saudi Arabia, took to the streets to demand more pious government. The authorities agreed to rewrite school textbooks and remove a statue of the Greek goddess of justice from in front of the Supreme Court. Extremist groups may feel emboldened under a ruling party that is losing its reputation for secularism. And the camps housing more than 600,000 Rohingya refugees who have fled an army-led pogrom in Myanmar may become a fruitful recruiting ground for extremists.

Extrajudicial killings, growing concerns over weak environmental safeguards, pliable courts, a sense among young, educated Bangladeshis that they will be denied opportunities unless they have the right connections, and rich pickings for extremism: breakneck growth is being asked to paper over a lot.

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# China

A new branch of government

## China gets a new system to curb corruption—and ideological lapses

The Communist Party gives itself more policing and judicial powers


Dec 7th 2017 | BEIJING

THREE hours into his marathon speech to the Communist Party congress in October, as delegates glanced surreptitiously at their watches, Xi Jinping, China's president, sprang a surprise. "The practice of *shuanggui*," he suddenly announced, "will be replaced by detention." *Shuanggui* is a system in which party members accused of corruption are locked up in secret jails, beyond the reach of the judiciary and isolated from family or lawyers. In 2016 Human Rights Watch, an NGO, documented cases of beatings, sleep deprivation, stress positions and other forms of torture in *shuanggui* jails. That makes it sound as if Mr Xi's unexpected moveis a step forward for human rights. It may not be.

The abolition of *shuanggui* is the most visible part of a sweeping reform that in effect sets up an entirely new branch of government. Called the National Supervision Commission, it is designed to streamline administration, improve the implementation of policy and eliminate protectionist rules in the cities and provinces. A draft law governing the commission appeared in November; three provinces, Beijing, Zhejiang and Shanxi, have been giving it a trial run as it undergoes a public review. It is proving highly controversial, but is likely to get the go-ahead nationwide in March.

Unlike most countries, China has two pyramids of authority, the state and the Communist Party. High-ranking officials belong to both. Mr Xi is state president and general secretary of the party. The party hierarchy parallels the state one and outranks it. For example, the politburo, a party committee of 25, is more important than the state council, composed of government ministers. The *shuanggui* system belongs to the party. Ordinary jails, the police and the courts are parts of the state.

The new supervision system will be a mixture of the two. At the top is the new commission, which the law says will be led by the Communist Party and share space and personnel with the Central Commission for Discipline Inspection (CCDI). The CCDI is the party's anti-corruption body and one of the most feared institutions in the country. It is responsible for Mr Xi's purge of officials. Below the commission there will be a ladder of lower-level agencies that will work with courts and the procurators' offices (ie, with the state judicial system). Like other government bodies, the agencies will report to the National People's Congress, the rubber-stamp parliament, which is supposed to control them.

The new law would expand the CCDI's powers. It will be allowed to investigate all officials, not just party members, and its mandate will include "improper conduct by state employees", meaning that it will probe officials' ethical standards and political beliefs, not just their compliance with the law. The new supervisors will be able to interrogate, search, wiretap, detain and punish suspects.

The extension of the graft-busters' authority reflects Mr Xi's belief that the current arrangement, in which the party is responsible for cracking down on corruption but only indirectly controls the police and judiciary, is no longer enough. The president's concerns seem to have broadened from corruption to party discipline, ideological correctness and the need to clamp down on local officials who ignore the orders of the central government.

The new system is likely to intensify the anti-corruption campaign, to judge from the results of the three pilot schemes. In all of them, the number of cases handled shot up in the first eight months of the year compared with the same period in 2016 (when the old rules still applied), by 30% in Beijing, 40% in Shanxi, a province west of the capital, and 92% in Zhejiang, near Shanghai. Shanxi's anti-corruption chief attributed the rise to efficiencies created by pooling the resources of party and state.

**No smoke without some ire**

A sense of the system's likely impact comes from inspection tours organised this summer by the Ministry of Environmental Protection of factories in the north-east, China's rust belt. The aim of such tours is to close down those that are exceeding legal limits on pollution. The ministry makes them all the time but its edicts are typically flouted. This time was different. Inspectors from the CCDI came along. Terrified polluters promptly closed dozens of foundries and smelters.

If an expanded CCDI can improve law enforcement in this way, then many business people, as well as those living in China's most polluted places, will welcome the new system. But it is not clear whether it will improve the rule of law. What is really being abolished, says Jeremy Daum of the Paul Tsai China Centre at Yale Law School, is the pretence of the separation of party and state. Under the new system, suspects will not have the constitutional protection afforded to those accused of ordinary crimes. They will have no guaranteed access to a lawyer, for example, and though family members are supposed to be informed of an arrest, that requirement can be waived if it would hamper an investigation. Suspects can also be detained for longer than before: six months, not four. Jiang Ming'an, a professor at Peking University and a university friend of Li Keqiang, the prime minister, worries that the appeals system "does not seem effectively to protect the legal rights of detainees." Chen Guangzhong of China University of Political Science and Law in Beijing argues that the legislature's powers to supervise the supervisors need to be strengthened. He proposes a two-year nationwide trial to ensure due process.

Han Dayuan, the dean of the law school at Renmin University in Beijing, goes further, suggesting that the proposed system marks such a sweeping change that it requires a constitutional amendment. These concerns appear to be falling on deaf ears, however. Mr Xi has already given the system his seal of approval. The law is likely to be approved at the next meeting of the legislature, in March. The Communist Party’s authority is set to become even more entrenched.

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**Labour of lavs**

## China plans one last push in the toilet revolution

A campaign to improve public lavatories is extended and expanded


Dec 7th 2017 | BEIJING

THE state of China's smallest rooms is no small matter. So said Xi Jinping, the Communist Party's general secretary, in statements carried prominently by state media last month. For three years national and local authorities have been busily scrubbing up the country's public lavatories, an effort the party has dubbed the "toilet revolution". Having hit the programme's original set of targets, Mr Xi is requesting another push.

In the past few decades China has done a fairly good job of supplying basic sanitation. Only 2% of Chinese still do their business in the bushes, compared with 40% in India; three-quarters have access to toilets which the World Health Organisation deems acceptable, up from less than two-thirds in 2000. But about 70m still use shared facilities, and 260m continue to rely on bucket loos, open pits and other grungy facilities. Some are literally lethal: last month police traced a huge blast in the port city of Ningbo, which killed two people, back to an exploding septic tank.

A second problem for the party is that China's middle classes are growing ever less inclined to tolerate the rank state of public toilets, which can be filthy even in big cities. Poisonous smells waft from squatting pans that may not be hidden in cubicles. Loo roll is a luxury and hand soap vanishingly rare, even in places, including some hospitals, where it is essential. Rising domestic tourism means that more and more Chinese are coming face to face with gritty provincial and roadside privies.

A steady succession of official initiatives has gradually improved matters. Since 2003 officials have operated a national rating system for public toilets, similar to the star-gradings for hotels. In 2012 authorities in Beijing issued a much-mocked circular stipulating that toilet blocks should contain no more than two flies. Mr Xi's "toilet revolution" began in 2015, when the tourism ministry launched a three-year loo-upgrading programme. It says that it has supervised the building or renovation of 68,000 toilets since then.

A lot of the new loos are in scenic rural spots; the hope is that they will benefit both villagers and visitors. Meanwhile city planners have started requiring developers to provide more female toilets than male ones (a reform for which some women had long campaigned), and are growing more enamoured of unisex ones. Showboating authorities in some well-off places have flooded flashy new toilet blocks with free Wi-Fi, phone-charging and vending machines. Earlier this year toilets near the Temple of Heaven, one of Beijing's biggest tourist draws, were fitted with facial-recognition systems designed to prevent thieves from absconding with its loo roll (the technology prevents toilet-paper dispensers from serving each visitor more than once).

More is to come. On World Toilet Day, a UN-sponsored event celebrated annually on November 19th, a senior tourism official promised that his agency would not only "consolidate the fruits of the last round of the toilet revolution" but also "open up a new chapter". In a statement padded with reverent references to the Communist Party's just-concluded congress, he promised to improve or construct another 64,000 toilets by the end of 2020.

The hope is that cleaner toilets will both improve public health, and boost tourist receipts, which the government hopes will swell by 11% a year.

Chinese manufacturers hope that swanky new public facilities will boost the market for smart toilets, in which they compete fiercely with the Japanese. Less whining from foreign visitors would also provide a fillip to national pride.

As for politics, some wonder if Mr Xi's very visible support for better lavatories is designed to paint him as a man of the people. The renewed focus on toilet-upgrading does seem to chime with a subtle doctrinal shift detected during the recent congress, at which a party long obsessed with boosting economic growth hinted that it would start looking for more holistic ways of improving citizens' lives. China-watchers are jumping at any indication of what the "new era" Mr Xi proclaimed at the event in October will look like in practice. The relaunch of the toilet revolution will give them something to go on.

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# Middle East and Africa

**Capital punishment**

## The world reacts to Donald Trump's recognition of Jerusalem as Israel's capital

A campaign promise kept, a problem aggravated


Dec 7th 2017 | JERUSALEM

EVEN before Donald Trump issued his proclamation recognising Jerusalem as the capital of Israel, stiff opposition was brewing. Pope Francis and the Supreme Leader of Iran denounced his plan to move America's embassy from Tel Aviv to Jerusalem. So did the UN Secretary-General, the prime minister of Italy and a global chorus of diplomats. If anything, opposition from such grandees emboldened Mr Trump. On December 6th he jettisoned most of the conventional wisdom about the Israeli-Palestinian peace process.

Without preconditions, Mr Trump recognised Jerusalem as the historic capital of the Jewish people, "established in ancient times", and the seat of Israel's government. In the first taste of a peace plan he is expected to unveil next year, he failed to mention Jewish settlements in the West Bank or the Palestinians' claims to Jerusalem. It was, as he said, "very fresh thinking".

The proclamation delighted Israel's prime minister, Binyamin Netanyahu, who hailed it as "a historic day" for which Israel is "profoundly grateful".

Since David Ben Gurion moved his government to Jerusalem in 1949, Israel has been the only country with a capital that is not formally recognised by the rest of the world. The city is still considered by the UN a *corpus separatum*—a separate entity under international jurisdiction. On the ground this has never been the case. Until 1967, Jerusalem was split between Israel and Jordan, and since that year's six-day war, it has been solely under Israeli control. But even Israel's closest allies have continued maintaining their embassies 40 miles (65km) to the west in Tel Aviv.

Saeb Erekat, secretary-general of the Palestine Liberation Organisation, and previously the Palestinians' chief negotiator with Israel, said that Mr Trump had "disqualified his country from any possible role in the peace process". But Mr Trump insisted that he still intends to honour his earlier promise to achieve the "ultimate deal"—peace between Israel and the Palestinians. He stressed: "we are not taking a position on any final status issues, including the specific boundaries of the Israeli sovereignty in Jerusalem, or the resolution of contested borders." But it will be hard from this point to get the Palestinians to return to the negotiations that they abandoned three years ago.

The move of the embassy could in theory be stalled by a future president, though that is unlikely. Meanwhile, protests are erupting. The Palestinians still insist that part of Jerusalem should serve as the capital of a future Palestinian state, as a condition of any peace deal. Some 300,000 Palestinians live in Jerusalem—nearly a third of the city's population. They carry Israeli identity cards and can travel and work throughout Israel. But they are not Israeli citizens and cannot vote in national elections. Their status remains to be resolved.

Mr Trump has based much of his Middle East policy on building a closer alliance with Saudi Arabia. The Saudis, along with America's other Arab allies, publicly opposed the recognition of Jerusalem. But it is unlikely that Mr Trump would have gone ahead if they had not privately assured him that they had bigger things to worry about. The Sunni Arab states are less concerned about Palestine than about Iran's growing influence, and finding ways to contain it (see article). Israel, behind the scenes, has become a tacit ally of the Saudis in the Sunni-Shia conflict.

### Holy city, unholy mess

This leaves the Palestinians isolated, a sentiment palpable on the streets of East Jerusalem this week. They feel abandoned not only by America but by the Arab world and even by their own leaders. Jawad Siam, a local leader in Silwan, an Arab district of Jerusalem, has harsh words for Mahmoud Abbas, the Palestinian president. “Abbas is always saying there is still a chance for diplomacy, and now Trump is making Abbas very small in front of his people.” Ever since his election in 2005, Mr Abbas has rejected violence and called upon his people to pursue statehood through diplomacy. Now the calls from within the Palestinian national movement for a return to *intifada*, ie, a violent uprising, are growing.

However, many Palestinians remain weary of conflict with the Israelis. “Why should we start another *intifada* and lose our sons?” asked Fowzi Iyad, a trader from Jerusalem’s Muslim Quarter. “Just because Trump said he’s going to build an embassy? Let’s see Trump building something. All he does is talk.”

***Correction:*** *The original version of this story said that Mr Trump issued his Jerusalem proclamation on December 4th. This actually happened two days later. Sorry for the error.*

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**Spreading the word**

## The sudden, surprising rise of Arabic on Israeli street signs

One area where Binyamin Netanyahu's government is not so hostile to Arabs


Dec 6th 2017 | TEL AVIV

TWO years ago Ayman Odeh, the pragmatic new leader of Israel's Arab parliamentary bloc, said that within a decade Arabic would be "on Tel Aviv street signs as part and parcel of the urban environment". It is happening faster than he predicted. Across Jewish as well as Arab towns, Arabic signage is sprouting on highways, bus routes and, most recently, railway stations. Some 40% of the digital panels on public buses now list their routes in Arabic alongside Hebrew, up from near zero two years ago. By 2022, says the government, the service will be fully bilingual. A new department pumps out road-safety warnings in Arabic.

In tandem, a five-year plan, Resolution 922, aims to narrow the gap between Jews and Arabs in education, housing and policing. Though not the first, it is by far Israel's most ambitious. It costs 15bn shekels ($4.3bn), and unlike previous plans was devised together with Arab representatives.

The government of Binyamin Netanyahu, the prime minister, is often derided as chauvinist. So its espousal of integration surprises many. Mr Netanyahu often plays up the Arab threat, particularly at election time. However, he sees pragmatic reasons for treating Israeli Arabs a bit better.

Israel's 1.8m Arabs are citizens, and Arabic is an official language which most Jews study in school. But for decades after independence the authorities left most Arabs isolated in ill-funded villages and towns without transport to the country's economic hubs. As of 2015, 53% of Arabs were poor, against 14% of Jews. The gap fed resentment. Israeli Arabs now fly Palestinian flags at their rallies. For years security officials have warned that, without integration, Israel's Arabs would rally behind Palestinians in the occupied territories. Government economists add that including Arabs more fully in the economy would give it a boost—much as immigrants from the former Soviet Union did in the 1990s, says Amir Levy, who drafted the five-year plan.

Since the plan was approved in 2015, a third of the budget has been spent. The transport ministry is connecting Arab towns to Jewish hubs such as Tel Aviv with over 300 new and upgraded routes. One aim is to get more Arab women into work. Last month Mr Netanyahu opened the first of 17 police stations to be staffed by Arab officers in Arab towns. "If we want Israel to be strong, we need our minorities to be strong, with the same rights and budgets as everyone else," says Gila Gamliel, the minister overseeing the plan.

The new policy has sometimes been implemented insensitively. Arab cities like Jaffa, Acre and Nazareth are given Hebrew names on Arabic signs. Especially galling is "Awrushaleem", an Arabised version of "Jerusalem" in place of "Al-Quds", the usual Arabic name for the city. Signs are also Hebraising what Arabs call "Tel Abib": Arabic has no letter V, so the large sign at a Tel Aviv station has a workaround—three dots below the letter B—that make the sign look more like Urdu. "It's humiliating to see Arabic treated with such disrespect," says Mohammad Darawshe, an activist.

Some Israeli officials resist the spread of Arabic. The mayor of Beersheva, a southern town of 200,000 Jews surrounded by 100,000 Arabs, tried to ban bus announcements in the language. And Israel Railways has refused to follow Jerusalem's tramline in announcing stops in Arabic over the tannoy. "It would be too noisy," explained its chief executive. Banks offer online services in Arabic. But the only Arabic that visitors could find in the central bank’s corridors were prohibitions against smoking.

Some Israelis fear that a bilingual country might become a binational one. Mr Netanyahu’s cabinet is backing a bill designating Israel the nation-state of the Jews and stripping Arabic of its official status. “The more Arabic we hear, the more the government wants to downgrade its status,” says Yonatan Mendel, an expert on Arabic education. Israelis are justly proud of having revived Hebrew as a spoken language—a feat akin to resurrecting Latin in everyday conversation. But for some, that is not enough; Hebrew should have no rival.

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**Geriatric autocrats**

## Africa’s ageing leaders don’t know when to quit

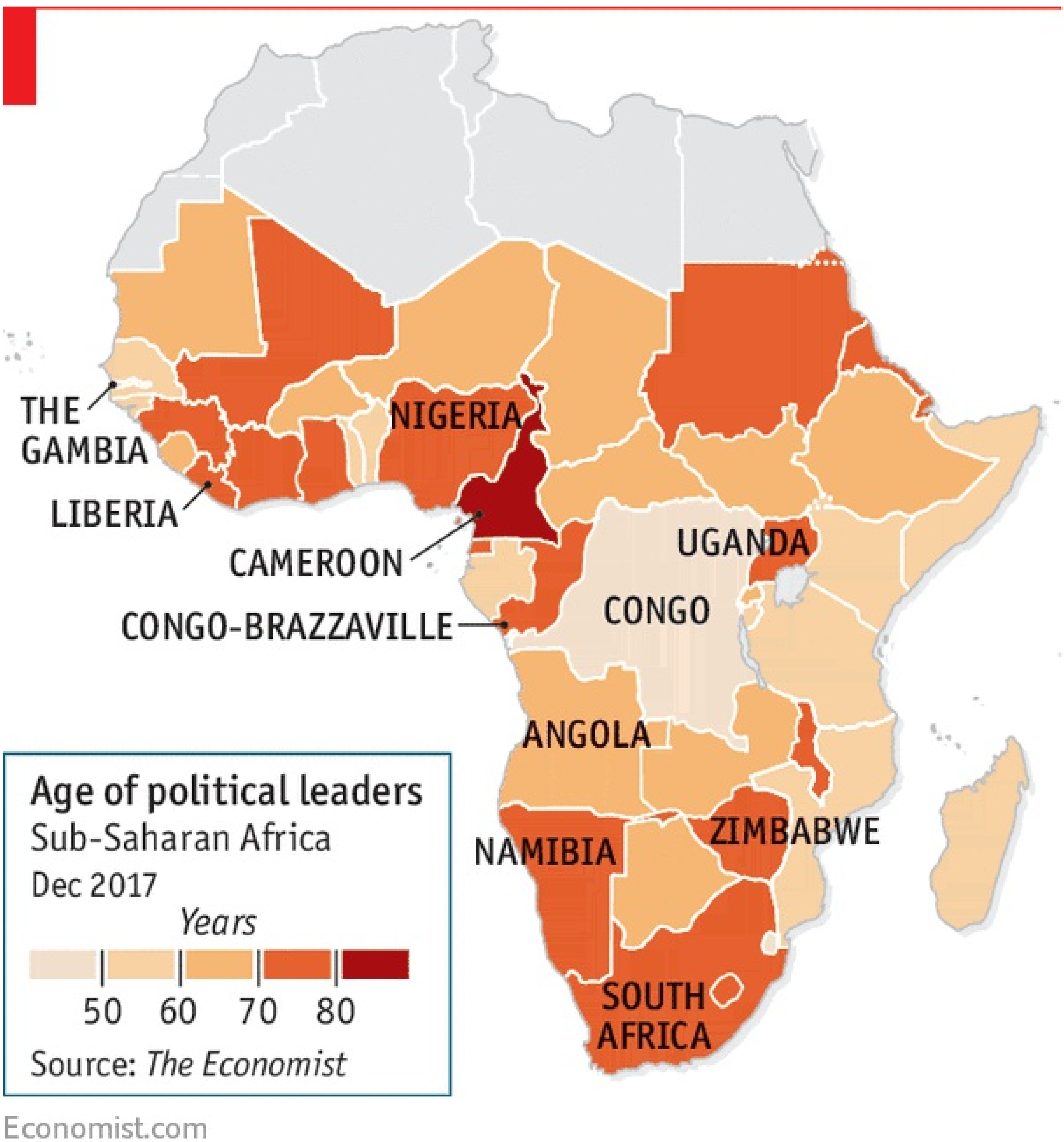
The median age on the continent is just over 18. But two-fifths of its leaders are over 70


Dec 7th 2017 | KAMPALA

THE old taxi park in central Kampala, Uganda’s noisy, traffic-clogged capital, is a huge patch of bare earth and mud filled almost entirely with minibuses. Battered, often still with old Chinese names painted on the side, these are the core of the city’s transport system. Each day, they bring thousands of commuters into the city.

Yet this is also, curiously, a centre of politics. To enter the rank, drivers must pay a fee of 120,000 Ugandan shillings (roughly $34) per month to the city council. In November, hundreds of them surrounded President Yoweri Museveni’s convoy to demand a reduction. The ageing president conceded; from January, the fee will be cut by a third. But that may not mollify the drivers. “We are still not happy,” says Waiswa Mubarak, a 30-year-old driver. “According to us youths, he has to retire. If he doesn’t, we will force him to."

Mr Museveni, aged 73, has been president since 1986, longer than four-fifths of Ugandans have been alive. But he shows no sign of retirement planning. Earlier this year, he described himself as a "wonderful dictator". Before the end of the year, his allies in parliament are expected to force through a change to the constitution, removing an age-limit of 75 for candidates, allowing him to run again in 2021.



But after the sudden fall of Robert Mugabe in Zimbabwe some are beginning to wonder if Mr Museveni too might suffer a similar fate. Nor is he alone. Africa is the world's youngest continent: south of the Sahara the median age is 18. Yet two-fifths of the region's leaders are over 70, with a mean age of 65. Some, such as Muhammadu Buhari of Nigeria (74) and Ellen Johnson Sirleaf of Liberia (79), were freely elected and will no doubt step down peacefully. Others are determined to cling on—but may find that hard.

Paul Biya of Cameroon (84) has faced protests in the north-west and south-west of the country for over a year now. Denis Sassou Nguesso of Congo-Brazzaville (74) has resorted to air strikes on opposition areas. Another former dictator, José Eduardo dos Santos of Angola (now 75), stepped down in September as his unpopularity soared and is now watching his family's empire being dismantled by his successor.

In Kampala, though many were excited by the fall of Mr Mugabe, few expect a coup. But many are beginning to wonder whether Mr Museveni will ever leave power unless he is forced. Some 75% of Ugandans are opposed to the bill that would let him run again, according to an Afrobarometer poll taken in September. Yet it is being rammed through.

When the bill first came to parliament, troops had to pull brawling politicians off each other. When it returns for its second reading, it is sure to pass, but only thanks to a campaign of bribery. MPs have openly been paid 29m shillings ($8,120) each to "consult" on the bill; the sums paid under the table could be far higher. And parliament is relatively pliable, says Bernard Tabaire, a Ugandan political analyst. Most MPs enter it with extravagant debts and less than half hold their seats for more than one term. That means many can be bought off rather cheaply.

As Mr Museveni's popularity declines, the payoffs needed to keep him in power grow. Since 2002, the number of districts has more than doubled; the number of "traditional" monarchies has grown too. That creates jobs, to be given out in exchange for loyalty. But it also starves the rest of government of money. Public-sector doctors held a strike in November, demanding a tenfold increase in their salaries, currently starting at $308 per month. Prosecutors are also striking, and nurses may follow. Local government has been crumbling for years. As services decline, that in turn fuels anger at the government.

Eventually, patronage strangles the economy—and shadowy violent sources of power grow more important than the formal state. Already, more people are being arrested. Kizza Besigye, Uganda's main opposition leader, was at one point was charged with treason. The editors of *Red Pepper*, a newspaper, were arrested on November 21st, and remain in prison for publishing an article suggesting Mr Museveni wants to overthrow his counterpart Paul Kagame of Rwanda. Protests have been put down with gunfire. Political assassinations seem to be becoming more common.

Although violence can work for a while, oppressive states that are running out of money are rarely stable. In Gambia in January, Yahya Jammeh, who had been president for 22 years, lost an election, tried to stay on, and was forced out by the threat of military intervention from Gambia's neighbours. Mr Mugabe was toppled by a coup. How long might Mr Museveni survive? Unlike some other despots, he is seemingly still healthy and works long hours—indeed, he micromanages almost every decision. Uganda's economy, though slowing, is still far from bust. But he seems to have no plan for succession. If he doesn't make one, a crisis will eventually come. What then? Ugandans watching events in Zimbabwe are wondering.

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Ethiopia

## Why Ethiopians are nostalgic for a murderous Marxist regime

Violent and incompetent, the Derg is nevertheless remembered fondly by some


Dec 7th 2017 | AMBO

IN AMBO, a town in central Ethiopia, a teenage boy pulls a tatty photo from his wallet. “I love him,” he says of the soldier glaring menacingly at the camera. “And I love socialism,” he adds. In the picture is a young Mengistu Haile Mariam, the dictator whose Marxist regime, the Derg, oversaw the “Red Terror” of the 1970s and the famine-inducing collapse of Ethiopia’s economy in the 1980s. Mr Mengistu was toppled by rebels in 1991 before fleeing to Zimbabwe, where he still lives. He was later sentenced to death, in absentia, for genocide.

But the octogenarian war criminal seems to be growing in popularity back home, especially in towns and among those too young to remember the misery of his rule. When Meles Zenawi, then prime minister, died in 2012, a social-media campaign called for Mr Mengistu to return. In the protests that have swept through towns like Ambo since 2014, chants of "Come, come Mengistu!" have been heard among the demonstrators.

Asked by Afrobarometer, a pollster, how democratic their country is, Ethiopians give it 7.4 out of 10. They give the Derg regime a 1. Yet even some of those old enough to remember life under Marxism are giving in to nostalgia, admits a middle-aged professor at Addis Ababa University. The coalition that ousted the Derg, the Ethiopian People's Revolutionary Democratic Front (EPRDF), introduced a system of ethnically based federalism in 1995 that critics say favours the Tigrayan minority. After bouts of ethnic violence, most alarmingly this year, many now look back fondly on Mr Mengistu's pan-Ethiopian nationalism.

"The general perception is that whatever the Derg did was out of love for the country," explains Befekadu Hailu, a human-rights activist, who is himself no fan. Mr Mengistu fought a victorious war against Somalia in the 1970s, and waged a homicidal campaign against secessionists in Eritrea, then a region of Ethiopia, for more than a decade. The EPRDF, in contrast, oversaw the loss of Eritrea and with it access to the sea when it allowed an independence referendum in 1993.

The Derg's policies were ruinous: nationalising almost every firm; forcing peasants at gunpoint onto collective farms, where they starved. Mr Mengistu was also more brutal than any Ethiopian ruler before or after. But the EPRDF is struggling to win the hearts of ordinary Ethiopians. Its heavy-handed propaganda—which includes ideological "training" for students and civil servants, and an annual celebration of its victory over the Derg—are widely met with contempt.

"When you have no hope for the future you go back and try to find some light in the past," says Hassen Hussein, an activist who now lives abroad. The country's most popular musician is Teddy Afro, a 41-year-old whose songs celebrate Ethiopia's former emperors and its feudal past. The ruling party has yet to come up with such a catchy tune.

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**Talking shop stopped**

## Why the Gulf Co-operation Council can’t co-operate

A two-day summit in Kuwait City broke up after 15 minutes, over Qatar and more


Dec 7th 2017 | DUBAI AND DOHA

EVERYONE knew this year’s summit of the Gulf Co-operation Council (GCC) would be contentious. But the envoys barely had time for a cup of tea. Since June, three out of six GCC members (Saudi Arabia, the United Arab Emirates and Bahrain) have blockaded a fourth (Qatar), cutting ties and trade until it stops backing Islamist groups. Kuwait, the host, hoped to use the summit on December 5th to broker a solution. “We believe that wisdom will prevail,” said the emir, Sheikh Sabah al-Ahmad al-Sabah, at the opening.

His optimism lasted about 15 minutes before he emerged from a closed-door meeting and abruptly ended the conference, which was meant to last two days. The Kuwaitis felt snubbed: though Qatar sent its emir, other members dispatched mere cabinet ministers. Hours before the summit even began, the UAE announced a new economic and military alliance with Saudi Arabia. It was a clear sign that the GCC's two most important members think the bloc has outlived its usefulness.

As an economic union the GCC has had some successes, including a free-trade area with standardised tariffs and laws. But more ambitious plans, like a common currency meant to be adopted by 2010, have stalled. And as a political grouping it is dysfunctional. Saudi Arabia and the UAE are hostile to their regional rival, Iran, and to Islamist groups like the Muslim Brotherhood. Bahrain has been under the Saudi thumb since 2011, when the kingdom sent troops across the King Fahd Causeway to quell an uprising led by the island's disenfranchised Shia majority. Oman, meanwhile, keeps close ties with both the Arab Gulf states and Iran. Kuwait tries to sit out (or at the summit, help resolve) regional disputes. And Qatar, always the black sheep, broke decisively with its neighbours during the Arab spring when it supported Islamists across the region.

The embargo has not yet forced it to stop. With huge gas reserves and a population of just 2.7m, it is the world's richest country in purchasing-power terms. The central bank has poured over $40bn into the economy since the financial crisis. Visitors and residents barely notice the blockade. Locals complain about the potato crisps, now imported from Oman and less flavourful than the old Saudi ones, and goods like cardamom and Diet Pepsi can run short. But in Villagio, a gaudy Venetian-themed mall, shelves are stocked. Though tourism has taken a hit, the restaurants and bars at Doha's five-star hotels are still busy serving lavish buffets and imported wine. "We've adjusted to the blockade, to living on an island," says one member of the ruling family.

The blockading states, meanwhile, have moved on to bigger concerns. In November the Saudis tried to remove Lebanon's prime minister. They felt Saad Hariri had made too many concessions to Hizbullah, the Iranian-backed militia that sits in his government. Mr Hariri was summoned to Riyadh, forced to resign, and held under house arrest for two weeks. But the stunt backfired when France brokered his release, and on December 5th he formally rescinded his resignation. Saudi efforts failed, too, to flip Ali Abdullah Saleh, the former Yemeni president, who since 2014 had been aligned with the Houthi rebels fighting a Saudi-led coalition. In early

December Mr Saleh turned on his allies and called for dialogue with the Saudis. Within days, he was dead (see article).

Even Saudi Arabia and the UAE have their differences. The Saudis consider Iran an existential threat. Less so the Emiratis: one-sixth of Iranian exports go across the Strait of Hormuz, with non-oil trade valued at more than $5bn per year. Dubai is an entrepot between Iran and the world. Saudi Arabia and the UAE have backed different factions in Yemen, and have different goals in Syria. At present, though, more unites than divides them. Their new alliance does not replace the GCC, but it pushes the 36-year-old bloc further into obsolescence. “It’s just a talking shop,” says an Emirati businessman in Dubai.

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**An ex-dictator slaughtered**

## Ali Abdullah Saleh's death will shake up the war in Yemen

The former dictator fought the Houthis and then allied with them. His final break with them was fatal


Dec 7th 2017 | BEIRUT

IT WAS an unceremonious end. On December 4th Ali Abdullah Saleh, Yemen's former dictator, was killed outside the capital Sana'a, which has been paralysed by a week of fighting. A video circulated online showed his bloodied body wrapped in a gaudy blanket, surrounded by militiamen. State television called the former president "the leader of the traitors" (see Obituary).

His death was emblematic of Yemen's complexity: Mr Saleh was killed by the Houthis, enemies who had become allies, only to become enemies again. For all his many faults, Mr Saleh was the most powerful politician in Yemen, and both America and Saudi Arabia had hoped to use him to broker an end to the war. His death leaves a power vacuum that no one else will be able to fill any time soon.

Mr Saleh ran Yemen (before 1994, North Yemen) for 33 years. But he failed to give a growing population the necessary investments in health care and education. Instead he and his allies were accused of plundering billions from the Arab world's poorest state. Mr Saleh faced mass protests during the Arab spring, and survived an assassination attempt. The Gulf states finally forced him out and replaced him with his vice-president, Abd Rabbo Mansour Hadi. But the Houthis felt disenfranchised, and in late 2014 stormed Sana'a, to the relief of many frustrated with Mr Hadi's inept rule. They also forged an unlikely alliance with Mr Saleh, who saw a way back to relevance. Within six months their forces had reached the southern port city of Aden, leading the Saudis to intervene.

For more than two years a Saudi-led coalition has battered Yemen with air strikes. At least 10,000 people have been killed, most of them civilians. Disease and hunger are widespread. The conflict has become another front in the proxy war between Saudi Arabia, which champions Sunni Islam, and Iran, which provides some support to the mostly Shia Muslim Houthis. For all its military might, the Saudi-led coalition has struggled to defeat a much weaker foe. Twice in the past month, the Houthis even managed to launch ballistic missiles at Saudi Arabia.

Last week, after months of tensions with the Houthis, Mr Saleh suddenly ended their three-year partnership and called for dialogue with the coalition. Backed by Saudi warplanes, his network of tribal fighters captured large parts of Sana'a. But within days the Houthis recaptured most of the territory they had lost, and besieged the ex-president's home, which they later blew up. At least 200 people were killed in Sana'a over the past week, according to the International Committee of the Red Cross. The former president was one of them, shot by those same rebels he had just days before been fighting alongside.

His death is an embarrassment for Saudi Arabia's crown prince, Muhammad bin Salman, who has suffered a string of foreign-policy failures (see article). It will probably open a new front in the war, between the Houthis and Mr Saleh's now leaderless fighters. Mr Saleh's son, Ahmed, may seek to fill his father's shoes, keeping the fighters on the coalition's side. He has already vowed to "lead the battle until the last Houthi is thrown out of Yemen". So might General Ali Mohsen al-Ahmar, a one-time Saleh loyalist who now serves as Mr Hadi’s vice-president.

So the battlefield is likely to become even more splintered. The rebels will try to consolidate power in the capital, where tens of thousands of their supporters jubilated after Mr Saleh’s death. The coalition, for its part, has already increased its bombing campaign. General Ahmar’s men are already advancing south towards the capital. Donald Trump called on December 6th for Saudi Arabia to lift the blockade, but this looks unlikely. Further misery lies ahead for an already battered country.

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# Europe

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**Revolution devolution**

## The West is letting Ukraine lose its battle against corruption

Local graft and foreign indifference are betraying the promise of the Maidan revolution


Dec 7th 2017 | KIEV

UKRAINE is in turmoil—again. Protesters are blocking streets and chanting *Bandu het!* (“Bandits out!”). Smoke again permeates Kiev’s chilly air. The police are again trying to clear out protesters’ tents. The scale is smaller than four years ago, when demonstrators on Maidan square overthrew the corrupt regime of President Viktor Yanukovych. But once again, Ukraine’s viability as a state is at stake.

The catalyst of the latest upheaval is Mikheil Saakashvili, a former president of Georgia who entered Ukrainian politics after the Maidan uprising to help fight corruption. After serving as governor of the Odessa region, Mr Saakashvili turned against Petro Poroshenko, Ukraine’s president, who responded by stripping him of his Ukrainian citizenship while he was abroad. (He had already lost his Georgian citizenship.) Bundled through a border post by his supporters, the stateless Mr Saakashvili defiantly re-entered the country and, on December 3rd, staged a rally calling for Mr Poroshenko's impeachment.

Two days later Ukraine's security services came to arrest him. Mr Saakashvili climbed to the top of an eight-storey building and rallied his supporters from the roof. When agents grabbed him, the crowd blocked their van and freed him. With one wrist still dangling a handcuff, Mr Saakashvili led his supporters to the Rada, Ukraine's parliament, to demand Mr Poroshenko's resignation.

Mr Poroshenko's attempted show of force ended up exposing his weakness, as well as that of a state plagued by secret deals and graft. The root of the crisis lies in the failure of the governing elites to meet the Maidan revolution's main demand: ending the country's oligarchic system.

The hope that Ukraine's corrupt elites could themselves reform Ukraine and introduce the rule of law was never high. But their dependence on Western support, and the West's alliance with Ukraine's thriving civil-society activists, gave some cause for optimism. Both these factors have since weakened. Civil society has failed to build political muscle, while the European Union is suffering Ukraine fatigue. Most important, says Yulia Mostovaya, the editor of *Zerkalo Nedeli*, an independent weekly, is that America no longer has a comprehensive Ukraine policy.

**Reform deformed**

American policy now focuses on security, giving short shrift to internal problems. President Donald Trump has little interest in state-building in Ukraine. (He may also resent Ukraine for helping American investigators to indict Paul Manafort, his former campaign manager.) No senior official keeps watch over Ukrainian politicians. "It is a test of Ukrainian democracy without America," says Ms Mostovaya.

Over the past few months the situation in Ukraine has deteriorated. Anti-corruption activists and opposition politicians are under pressure. Mr Saakashvili's allies have been harassed. Some journalists fear for their safety. Exhausted by war and still lacking functioning institutions, Ukraine risks descending into feudal violence. Oligarchs are now measured not just by their money, loyal MPs and private TV channels, but also by the size of their armed forces.

One of the most powerful figures is Arsen Avakov, the interior minister and a business tycoon. Mr Avakov controls the police and the national guard, as well as a television channel. Formally Mr Avakov is in coalition with Mr Poroshenko, but in fact he views him as a rival oligarch. Mr Avakov wants to shift Ukraine towards a parliamentary system that would give each power player his due.

Ukraine's squabbling elites take little responsibility for their state, uniting only to battle the civil activists and independent institutions that threaten their oligopoly. The most critical battle is around the National Anti-Corruption Bureau (NABU), the sole credible institution that pressure from civil society and Western backers has brought into being. Trained by America's FBI, NABU started to attack serious vested interests in Ukraine, provoking an inevitable counter-attack.

The fight escalated in October, after NABU detained Mr Avakov's son in connection with the suspected embezzlement of $521,000 through a contract to supply backpacks to the interior ministry. Mr Avakov perceived this as a declaration of war by Mr Poroshenko, and dispatched national guardsmen and police officers to block roads in Kharkiv to prevent his son's arrest. Mr Avakov, who previously backed NABU as a counterweight against Mr Poroshenko, withdrew his support, leaving it exposed.

On November 29th the prosecutor general's office, controlled by Mr Poroshenko, disrupted a sting operation investigating the deputy head of the immigration service, who had allegedly offered to sell Ukrainian citizenship to foreigners for $30,000. NABU's undercover agent was in the process of handing over a "bribe" when she was arrested by the prosecutor general's men. The agent was later released, but the operation had been foiled. Artem Sytnik, the head of NABU, says his agency is outmatched: "All we have is our integrity and our conviction that we are doing the right thing."

Both the EU and the American government issued strongly worded statements. "These actions appear to be part of an effort to undermine independent anti-corruption institutions that the United States and others have helped support," the State Department said. The ruling coalition responded with contempt, crippling NABU by removing its main political backer, the head of the parliament's anti-corruption committee, from his post. It also tried to push through a law to remove NABU's independence, but backed down in the face of protests from civil-society activists and the IMF, which funds Ukraine's debt.

The oligarchs are confident that America lacks the will to back up its rhetoric. Admitting that Ukraine is corrupt and dysfunctional would prompt uncomfortable questions among American voters about their country's involvement and sanctions against Russia.

Mr Poroshenko, whose popularity rests on the war with Russia, casts his internal opponents as Russian agents. His prosecutor general accuses Mr Saakashvili of trying to mount a coup on Russia's behalf. In fact, the coup is being mounted in Kiev, whose rulers are pushing their country away from the West. As Mr Poroshenko's approval rating falls, Ukrainians' positive attitudes towards Russia are rising. Mr Putin must be enjoying the show.

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Arms control in Europe

## Russia is undermining a symbol of cold-war diplomacy

The Intermediate-Range Nuclear Forces treaty is unravelling


Dec 9th 2017

THIRTY years ago, Ronald Reagan and Mikhail Gorbachev signed the Intermediate-Range Nuclear Forces (INF) treaty, banishing an entire category of destabilising weapons from Europe. Some 2,700 ground-launched ballistic and cruise missiles with ranges between 500 and 5,500 km were destroyed in a deal that presaged the end of the cold war. Yet today the treaty is imperiled by Russian violations. If those do not cause it to collapse, the response America is contemplating may.

America first announced its concerns over Russian violations in 2014, a few months after Vladimir Putin annexed Crimea. The treaty obliges both countries not to possess, "produce or flight-test" new intermediate-range ground-launched missiles. Russia, the Americans said, had tested a cruise missile that breached that agreement. No countermeasures were proposed, apparently in the hope that the Russians would be embarrassed into quietly abandoning the new system.

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The Russians denied the charge, though they had been complaining about the treaty for years, saying it blocked them from deterring new missile powers. (China, India, Pakistan, North Korea and Israel, they noted, all have intermediate-range missiles.) Another reason why America hesitated to retaliate was that it was focused on deploying new troops to NATO's eastern members, who were worried by Russia's intervention in Ukraine. The threat to the treaty was seen as a slow-burn problem that could be addressed later.

That time appears to have come. In February Donald Trump's administration revealed that Russia had secretly begun deploying the new missile, known as the SSC-8, a ground-launched variant of the 3M14 naval cruise missile used on targets in Syria two years ago. The SSC-8 can be moved by road and has a range of 2,500 km. The Russians have two operational battalions, each with about 36 missiles. One is thought still to be at the Kapustin Yar test site near Volgograd, the other at a base in the central military district that puts it in range of targets across Europe.

The Trump administration is expected to publish its Nuclear Posture Review early next year, which will guide its nuclear weapons policy. Officials are seeking ways to bring Russia back into compliance with the treaty rather than walking away from it. But some in the administration are sceptical about all arms-control agreements, and the INF treaty in particular. Last month Congress authorised the Pentagon to spend $58m on a response. The plan includes initial development of a new American intermediate-range missile. That would not breach the treaty, but most arms-control experts regard it as a step in the wrong direction. Producing such a missile would take many years and cost billions of dollars that the Pentagon can ill afford. The effort to persuade European members of NATO to host the missiles would divide the alliance, and the Russians could claim that not they, but the Americans, had blown up the treaty.

Steven Pifer, a former arms-control negotiator at the Brookings Institution, a think-tank, says that it makes no sense to give Mr Putin exactly what he wants. He reckons there are better ways to put pressure on Russia. One would be deploying existing air-and sea-launched cruise missiles to Europe and nearby waters. B-1 strategic bombers armed with stand-off missiles could be stationed at Fairford, an American base in Britain. Submarines carrying cruise missiles might turn up on patrol in the North Sea. Mr Pifer also thinks it is high time that America's European allies, in particular France and Germany, criticised the Kremlin's behaviour, which is a threat not just to the treaty but to them.

It may be too late to save the INF treaty, but it is worth an effort. If the treaty dies, the prospects for extending the New START strategic weapons deal, which will otherwise expire in 2021, will be dim. So will the future of nuclear-arms control itself.

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Plot of gold

## A court case in New York rattles Turkey’s president, Recep Tayyip Erdogan

A gold trader spills the beans


Dec 7th 2017

A FEDERAL court in New York is not the obvious setting for a trial that has sent panic through the Turkish establishment. But since he began testifying on November 29th, Reza Zarrab, a 34-year-old gold trader, has pled guilty to violating American sanctions against Iran; implicated Halkbank, a Turkish bank, and Recep Tayyip Erdogan, Turkey’s president, in his scheme; and confessed to bribing a former economy minister who, alongside an executive from Halkbank and six others, is a suspect in the case. In Turkey, a prosecutor has placed one current and one former US attorney under investigation, and Mr Erdogan has accused an Islamic sect of using America’s judiciary to stage a coup against his regime.

The charges against the gold trader, who was arrested during a trip to Florida in 2016, and the substance of his own allegations will sound familiar to most

Turks. In 2013 police in Turkey arrested dozens of people, including Mr Zarrab, the sons of three cabinet ministers, and Halkbank's general manager. Then as now, Mr Zarrab was accused of operating a laundering scheme that involved converting revenues from sales of Iranian gas to Turkey into gold, shipping the bullion to Dubai, and selling it for billions of dollars.

Mr Erdogan labelled the investigation a plot by a secretive Islamic movement, the Gulenists, to topple his government. He had it dismantled in the courts, the evidence dismissed as forgery, and the main suspects, including Mr Zarrab, released. He then sacked or reassigned thousands of alleged Gulenists from the police and the judiciary, the start of a purge that swelled to vast proportions after Turkey's failed coup in 2016. Many Turks share Mr Erdogan's view that the investigation was the work of the Gulenists. Yet few appear as eager as their president to overlook the evidence of wrongdoing it exposed. The shenanigans in an American courtroom risk becoming an embarrassment for Mr Erdogan.

The president has so far contained the damage to his reputation by muzzling the media. A day after Mr Zarrab confessed to paying Zafer Caglayan, the former economy minister, more than $60m in kickbacks and said Mr Erdogan ordered two banks to take part in his scheme, most of the country's biggest newspapers, as well as the state news agency, censored the story. The day before, when the leader of the main opposition party accused Mr Erdogan's family of depositing millions of dollars in offshore accounts, the state news channel cut its live broadcast of his speech.

The more immediate risk is to Turkey's economy and its banks. In the event of a guilty verdict, Halkbank faces the prospect of major fines over its alleged role in the sanctions-busting, says Inan Demir, an economist at Nomura Bank. "We might be looking at something in the area of $5bn," he says, an estimate almost double the bank's market value. Halkbank has denied taking part in any illegal transactions.

On December 5th Mr Erdogan called the case "an international coup attempt". His foreign minister has claimed that Gulen supporters have "infiltrated" America's institutions, including its courts. Turkish prosecutors, meanwhile, have seized Mr Zarrab's assets, including a private jet and property worth some $80m, opened an investigation into the American officials who put him on trial, and issued an arrest warrant for a former opposition lawmaker who is meant to appear as a witness.

Yet Turkey may have no choice but to accept the court's verdict and pay any penalties. Its currency, the lira, has lost more than a tenth of its value against the dollar over the past year, partly due to anxiety about the Zarrab case and its consequences for Turkish banks. Failure to comply with American fines would send the currency into a nosedive. Mr Erdogan might risk a fresh row with America, but not that. "Right now," says one banker, "the lira is the only check on his power."

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**Russia's digital gold rush**

# Why Siberia is a great place to mine bitcoins

Cheap electricity and frozen winters to cool massive computer servers


Dec 7th 2017 | IRKUTSK

RUSSIA'S recession had taken its toll on Yuri Dromashko, an entrepreneur from the Siberian city of Irkutsk. His property investments had floundered. A karaoke bar was flailing. A venture to make machines that print magnets from Instagram photos failed miserably. "We were all crying," he recalls. Then in 2016 his brother proposed bitcoin mining. Mr Dromashko acquired servers from China and watched the cash roll in. "It's almost like you print money out of nowhere," he says. "It's the childhood dream."

Irkutsk has embraced the digital gold rush. Awash in electricity from hydroelectric plants, the region charges 2.1 roubles ($0.04) per kilowatt-hour, compared with 5.3 roubles in Moscow. That makes "mining", in which computers solve cryptographic challenges to generate currency, especially profitable. Seminars have proliferated. "Cybercurrency fever has swept Irkutsk," declared a local television station this month.

This week the price of one bitcoin hit $12,000, up 1,485% on the year. Mr Dromashko says he spends about 4m roubles per month on electricity, but easily recoups that. “Selling drugs and guns wouldn’t generate such profits,” he says. (“Though I haven’t tried,” he clarifies.)

Some see cybercurrency as a path to self-sufficiency. Dmitry Tolmachev, an Irkutsk furniture magnate, developed a prototype modular home warmed by the servers’ excess heat. The homes cost $8,500 and up, and generate about $850 per month in mining profit. Mr Tolmachev sports a black beret, goes by “Che”, and recently did jail time for hosting a rally by the opposition leader Alexei Navalny. “The Russian man doesn’t love to work, he needs free money,” he says, invoking “Wish Upon a Pike”, a classic Russian fairy tale about a lazy villager who catches a magic fish that grants his wishes. “This is a kind of pike that does everything for you: it produces money, and heats your home too.”

At present the miners exist in a legal vacuum. In October, President Vladimir Putin ordered his officials to draw up a regulatory framework. Some in the Russian government see cryptocurrencies as a way around Western sanctions; the president’s internet ombudsman has his own mining farm, and one Duma deputy even proposed building a mining city in Siberia. But the central bank is sceptical, with one senior official calling cryptocurrency “a sort of financial pyramid that may collapse at any moment”. Siberia’s digital pioneers are undaunted. “Sure it’s a bubble,” Mr Dromashko acknowledges. “But all money is a bubble.”

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**French drift**

# If Corsica doesn't get autonomy, it may ask for independence

The island's nationalists win an election


Dec 7th 2017 | FOZZANO

STAND in Fozzano (pictured), a hamlet of stone houses perched above the spectacular western coast of Corsica, and it is easy to see why locals think of themselves as special. Rugged mountains tower behind. Below, the Mediterranean glimmers under a setting sun. Gilles Simeoni, a visiting politician in a duffel coat, tells a crowd that villages like theirs are the repository of the island's true, "deep culture". He earns appreciative nods and supportive muttering as strong coffee and dark chocolates are passed round.

Corsicans have taken a shine to Mr Simeoni and his fellow nationalists. They voted on December 3rd for a new territorial council that will combine the island's north and south into a single administrative unit. In the first round, the Pè a Corsica movement which he jointly leads won an impressive 45% of the vote. (La République En Marche, the party led by France's president, Emmanuel Macron, came fourth with just 11%.) The run-off election on

December 10th will probably confirm that nationalists will run the council, as they have for the past two years.

Corsicans seeking more autonomy have grown stronger of late. In 2014 the National Liberation Front of Corsica, a separatist militant group, gave up their 40-year war against the French state. That had involved assassinations, house bombings and, some claim, involvement with the island's murderous mafia networks. In 1998 militants assassinated a *préfet*, Paris's representative on the island. But after the violence ended, "we won the battle of ideas", says a senior party figure in Ajaccio, the capital. The party appeals to a sense of *dégagisme*, a popular backlash evident across France against established political parties and in favour of someone new.

The nationalists narrowly won previous local elections in 2015. Then in June this year they scooped three of the island's four constituencies in the national legislature, displacing representatives of ancient dynastic families. "We have convinced people who never voted nationalist," says Paul-André Colombani, one of the new MPs. Another MP, Jean-Félix Acquaviva, says Corsicans seek devolved powers similar to those enjoyed by Scotland within the United Kingdom. These include local control of police, expanded use of the Corsican language (which is closer to Italian than French) and some fiscal powers.

The question is whether Corsica, like Catalonia, might ultimately seek outright independence. A journalist in Ajaccio points out the difficulties: whereas wealthy Catalonia generates 19% of Spain's GDP, Corsica is isolated and hard-up, accounting for less than 1% of France's. Yet Mr Simeoni and his fellow nationalists have spent time studying the Catalan independence movement. Some of them went to Barcelona to observe the referendum in October.

One nationalist MP, who thinks perhaps a third of the island's 330,000 people already want more autonomy, hopes that support for independence will rise enough to merit a referendum in a decade or so. For now, though, the two factions of the party—radical separatists and moderate advocates of autonomy—have agreed to bury the independence question until at least 2027.

The central government, meanwhile, has shown no interest in engaging with

Corsican nationalists. Mr Macron has stayed aloof, says Mr Simeoni, though that might change after the election. France's education minister, Jean-Michel Blanquer, upset the nationalists by tweeting in November that the country will allow only one language. "They have a Jacobin mentality," says a Corsican politician, bemoaning France's exceptionally centralised system of government.

Mr Macron may want to reconsider his intransigence. Places like Corsica and Brittany, which also harbours a regionalist movement, could be given more autonomy without threatening the French state. The alternative may be that harder-line nationalists grow more popular. In Vico, a mountain village farther north, Paul-Félix Benedetti of Rinnovu Naziunali, a separatist movement, drew a solid crowd during the campaign. "Free the Corsicans from oppression," he proclaimed, railing against France's "colonisation" of the island. Then he switched into Corsican. His party got less than 7% of the votes in the first round. But a decade ago few people took Catalan secessionism seriously, either.

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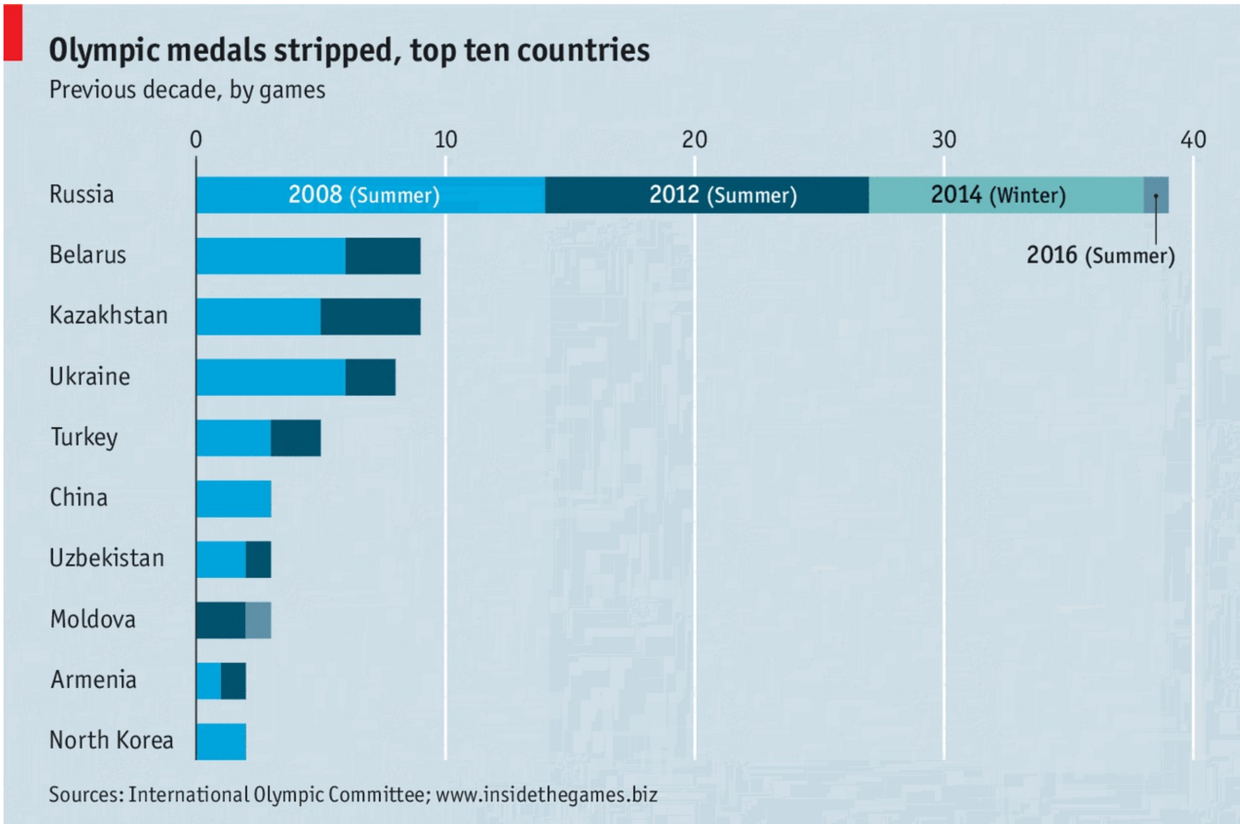
**Drugged, out**

## Russia is banned from the Winter Olympics

The world’s worst state-sponsored doping programme at last draws punishment


Dec 9th 2017

It has taken several investigative reports across three years. But at long last the International Olympic Committee (IOC) decided on December 5th to punish Russia for running a state-sponsored doping programme. Russian athletes hoping to compete in the winter games in February in Pyeongchang, South Korea, will have to do so under a neutral flag—after proving they are clean. The World Anti-Doping Agency provided extensive proof of cheating before the summer games in Rio in 2016, but the IOC still let Russia take a team to Brazil. It has toughened up recently: since the start of November, Russia has been stripped of 11 medals it won when hosting the winter games in Sochi in 2014, a pet project of Vladimir Putin’s. Russian officials have reacted with indignant (some might say Olympian) anger, calling the ban part of a Western campaign to keep Russia down.

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**Charlemagne**

# Germany is not about to reinvigorate the EU

Europe's Sleeping Beauty is proving devilishly hard to wake up


Dec 7th 2017

FOR so long the last man standing in Europe, Germany has suddenly become its Sleeping Beauty. Several Princes Charming are gathered around the bed, desperate to rouse the princess from her slumber. Emmanuel Macron, France's president, urges Germany to wake up for the sake of Europe. Brussels anxiously watches the princess's repose. Even Alexis Tsipras, who as Greece's prime minister is more used to taking instructions from Berlin than giving them, has been whispering into her ear.

Europeans complain about the results of German leadership when they receive it, but do not much like its absence. In 2011 Radek Sikorski, then Polish foreign minister, declared himself less fearful of German power than German inaction. Today, as Germany clumsily grapples with the result of its inconclusive election in September, much of Europe finds itself in a similar spot.

It is all so frustrating. When France elected an avowedly reformist president in May, Germany seemed to have found the partner it had long claimed to seek. Two days after Germany's election Mr Macron, who barely blinks without first considering the reaction in Berlin, delivered an ambitious speech on European reform calibrated not to antagonise Angela Merkel's government. Some Germans are wringing their hands that he still awaits an answer. "France is ready for a European revolution and it is Germany that is pulling the brakes," Martin Schulz, leader of Germany's Social Democrats (SDP), told *Der Spiegel*, a weekly.

But Mrs Merkel cuts a diminished figure these days. Leading her Christian Democrats (CDU) to their worst election result since 1949 was the first wound. The second came when Christian Lindner, pugnacious leader of the liberal Free Democrats (FDP), blew up her bid to form a "Jamaica" coalition with his party and the Greens. Soon afterwards the German agriculture minister went rogue in Brussels, voting against a European Union weedkiller ban without first checking with his colleagues in Berlin. Mrs Merkel is not to blame for all this, but it contributes to a sense that the chancellor is increasingly at the mercy of events.

Optimists, inside and outside Germany, say a government without the FDP could be a blessing in disguise, even if it will take a while to build. The puritanical Mr Lindner once wanted to abolish the euro's bail-out fund and kick Greece out. (In opposition, along with the far-right Alternative for Germany, his party will give the moribund Bundestag a populist shock.) Now Mrs Merkel is trying to rebuild the "grand coalition" of the past four years with the SPD, and some hope Mr Schulz's party could inject it with some pro-European vim. As a former president of the European Parliament, Mr Schulz is well suited to place the EU at the heart of his coalition talks with the CDU, and Mrs Merkel's lack of alternatives hands him tremendous leverage. Lo, this week a list of SPD demands surfaced that proposed working with Mr Macron on issues like tax harmonisation and European investment.

Do not get too excited. The problem is not just that the SPD is intellectually bankrupt, politically rudderless and in desperate need of a period of renewal outside government. Nor that the chances of a new grand coalition, according to Berlin-watchers, float somewhere between 40% and 60%. (As *The Economist* went to press an SPD convention was preparing to vote on whether to open talks.) Nor even that the party's base is more interested in domestic policy, like health care and taxation, than reinventing Europe. Germany's reluctance to lead the EU runs deeper than these incidentals.

On the euro, the former sense that the stars were aligned for an overhaul of the currency's architecture has shrivelled into a smaller hope that the half-built banking union may inch towards completion—and officials in Berlin, eyeing Italy's debt-laden lenders, are not even sure about that. The Germans dismiss reform plans unveiled by the European Commission this week as a pointless Brussels power grab, and think that a summit of euro-zone heads of government on December 15th, the first for over two years, is a waste of time. These are not signs of a country in a rush to reform.

**Wake up**

Germany's conviction that the problems of the euro zone are merely those of ill-disciplined states, encouraged by a recklessly expansionary monetary policy, has only grown. The fearsome finance ministry remains hyper-alert to hints that German taxpayers' money might be used to fund the misbehaviour of others, whether through fiscal transfers, financial risk-sharing or any other villainous scheme. It is a defensive strategy, and largely unplugged from debates in other countries. "There's almost an intention not to look at the rest of Europe," sighs Marcel Fratzscher at the German Institute for Economic Research.

Prospects for a grand bargain with Mr Macron on security are only slightly brighter. German officials say his speech offered nothing new. Mrs Merkel's team think they have effected a huge change in Germany's approach to the world; it now directs European foreign policy in trouble-spots like the Western Balkans and Ukraine. But outsiders, including in the United States, still lament Germany's utter lack of strategic culture. A survey this week found that Germans want more EU defence, but want to pay no more for it. You might say they wish to have their cake and eat it.

Mrs Merkel's officials bristle at suggestions that Germany has done nothing: look how far the chancellor has moved on bail-outs and risk-sharing in recent years. But as Kersti Kaljulaid, Estonia’s president, says, “When the crisis abated, the enthusiasm was gone.” Maybe the status quo suits Germany too well. Europe’s economies are growing nicely and refugees are no longer pouring in. At home unemployment is rock-bottom and the treasury’s coffers are spilling over. It took a century for Sleeping Beauty to awaken. In the meantime most of her would-be suitors died in the thorns that surrounded her keep.

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# Britain

**False summit**

# Phase one of the Brexit talks is proving hard. Just wait for phase two

Theresa May gets a Northern Irish lesson in diplomacy


Dec 7th 2017

FEW things are as flexible as a deadline—as Northern Ireland's politicians know well. They have spent most of this year ignoring deadlines set in Westminster for the conclusion of talks to restore the devolved government in Belfast, which has been suspended since January. On December 4th they forced Theresa May to break another deadline, when they vetoed her plan to move the Brexit talks forward.

Mrs May had been told by the European Union that she had until this date to come up with enough concessions on the Brexit divorce to have a chance of persuading the EU summit on December 14th-15th to agree that "sufficient progress" had been made to move on to discussing the future relationship. The prime minister duly flew that day to Brussels to lunch with Jean-Claude Juncker, the European Commission's president. But at the last minute, Northern Ireland's Democratic Unionist Party (DUP), whose ten MPs Mrs

May needs for her ruling majority, stepped in to block a concession aimed at averting a hard border between Northern Ireland and the Irish Republic.

The border was always bound to be tricky. Today it is completely open, with no controls. But if the United Kingdom leaves the EU's single market and customs union while Ireland remains in both, it seems impossible to avoid frontier checks. And that would be deeply problematic for the Good Friday Agreement that underpins peace in the province.

Mrs May proposed that Northern Ireland observe "continued regulatory alignment" for most goods, including agriculture. But the DUP, which was not consulted about these words in advance, objected that they might mean Northern Ireland having different rules from the rest of the UK—and even a border in the Irish Sea.

As we went to press, Mrs May was still seeking a way forward. The DUP's leader, Arlene Foster, was demanding big changes. The Irish prime minister, Leo Varadkar, who had agreed to Mrs May's formula, said he was surprised and disappointed it had not been accepted. Mr Juncker said his door was open, though EU officials said a deal must be done by the weekend.

Even if Mrs May can find a way to make all sides agree, her bigger problem is that the DUP's bombshell has set off others. Political leaders from Scotland, Wales and even London were quick to say that, if Northern Ireland got special treatment to improve its access to the EU's single market, they should have a similar deal. Ruth Davidson, the Scottish Tory leader, chimed in on the importance of preserving the integrity of the UK.

But when David Davis, the Brexit secretary, then declared that any regulatory alignment for Northern Ireland would apply to the entire country, he infuriated Tory Brexiteers, since this seems to dash their dream of escaping all EU rules and doing free-trade deals with third countries. One Tory MP, Jacob Rees-Mogg, begged Mrs May to repaint red lines that were "beginning to look a little bit pink". In effect, the DUP has accelerated debate within the cabinet and party about the end-goal for Britain's relationship with the EU.

What next? There is just enough time to find a fudged form of words that would allow Mrs May to meet her hopes of sufficient progress. Other EU leaders are almost as eager to move on as she is. And although the DUP is notoriously intransigent, the party must back down eventually, if only because it fears two things even more than a separate status for the province: a no-deal Brexit that would instantly impose a hard border, and a government collapse in Westminster that could propel Labour's Jeremy Corbyn to power.

Yet Mrs May's troubles have only just begun. Charles Grant of the Centre for European Reform, a London-based think-tank, argues that phase two will be much tougher to negotiate than phase one. The clock is ticking towards March 29th 2019, when Brexit is due to happen. It will be hard to agree on a legally watertight, time-limited transition, not least because few experts think a new trade deal can be wrapped up (and ratified) within two years. And when it comes to the trade deal on offer, the EU will say that, if Britain insists on leaving the single market and customs union and retaining the option of regulatory divergence, it can only have a deal similar to Canada's, which covers most goods but barely any services.

Mujtaba Rahman of the Eurasia Group, a consultancy, notes that throughout the negotiations the EU has always been several steps ahead of Britain. Whereas the British cabinet has not even discussed the future relationship, Brussels has already prepared its negotiating guidelines. As if to illustrate his ill-preparedness, Mr Davis breezily admitted to a parliamentary committee this week that the government had made no impact assessments of Brexit on different industries, despite having boasted earlier of the depth of such studies.

In truth, Mrs May's Brexit red lines were misconceived. Just as when countries try to join the club, the EU sets the terms. Tory Brexiteers have now had to swallow a big exit bill, an implicit role for European judges, and now some regulatory alignment—all in exchange for a trade deal that may be little better than Canada's. They could yet be vindicated. But some may start to wonder what Brexit is really for.

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**Shoulder pips squeaking**

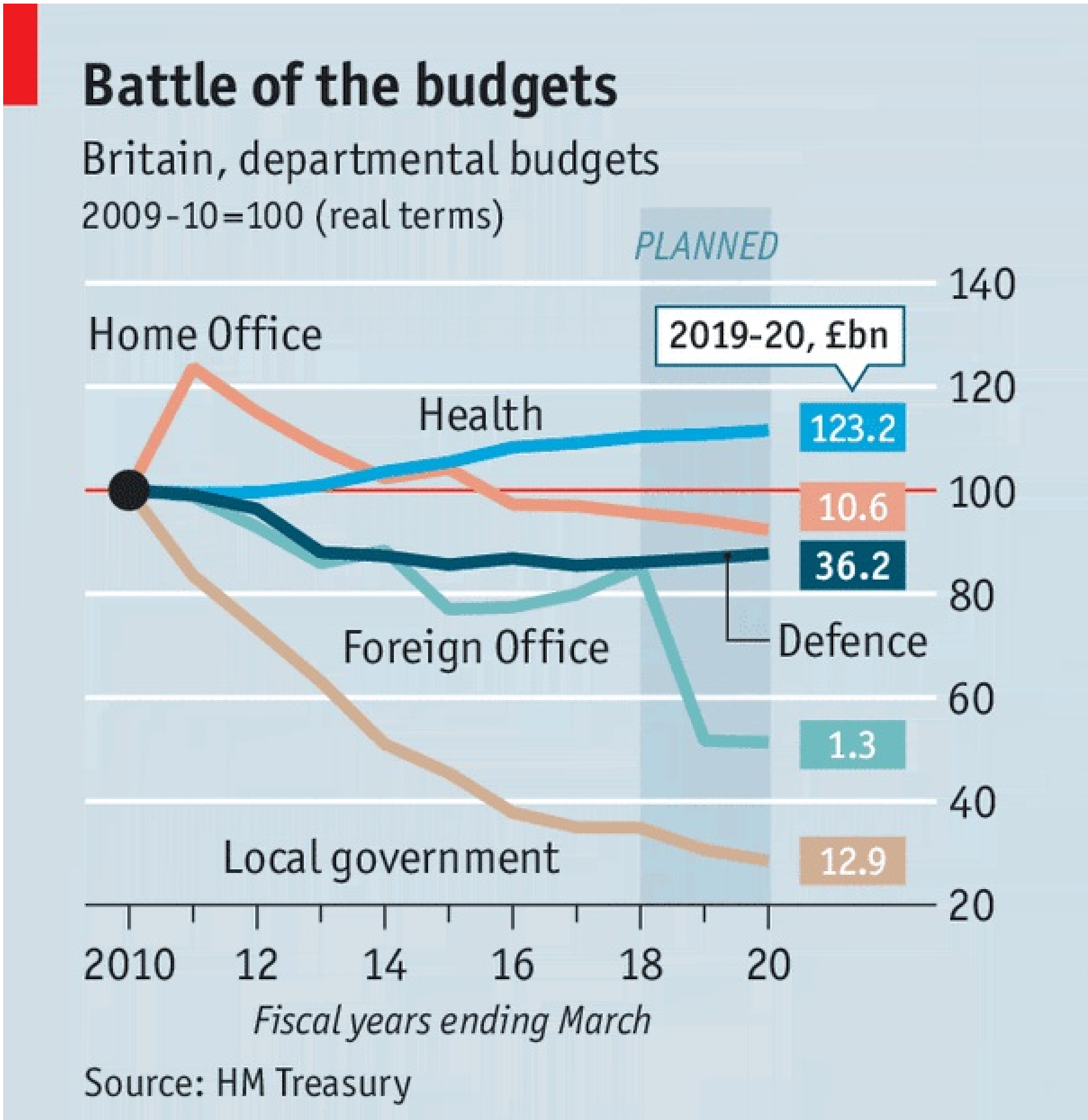
## Britain’s armed forces brace for cuts

Defence has fared better than most departments during austerity, but it is still squeezed


Dec 7th 2017

ANY hope that a chancellor of the exchequer who is a former defence secretary might have taken a sympathetic view of the plight of Britain’s squeezed armed forces was dashed by the budget on November 22nd. Voters’ alarm about the wheezing condition of the National Health Service persuaded Philip Hammond to provide an extra dollop of cash for health, but there is no equivalent constituency expressing worry at the erosion of the country’s defensive capabilities. And despite his stint at the Ministry of Defence in 2011-14, Mr Hammond appears resistant to the sound of shoulder pips squeaking on the other side of Whitehall.

Britain is committed to spending the equivalent of 2% of its GDP on defence, and so the £35bn ($47bn) defence budget is due to rise by 0.5% in real terms over each of the next five years. That is a much more generous settlement than some other central government departments have been awarded (see chart).




Economist.com

But it does not tell the full story. The most recent defence review, in 2015, was ambitious both in its goals for spending on new kit and in finding the savings to help pay for it. A big chunk of those savings was to come from efficiency gains. Unsurprisingly, not all of those hoped-for efficiencies look likely to be realised. Malcolm Chalmers of the Royal United Services

Institute, a defence and security think-tank, points out that, for example, the 30% saving on the civilian workforce that the Ministry of Defence has pencilled in can be fully achieved only through outsourcing, which may be cheaper but which still has to be paid for.

Further pressures on the defence budget are coming from all sides. The pound's depreciation since the Brexit referendum has added to the £178bn bill earmarked for equipment over ten years, 12% of which is to be paid in dollars or euros. The cost of the programme to replace Britain's ageing ballistic-missile submarines has crept up to £31bn, with another £10bn put aside for "contingencies". Ever more money must be found for advanced cyber-capabilities. Previous assumptions about a prolonged freeze on forces' pay are almost certain to prove untenable as other public sector workers secure pay increases.

The result is that the Ministry of Defence is desperately seeking ways to find savings of around £2bn a year, at least until 2022 and probably for five years after that. Exactly how the axe will fall is likely to be determined by a review of "national-security capabilities" that is expected to report early next year—a delay supposedly to allow the recently appointed defence secretary, Gavin Williamson, time to get a grip on his new brief.

There are already some indications of the way things are going. The navy, says Mr Chalmers, has made clear that its priorities are the nuclear deterrent, aircraft-carrier strike capacity (two new carriers are in the process of entering service), and the attack submarine force. The result is that Britain's amphibious capabilities are expected to take the hit, with two assault ships taken out of service and the number of Royal Marines cut by 15%.

The army is also likely to suffer. The government had promised not to go lower than 82,000 soldiers, but the current figure is around 77,400 and there are fears that it could go as low as 60,000. American generals are worried that Britain would be hard put to deploy a division (about 20,000 troops) alongside their forces in a future European war. The House of Commons defence committee warned earlier this year that, even at the previous numbers, the "credibility of the warfighting division will be undermined". Mr Chalmers thinks an expedient fudge on army size could be found, but there may be a price to be paid in terms of urgently needed new armoured vehicles.

Four years ago the then-chief of the defence staff, General Sir Nick Houghton, sounded the alarm about manpower cuts resulting in a “hollow force”. He could see what was coming.

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Blowing up

## Britain’s cocaine glut

The drug has become more plentiful—and more potent

Dec 7th 2017

“IT’S as easy as buying a drink from an off-licence.” That is how Ellen Romans, a recovering drug addict, describes picking up cocaine near where she lives in London. And today top-notch blow is much cheaper than it was five years ago, when she started using it heavily. David McManus, her treatment worker at Blenheim, a rehabilitation charity, agrees. Pubs and bars are “flooded” with the stuff. Dealers know that their product is no longer scarce. They are more tolerant of hagglers and are resorting to gimmicks, including Black Friday discounts, to boost sales.

The observations of Ms Romans and Mr McManus (not their real names) fit a countrywide pattern. There are signs that changes are afoot in the cocaine market. Though overall use has not increased, supply seems to have soared and dealers are offering a purer product.

One indication of growing supply is the volume of cocaine seized each year. Between 2010 and 2016 this doubled, to 5.5 tonnes, even as seizures of other hard drugs fell. Analysis of sewage by the European Monitoring Centre for Drugs and Drug Addiction suggests a similar trend. It found that the prevalence of substances the body produces when it breaks down cocaine has doubled in London in the past five years. In Bristol it has jumped by 60% since data collection started in 2014. This probably captures a rise in purity.

And though the use of powdered coke is stable, crack has become more popular. Modelling by academics at Liverpool John Moores University suggest that the number of users rose by about 10% between 2011-12 and 2014-15. These estimates rely on data from prisons and treatment centres, and are thought to be more accurate than surveys, which under-represent those most likely to develop crack dependency.

Data from the National Crime Agency (NCA) on small-scale drug busts show that cocaine purity rose steadily from 26% in 2011 to 44% in 2015. Crack saw a similar increase. This has not gone unnoticed on the street. Mr McManus says that punters looking for top-notch cocaine in London used to ask for “shine”. But that word has almost fallen out of use as quality has improved.

Surprisingly, average street prices have not budged, even though wholesale prices fell by 15% between 2014 and 2016. That is partly because cocaine has a known street price of £40 ($53) per gram, explains Lawrence Gibbons of the NCA. Raise it, and punters go elsewhere; lower it and they suspect an inferior product.

What is behind this abundance of high-quality cocaine? Britain’s import boom has been fuelled by changes elsewhere. Colombia has upped its production of coca, the crop used to make cocaine, from 49,000 hectares in 2012 to 146,000 in 2016, according to the UN. That is explained partly by the collapse in 2014-15 of the Colombian peso against the dollar, making exporting more profitable. Also in 2015, the government stopped aerially spraying coca fields with weedkiller. A third, unexpected factor was a peace agreement between the government and the FARC, a rebel group. The terms included money for farmers who switched away from coca. But this was known in advance of the deal being struck in 2016, and actually encouraged a bigger crop.

Another international factor is a fall in demand in America. RAND, a consultancy, estimates that the amount of cocaine hoovered up by Americans halved between 2006 and 2010. Many explanations have been put forward, such as users growing older and tougher measures against trafficking from Mexico. Whatever the reason, excess supply could feed Britain’s habit.

Developments closer to home may also play a part. One is Britain’s online-shopping fixation, which extends to drugs. The share of British drug-takers who sourced narcotics from “dark web” markets rose from 12% in 2014 to 25% in 2017, according to the Global Drugs Survey, an online study. Web-bought drugs tend to be purer because vendors fear that poor customer reviews, like those on Amazon, will hurt business. Energy Control, a Spanish think-tank, examined samples of cocaine bought online and found an average purity of 72%, compared with 48% for street-level stuff.

Anti-drugs laws in Britain may have inadvertently boosted coke’s potency, says Harry Sumnall, a professor of substance use at Liverpool John Moores. In 2015 the Serious Crime Act gave police new powers to seize chemicals used as cutting agents, such as benzocaine, a dental anaesthetic. Though MPs hoped this would disrupt supply chains, dealers short of cutting agents may just flog a purer product.

This may sound like good news for casual users, who get a better product for the same price. But some seem to be overdoing it. The number of deaths related to cocaine or crack in England and Wales jumped from 139 in 2012 to 371 in 2016, a sharper increase than for any other mainstream drug. Police worry about an associated rise in other crimes, such as shoplifting. And treatment centres, already under strain from spending cuts, will have to care for addicts. Better cocaine will only lead to more people getting hooked faster, says Mr McManus. He worries that, in a couple of years, his treatment centre in London will have a lot more clients.

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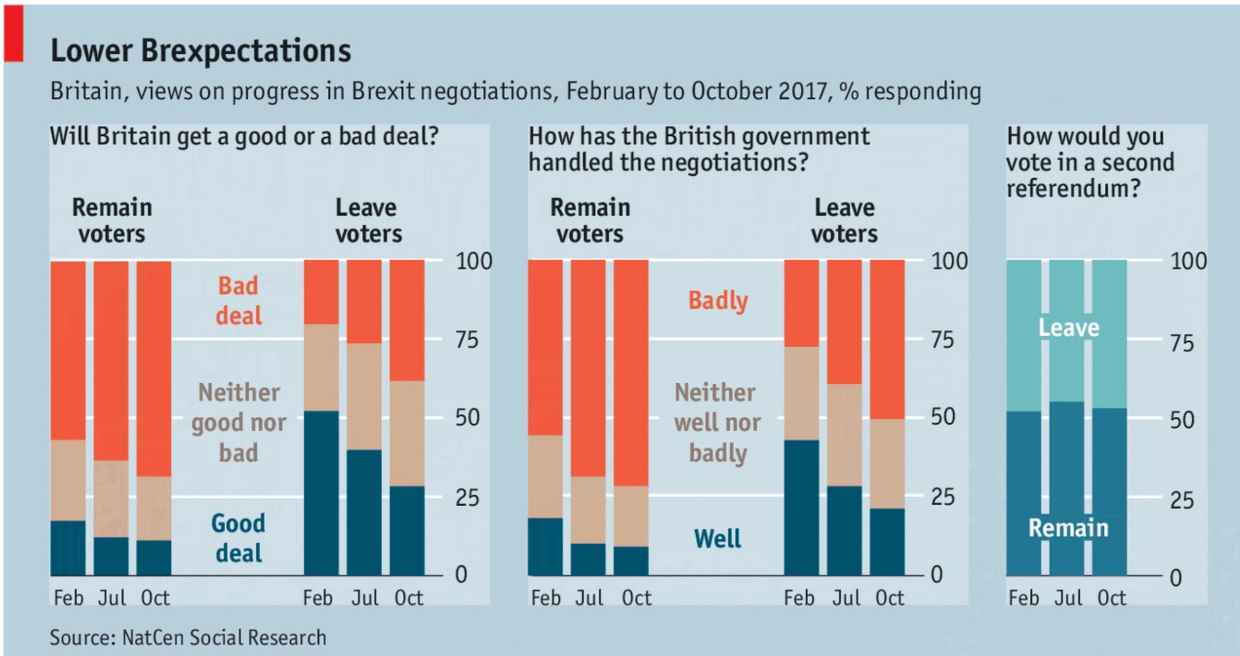
**Lower Brexpectations**

## Even Leave voters now expect a bad deal from Brexit

But rather than change their minds about the project, they are blaming the government

Dec 7th 2017




Economist.com

Britain is heading for a bad deal. That is the view not only of those who voted to remain, but a plurality of those who voted to leave, according to NatCen Social Research. Since February the share of Leavers expecting a good deal has fallen almost by half, to 28%. But few have changed their minds about Brexit. They are no more willing to accept free movement in return for freer trade, nor to vote Remain in a new referendum. Instead they blame the EU, as well as their own government: half of Leavers say it is bungling the talks. In other words, Brexit is still a good idea—it is just being done badly.

**Polling in an age of magical thinking**

# Why isn’t Labour doing better?

The opposition has yet to capitalise fully on the Conservatives’ misery


Dec 7th 2017

JEREMY CORBYN’S raucous online supporters have a simple mantra whenever a new poll appears: “It will go higher.” Dismissed as magical thinking when it began in the spring, it has turned into one of 2017’s more accurate political predictions. Labour’s polling almost doubled, from 25% of voters when the election was called in April to 45% in one recent survey. Magical thinking trumped political expertise.

Yet the growth has stalled. On December 3rd a poll by Survation put Labour eight points clear of the Conservatives, who stood on 37. But this was an outlier. Other polls give Labour only a slim lead or put the party level with the Tories. A flurry of governmental scandals and cock-ups, ranging from ministerial resignations to rocky Brexit negotiations, has failed to put a dent in the Conservatives’ polling numbers. Why isn’t Labour doing better?

Start with Brexit. Labour’s position on the topic—that it would seek to “retain the benefits” of both the single market and the customs union—is either cynically slippery or simply confused. Either way, it means the party has found it hard to hammer the government’s handling of the negotiations. This leaves British politics in a curious stalemate, with an opposition ducking the chance to pummel the government on the biggest issue of the day.

Others point to tried and tested metrics to explain Labour’s political plateau. Labour still lags behind the Tories in voters’ perception of economic competence, notes Ben Page of Ipsos-MORI, a polling company. Philip Hammond is seen as a more capable chancellor than John McDonnell, his opposite number. Although Theresa May’s approval rating has collapsed, Mr Corbyn still sits (just) behind her when people are asked who they would prefer as leader, according to YouGov, another pollster. And Mr Corbyn is still less popular than his party. Labour MPs in marginals across the Midlands wince when asked whether he is an asset. One cabinet minister has a blunt explanation for what is keeping the Tories’ polling numbers afloat: “Fear of Corbyn.”

Supporters of Mr Corbyn offer a simple retort to those questioning why Labour is not farther ahead: pundits were wrong about the election in June and they are wrong again now. Pollsters underestimated Labour in the run-up to the vote and it is feasible that they are making the same mistake, concedes Mr Page. After all, the job has not got any easier. Polling companies are left “literally guessing” when it comes to predicting who will turn out to vote, according to one executive. This is especially problematic given Labour’s commanding lead among young people, whose voting track-record is erratic.

But whereas voting intention is tricky to measure, other metrics are clearer—and they are moving against the Tories. Earlier this year, Mrs May enjoyed a 39-point lead over Mr Corbyn on the question of who would be the better prime minister. Now “Not sure” outranks them both. The Tories’ lead on economic confidence has also fallen by half, from 18 points to nine, according to Ipsos-MORI. The fear among some Conservative advisers is that the party has mimicked Wile E. Coyote: it has already run off the cliff, but not yet plunged. Brexit is protracted and complicated. Although voters are concerned about it, they “have completely tuned out” says Lord Cooper, who runs Populus, another pollster. How they will react when they wake from their stupor remains to be seen.

Barring a collapse of the government, the next election is not scheduled until 2022. “We have to wait for an event that focuses people’s minds on politics for there to be a big shift either way,” says one Labour adviser. Until then, British politics is stuck in a holding pattern. A final run-off between magical thinking and political expertise has to wait.

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Dysfunctional families

## Family-owned firms hold part of the answer to the productivity puzzle

The desire to pass the business on to the next generation means they value stability over innovation


Dec 7th 2017 | BLANDFORD ST MARY

HALL AND WOODHOUSE has been brewing beer amid the Georgian splendour of Blandford St Mary, in Dorset, since 1777. The company's founder, Charles Hall, made his fortune during the Napoleonic wars selling ale to the troops bivouacked in nearby Weymouth, ready to repel the French. Today the seventh generation runs the firm and the extended family still owns almost all the shares. It is a venerable example of the dominant form of business structure in modern Britain, where over two-thirds of companies are family owned.

Hall and Woodhouse looks like everything the chancellor of the exchequer, Philip Hammond, would like a company to be. It trades heavily on its heritage, yet remains innovative. With a turnover of £100m ($135m) a year it has just spent £20m on a new factory to produce more of its Badger beer. "We experiment," says the managing director, Anthony Woodhouse. Last summer the firm added a range of ice-creams for dogs, including Carrot Crunch and Old Sock flavours, to the desserts on sale in its pubs, and ended up selling more ice-cream to canines than to human customers.

Britain is almost as sentimental about families as it is about pets, which means that family businesses sometimes escape the scrutiny that other bits of the economy are subject to. But the evidence suggests that they tend to underperform when compared with companies with more diverse ownership and management. Indeed, as Mr Hammond searches for ways to improve Britain's weak productivity growth, he could do worse than take a look at family businesses. Britain is not unusual in having such a preponderance of them (some countries in Europe and Latin America have an even larger share), but it seems to have unusually poor performers.

A survey of the manufacturing industry by the Office for National Statistics showed that family-owned and -run companies are about 19% less productive than others. Family-owned companies that have non-family management do better, but still lag the rest (see chart). Whereas 18% of small and medium-sized firms export, only a tenth of small and medium family firms do, although they tend to be smaller.


Economist.com

One reason for their lower productivity is that family firms value stability, and the chance to hand on the business to the next generation, over innovation. Mike Wright, a professor of entrepreneurship at Imperial College London, says that research and development budgets in family firms are lower than in others, and that family companies are more risk-averse. More than three-quarters of private R&D; investment in Britain is carried out by just 400 businesses. Family firms typically focus more on improving existing products than on inventing new ones. One survey found that 86% had never filed a patent. Britain's small and medium-sized companies are less likely than their European competitors to introduce new products and processes, the government pointed out in its recent “industrial strategy” paper.

Poor management is another feature of family firms. Britain emerges badly from the World Management Survey in this respect: only 37% of managers in its family-owned, family-run companies have degrees, whereas 48% do in companies with a diverse shareownership. In Germany, 49% of managers in family-run and family-owned firms have degrees, rising to 70% in companies with a wider ownership.

Take Nisbets, a Bristol-based catering-equipment company which sells to schools, hotels and restaurants. Founded in 1983, in one sense it is a very successful business. It has an annual turnover of £400m, employs about 2,000 people and has offices in continental Europe and Australia. Looking back, however, Andrew Nisbet, the founder, concedes that the company was “initially slow and not terribly successful” at expanding abroad. “Management mistakes let us down,” he says. Mr Nisbet set up the company straight out of school, from one of his father’s business interests. “In the early days we weren’t up to the challenge,” he admits.

In Europe management is “more structured and professional”, Mr Nisbet believes. The contrast may, in part, account for the success of the *Mittelstand*. Two-thirds of Germany’s economic powerhouse is family owned, but its firms are better run and more ambitious than their British counterparts. *Mittelstand* companies account for 23% of EU exports that go beyond the EU, far ahead of the 10% made up by small and medium British firms.

Tweaks to financing rules could help British family companies do better. Many finance their activities strictly through cashflow, rarely taking on debt. This helps them to survive during the bad times, but limits their ability to expand during booms. They are often loth to take on outside investment because it would dilute the family’s ownership. Premium listings on the London Stock Exchange allow only one class of share, meaning that families cannot retain special voting shares, for instance, as they can on some other exchanges. Some families that have successfully floated their firms argue that it is better to have a smaller share of a larger pie. Most, however, keep it in the family.

**Bagehot**

## Britain ignores social mobility at its peril

As mobility has become more important it has also become more difficult to promote


Dec 9th 2017

IN 1845, as the Industrial Revolution gathered pace, Benjamin Disraeli, a young politician on the make, published a novel, “Sybil”, which lamented that Britain was dividing into “two nations between whom there is no intercourse and no sympathy”. Today, as the information revolution gathers pace, Britain suffers from the same problem. The country is more divided than it has been for decades, with the rich consolidating their power and people who are born in the wrong class or region seeing their chances of getting ahead declining. Theresa May rightly put dealing with this problem at the top of her agenda when she became prime minister. But on December 3rd all four members of Britain’s Social Mobility Commission resigned in protest at the lack of progress. This was one of the lowest points for a government that has no shortage of low points to choose from.

Social mobility is essential to the working of an advanced capitalist society. For one thing, citizens will accept the inequalities that capitalism generates only if they think they have a fair chance of getting ahead. The notion that the system is rigged can be just as destabilising as economic crises. Secondly, advanced economies can grow only if they make a reasonable job of discovering the hidden Einsteins who might be able to produce the next great invention if they were given the chance.

Britain is failing badly on both fronts. Its decision to leave the European Union was above all a revolt of the left-behind. The Social Mobility Commission discovered that 62 of the 65 parts of the country that it identified as "social-mobility cold spots"—that is, those with the worst education and employment prospects—voted to leave. A new paper by Raj Chetty, of Stanford University, and colleagues, argues that American growth is being hindered by the missing-Einstein problem because educational opportunity is increasingly restricted by class or region. That problem is as bad, if not worse, in Britain.

As social mobility has become more important it has become more difficult to promote. The reason for this is the paradox of meritocracy. In the first half of the 20th century, when the old establishment ruled the country, opening up opportunities was relatively simple. You forced the establishment to abandon obvious prejudices, such as the fact that the best Oxbridge colleges were reserved for men. You also forced it to build a ladder of opportunity for the poor: the 1944 Education Act raised the school-leaving age to 15, then 16, and the expansion of universities in the 1960s democratised higher education. Today opening up opportunities is much more difficult, precisely because the meritocratic revolution has been so successful.

The meritocratic elite has proved remarkably good at hoarding opportunities. Successful people tend to marry each other. Couples devote themselves to giving their children the best education possible, starting in the nursery. Private schools have also proved to be more successful than state schools at adapting to the meritocratic spirit. Institutions that once turned out flannelled fools and muddied oafs are now obsessed with exam results.

To make matters worse, the knowledge economy is a winner-takes-most economy. Superstar firms are pulling ahead of run-of-the-mill ones. Superstar cities are pulling ahead of second-tier ones. This problem is more pronounced in Britain than almost anywhere else because London is so dominant. The London effect is obviously good for London-based professionals who can provide their children with bed and board as they get their feet on the career ladder (often as unpaid interns). But it is also good for poorer people who are lucky enough to have subsidised accommodation within the sound of Bow Bells. London's state schools are better than the national average, jobs are plentiful and you can get almost anywhere, at a squeeze, by public transport.

The result is a calcified society. Seventy-one per cent of senior judges, 62% of senior officers in the armed forces and 55% of civil service department heads attended private schools, which educate only 7% of the population. In Barnsley only 10% of disadvantaged young people make it to university, compared with 50% of similarly disadvantaged youngsters in Kensington and Chelsea. Only 6% of doctors, 12% of chief executives and 12% of journalists come from working-class backgrounds.

## Going up

Reversing this calcification will take a lot of innovative thinking. The Social Mobility Commission produced a series of excellent reports which suggested sensible solutions such as better early education for disadvantaged children. This columnist would support a combination of reaching into Britain's past and peering into its future. Britain has a distinguished history of elite institutions doing their bit for mobility: Oxbridge colleges creating feeder schools, and private schools setting aside places for poor scholars. Given that so many private schools have forgotten their social obligations in their zeal to fatten their coffers with fees from rich Russians and Chinese, it is time to remind them that they need to earn their charitable status. Meanwhile, the very technology that is widening class divisions can also be used to close them. The Israel Defence Forces respond to the lost-Einstein problem by monitoring children's performance in video games, as well as more routine academic tests.

But Britain's two main parties are failing to give this growing problem the energy it requires. The Conservatives are overwhelmed by Brexit. Labour is devoting its intellectual resources, in so far as it still has any, to the old problem of a closed establishment rather than the new problem of the marriage of meritocracy and plutocracy. Thanks to its commitment to intelligent reform, Disraeli's Britain became the most peaceful, as well as the most successful, country in Europe. The political class may well be about to demonstrate that what intelligence and reform can do, stupidity and stasis can undo.

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# International

- **Islamic family law: Marriages of inconvenience** [Fri, 08 Dec 17:10]
- **Islamic marriage in Canada: One is enough** [Fri, 08 Dec 17:10]

Islamic family law

## How sharia marriages can hurt women in the West

Differences in marital law provide an opportunity for unscrupulous men

Dec 7th 2017 | BRUSSELS

SHIRIN MUSA draws on bitter experience to inspire her work to help women caught between legal and cultural worlds. Educated and long-resident in the Netherlands, she was unhappily married to a man from her native Pakistan. In 2009 a Dutch judge put a legal end to their union but her husband would not grant an Islamic divorce. Although she lived in secular Europe, this refusal mattered. If she remarried, she would be considered an adulteress under Islamic law and risk punishment if she returned to Pakistan.

So Ms Musa pursued her spouse through the Dutch courts. In 2010 she received a landmark judgment: he would be fined €250 ($295) a day, up to a maximum of €10,000 ($11,795), as long as he refused to cooperate. This had the desired effect. She then persuaded the Dutch parliament to make holding women in such "marital captivity" a criminal offence, in theory punishable by jail. Now she runs Femmes for Freedom, a charity that campaigns for people in similar situations. “I was lucky to be well-educated and have a supportive blood family,” she says. “Others are not.”

The Dutch law, in force since 2013, is an unusual effort to protect women in the West from rules made in harsher places. But in a transient world it is hard to seal one country’s legal and cultural norms from another’s. Under the basic principles of so-called private international law, courts in country A can enforce the legal norms of country B as they apply to people who are clearly from country B and to transactions which occurred in country B. This can have odd effects. Iranians who fled after the revolution in 1979 found 30 years later that German courts were adjudicating their marital affairs by the Islamic rules of their homeland. In most democracies, recognition of foreign codes is balanced by a countervailing principle. A judge can refuse to recognise, say, a child marriage contracted overseas if it offends “public order”.

Still, the risk of being trapped between systems is acute for those in transition from the Islamic world, which has detailed prescriptions for marriage, divorce, custody and inheritance, to Western countries where egalitarian, secular standards prevail. In classic Muslim thinking a man can renounce his wife unilaterally by pronouncing the word *talaq* on three occasions. The ex-wife keeps the *mahr*, the gift which the man gives her on marrying. For a woman, obtaining a divorce is far harder. She can start proceedings, with the help of an imam or Islamic authority, and this can lead to a *khul’a* or divorce by consent, though she may have to cede her *mahr* to make her husband agree. If he has behaved badly and refuses a termination, an Islamic judge can impose a *faskh* or judicial divorce. But getting this can be hard.

The situation for hundreds of thousands of Pakistani-descended women in England isin some ways worse than for those living in their homeland where only one, Islamic set of rules applies. That is thanks to an ever-growing habit among English Muslim couples: having an Islamic ceremony which is not registered with the British state. A recent survey of 1,000 married Muslim women by Britain’s Channel 4, a publicly owned broadcaster, found that 600 had religious-only unions.

Only a few imams in England are licensed as state registrars. In England, if the relationship breaks down, the financially weaker partner, usually the woman, is poorly placed to claim maintenance or a share of assets. (This is rarely an issue in Scotland, where many imams are registered as celebrants.) "If they had married Islamically back in Pakistan, that would have standing," says Aina Khan, a lawyer and activist. A religious rite in Pakistan can ultimately gain recognition in England, but a religious-only union conducted in England can be the worst of all worlds.

A rite mess

England has an elaborate subculture where Islamic family law is practised. There are dozens of *sharia* councils, whose main work concerns appeals from women who want release from failed marriages. Ms Khan thinks these councils have burgeoned in an unhealthy way, in part because of English law's inconsistent treatment of faiths. Anglican marriage includes the signing of a registry which makes the union official, and the state also acknowledges Jewish and Quaker ceremonies, but not automatically those of other creeds. A reformed law could either insist that unions of all kinds be registered civilly, as happens in France, or else it could give legal standing to the rites of popular faiths.

In the Netherlands it is illegal to conduct a religious ceremony unless a civil one has already been carried out. When Dutch judges adjudicate the affairs of Muslims who have married elsewhere, they can use a generic provision in the civil code against "wrongful acts" as a way of delivering judgments which seem humane in modern eyes. In practice, their rulings in Muslim marital matters usually favour women, says Eefje de Kroon, a Dutch human-rights campaigner.

For the 800,000 or so Muslims of Belgium, many of whom oscillate between there and Morocco, marrying is an obstacle course. In Belgium only civil marriages are valid. But the Moroccan state recognises only Islamic procedures, either in Morocco or one of its consulates. Without a religious marriage a couple cannot dispose of property or even share a bedroom in Morocco. Meanwhile, Belgian-Moroccans often feel the need to have a religious rite in Belgium, even though it has no legal status anywhere. Many couples do all three. Simply cohabiting is not an acceptable option, any more than it is for young Muslim couples growing up in east London or Marseille.

Yacob Mahi, one of Belgium's best-known imams, says he tries to limit harm by refusing to conduct a religious ceremony unless the couple has already undergone a civil procedure. He also tries to ascertain if the marriage is abusive or forced. Yet despite the efforts of vigilant imams, people game the system. For example, a Belgian-Moroccan man can use a religious rite in Brussels to dignify a bigamous marriage which would be banned even in Morocco (unless the first wife had consented).

Spain is a rare European country where marriage in a mosque (or synagogue or church) enjoys state recognition. Germany used to insist on civil marriage for all couples before any spiritual rites. But from 2009 it has allowed religious-only marriages, in deference to newcomers from Muslim countries and Israel, another land where only religious nuptials count.

As they dodge between cultures and systems, the parameters for Muslims in Europe keep shifting. Morocco's family law was modernised in 2004 and the knock-on effects are still emerging. But a complex reality is no argument for inequality of rights, and a forum exists where this should be sorted out. Whatever the fate of the continent's other clubs, there is one institution, the Council of Europe, whose job is to uphold the rule of law and basic human rights across its 47 member states (28 of which belong to the EU).

Without trying to harmonise every piece of family law, the council could do useful work by pooling experience and elaborating some common standards to ensure that no European lives under a harsh marital regime through being born into the wrong religion, the wrong country or the wrong sex. That would feed through to other democracies, and perhaps to Islam's heartland as well.

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**Islamic family law**

## Canada’s problem with polygamy

Why feminism and multiculturalism make for an awkward mix


Dec 7th 2017 | OTTAWA

MENTION polygamy in Canada and what might come to mind is Bountiful, a suitably named town in British Columbia. It is home to Canada’s best-known polygamist, Winston Blackmore, who has an estimated 148 children. He and James Oler, a fellow adherent of a fundamentalist splinter sect of the Mormon church, practised “plural marriage” for decades until a court found them guilty in July of the crime of polygamy. (Their appeal will be heard on December 12th.)

It was the first conviction for more than a century under a law from 1892 that aimed to stop American polygamists (many of them Mormons irked by their church’s renunciation of polygamy in 1890) from practising in Canada. Authorities had been wary of laying such charges for fear of a constitutional challenge. That obstacle was removed in 2011 when the Supreme Court in British Columbia found freedom of religion could not be used to justify actions that harmed others.

The debate about the conflicting principles of human rights and religious freedom is shifting to Islamic immigrants. That is partly because of the trial of Mohammad Shafia, an Afghan immigrant who in 2009, with the help of his second wife and son, murdered three of their other children, as well as his first wife; and partly because of the passage in 2015 of the Zero Tolerance for Barbaric Cultural Practices Act by the previous Conservative government. The law, which reiterated that polygamy is a crime, as are “barbaric practices” such as genital mutilation and the forced marriage of children, was criticised for having an Islamophobic tone. Yet it struck a chord with those Canadians who feel Muslims do not share their values.

Polygamy is legal for Muslims in three of the top five source countries for immigrants to Canada in 2015 (the Philippines, Iran and Pakistan) and quite common in another (India). Canada has advised UNHCR, the UN’s agency for refugees, not to refer any refugees in polygamous marriages to Canada for resettlement. But border agents in Canada must often make snap judgments based on little information. Often the only way they can identify a polygamist is if he were to volunteer the information or tried to bring in more than one wife at once. Easier to bring them in separately as domestic servants or relatives (Ms Shafia was brought in as a servant and described as the children’s aunt).

Often the first sign officials have of a polygamous relationship is when it comes to light in a case of domestic abuse, says Shalini Konanur of the South Asian Legal Clinic of Ontario, which helps women in violent relationships who risk deportation. The impact of enforcement falls most heavily on women, who are barred at the border, abandoned in their home country or stuck in abusive relationships in Canada for fear of being found out and deported.

Martha Bailey, a specialist in family law at Queen’s University in Kingston, says polygamy sometimes comes up as an issue when multiple wives seek shares in an inheritance. Susan Drummond, a legal anthropologist, argued in 2009 that the ban on polygamy should be dropped because Canada has other laws and regulations to protect women and minors.

Canada’s prime minister, Justin Trudeau, has promised to ensure Canadian laws are analysed to see if they harm women. That is a nice gesture. But he should look at how laws work in practice, too.

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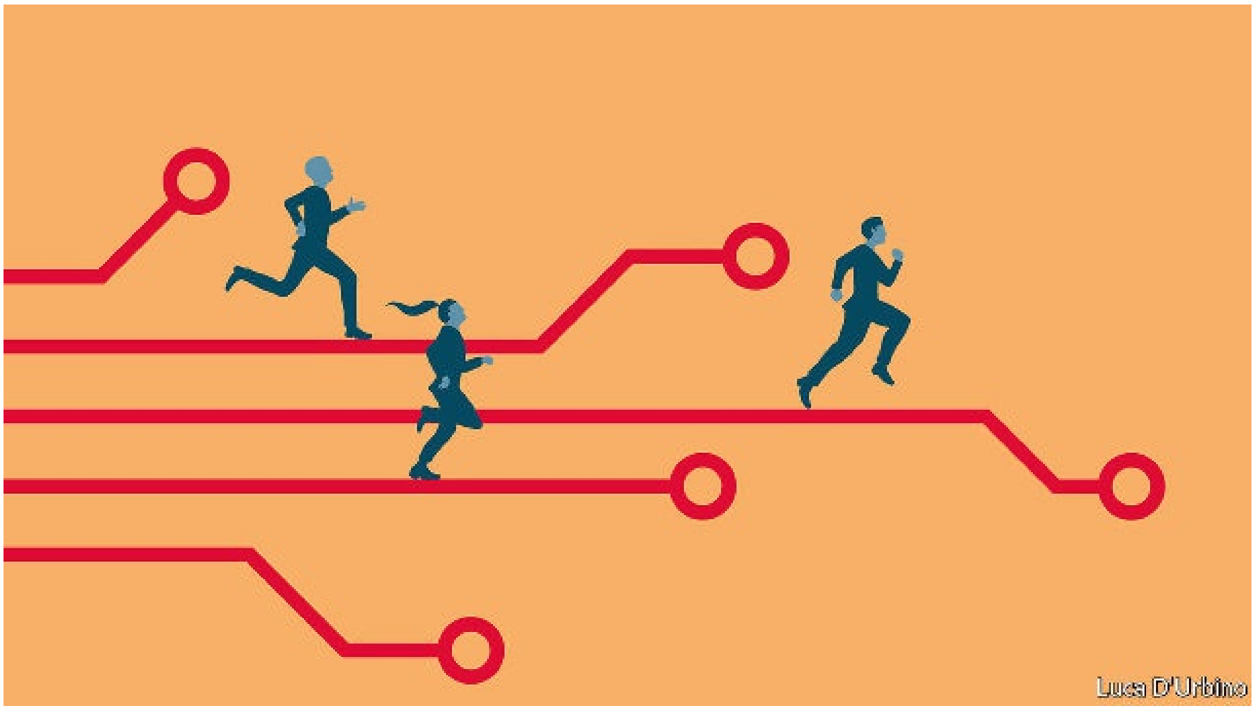
# Business

**Battle of the brains**

# Google leads in the race to dominate artificial intelligence

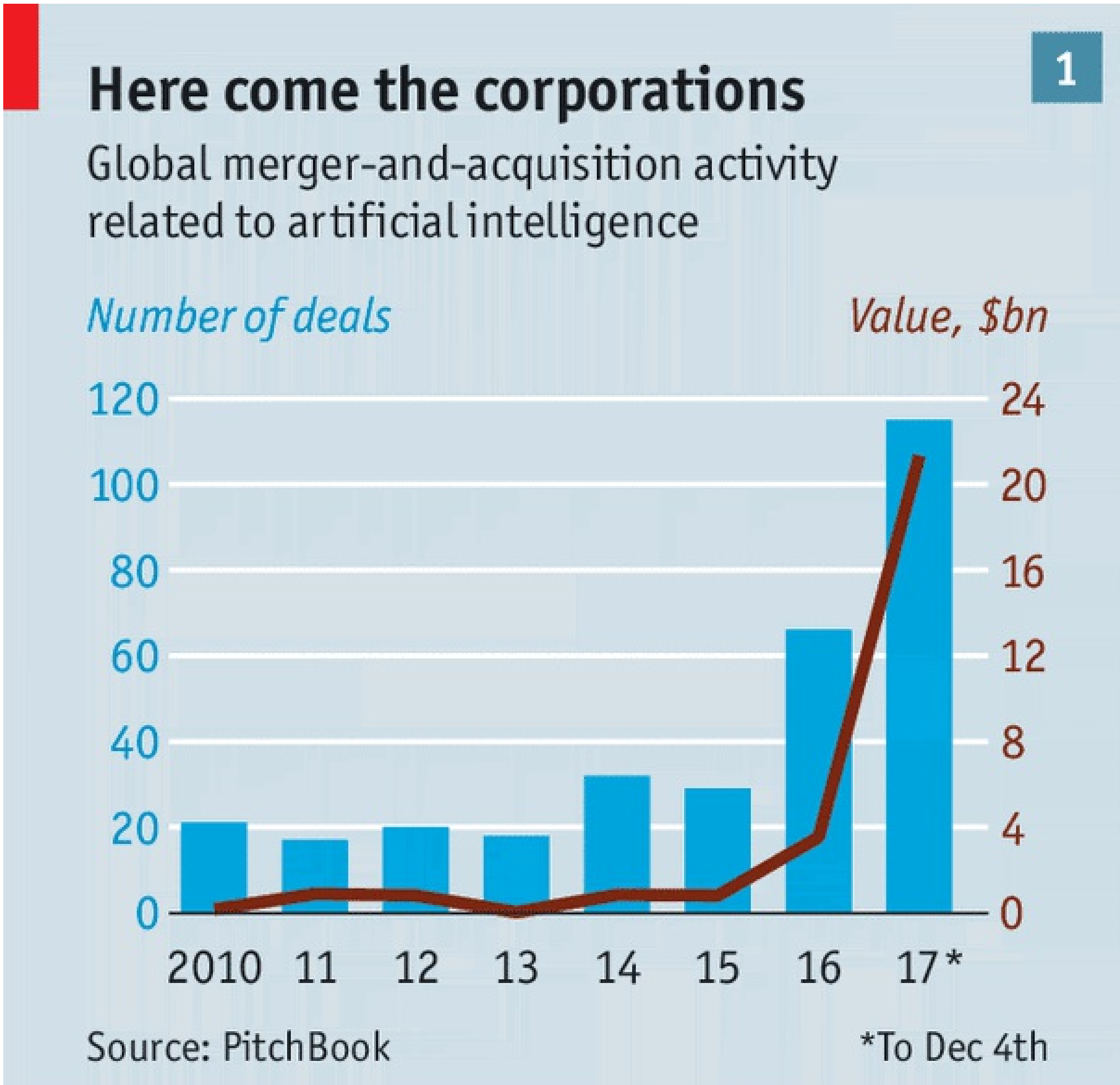
Tech giants are investing billions in a transformative technology




Dec 7th 2017 | SAN FRANCISCO

COMMANDING the plot lines of Hollywood films, covers of magazines and reams of newsprint, the contest between artificial intelligence (AI) and mankind draws much attention. Doomsayers warn that AI could eradicate jobs, break laws and start wars. But such predictions concern the distant future. The competition today is not between humans and machines but among the world's technology giants, which are investing feverishly to get a lead over each other in AI.

An exponential increase in the availability of digital data, the force of computing power and the brilliance of algorithms has fuelled excitement about this formerly obscure corner of computer science. The West's largest tech firms, including Alphabet (Google's parent), Amazon, Apple, Facebook, IBM and Microsoft are investing huge sums to develop their AI capabilities, as are their counterparts in China. Although it is difficult to separate tech firms' investments in AI from other kinds, so far in 2017 (see chart 1) companies globally have completed around $21.3bn in mergers and acquisitions related to AI, according to PitchBook, a data provider, or around 26 times more than in 2015.




Economist.com

Machine learning is the branch of AI that is most relevant to these firms. Computers sift through data to recognise patterns and make predictions without being explicitly programmed to do so. The technique is now used in all manner of applications in the tech industry, including online ad targeting, product recommendations, augmented reality and self-driving cars. Zoubin Ghahramani, who leads AI research at Uber, believes that AI will be as transformative as the rise of computers.

One way to understand AI's potential impact is to look at databases. From the 1980s these made it cheap to store information, pull out insights and handle cognitive tasks such as inventory management. Databases powered the first generation of software; AI will make the next far more predictive and responsive, says Frank Chen of Andreessen Horowitz, a venture-capital firm. An application such as Google's Gmail, which scans the content of e-mails and suggests quick, one-touch replies on mobile devices, is an early example of what could be coming.

As with past waves of new technology, such as the rise of personal computers and mobile telephony, AI has the potential to shake up the businesses of the tech giants by helping them overhaul existing operations and dream up new enterprises. But it also comes with a sense of menace. "If you're a tech company and you're not building AI as a core competence, then you're setting yourself up for an invention from the outside," says Jeff Wilke, chief executive of "worldwide consumer" at Amazon, and adjutant to Jeff Bezos.

Fuelled by rivalry, high hopes and hype, the AI boom can feel like the first California gold rush. Although Chinese firms such as Baidu and Alibaba are also investing in AI, and deploying it in their home market, the most visible prospectors are Western tech firms. Alphabet is widely perceived to be in the lead. It has been making sizeable profits from AI for years and has many of the best-known researchers. But it is early days and the race is far from over. Over the next several years, large tech firms are going to go head-to-head in three ways. They will continue to compete for talent to help train their corporate "brains"; they will try to apply machine learning to their existing businesses more effectively than rivals; and they will try to create new profit centres with the help of AI.

**Idiot savants**

The most frenzied rush is for human talent, which is far more scarce than either data or computing power. Demand for AI "builders" who can apply machine-learning techniques to huge sets of data in creative ways has ballooned, far exceeding the number of top students who have studied the techniques.

Today AI systems are like “idiot savants,” says Gurdeep Singh Pall of Microsoft. “They are great at what they do, but if you don’t use them correctly, it’s a disaster.” Hiring the right people can be critical to a firm’s survival (some startups fail for lack of the right AI skills) which has set off a trend of firms plundering academic departments to hire professors and graduate students before they finish their degrees.

Job fairs now resemble frantic “Thanksgiving Black Friday sales at Walmart”, says Andrew Moore, dean of Carnegie Mellon University’s (CMU) school of computer science, a pioneering institution in AI (whose robotics department was famously plundered by Uber in 2015). Academic conferences, such as this week’s Neural Information Processing Systems in Long Beach, California, double up as places to shop for talent (see article). The best recruiters are academia’s AI celebrities: people like Yann LeCun of Facebook and Geoffrey Hinton of Google—both former professors who keep a university affiliation—can attract others to work alongside them. Proprietary data can also serve as a draw, if the huge salaries are not enough.

If none of that works, companies buy whole startups. The tech industry first took notice of this trend in 2014, when Google spent an estimated $500m on DeepMind, a startup with no revenue or marketable product but a team of “deep learning” researchers; after the deal they designed a program that beat the world champion at “Go”, an ancient board game. Other firms have also shelled out to buy money-losing startups, which are typically valued not on future profits or even sales but instead receive a price for each employee that can be as much as $5m-10m.

**Behind closed doors**

Companies have different philosophies about how to deal with staff. Some, such as Microsoft and IBM, invest heavily in AI research and publish a large number of papers (see chart 2), but do not require researchers to apply their findings to money-making activities. At the opposite end of the scale are Apple and Amazon, which do not have enormous research initiatives, expect all work to feed into products and are tight-lipped about their work. Google and Facebook are somewhere in between on whether researchers must toil only on money-making ventures.


Economist.com

The intense battle for talent may force secretive companies to become more open. “If you tell them, ‘come work with us but you can’t tell anyone what you’re working on’, then they won’t come because you’ll be killing their career,” explains Mr LeCun, who leads Facebook’s AI research lab. This trade-off between secrecy and the need to attract people also applies to the

Chinese giants, which are trying to establish Western outposts and hire American researchers. Baidu has opened two research labs with an AI focus in Silicon Valley, in 2013 and this year. Western AI researchers rate them highly but prefer to work for the American giants, in part due to their relative transparency.

If companies can lure the right people in AI, the effect is to extend their workforces exponentially. AI is "like having a million interns" at one's disposal, says Benedict Evans of Andreessen Horowitz. That computational power is then integrated into firms' existing businesses.

The advantages of AI are most visible in firms' predictions of what users want. Automated recommendations and suggestions are responsible for around three-quarters of what people watch on Netflix, for example, and more than a third of what people buy on Amazon. Facebook, which owns the popular app Instagram, uses machine learning to recognise the content of posts, photos and videos and display relevant ones to users, as well as filter out spam. In the past it ranked posts chronologically, but serving up posts and ads by relevance keeps users more engaged.

Without machine learning, Facebook would never have achieved its current scale, argues Joaquin Candela, head of its applied AI group. Companies that did not use AI in search, or were late to do so, struggled, as in the case of Yahoo and its search engine, and also Microsoft's Bing.

Amazon and Google have gone furthest in applying AI to a range of operations. Machine learning makes Amazon's online and physical operations more efficient. It has around 80,000 robots in its fulfilment centres, and also uses AI to categorise inventory and decide which trucks to allocate packages to. For grocery ordering, it has applied computer vision to recognise which strawberries and other fruits are ripe and fresh enough to be delivered to customers, and is developing autonomous drones that will one day deliver orders.

As for Google, it uses AI to categorise content on YouTube, its online-video website, and weed out (some) objectionable material, and also to identify people and group them in its app, Google Photos. AI is also embedded in Android, its operating system, helping it to work more smoothly and to predict which apps people are interested in using. Google Brain is regarded in the field of AI as one of the best research groups at applying machine-learning advances profitably, for example by improving search algorithms. As for DeepMind, the British firm may not ever generate much actual revenue for Alphabet, but it has helped its parent save money by increasing the energy efficiency of its global data centres (and its Go experiment was a public-relations coup).

Artificial intelligence is also being applied in the corporate world. David Kenny, the boss of Watson, IBM's AI platform, predicts that there will be "two AIs": companies that profit from offering AI-infused services to consumers and others which offer them to businesses. In practice, the two worlds meet because of the tech giants' cloud-computing arms. Providers are competing to use AI as a way to differentiate their offerings and lock in customers. The three largest—Amazon Web Services, Microsoft's Azure and Google Cloud—offer application-programming interfaces (APIs) that provide machine-learning capabilities to other companies. Microsoft's cloud offering, Azure, for example, helped Uber build a verification tool that asks drivers to take a selfie to confirm their identities when they work. Google Cloud offers a "jobs API", which helps companies match jobseekers with the best positions.

**AI on the brain**

Many firms in other industries, from retailing to media, stand to benefit from what those in the cloud business tout as the "democratisation" of AI. Providing AI to companies that do not have the skills or scale to build up sophisticated capabilities independently could be a money-spinner in the $250bn cloud market. But providers often must customise APIs for clients' complex needs, which is time-consuming. Microsoft, with its history of selling software to clients and offering them support, seems likely to do well in this area. It is only a matter of time before AI offerings become "more and more self-help", counters Diane Greene, who runs Google Cloud.

IBM is another contender, having backed a huge marketing campaign for its Watson platform. AI researchers tend to be dismissive of IBM, which has a large consulting business and a reputation for valuing time billed over terabytes. The firm's critics also point out that, although IBM has invested over $15bn in Watson and spent $5bn between 2010 and 2015 to buy companies, much of that with the aim of acquiring proprietary data, for the most part it does not have unique data of its own. But IBM's weaknesses may not hold it back. Bosses of most businesses feel pressure to have an AI strategy, and they will pay handsomely to acquire one quickly.

To date tech giants have mostly tried to apply AI to reap profits from their existing operations. In the next few years they hope that AI will let them build new businesses. One area of intense competition is virtual assistants. Smartphones know their users intimately, but AI-powered virtual assistants aim to take the relationship further, whether through phones or smartspeakers. Apple was first to explore their promise when it bought Siri, a voice assistant, in 2010. Since then Amazon, Google and Microsoft have invested heavily: their assistants' speech recognition is better as a result. Samsung, Facebook and Baidu are also competing to offer them.

**One algorithm to rule them all**

It is unclear whether standalone speakers will become a huge market, but it is certain that people will move beyond text to engage with the internet. "All these companies understand that whoever owns that choke point for consumers will rule the market," says Pedro Domingos, author of "The Master Algorithm", a book about AI.

Further into the future, augmented-reality (AR) devices are another AI-infused opportunity. Mobile apps like Snap, a messaging app, and the game Pokémon Go are early examples of AR. But AR could more radically transform people's relationship with the internet, so that they consume digital information not from a small screen but via an ambient, ever-present experience. AR devices will offer portable AI capabilities, such as simultaneous translation and facial recognition.

In the race for AR, big tech firms have not got much beyond the warm-up phase. Google and Apple have launched AR software-development kits; they both want developers to build apps that use AR on their platforms. There is also a rush to develop AR hardware. Google was early to launch a prototype for AR glasses, but they flopped. Microsoft has developed a headset it calls HoloLens, but with a price of between $3,000-5,000, it is a niche product.

Other firms, including Facebook and Apple, are thought to be planning their own offerings. Being ahead in AI could translate into big leads in these new fields.

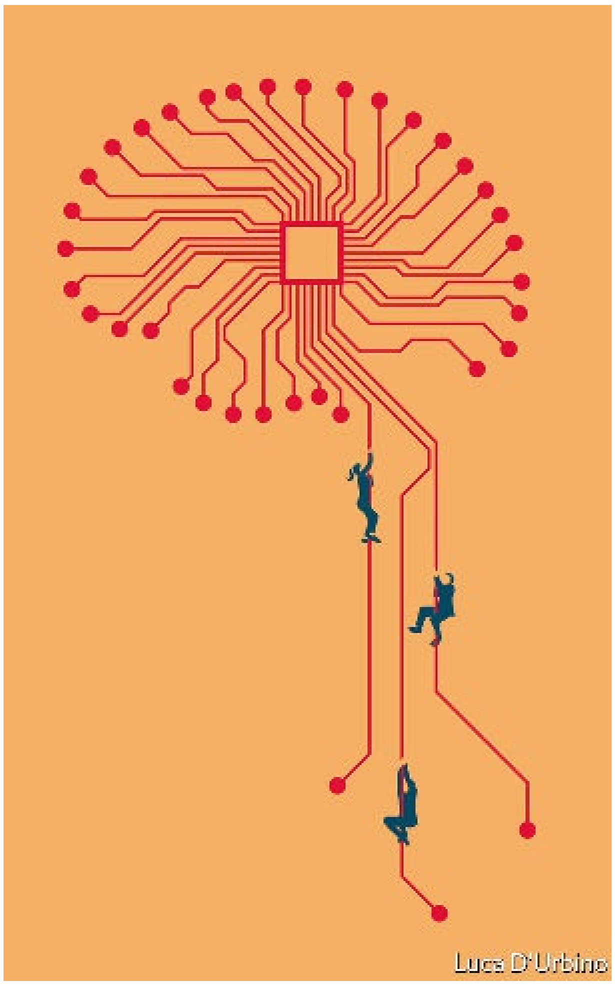
Nowhere is that truer than in the realm of autonomous vehicles. Tech firms are driving millions of miles to build up big, proprietary datasets, and are making use of computer vision to train their systems to recognise objects in the real world. The potential spoils are huge. Personal transportation is a vast market, worth around $10trn globally, and whoever cracks self-driving cars can apply their knowledge to other AI-based projects, such as drones and robots. Unlike search engines, where people may choose to use a service that is good enough, users are more likely to favour self-driving cars with the best safety record, meaning that the companies that best employ AI to map out the physical world and register the fewest crashes will enjoy outsize benefits.

Each firm is approaching the problem differently. Baidu, the Chinese giant, is trying to create a self-driving-car operating system, much like Google's Android in mobile devices (although it is unclear how it plans to make money). Alphabet has its own autonomous-car effort, as do Uber, Tesla, an electric carmaker, a herd of little-known startups and, increasingly, established carmakers. (Apple is rumoured to have scaled back its car ambitions.)

Self-driving cars are just one example of how technology firms' AI strategies are pushing beyond the virtual world of software into hardware. Many companies, including Alphabet, Apple and Microsoft, are also investing to build specialised, powerful "AI chips" that can power their various activities. These will compete with those made by NVIDIA, a tech firm that has built an empire on powerful chips used in various AI realms, such as autonomous cars and virtual reality.

It is unclear whether the likes of Alphabet and Apple will sell these chips to rival firms or keep them for themselves. They have an incentive to use their innovations to improve their own services, rather than renting or selling them to rivals—which could become a problem if it means a very few firms develop a meaningful advantage in brute computing power.

That begs the broader question of whether AI will further concentrate power among today’s digital giants. It seems likely that the incumbent tech groups will capture many of AI’s gains, given their wealth of data, computing power, smart algorithms and human talent, not to mention a head start on investing. History points to the likelihood of concentration; both databases and personal computers ushered in ascendancies, if only for a while, of a tiny group of tech firms (Oracle and IBM in databases, Microsoft and Apple in personal computers).




By the metrics that count—talent, computing power and data—Google appears to be in the lead in AI. It can afford the cleverest people and has such a variety of projects, from drones to cars to smart software, that people interested in machine learning rarely leave. Other firms had to learn to take AI seriously, but Google’s founders were early devotees of machine learning and always saw it as a competitive edge.

## AI’s spiritual home

Some in the tech industry, such as Elon Musk, the boss of Tesla and rocket firm SpaceX, worry about Alphabet and other firms monopolising AI talent and expertise. He and a handful of other prominent Silicon Valley bosses funded OpenAI, a not-for-profit research outfit focused on AI with no corporate affiliation. Mr Musk and others are worried about what might happen when a firm finally cracks “general intelligence”, the ability of a computer to perform any human task without being explicitly programmed to do so. Such a vision is probably decades away, but that does not stop Google from talking about it. “We absolutely want to” crack general AI, says Jeff Dean, the boss of Google Brain. If a firm were to manage this, it could change the competitive landscape entirely.

In the meantime, much will depend on whether tech firms are open and collaborative. In addition to publishing papers, many companies today make their machine-learning software libraries open source, offering internal tools to rivals and independent developers. Google’s library, TensorFlow, is particularly popular. Facebook has open-sourced two of its libraries, Caffe2 and Pytorch. Openness has strategic advantages. As they are used, the libraries are debugged, and the firms behind them get reputational benefits. “Beware of geeks bearing gifts,” quips Oren Etzioni of the Allen Institute for Artificial Intelligence, another non-profit research group.

One guru of the field worries that libraries such as TensorFlow will bring in talented researchers but that their owners may start charging later on, or use them for profit in other ways. Such caution may prove wise, but few think about the long term when a gold rush is under way. So it is now in Silicon Valley. Most techies are too consumed by the promise and potential profits of AI to spend too much time worrying about the future.

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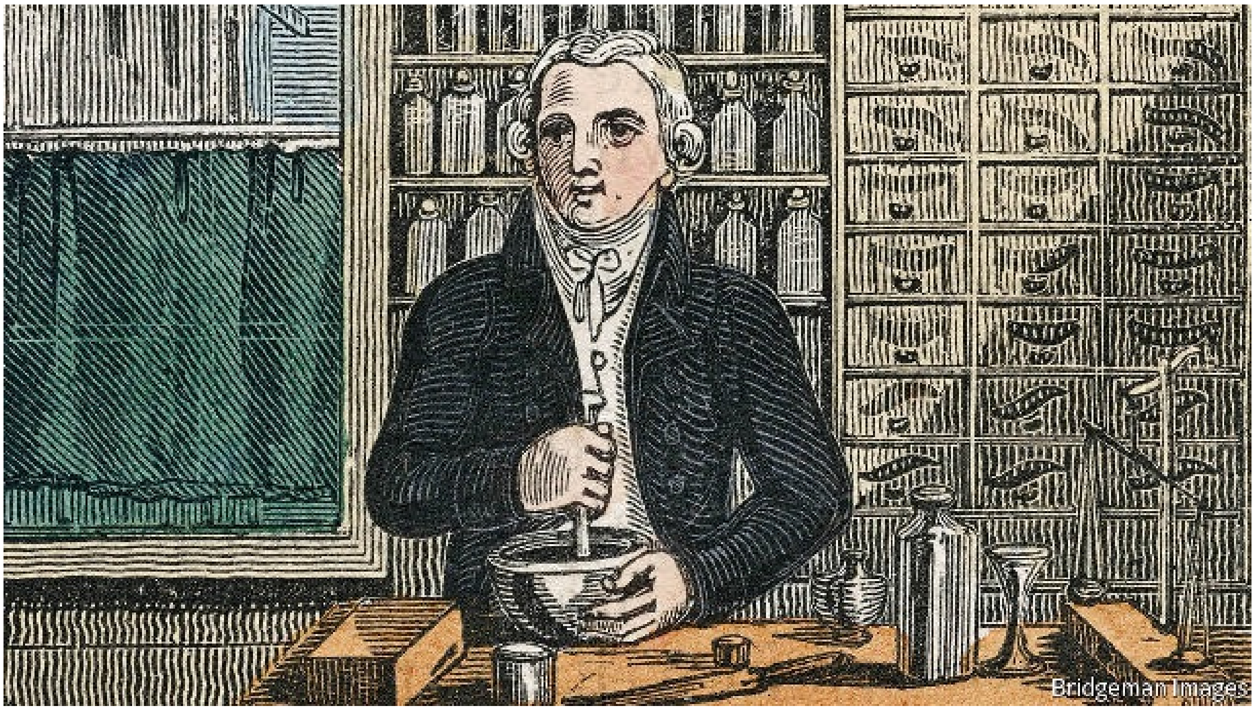
**Doses of reality**

## The prospect of Amazon’s entry is a spur to a massive deal in health care

CVS Health’s $69bn purchase of Aetna is partly about the e-commerce giant’s rumoured plans to transform the prescription-drugs business




Dec 7th 2017 | NEW YORK

“WE’RE bringing health care to where people live and work.” So declared Larry Merlo, chief executive officer of CVS Health, an American retail-pharmacy giant, on December 3rd, announcing a $69bn deal to buy Aetna, a health insurer. The deal is worth some $77bn after CVS’s assumption of Aetna’s debt, and is due to close in the second half of next year.

Shares in both firms fell on the news, perhaps because the deal is likely to yield results only over the long term. Most tie-ups in America’s health industry in recent years have been “horizontal”, with firms attempting to acquire direct competitors; instead, the CVS-Aetna deal represents vertical integration. As a result, there are fewer obvious overlaps and less fat to cut.

One rationale for the deal—assuming the regulators wave it through—is for the merged firm to develop personalised health care that people can easily get access to. CVS runs some 1,100 walk-in medical clinics in addition to 9,700 retail outlets. It is also a pharmacy-benefits manager (PBM), a sort of middleman that buys drugs for insurers and companies. Because it will swallow Aetna's records on patient medical care, its physical outlets will have access to far more information about patients' chronic illnesses. As Aetna's boss, Mark Bertolini, put it, "We have 10,000 new front doors to the health-care system."

There is another, more defensive, impetus behind the deal—the prospect of Amazon going into prescription medicine. The American pharmaceutical market is an alluring one for the online giant. It is large, worth $450bn in 2016. And it is widely regarded as inefficient, leaving customers without good information about products they are buying, because of opaque pricing and middlemen like the PBMs. According to a survey by Cowen, an investment bank, 67% of Amazon Prime customers would like to buy prescription drugs on the website. Amazon could be earning as much as $10bn a year from drugs by 2023, it reckons.

Compared with books, toys and other bulky items, the drugs market would appear to be a nirvana for Amazon. Prescription medicines weigh almost nothing, take up little space and can cost hundreds or thousands of dollars per pill. But three hurdles block the road to this idyll.

First, the sale and distribution of drugs is heavily regulated. Amazon would not be able to dump prescription drugs into the same fulfilment channels as its other products. It must acquire pharmaceutical licences for any state where it wishes to operate (it already has these in 12 states, but has said it means to use them only to sell medical supplies, which also require the licence, not drugs). Amazon would also need approval from the Food and Drug Administration at a federal level. Operating in a controlled industry would be a departure for a free-wheeling tech firm.

Second, most drugs are paid for by insurers, not by consumers. The PBMs perform the complex task of matching purchases with patients' insurers, so that drugs are paid for. That is a source of the sort of opacity that Amazon would seek to remove. But the e-commerce firm would still need to handle issues of payment in the background, without nagging consumers for insurance details.

Third, although drugs do come in small packages, their shipping and handling often require special attention. Many drugs, such as new cancer treatments, must be kept cold throughout the supply chain. Others, like opioid painkillers, are dangerous, and must be kept in locked cages. Yet these drugs are often also the most expensive. If Amazon cherry-picks drugs that fit well into its existing network, it will miss out on a large slice of the market. Customers could find it confusing to be able to get some prescriptions through Amazon’s store but not others.

Amazon could find itself a partner, however. In July the boss of Express Scripts, a PBM, said it could use Amazon as an “efficient provider in networks”. Or Amazon could buy what it needs. John Blackledge of Cowen suggests that it might buy Rite Aid, a big pharmacy chain, giving it licences, a “cold-chain” infrastructure and Rite Aid’s small PBM in one swoop. A prospect like that goes a long way to explaining the marriage of CVS and Aetna.

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**Looting the punters**

## Video games could fall foul of anti-gambling laws

What comes out of a loot box is a lot like a lottery


Dec 7th 2017

A DECADE ago the idea of paying real money for virtual items was strange and exotic. These days many video-game publishers build their business models around it. Some of the world's biggest games, such as "League of Legends", cost nothing to buy. Instead they rely for their revenue on players buying things for use in the game, such as new characters to play with or costumes to put them in.

A new twist on that model has been attracting the attention of regulators in recent weeks. "Loot boxes" are yet another type of "in-game" item that gamers buy with currency. Unlike the usual sort of purchase, however, players do not know in advance what they are buying, for the contents of a loot box are generated randomly. Sometimes they might be desirable, and therefore valuable; prized items include new gestures or "emotes" for a character, or a pearl handle for an automatic weapon. If less alluring, well, players can pay a bit more money to have another go.

If you think that sounds a lot like gambling, you are not alone. In November Belgium's gaming commission announced that it had opened an investigation into "Star Wars: Battlefront 2" and "Overwatch," a pair of shooters published by Electronic Arts (EA) and Activision Blizzard, respectively, that both feature loot boxes. China, where the virtual-item business model is very popular, has already passed laws restricting their sale.

Lawmakers and regulators in South Korea, Singapore, Australia and Hawaii have also made disapproving sounds. In Britain the Gambling Commission has said that publishers of games must buy a gambling licence only if the contents of loot boxes can be converted back into money. Often they cannot, at least in theory. In practice the distinction is murkier. There are plenty of grey-market websites that allow gamers to buy and sell accounts for individual games. (On one such site, for instance, punters can buy the login details for an "Overwatch" account boasting of several rare "skins", or costumes, for $295.)

Not everyone is worried. The Entertainment Software Rating Board (ESRB), an American organisation that provides voluntary age ratings for games, says that loot boxes are not gambling, on the grounds that players always win something, even if it is of little value. But the controversy is unlikely to end, for loot boxes are a response to a long-standing problem within the video-games industry. The retail price of a blockbuster game has stayed at between $40 and $60 for over twenty years, thanks to the price-sensitivity of customers and widespread discounting of games online. Accounting for inflation, prices have fallen in real terms by a third or more at a time when production budgets have ballooned to tens or hundreds of millions of dollars for a high-quality game.

So publishers have been searching for new revenues. Many split video games into smaller chunks and charge separately for each, selling a base game for $60, then releasing extra downloadable content a few months later. Another option is to offer expensive "collector's edition" boxes with soundtrack CDs and the like.

Loot boxes, though, cost nothing to make. Even though most players indulge only sparingly, that makes them extremely profitable. The industry also uses psychological tricks long known to makers of gaming machines. Some games announce when a player’s friends have won big, encouraging them to think they could be next. Others tweak the algorithms in various ways, such as making sure droughts do not last too long, which encourages players to keep buying.

The backlash against loot boxes is not coming only from regulators. Many players are unhappy, too. Pressure from customers this year persuaded EA temporarily to remove the ability to spend real money on loot boxes in “Star Wars: Battlefront 2”. In the end, that sort of bad publicity may prove a bigger stick than gambling laws. Laws, after all, can be complied with. But the video-games industry has spent decades trying to shed its image as an unwholesome pastime for oddballs. It has been succeeding, slowly. A public association with gambling will do that cause no favours. Better, perhaps, to simply raise prices and take the consequences.

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**Found in translation**

## Western companies are getting creative with their Chinese names

Simple transliteration is giving way to more evocative phrases


Dec 7th 2017

MCDONALD'S drew ridicule in China when it changed its registered name there to *Jingongmen*, or "Golden Arches", in October, after it was sold to a Chinese consortium. Some on Weibo, a microblogging site, thought it sounded old-fashioned and awkward, others that it had connotations of furniture. The fast-food chain was quick to reassure customers that its restaurants would continue to go by *Maidanglao*, a rough transliteration that has, over the years, become a recognisable brand name. But for most companies now entering Chinese markets, transliterations are a thing of the past, says Amanda Liu, vice-president of Labbrand, a consultancy based in Shanghai that advises firms on brand names.

Companies are instead choosing Chinese names with meanings that capture people's imagination. That often involves going beyond a direct translation. New entrants are taking inspiration from BMW, which is the evocative

*Baoma*, or “treasure horse”, in China, and from Coca-Cola, which is *Kekoukele*, or “delicious happiness”.

The naming process is forcing companies to think harder about the image they want to project in China, says Ms Liu. LinkedIn, a professional-networking site owned by Microsoft, chose the name *Lingyin*, or “leading elite”, in 2014, signifying more exclusivity than its Western name. Her other corporate customers have included Airbnb, Marvel Comics and Haribo. Labbrand tests proposals with focus groups, ensuring that the name has no negative associations in any of the major Chinese dialects.

A vital part of the process is checking that candidate names have not already been snapped up. The Chinese are energetic trademarkers: in 2015 there were 2.8m trademark applications in China, more than treble those in America and the EU combined. Companies considering entering the Chinese market might often find that their products have already been given local names, thanks, for example, to coverage in the press.

Some even find that their Chinese name has already been trademarked, says Matthew Dresden of Harris Bricken, a law firm, either by their own distributors, competitors seeking to block its entry, counterfeiters hoping to pass as the company, or squatters intending to sell the trademark to the highest bidder. Counterfeiters might also take advantage of soundalikes, says Mr Dresden, who advises clients to trademark those, too.

Such complexities have often tripped up foreign brands. Pfizer tried to stop Viaman, a Chinese drugmaker, from using the local name for Viagra —*Weige*, or “mighty brother”—but was unable to convince the courts that ownership of the trademark should be transferred to it. (Pfizer did manage to stop Viaman and other local companies from mimicking Viagra’s diamond shape, though.) After years of litigation, Michael Jordan won the rights to his name in Chinese—the transliteration *Qiaodan* — last year from a local sportswear company which had registered the trademark (although the court ruled he had no rights to the Chinese name when it was spelt in the Roman alphabet).

Perhaps thanks to these mishaps, foreign firms are getting wiser to the importance of naming in China. More Chinese firms are also seeking advice on foreign names, says Ms Liu, as they seek to conquer Western markets. Both know that if they blunder, the social-media critics will be waiting.

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**Ghost in the machine**

## Rio Tinto puts its faith in driverless trucks, trains and drilling rigs

But will it stop the mining firm from splurging on overpriced acquisitions?


Dec 7th 2017 | NEWMAN, WESTERN AUSTRALIA

FOR millennia, man has broken rocks. Whether with pickaxe or dynamite, their own or animal muscle, in a digger or a diesel truck, thick-necked miners have been at the centre of an industry that supplies the raw materials for almost all industrial activity. Making mining more profitable has long involved squeezing out more tonnes of metal per ounce of brawn. Now robots, not man, are settling themselves into the driving seat.

Rio Tinto, one of the world's largest mining firms, is leading that transformation in its vast iron-ore operations in the Pilbara region of Western Australia. It is putting its faith in driverless trucks and unmanned drilling rigs and trains, overseeing them from the office equivalent of armchairs about 1,000km (625 miles) south, in Perth. Jean-Sébastien Jacques, Rio's chief executive, says it is ten years ahead of mining rivals in autonomous technology. For him and for Simon Thompson, a new chairman appointed on

December 4th, the question is how much such technology can tame another ancient feature of mining: the boom-and-bust cycle.

On a visit to Rio's Hope Downs 4 mine in the Pilbara, it is eerie at first to watch 300-tonne trucks speeding uphill in a cloud of red dust with no one in the cab. Then it becomes endearing, as you watch supersized robotic mammoths so safety-obsessed that when sagebrush blows in their way, they judder to a halt.

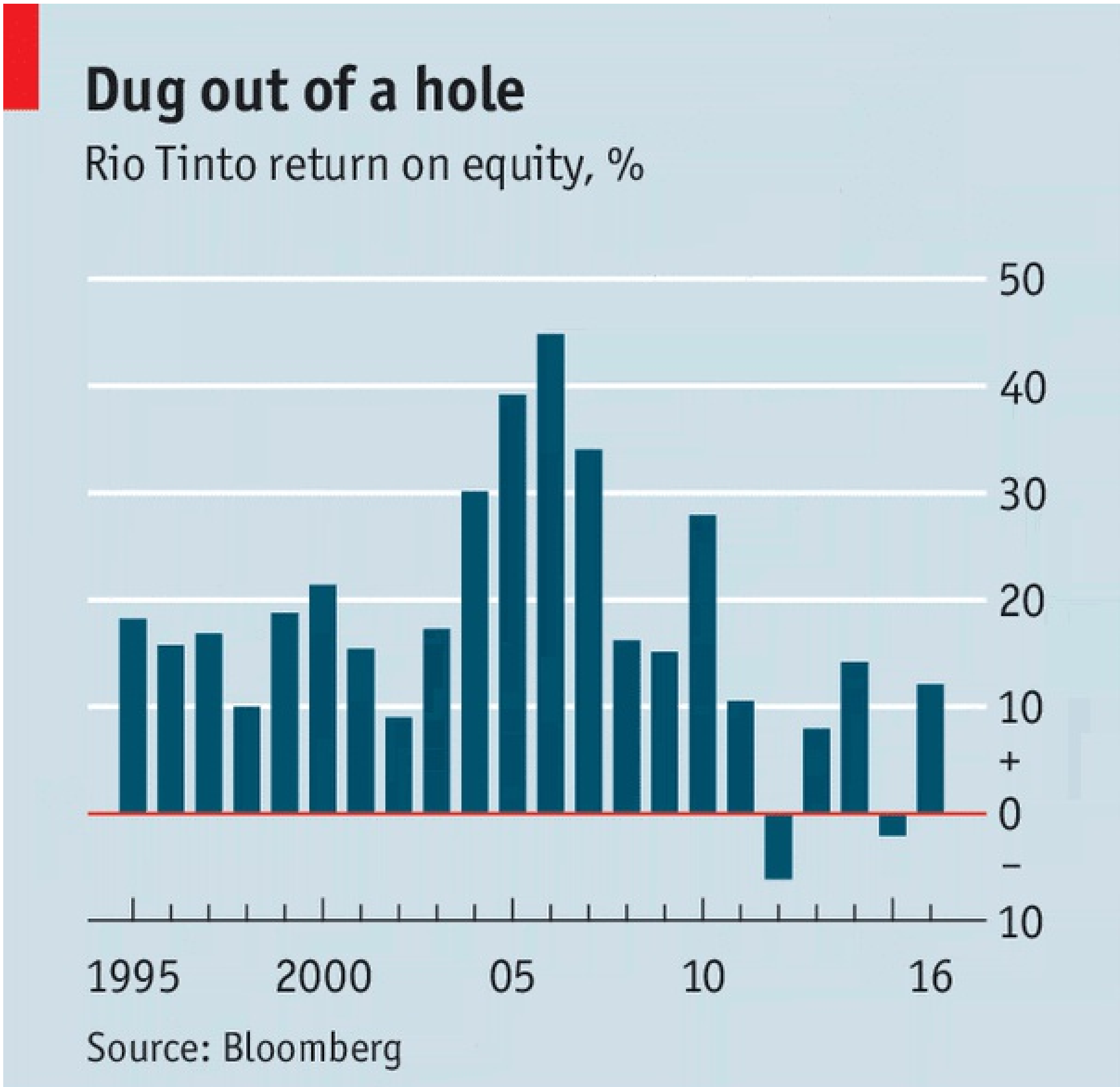
As for the mine's managers, they are struck by the silence; there is no longer a steady stream of banter across drivers' two-way radios. They also welcome the productivity gains. Over a 12-hour period, they say, manned trucks are competitive, but over 24 hours and longer, the absence of coffee breaks, fatigue and driver changeovers begins to tell. The autonomous trucks stop only once a day for refuelling. "Then you pat them on the bum and out they go again," one says. He adds that the workforce at the mine is already about one-third lower as a result of automation. The 76 autonomous vehicles in Rio's 400-strong truck fleet in the Pilbara are an estimated 15% cheaper to run than the rest.

Two hours' flight away, at Rio's operations centre in Perth, engineers remotely control the equipment with screens and computers. "You have to blow dust in their faces to make them feel like they're in the Pilbara, otherwise it's too comfortable," quips an executive, as he oversees desk-bound employees operating two of Rio's six autonomous rigs digging into the Pilbara rock. Rio's boss of iron ore, Chris Salisbury, says that autonomy enables drilling to run for almost a third longer on average than with manned rigs, and to churn through 10% more metres per hour. The extra data collected helps the firm to evaluate the quality of the ore for further digging.

Next year Rio hopes to win regulatory approval to run the world's first driverless trains along 1,700km of track between its 16 iron-ore mines and four ports in the Pilbara. It completed a 100km test run in September. According to Mr Salisbury, autonomy can provide a 6% improvement in average speed, and the elimination of three driver-changes in each 40-hour period. This may sound small, but it adds up. Trains will also run closer together, adding more to the system at any one time.

Although Rio introduced its first driverless trucks almost a decade ago, the move to autonomy has been slow, involving finicky fine-tuning with suppliers. Mr Jacques says technological improvements will provide only a third of the $5bn in additional free cashflow, chiefly from its iron-ore and aluminium operations, which Rio intends to generate over the next five years. But from 2021 onwards he expects new technologies, and autonomy in particular, to be a bigger driver of returns. By then Rio intends to start iron-ore production at Koodaideri in the Pilbara, which it says will be the first mine designed to be “intelligent”, at a cost of $2.2bn.

Rio also intends to squeeze out higher returns with more disciplined spending and improved quality. For investors a focus on the bottom line is reassuring—especially as much of Rio’s spare cash is being returned to shareholders in the form of dividends, or being used to de-leverage the balance-sheet. It also makes a change. Under previous management, Rio’s splurges on overpriced assets, such as Alcan, a Canadian aluminium company, in 2007 during the China supercycle, and Riversdale, a coal mine in Mozambique, in 2011, clobbered returns (see chart).



Economist.com

In a sign of their concern, some big shareholders railed against the possibility that Sir Mick Davis, a dealmaking supremo who once led Xstrata, another mining company (and who is now the chief executive of Britain's Conservative Party), would be named as chairman. Mr Thompson, a financier and former executive at Anglo-American, another mining rival, is seen as a more conservative choice.

His first big task will be to deal with the legacy of Rio's spendthrift era. In October America's Securities and Exchange Commission charged the firm, its former boss, Tom Albanese, and another former executive with fraud. It alleged that they failed to disclose the loss of value of the Mozambique transaction to Rio's board, its auditor or investors, and also released misleading financial statements shortly before raising debt in America. (Rio and its ex-employees deny the charges.)

These headaches aside, the firm's core mining business is in comparatively good shape. China's demand for the high-grade iron ore that is a speciality of Rio's Pilbara operations is buoyant; iron ore accounts for about two-thirds of its earnings. Aluminium demand is also likely to grow briskly, thanks in part to demand for lighter cars. Mr Jacques insists that Rio will not make overpriced acquisitions even to secure prized battery minerals such as lithium. The future may be driverless, but steadier hands appear to be on the wheel.

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Schumpeter

## The beast of Bentonville battles Amazon, the king of the e-commerce jungle

Amazon’s position today is eerily reminiscent of Walmart’s circa 1999


Brett Ryder

Dec 7th 2017

A BOA constrictor swallowing capitalism. A cyclone dragging the economy into its vortex. If you look back at how people described Walmart a decade ago, it is eerily similar to how Amazon is viewed now. The supermarket chain has “a scale of economic power we haven’t encountered before”, warned “The Walmart Effect”, a best selling book in 2006. But capitalism never stands still. The world’s largest company by sales is now the perceived underdog in an escalating grocery war with Amazon to fill 320m American bellies. The struggle will probably end in a messy stalemate. That will mean mediocre returns for investors—and happy days for consumers.

Just when Walmart’s aura was at its most intimidating, in 2006, stagnation beckoned. Its reputation for bullying its suppliers and staff became toxic. Over the next decade it hit saturation point. About 95% of Americans shop at

Walmart at least once a year. It has three square feet of shop space for every adult in the country and has sunk $83bn into a fixed-asset base that is the fourth-largest owned by any American firm. Investors have worried for years that this empire of aisles and tills run from Bentonville, Arkansas, would become obsolete—what did Walmart's executives, schooled in the arts of beating up baked-beans suppliers, know about the slick world of e-commerce being dreamed up in Silicon Valley and Seattle?

More than you might think. This year Walmart's shares have risen by 40% on hopes that it has more than a fighting chance. It is clear that selling groceries online is very different from selling books. In food, penetration of e-commerce is low, at 2%, compared with 9% for all retail. Food is perishable. People will not stuff it in their mouths unless they trust its provenance. They also want flexibility—to buy food in a store, to order online and pick it up themselves, or to have it delivered to their homes. So some physical infrastructure is helpful. "I wouldn't want another set of assets," Doug McMillon, Walmart's boss, told the Economic Club of New York in November.

He has run Walmart's businesses in Europe and Asia, where e-commerce for groceries is more developed. In 2016 Walmart spent $3bn buying Jet.com, an e-commerce firm whose boss, Marc Lore, now runs all Walmart's online operations. Walmart has launched internet-based services such as "Easy reorder" and "Pickup discount" and formed a partnership with Latch, which lets its users open and lock their front doors remotely. On September 29th it acquired Parcel, a logistics startup. On December 6th it changed its legal name from Walmart Stores, to just Walmart.

There are three reasons to be optimistic. First, Walmart's performance has improved. In the most recent quarter, same-store sales rose by 2.7% year on year, and store traffic by 1.5%. Food sales increased at their fastest pace in six years. Sales from e-commerce represent only about 2% of the total but are rising at an annual rate of 50% (customers who shop online and in stores typically spend twice as much as those who only go to stores). Walmart has the second-most-downloaded retail app, after Amazon's.

Second, Amazon's behaviour is a backhanded compliment. In June it spent $14bn on Whole Foods, a mid-sized grocery chain, The deal brings Amazon more physical locations to sell, sort and dispatch goods. It also gives it trusted private-label brands, of the kind Walmart already has. If you type “spinach” into Amazon.com, bags of Whole Foods branded greenery appear.

Lastly, the example of China points to a fusion of the online and physical worlds. In some ways the country is more advanced than America; e-commerce comprises 9% of grocery sales, according to Alliance Bernstein, a research firm. On November 20th Alibaba, an e-commerce giant, bought 36% of Sun Art Retail, a hypermarket retailer. Four of the six biggest Chinese supermarket chains have partnerships with e-commerce platforms. (Walmart, which has 424 stores in China, has teamed up with JD.com.)

The duel between Walmart and Amazon could go in two directions. It might escalate into a war across America, for both companies hate losing. Or each firm might conquer different geographical areas and demographic groups. Amazon could seize well-to-do cities, where population density is high and home delivery is more efficient. Walmart could continue to rule suburbia.

Either way, margins will probably be squeezed as Amazon throws money at the fight with its customary abandon. Mr McMillon knows this. “One of the challenges at Walmart is that we don’t have free money—we are expected to make a profit,” he says. The danger is that it overestimates how much physical presence it needs. If it went back to its position in 2006, it could cut its domestic asset base by 34% and still have 90% of Americans within 15 miles of a store. For every dollar of sales, it has twice as many square feet of sales and distribution space as Amazon’s retail operation (including Whole Foods). If Mr McMillon is brave he will sell stores and return capital to investors. Walmart needs to make its balance-sheet leaner.

**What’s in store for Amazon**

Walmart is probably the most formidable adversary Amazon has ever faced. Disrupting the music, book and media industries, each known for their Corinthian spirit and long lunches, was child’s play compared with taking on Walmart, with its fanatical commitment to low prices.

Walmart’s history is also a warning. If you examine the two companies’ financials, Amazon today looks almost identical to Walmart in 1999. It has annual sales of $160bn or so, low margins, fast growth, a ballooning asset base and massive capital investment. The firm's managers are on a high and investors have dizzying expectations for the future. But for the ten years after 1999, Walmart's share price was as flat as a pancake, because all the good news was already baked in. The actual business of world domination turned out to be a long, hard slog.

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# Finance and economics

The World Trade Organisation

# As WTO members meet in Argentina, the organisation is in trouble

Not all those problems stem from the Trump administration, but some of the most serious do


Dec 7th 2017

“EVERYBODY meets in Buenos Aires,” said Cecilia Malmstrom, the European Union’s trade commissioner, days before heading there for the World Trade Organisation’s (WTO) biennial gathering of ministers, which opens on December 10th. Some non-governmental organisations have been blocked by the protest-averse Argentine authorities, but a meeting of people will indeed take place. One of minds is another matter.

Most participants can agree on one thing. The WTO, which codifies the multilateral rules-based trading system, needs help. President Donald Trump has railed against it and threatened to pull America out. Without American leadership, there is little hope of reaching new deals. And even as the WTO’s dealmaking arm is paralysed, the Trump administration is weakening its judicial one by starving it of judges.

Despite Mr Trump's threats, America does not seem on the verge of crashing out of a system it helped to construct, to rely entirely on bilateral trade deals and remedies. He may think that true reciprocity means American tariffs to match Chinese ones. (For goods, America's average 3.5%, China's 9.9%.) But Congress is likely to stymie attempts to raise duties, and anything he does manage will face swift and painful retaliation. Robert Lighthizer, the United States trade representative, seems to be sticking to the WTO's rules for now. On December 4th, for example, he requested evidence relating to solar-panel imports to help make the case that any tariffs would be WTO-compliant.

But an institution can be damaged without blowing it up. Over the past few weeks organisers of the meeting in Buenos Aires have been managing expectations down. No one thinks much will be agreed on. Some sigh that a committed American administration might have achieved an agreement on curbing fishing subsidies, revived one easing barriers to trade in environmental goods, and organised an ambitious agenda for e-commerce. Instead, the Americans have been bickering over the language in a proposed joint statement. They quibble with references to the "centrality of the multilateral trading system" and to "development" as an objective.

Still, it is unfair to blame the Trump administration alone for the likely lack of progress in Buenos Aires. The dealmaking arm of the WTO has not worked for years. India routinely holds agreements hostage to its demands. The Chinese scuppered an agreement over environmental goods. Some developing countries complain that deals to help them should be agreed on before new areas are opened up. Updating the rules needs consensus among all 164 member countries, which is almost unattainable. "Even the US at its most constructive isn't going to fix the system where it is now," says Andrew Crosby of the International Centre for Trade and Sustainable Development, a Geneva-based think-tank.

The sabotaging of the WTO's appellate body, however, is clearly the handiwork of the Trump administration. On December 11th the term of Peter Van den Bossche, the European judge on the body, will expire. He will be the third judge whose reappointment the Americans have blocked.

On the present course, by the end of 2019 too few judges will be left to rule on new cases (three are required). Mark Wu, a law professor at Harvard University, worries that gumming up the judicial arm may make countries doubt that the WTO is the best forum for settling disputes. “The risk is less of an immediate explosion,” he says, “than a slower death by a thousand cuts.”

Mr Lighthizer has hinted at a return to the old, pre-WTO system of resolving trade disputes—by national muscle rather than lawyers. Ms Malmstrom says she cannot envisage going back to that. But the impasse has no obvious way out. Any manoeuvre to bypass the American blockage of the appellate body would be politically, if not legally, untenable. And the Americans have not said what reforms they want.

**Bull in a China shop**

As the Trump administration kicks at the working leg of a limping institution, it is worth recalling that previous American administrations have also felt frustrated with the WTO. Few would disagree that it needs reform. In particular, China, described by Ms Malmstrom as the WTO’s “problematic client”, has an economic model that sits awkwardly inside the WTO system. The organisation’s rules were drafted in the early 1990s with transitional economies like those of Eastern Europe in mind. Hosuk Lee-Makiyama of the European Centre for International Political Economy, a Brussels think-tank, says they are toothless against China’s “state-capitalist model”, which is far more influential than was envisaged. A case working its way through the dispute-settlement system concerning China’s treatment by its biggest trading partners (see article) highlights an old tension between the WTO’s most important members.

If the frustrations are familiar, the strategy is not. To brandish a stick at China, the previous American administration sued it at the WTO for subsidising export industries. Dangling a carrot, it negotiated a big regional trade deal with “21st-century rules”. This administration is all stick and no carrot. Asked whether she thinks the Trump team wants to destroy the system, Ms Malmstrom says: “I don’t know.” Mr Trump may think that the system is so broken that it must be smashed before it can be fixed. His approach risks making that view self-fulfilling.

**Market failure**

## China takes on the EU at the WTO

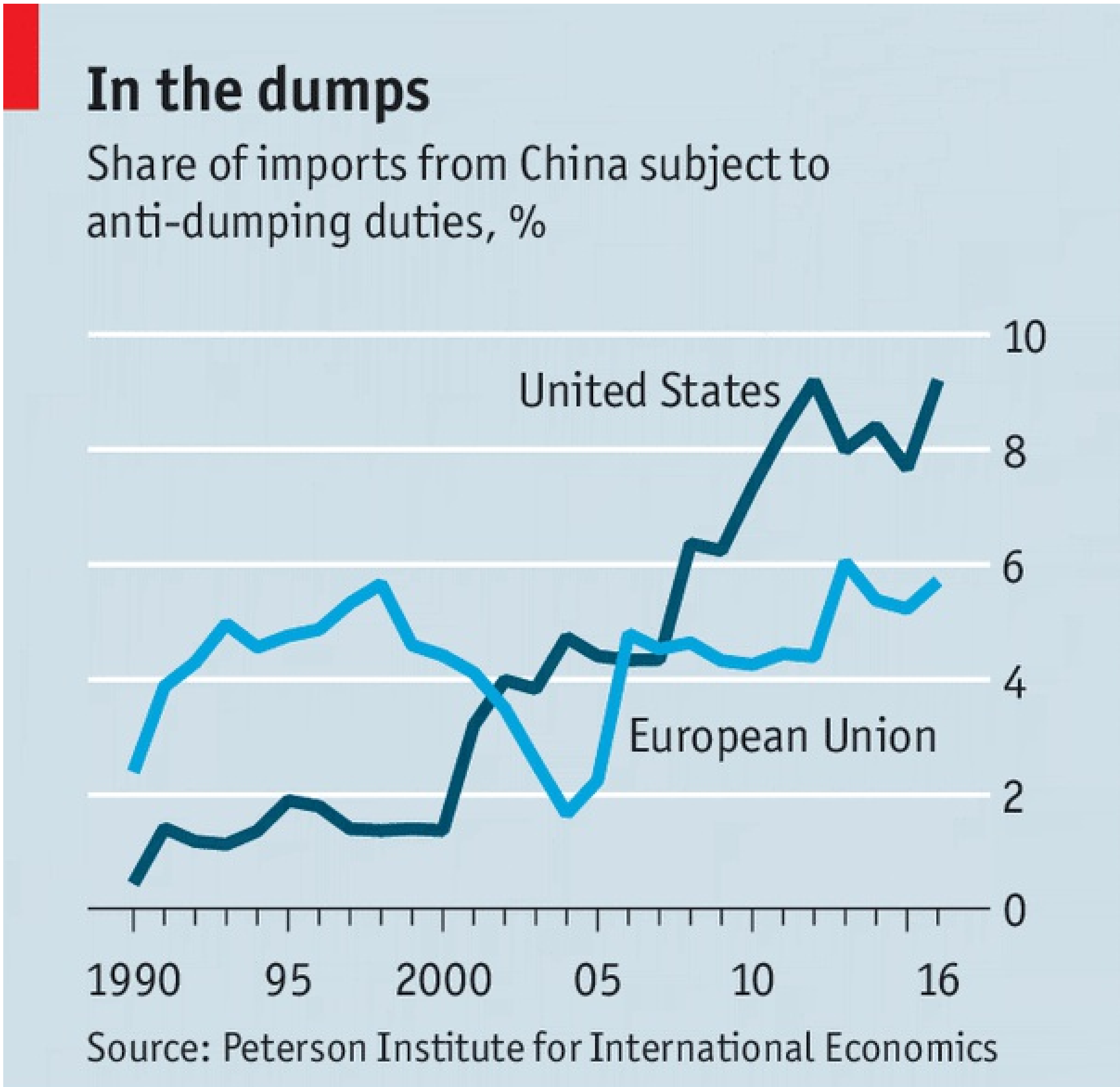
Both the EU and America are loth to weaken their defences against Chinese dumping

Dec 7th 2017

NOT all trade tension is made in America. China is suing the European Union at the World Trade Organisation (WTO). Hearings began this week. China thinks it deserves treatment as a "market economy". The EU, supported by America, disagrees. As they lock horns, each side sees the other as breaking a promise.

China's entry into the WTO in 2001 was part of a grand bargain. In return for market access, it promised economic reform. The deal laid out unusually strict terms. Any members' exports can face anti-dumping duties if sold too cheap. But China's accession agreement allowed others to erect stronger defences, and assume that it was a non-market economy when calculating the "fair" duty—using third-country prices for comparison. In practice this meant higher tariffs.

China expected this treatment to be temporary and expire after 15 years. But as the deadline loomed and the share of imports covered by anti-dumping duties rose (see chart), the EU and America balked at the idea of giving up their trade defences. On December 4th the EU approved new rules to drop the label of "non-market economy". But it will still apply third-country pricing on a case-by-case basis. Mei Xinyu of the Chinese Academy of International Trade and Economic Co-operation, an official body, calls this "a trick that avoids calling China a non-market economy".



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The legal dispute will take years. On November 30th the Americans published their legal arguments in support of the EU. They outlined historical instances where economies in transition were treated as non-market economies. When Poland, Romania and Hungary acceded, they got the same non-market treatment as China. As long as WTO members show that Chinese prices are distorted, they say they are within their rights to refer to different ones.

The Chinese say that there is no agreed definition of a market economy, and dispute the EU and American interpretation of their accession agreement. Whatever happens, at least one large member of the WTO will be extremely upset. “If China loses, the WTO will lose its fairness,” says Wei Jianguo at the China Centre for International Economic Exchanges, an official think-tank. That is an awful lot of pressure to put on a panel of judges in Geneva.

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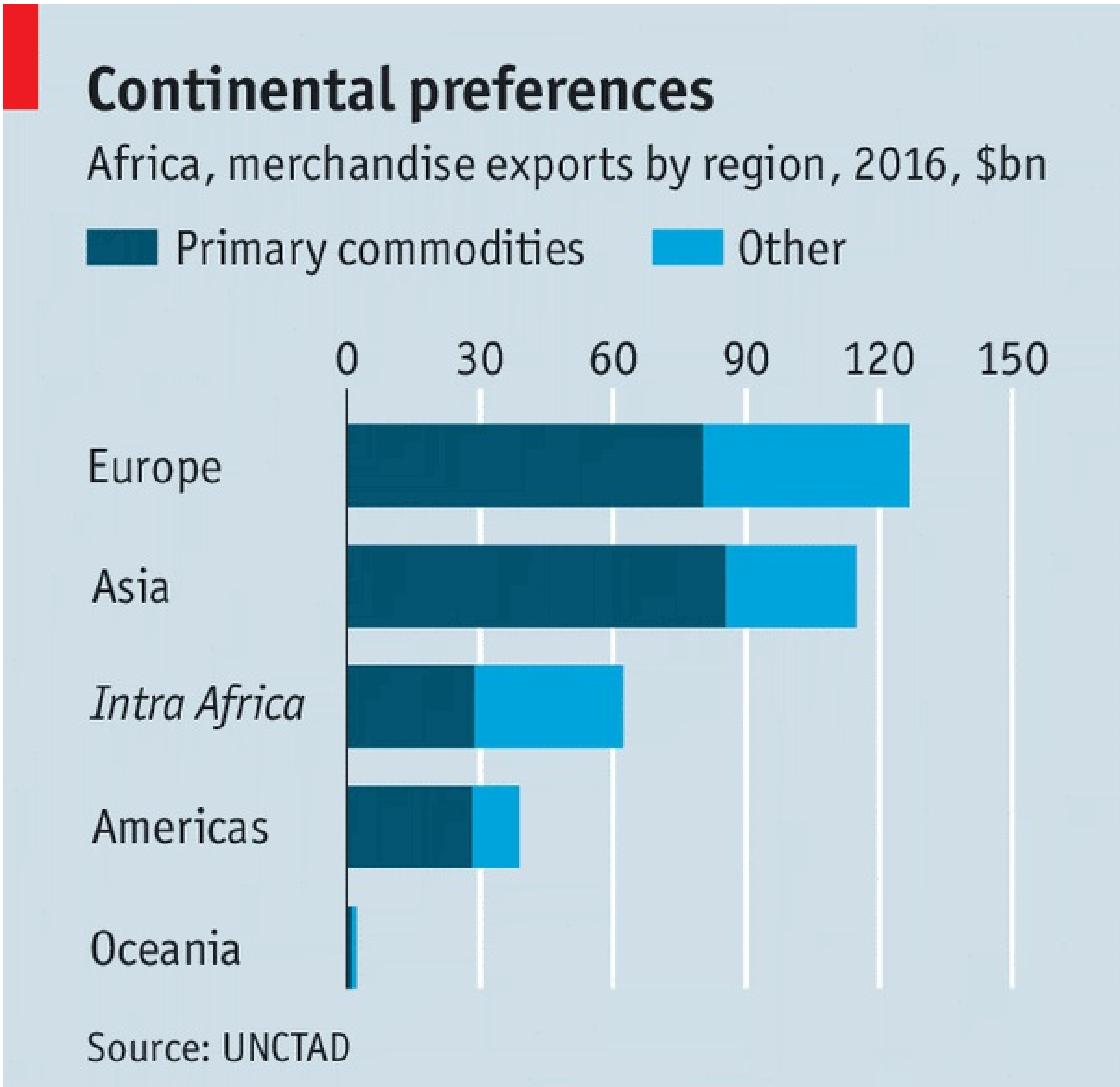
**Africa, unite!**

## African countries are building a giant free-trade area

They have long traded with the world, now they want to trade with each other

Dec 7th 2017 | KAMPALA

“AFRICA must unite,” wrote Kwame Nkrumah, Ghana’s first president, in 1963, lamenting that African countries sold raw materials to their former colonisers rather than trading among themselves. His pan-African dream never became reality. Even today, African countries still trade twice as much with Europe as they do with each other (see chart). But that spirit of unity now animates a push for a Continental Free-Trade Area (CFTA), involving all 55 countries in the region. Negotiations began in 2015, aimed at forming the CFTA by the end of this year. In contrast to the WTO, African trade talks are making progress.



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At a meeting on December 1st and 2nd in Niamey, the capital of Niger, African trade ministers agreed on final tweaks to the text. Heads of state will probably sign it in March, once an accompanying protocol on goods has been concluded (agreement on services has already been reached). But trade barriers will not tumble overnight. The CFTA will come into force only when 15 countries have ratified it. Even then, the deal only sets a framework, within which some details of tariff reduction have still to be worked out. Separate negotiations, covering competition, investment and intellectual-property rights, are yet to begin.

Nonetheless, technocrats are keen to talk up the agreement. Chiedu Osakwe, Nigeria's chief negotiator and chairman of the negotiating forum, sees it as a "massive historical opportunity" to escape the colonial legacy. Some 82% of African countries' exports go to other continents; they consist mostly of commodities. By contrast, over half of intra-African trade is in manufactured products. Supporters of the deal argue that it will create larger, more competitive markets, helping to ignite Africa's stalled industrialisation.

African leaders also have an eye on relations with the rest of the world. No longer able to count on unilateral trade concessions from rich countries, they are instead being forced into reciprocal deals, which involve more give-and-take. A strong CFTA would give Africa extra weight in talks with Europe and America, argues George Boateng of the African Centre for Economic Transformation, a pan-African think-tank.

Yet political pressure to rush negotiations may weaken the final text. The CFTA aims to eliminate tariffs on 90% of products over five to ten years, which is less ambitious than it sounds. Much intra-African trade is already between members of smaller free-trade areas, such as the Southern African Development Community. The rest is concentrated in a small range of goods. Peter Draper of Tutwa Consulting, a South African firm, notes that, by retaining tariffs on just 5% of products, African countries could in effect exclude most of their current imports from liberalisation.

A study by the United Nations Economic Commission for Africa estimates that, with the CFTA, intra-African trade would be 52% higher in 2022 than it was in 2010. Since that assumes the removal of all tariffs, the actual effect will almost certainly be more modest. Research also shows that the largest gains come not from reducing tariffs, but from cutting non-tariff barriers and transport times. That will come as no surprise to drivers in the long lines of lorries queuing at a typical African border post. The World Bank estimates that it takes three-and-a-half weeks for a container of car parts to pass Congolese customs.

African countries have a mixed record on easing trade. A new one-stop border post has slashed the time taken to move cargo from Tanzania to Uganda by 90%. But even as tariffs have come down, east African countries are also erecting new non-tariff barriers, such as divergent standards for goods. Informal traders, most of them women, report harassment and extortion at borders. Meanwhile multiple deadlines have been missed on the road to the Tripartite Free-Trade Area, a separate scheme to link three regional blocs.

Free trade runs counter to political currents in many countries, including South Africa and Nigeria, where governments fear losing control over industrial policy. They also worry about losing tariff revenues, because they find other taxes hard to collect. Patience over the CFTA may be a virtue, if it gives countries more time to adjust. The technocrats are optimistic. “You create the foundation, then you can build the house,” says Prudence Sebahizi, the African Union’s chief technical adviser on the CFTA. “Even if it takes many years.”

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**Buttonwood**

## The markets believe in Goldilocks

But the bears are out there

Dec 7th 2017

ANOTHER week, another record. The repeated surge of share prices on Wall Street is getting monotonous. The Dow Jones Industrial Average has passed another milestone—24,000—and the more statistically robust S&P; 500 index is up by 17% so far this year. Emerging markets have performed even better, as have European shares in dollar terms (see chart).


Economist.com

Political worries about trade disputes, the potential for war with North Korea and the repeated upheavals in President Donald Trump's White House: all have caused only temporary setbacks to investors' confidence. No wonder the latest quarterly report of the Bank for International Settlements asked whether markets are complacent, noting that "according to traditional valuation gauges that take a long-term view, some stockmarkets did look frothy", and pointing out that "some froth was also present in corporate-credit markets".

The authors of the BIS report are not the only ones to worry that markets look expensive. The most recent survey of fund managers by Bank of America Merrill Lynch found that a net 48% of them thought equities were overvalued, a record high. Despite that, a net 49% of managers had a higher than normal allocation to stockmarkets.

How do fund managers rationalise this apparent discrepancy? First, they are more optimistic than usual about the economy, with a record number believing in a "Goldilocks scenario" of above-average growth and below-average inflation. Second, investors are even more worried about bonds, the other main asset class; a net 81% think bonds are overvalued. In short, they are piling into shares because they see no alternative.

Improving economic data have driven the most recent spurt of enthusiasm. Alan Ruskin of Deutsche Bank points out that, in the manufacturing sector, South Africa is the only country where the purchasing managers' index is below 50—the dividing line between expansion and contraction. Another boost is the expectation that America's Congress will pass a bill that will cut taxes for corporations, allowing them to pass more cash to shareholders.

Confidence was also lifted by a decent third-quarter results season, which showed that companies in the S&P; 500 managed annual earnings-per-share growth of 8.5%, according to Société Générale, a French bank. But long-term profits expectations are "ridiculously high", says BCA Research, an advisory firm, with earnings forecast to grow at 14% a year in both America and Europe. That would imply an ever-greater share of GDP going to profits, and an ever-lower share for workers. If that were to happen, support for populist parties would go through the roof.

Analysts rarely tend to forecast falls in profits. But Andrew Smithers of Smithers & Co, a consultancy, points out that the earnings per share of quoted companies have become far more volatile since 1992, compared with the volatility of profits in the national accounts. One reason for this is the much greater importance of foreign profits in the figures reported by US-quoted companies; the overseas portion rose from 18% in 1982 to 38% in 2015.

Even allowing for this, reported profits are more volatile than they used to be. Mr Smithers argues that it is in the interests of managers to present higher profits when share prices rise and to understate profits in bear markets. In the former case, higher profits will allow executives to meet targets and exercise their lucrative share options. Conversely, in a bear market, it is worth managers taking a “kitchen-sink” approach—getting all the bad news out of the way so the next set of performance targets will start from a lower base.

Share buy-backs add another factor to the equation. Companies tend to be trend-followers rather than bargain-hunters when purchasing their own shares. Since early 2005, the only two quarters when corporations have not been net buyers were the second and third quarters of 2009. That was the period when valuations were cheapest.

All this suggests that there is a risk that when the market does at last turn down, the decline will be exaggerated. Share buy-backs will stop and profits will decline sharply.

But judging when that moment comes is another matter. While the economy is improving and interest rates are low, it is hard to foresee the next downturn. As one fund manager says, investors feel like Chuck Prince, a former head of Citigroup, who was asked why the bank was still lending in mid-2007, just before the financial crisis. “As long as the music is playing, you’ve got to get up and dance,” he said.

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**Christmas Caracas**

## A full-scale Venezuelan default could push up oil prices

And it could allow fellow OPEC countries to cheat on their production cuts


Dec 7th 2017

ON NOVEMBER 30th, as oil tsars from the Organisation of the Petroleum Exporting Countries (OPEC) and Russia met in Vienna, Venezuela's former oil minister, Eulogio del Pino, once one of their number, was seized by armed guards at dawn in Caracas, and taken to jail. His arrest was not publicly acknowledged in Vienna. His replacement, Manuel Quevedo, a general in the national guard, attended OPEC and was received with the usual deference.

Also unmentioned was how Venezuela, embroiled in a massive, messy debt default, is doing plenty of OPEC's dirty work. Since November 2016, when OPEC first agreed with Russia to cut output to push up oil prices, Venezuela's has fallen by 203,000 barrels a day (b/d), to 1.86m b/d in October. That is more than twice the cut it agreed with OPEC of 95,000 b/d.

If its production continues to fall—some analysts say it could be down to

1.6m b/d in 2018—it could either drive up oil prices further or absolve some countries from the cuts they agreed to last month. “Venezuela gives OPEC and Russia wiggle room,” says Helima Croft of RBC Capital Markets.

Venezuela’s output has lurched lower since 2016 amid economic mismanagement by the government of President Nicolás Maduro. A cash crunch hit payments to the oil-service companies that work on the world’s most abundant oil reserves. Making matters worse has been the partial default on debts of the government and PDVSA, the state oil company that provides 95% of the country’s exports. PDVSA has made $9bn of payments this year, and owes $5bn in 2018.

In recent weeks the disarray has become farcical. The Maduro administration arrested more than 60 oil executives, accusing them of corruption, and replacing them with soldiers such as Mr Quevedo, who have no clue how to produce oil. In a Christmas message on December 3rd, Mr Maduro compounded the absurdity by announcing a planned cryptocurrency called the “petro”, backed by Venezuela’s oil reserves, to evade American financial sanctions. He might as well have asked people to believe in Santa Claus.

The threat to Venezuelan oil production is real enough, though. Vortexa, a firm that tracks flows of crude in real time, says shipments to America, where Venezuela provides heavy crude feedstock for its own and other refineries, plunged in the three months to November 30th. On Vortexa’s data, China has replaced America as Venezuela’s biggest export market. But it is losing patience. This week Sinopec, a state oil company, sued PDVSA over unpaid debts.

Output could plummet if the country or PDVSA fall into full-scale default. So far, the company is considered to be in default on some interest payments, though it continues to repay principal, according to rating agencies. Lee Buchheit, a debt-restructuring expert at Cleary Gottlieb, a law firm, says that so long as some cash continues to flow to bondholders, they are reluctant to use legal means to seize Venezuelan assets, as they did in Argentina. If that calculation changes, oil firms could be loth to buy Venezuelan oil.

American sanctions make things harder. Francisco Monaldi, an economist at Rice University in Texas, says Venezuela’s exclusion from American credit markets has worsened PDVSA's difficulty in paying partners and suppliers. As a result, production from fields it operates directly has fallen sharply. He says fields where it is in partnership with international oil companies have provided almost two-thirds of recent production, but are also starting to suffer.

Mr Quevedo blames PDVSA's falling output on American "sabotage", as a prelude to a coup. Adding to the ferment, Russia has backed Venezuela by refinancing some of its debts, thanks largely to Igor Sechin, boss of Rosneft, an oil giant, which has lent $5bn to PDVSA. The upside for him is that even if Venezuela's plight worsens, its oil assets will become cheaper.

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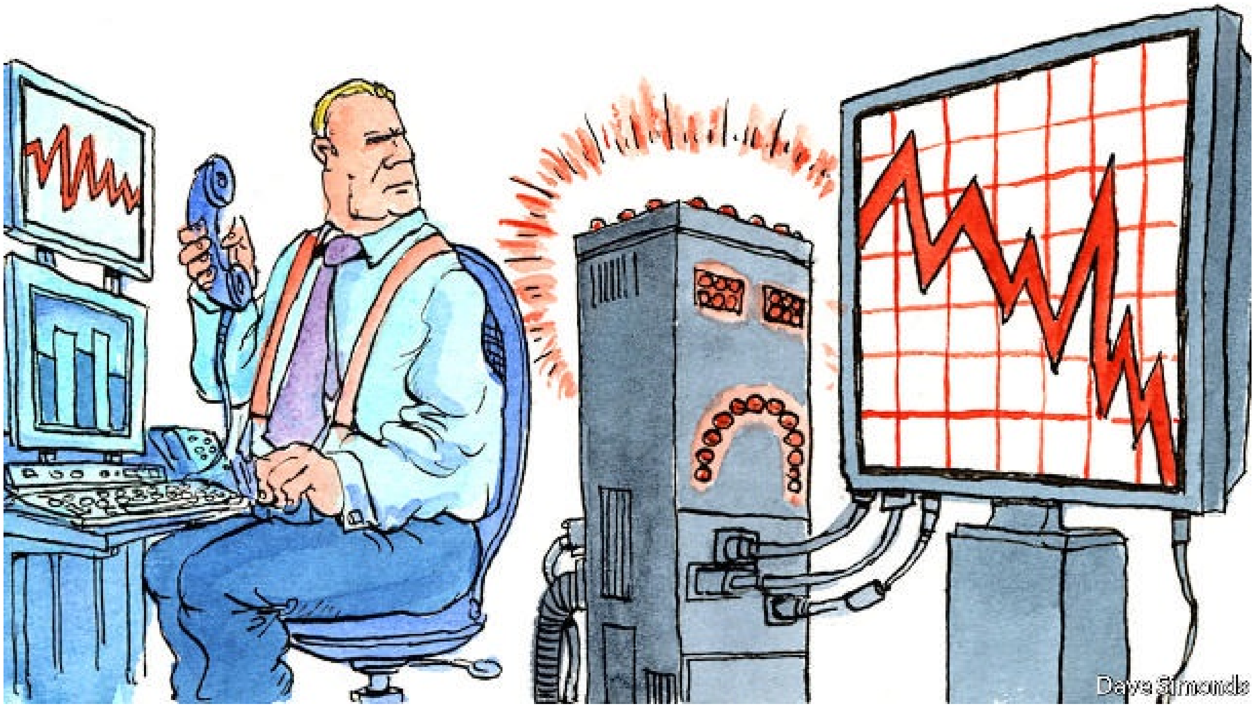
**Return on AI**

## Hedge funds embrace machine learning—up to a point

In investing, more artificial intelligence need not mean less of the human kind




Dec 9th 2017 | SAN FRANCISCO

ARTIFICIAL intelligence (AI) has already changed some activities, including parts of finance like fraud prevention, but not yet fund management and stock-picking. That seems odd: machine learning, a subset of AI that excels at finding patterns and making predictions using reams of data, looks like an ideal tool for the business. Yet well-established "quant" hedge funds in London or New York are often sniffy about its potential. In San Francisco, however, where machine learning is so much part of the furniture the term features unexplained on roadside billboards, a cluster of upstart hedge funds has sprung up in order to exploit these techniques.

These new hedgies are modest enough to concede some of their competitors' points. Babak Hodjat, co-founder of Sentient Technologies, an AI startup with a hedge-fund arm, says that, left to their own devices, machine-learning techniques are prone to “overfit”, ie, to finding peculiar patterns in the specific data they are trained on that do not hold up in the wider world. This is especially true of financial data, he says, because of their comparative paucity. Share-price time series going back decades still contain far less information than, say, the image data used to train Facebook’s facial-recognition algorithms.

The trick, then, is to take a more thoughtful approach to deploying AI. Technical prowess obviously matters; Sentient employs a couple of dozen AI experts and constantly researches new methods. But business models matter enormously, too. Sentient started out as a tiny fund a decade ago, managing only its own founders’ money. In the past three years it has expanded into other applications for AI, such as online shopping and website optimisation. Only earlier this year did it launch a hedge fund open to outside money, on which it hopes to apply the insights gleaned elsewhere in its investment arm.

Another San Francisco hedge fund that draws on an even wider pool of expertise, by virtue of its unusual business model, is Numerai, a firm founded in 2015 that launched its first fund this autumn. It starts by taking financial data and then encrypts them so that they are unrecognisable. Its chief operating officer, Matthew Boyd, says this turns them into a “pure math problem”. The idea is that this avoids biases creeping into models—and appeals to Valley types better than the grubby business of picking securities.

It then runs two-stage competitions for machine-learning algorithms that perform best on the data. Some 1,200 data scientists now take part weekly, competing for virtual prizes (in the fund’s own cryptocurrency) in the first round and cash prizes in the second. That structure seeks to encourage algorithms that do well at picking winners over time. The firm takes the results of the best algorithms, decrypts these results back into financial data, and uses the insights to decide which shares to trade. The fund owes at least as much to crowdsourcing, then, as it does to harnessing AI.

One hedge fund that does tout its machine-dependent model, despite naming itself after the human brain, is Cerebellum Capital. Founded as an arbitrage fund in 2008, it started work on a fully AI-run American equity fund in 2016, and launched it in April this year. The fund uses machine learning not just to crunch data and come up with strategies. The classification system that gauges the relative merits of these strategies is itself run by machine learning. But humans do the actual trading, following the algorithm's instructions.

However they perform in the long term, therefore, one feature of these new AI funds is already clear. At least in investing, more artificial intelligence does not necessarily mean less of the human kind.

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**Pill magic**

# Contraception does even more good in poor countries than thought

A study shows that its availability raises female school attendance


Dec 7th 2017

FEW tasks in developing countries are as tricky—or as important—as convincing parents to keep their daughters in school longer. One way of doing so is to make contraceptives available, concludes a new working paper by Kimberly Singer Babiarz at Stanford University and four other researchers.

Conducted in Malaysia, the study used a happy coincidence of surveys going back decades and family-planning programmes rolled out in a way that made it possible to measure their effect. Starting in the 1960s, these programmes were introduced in some areas a few years earlier than in others. So researchers could compare what happened to girls in areas where contraceptives became available when they were very young with girls from the same cohorts in areas with no contraceptives.

The girls in places with contraceptives stayed in school six months longer, or about a year longer if they were born after the programmes began. Similar effects have been seen in developing countries that have specifically aimed to increase school attendance. But no big changes in school policies accompanied the family-planning programmes. Nor was the extra schooling because these girls had fewer younger siblings. So the boost in school attendance seems linked to the availability of contraception—for some reason it may have made parents see the benefits of education.

They are considerable. When these girls reached adulthood, their jobs were much more likely to be paid than those of women who grew up in other areas. They were also more likely to have taken their elderly parents in, but not their in-laws—a sign that they probably had a greater say over family decisions.

All in all, the study suggests that the benefits of contraceptives in poor countries may be larger than thought. A lesson for policy wonks is that it pays to cast a wide net for side-effects when trying to work out whether something works.

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**From caches to ashes**

# Marijuana businesses, excluded from finance, are forced to use cash

The cash they must work with is vulnerable to crooks, cops and even combustion


Dec 6th 2017

MANY marijuana growers in northern California, America's biggest source of the stuff, had expected this autumn's harvest to be the largest ever. After all, recreational marijuana becomes legal in the state in January. Instead, wildfires in October—spreading so fast they killed 43 people—burned up half the marijuana growing in the area's tri-county "Emerald Triangle" alone and new fires now raging will claim more. Some reckon the fires set a record not just for burnt pot, but also for the value of banknotes turned to ash.

Although 29 American states allow sales of marijuana for medical use (or medical and recreational use), federal law still classifies it as a "schedule 1" drug like heroin. Firms handling marijuana proceeds can be prosecuted for moneylaundering. Ned Fussell of CannaCraft, a maker of marijuana products, says that a few firms open a bank account under an alternative identity. But banks almost always find out. So cannabis businesses operate almost exclusively in cash. Many pot farmers fled the fires without their banknotes.

Chiah Rodriques of Mendocino Generations, a cannabis-genetics consultancy, knows two dozen people who lost a hoard. One burnt cabinet had held $250,000. Cheryl Dumont, from a Mendocino County cannabis co-operative, says that of about 20 stashes buried by members or neighbours, only one was deep enough to survive. The gold and silver she had interred melted into a dirt-infused blob.

Combustion is not the only risk. The cash is also a magnet for robbers. And Fred Timpner, head of the Michigan Association of Police, worries that untraceable cash is "ripe for public corruption". Holders are tempted to bribe city, county and state authorities for lucrative permits.

Insurance is another problem. Growers cannot buy federal crop insurance, and most private insurers shun the market for fear of penalties. CannaCraft's ruined crop was worth $2.5m. Some insurers now cover cannabis grown indoors, but premiums are high, says Patrick McManamon of one of them, Cannasure, of Ohio. It has been kicked out of at least five banks—"I kind of lose track," he says.

California's Treasury hopes to tax marijuana sales, predicted to be worth nearly $7bn next year. In November, a working group it convened to look at how to collect it securely advised state agencies to hire armoured couriers. It also recommended opening a state bank for pot money.

That is unlikely. A bid by Colorado to legalise marijuana banking is bogged down in court. Moreover, police have an incentive to keep pot money unbankable. Remarkably, forfeiture laws let police departments seize cash and pocket much of it if they suspect it includes proceeds from crime. No crime need even be charged.

In theory, cryptocurrencies such as bitcoin should be safer from cops, crooks and combustion. On February 28th trading will begin for a new digital currency called PerksCoin. By next summer roughly 5,000 pot dispensaries in America and Canada will accept PerksCoin payment by smartphone, says Daniel Cheine of CannaSOS, the Toronto firm behind it. By then, a rise or fall in PerksCoin's initial unit value of 80 cents should hint at whether cryptocurrencies are indeed how pot-growers will stop their money going up in smoke.

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**Laying down the law**

## Europe is seeing more collective lawsuits from shareholders

A change in American practice and a proliferation of financing sources help explain why


Dec 7th 2017

LIKE the ghosts that haunted Ebenezer Scrooge, the scandals of years past—summoned up by angry shareholders—will not let companies rest. In Britain this year, the Royal Bank of Scotland (RBS) paid £900m ($1.2bn) to settle a long-running investor lawsuit related to the bank's behaviour at the time of the financial crisis of 2007-08. Also in Britain, Lloyds Banking Group faces litigation. And it is not just banks. Investors in Britain sued Tesco, a supermarket chain, for losses caused by an accounting scandal in 2014. In Germany and the Netherlands investors are seeking compensation from Volkswagen (VW), a carmaker, for failing to disclose its manipulation of diesel-emissions tests.

Securities litigation is on the rise in Europe for two main reasons. The first is that America is less hospitable than it was to such cases. Until 2010 harm suffered by foreign investors could be included in American lawsuits. That changed with a Supreme Court ruling on *Morrison v National Australia Bank*, which held that the losses of so-called "f-cubed" plaintiffs—foreign investors who bought shares in a foreign company on foreign exchanges—would have to be excluded.

Once, all the shareholder litigation against VW would have taken place in America, says Jay Eisenhofer of Grant & Eisenhofer, an American law firm. The *Morrison* ruling, however, meant that the current American class-action suit has largely been limited to municipal pension funds that held VW's American depository receipts (a proxy for its shares).

The second reason for the increased popularity of Europe as a venue for litigation is a proliferation of financing options. In Europe, claimants must shoulder legal costs for both sides if they lose. These can be astronomical: RBS is said to have spent £100m on its shareholder lawsuit, which was settled before it even went to trial.

Financing from litigation-funding specialists is an increasingly common way to cover the costs of a lawsuit. According to research by RPC, a London law firm, the 20 largest funders ploughed £723m into British lawsuits in 2016, up from £437m in 2011. Both the action in Germany against VW and the British Tesco lawsuit are being financed by Innsworth, a funding specialist, backed by an American hedge fund. Another option is to buy insurance against the risk of adverse costs. Premiums can either be paid upfront (often by funders) or be contingent on a successful settlement.

Funders and specialist law firms often act as co-ordinators for suits brought by investors. That is important in countries such as Britain and Germany, where collective cases generally require investors to opt in to legal action. The American system, in contrast, binds all potential claimants unless they explicitly opt out.

That is one reason why the Netherlands has become something of a magnet in Europe for disgruntled investors. Since 2005, it has allowed collective settlements on an opt-out basis. A common model is for shareholders, including foreign institutions, to be represented by a foundation which sues the company on their behalf in return for a share of any settlement. Such arrangements won payouts of $353m from Shell in 2007, following a write-down of its oil reserves. But for cases involving foreign companies the Netherlands may have little to offer. A case against BP after the Deepwater Horizon spill was thrown out in 2016. An investor case against VW might fail the jurisdiction test, too.

Practical obstacles to taking action remain, says Harry Edwards, a partner at Herbert Smith Freehills, a London law firm. Outside the Netherlands, opt-in systems mean investor interest has to be drummed up. Adverse-cost insurance and funding may be available, but the litigation will secure backing only if the expected returns are high enough. And in continental Europe, unlike Britain and America, plaintiffs cannot force companies to disclose all relevant facts—so cases are harder to win. Nor in Europe is there access to trials by jury. This may favour companies, which see such trials as unpredictable, and sometimes settle cases to avoid them. Despite the rise in litigation, it is hardly open season in Europe for nuisance claims from disgruntled shareholders.

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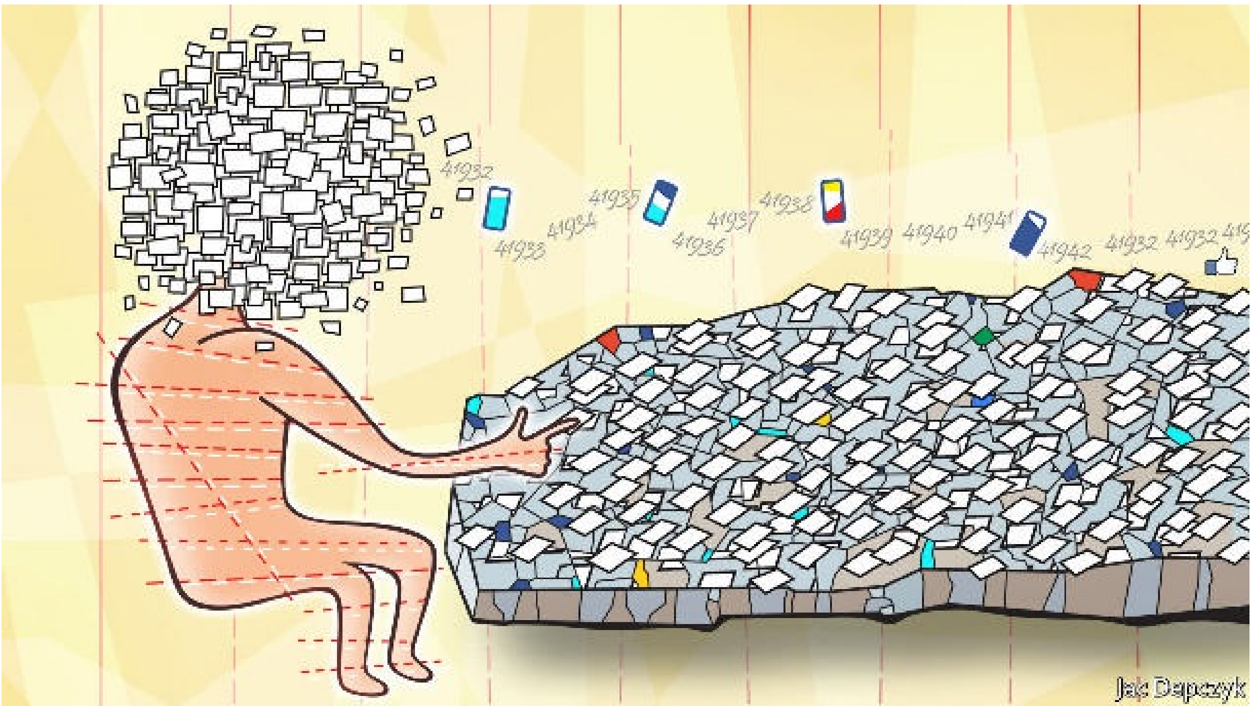
**Free exchange**

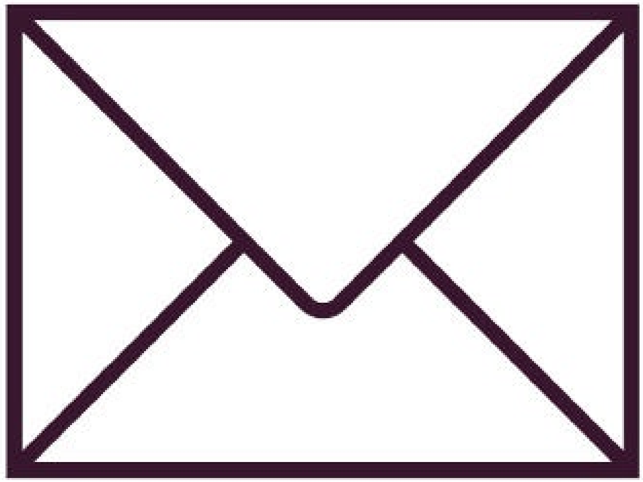
## Are digital distractions harming labour productivity?

The evidence is mixed; it seems clear, however, that they are making us unhappier




Dec 7th 2017

FOR many it is a reflex as unconscious as breathing. Hit a stumbling-block during an important task (like, say, writing a column)? The hand reaches for the phone and opens the social network of choice. A blur of time passes, and half an hour or more of what ought to have been productive effort is gone. A feeling of regret is quickly displaced by the urge to see what has happened on Twitter in the past 15 seconds. Some time after the deadline, the editor asks when exactly to expect the promised copy. Distraction is a constant these days; supplying it is the business model of some of the world's most powerful firms. As economists search for explanations for sagging productivity, some are asking whether the inability to focus for longer than a minute is to blame.



**This column will resume after you have returned from checking your notifications**

The technological onslaught has been a long time building. Bosses no doubt found the knock of the telegraph boy or the clack of the ticker-tape machine an abominable interruption. Fixed-line desk phones were an intrusion in their day, before the mobile phone brought work interruptions into the home. But the web is different, with its unending news cycle, social networks humming with constant conversation, and news feeds algorithmically structured to keep users scrolling and sharing. The louder the din, the greater the distraction—and the harder to tune it out for fear of missing important information.

Distractions clearly affect performance on the job. In a recent essay, Dan Nixon of the Bank of England pointed to a mass of compelling evidence that they could also be eating into productivity growth. Depending on the study you pick, smartphone-users touch their device somewhere between twice a minute to once every seven minutes. Conducting tasks while receiving e-mails and phone calls reduces a worker’s IQ by about ten points relative to working in uninterrupted quiet. That is equivalent to losing a night’s sleep, and twice as debilitating as using marijuana. By one estimate, it takes nearly half an hour to recover focus fully for the task at hand after an interruption.

What’s more, Mr Nixon notes, constant interruptions accustom workers to distraction, teaching them, in effect, to lose focus and seek diversions.

Could this explain the rich world’s productivity slowdown? In a paper published in 2007, Sinan Aral and Erik Brynjolfsson, of the Massachusetts Institute of Technology, and Marshall Van Alstyne, of Boston University, analysed firms’ use of information technology and its effects on labour productivity and revenue growth. They found an inverted U-shape pattern associated with multitasking and productivity. An initial increase in multitasking from the increased use of IT seems to raise productivity. But later, the accumulation of balls to be juggled reduces performance and increases the incidence of error.

IT does help workers in all sorts of ways. It speeds communication and allows documents to be shared remotely. The web makes finding information far simpler and quicker than it was in a world of paper archives. Productivity surged in the late 1990s and early 2000s as e-mail, digital databases and the web spread. The benefits technology brought, at that time, seemed to outweigh the cost of distraction. Since the mid-2000s, however, productivity growth has tumbled, perhaps because the burden of distraction has crossed some critical threshold.

But this is surely not the whole story. Performance across industries does not fit very well with the idea that distraction is the main cause of weak productivity. Over the past decade, labour-productivity growth in both manufacturing and construction has been particularly disappointing—and the problem can hardly be desk jockeys frittering away time on Pinterest.

Weak productivity is also a consequence of the reallocation of workers from industries with relatively high rates of growth to more stagnant ones. In America health care and education, where labour productivity is persistently low, account for more than half of total employment growth since 2000.

How then to reconcile evidence of the toll taken by new technologies with the difficulty in detecting a productivity cost? One possibility is that firms have not been as strenuous as might be expected in maximising output per worker. Employment does not fall much in response to minimum-wage rises because output per worker goes up. That is partly because workers try harder and partly because firms, faced with a new cost, focus more on tracking worker performance. Similarly, productivity leapt in the immediate aftermath of the financial crisis, and not because firms laid off less productive workers. Rather, workers appear to have upped their game to convince bosses not to sack them. After a decade of low wages and high profits, firms may be feeling complacent. That, and their consequent failure to invest, may be a better explanation of weak productivity than workers' distraction.

### Tweet dreams are made of this

Whether or not brains fried by constant interruption are slowing growth, the digital deluge takes a toll. Mr Nixon reckons that distracted workers become less empathetic, a serious side-effect in an economy where human connections with customers are cast as a defence against automation. Distraction also appears to reduce reported happiness, and that effect may be magnified if it means that fewer tasks are completed to the workers' satisfaction—or if the source of the distraction is another distressing news alert. So this is yet another reason to yearn for a truly tight labour market: when firms cannot spare an idle moment they might get serious about trimming productivity-sapping intrusions from the workplace, to everyone's benefit. Right, time for a tweet.

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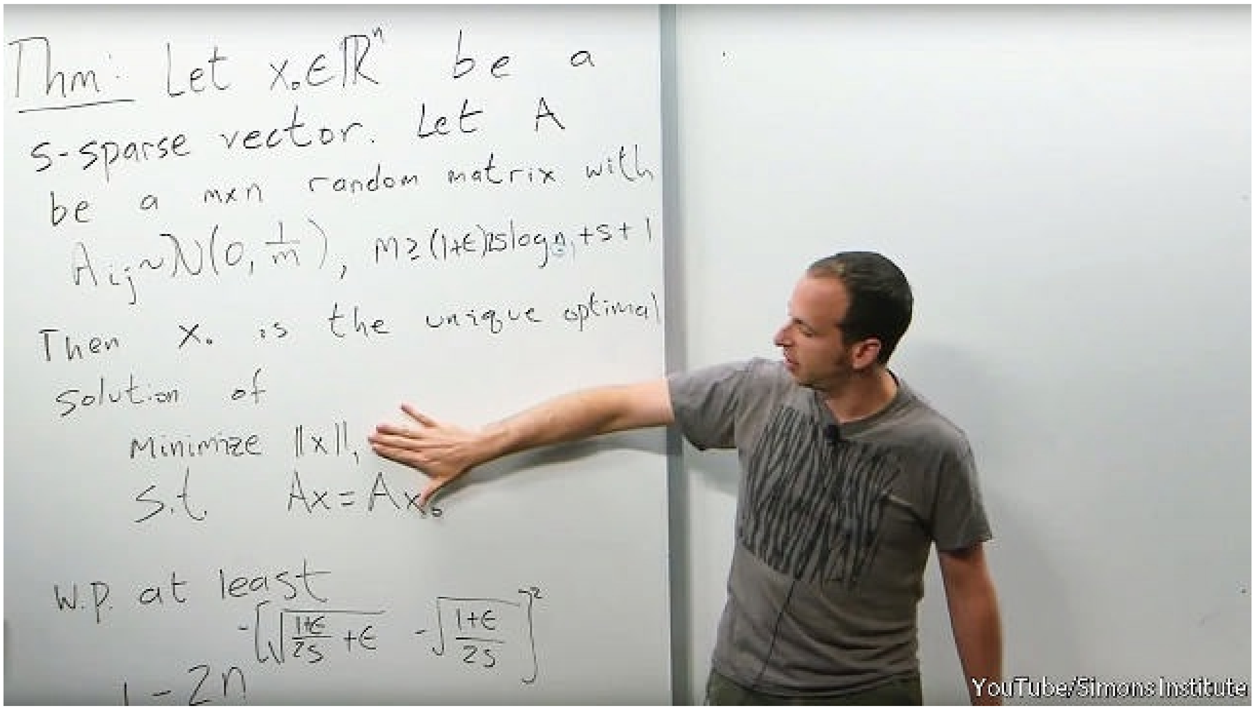
# Science and technology

**Algorithm is gonna get you**

## All the buzz at AI’s big shindig

Machine learning’s big event




Dec 6th 2017 | LONG BEACH, CALIFORNIA

“CORPORATE conferences still suck.” So read the T-shirt sported by Ben Recht, a professor at the University of California, Berkeley, as he collected an award at the Neural Information Processing Systems (NIPS) conference this week. Dr Recht, pictured above in lecture mode, was protesting against the flood of corporate money pouring into NIPS, aping the words Kurt Cobain wrote on a T-shirt when he appeared on the cover of *Rolling Stone* in 1992.

“It’s not an academic conference anymore,” Dr Recht says wistfully, perched in the Californian sun on the steps of the Long Beach Convention Centre. He complains that folk would rather go to corporate-sponsored parties these days (Intel’s featured Flo Rida, a rapper), than poster sessions. AI, it seems, is the new rock and roll.

NIPS began in 1987 as a humble little conference on an obscure branch of machine learning called neural networks. It spent the first 13 years of its life in Denver, then moved to Vancouver for a decade. It used to be a quiet affair, with a few hundred mathy computer scientists coming together to explain how they had solved some abstract problem in a new way.

Then, at the 2003 conference, Geoffrey Hinton, a British polymath, and a cabal of AI researchers founded the Neural Computation & Adaptive Perception (NCAP) working group. As a proponent of neural networks, Dr Hinton and the group helped accelerate the pace of research into a form of machine learning known as deep learning, leading to huge advances in image recognition in 2012. Deep learning, which stacks many neural networks on top of one another to learn the features of giant databases, now powers the image-processing operations of firms like Facebook and Google. As machines, trained with heaps of data to develop clever algorithms, have become capable of carrying out more and more tasks, so interest has grown. Google was sponsoring NIPS by 2010, and this year all of the world's largest tech firms could be found on the sponsor sheet.

For the 7,850 attendees, the big draw is the algorithms presented in halls heaving with mostly male bodies (90% of the authors of NIPS papers were male this year, a gender imbalance widely found in science - see article). They hang on every word of AI wisdom imparted by luminaries from Google and Microsoft; pore over a dizzying number of advances (laid out in more than 670 published papers) from the likes of Facebook, DeepMind (a unit of Google) and Tencent; and devour stories of novel ways to train machines to perform useful tasks.

Those stories come not just from the big names of technology, but also from more old-fangled companies, such as Target, a bricks-and-mortar American retailer. Brian Copeland, one of the firm's data scientists in Minneapolis, says he is trying to apply machine-vision algorithms to the video feeds from the cameras in Target's stores. Retailers employ behavioural experts to watch such videos so they can work out how people use their stores and where to place goods to the best advantage. With the right algorithms, Target could automate the process and run it in real time.

Many firms were also putting on a show as part of the battle for AI talent.

They included Mercedes-Benz, a first-time sponsor, which is trying to recruit data scientists to work on its autonomous cars. The German producer is already some way down the road, with Rigel Smiroldo, the firm's machine-learning boss in North America, happy to recite how the E-class Mercedes he drove to NIPS handled 250 miles of highway driving without him needing to intervene.

**Yes, no and now, maybe**

Mr Smiroldo does put his finger on one of the main trends at this year's NIPS: the merging of Bayesian statistics with deep learning. Instead of algorithms presenting deterministic "yes" or "no" results to queries, new systems are able to offer up more probabilistic inferences about the world. This is particularly useful for Mercedes-Benz, which needs driverless cars that can handle tricky situations. Instead of an algorithm simply determining if an object in the road is a pedestrian or a plastic bag, a system using Bayesian learning offers a more nuanced view that will allow AI systems to handle uncertainty better.

Netflix already uses data science to recommend shows to its subscribers. Nirmal Govind, who develops algorithms at the firm, was on the lookout at NIPS for new, improved versions that can handle imagery and video. The firm is particularly interested in automating the generation of promotional material around its original shows and finding ways to make that material more engaging.

Besides fundamental algorithms which firms hope to apply to their own operations, NIPS is also home to applied research, particularly in health care and biology. Becks Simpson from Maxwell MRI, a startup from Brisbane in Australia, showed a way to combine magnetic resonance imaging with deep learning to improve the diagnosis of prostate cancer. Elisabeth Rumetshofer from Johannes Kepler University Linz presented a system that could automatically recognise and track proteins in cells, helping to illuminate the underlying biology. A team from Duke University in North Carolina had used machine learning to detect cervical cancer automatically using a pocket colposcope, to the same level of accuracy as a human expert. Some used AI to mine doctors' notes to estimate the chances that a patient will be readmitted to hospital, to categorise and understand the allergic reactions of children and to model the geographic distribution of naloxone, which can help block the effects of opioids, in order to get a better grip on the use of such drugs.

Other applications ranged from researchers at the Federal University Lokoja in Nigeria trying to use machine learning to identify potential child suicide bombers to the Donders Institute in the Netherlands presenting a system that can reconstruct pictures of faces that a person sees simply by scanning their brains. Google researchers used machine learning to hide a complete image inside another picture of the same size. What they might do with that remains to be seen.

New hardware for machine learning was on display, too. At its party Intel unveiled its latest chip dedicated to solving AI problems. NVIDIA, a chipmaking rival whose share price has increased ninefold in the past three years thanks to sales of its graphical-processing units for deep learning, displayed its latest wares. Graphcore, a British startup, caused particular waves. It presented benchmarks for its chip's performance on common machine-learning tasks that tripled speeds for image recognition and delivered a claimed 200 times improvement over NVIDIA for the kinds of machine learning required for speech-recognition and translation applications.

Among older hands at NIPS, especially those who can remember its origins, there is a sense that the corporate obsession with machine learning will not last. They should not be so sure. The systems being developed are just beginning to be a broadly useful technology, and new algorithms presented at the conference are likely to be adopted rapidly. Powerful computers and large volumes of data lie waiting for exploitation. The world's most valuable companies have grasped the power of machine learning, and they are unlikely to let go.

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**Clean-up mussel**

## A nasty-tasting shellfish could be just the job for cleaning rivers

Filtering out the pollutants


Dec 7th 2017

SHELLFISH thrive in waters rich in nutrients. These include the nitrogen used in fertiliser, which passes from the land into rivers and then into the sea. The shellfish grow, as do the profits of those who harvest them. The problem comes when discharges into the sea are tainted with more noxious material, such as bacteria that pose a threat to human health. Once the bugs are in the shellfish, they can be passed on to anyone who eats them.

This problem—and another, of excess nitrogen that can cause poisonous algal blooms—might be mitigated by shellfish that people don't eat, reckon Eve Galimany and Julie Rose at the National Oceanic and Atmospheric Administration at Milford Laboratory in Connecticut. As they report in *Environmental Science & Technology*, their chosen candidate for the job is the ribbed mussel, more formally known as *Geukensia demissa*.

The ribbed mussel is edible, but it tastes terrible and so has no commercial value. This means growing the mussels in tainted waters is unlikely to tempt anyone into harvesting them. Previous studies have shown that the ribbed mussel is both hardy and adept at collecting a range of troublesome materials from its environment. Dr Galimany and Dr Rose thought it would be ideal to help clean up the Bronx River Estuary in New York. With an industrial waterfront and wastewater run-offs from a dense urban environment, the estuary has a long history of suffering from harmful bacteria and high levels of nitrogen.

With a group of colleagues they moored a six-square-metre commercial mussel-growing raft in the estuary and populated it with ribbed mussels. They closely monitored the health of the mussels over six months and, using a flow-through device, also analysed the chemistry of the water both before and after the mussels had done their filtering. The results were impressive.

The researchers found that not only did the mussels thrive in the polluted waters of the Bronx River Estuary, but they also collected a lot of pollutants. More specifically, a fully stocked raft of mussels cleared an average of 12m litres of water daily, removing 160 kilograms of particulate matter, of which 12 kilograms was absorbed by the mussels' digestive systems and integrated into their bodies. The remainder was excreted as waste, which drops down and is ultimately buried in the river sediment. The material filtered out by the mussels included nitrogen, bacteria, relatively harmless trace metals like aluminium, copper and iron, as well as toxic metals like mercury, lead and arsenic. Five groups of organic contaminants, including the insecticides chlordane and DDT, also ended up accumulating in the mussels.

Based upon these numbers, the team estimates an annual harvest of a single raft of mussels would remove more than 62 kilograms of nitrogen waste alone by sequestering it into the tissues and shells of the animals. But what can be done with the mussels once harvested? The researchers hope they can be treated and recycled instead of ending up in landfill. Provided the levels of contaminants are not too high, the mussels could be used as animal feed or fertiliser. What they will not do, though, is end up on someone's plate.

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just-job/print

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**Gender in academia**

# Women ask fewer questions than men at seminars

There is an easy fix

Dec 7th 2017


Economist.com

ONE theory to explain the low share of women in senior academic jobs is that they have less self-confidence than men. This hypothesis is supported by data in a new working paper, by a team of researchers from five universities in America and Europe. In this study, observers counted the attendees, and the questions they asked, at 247 departmental talks and seminars in biology, psychology and philosophy that took place at 35 universities in ten countries. On average, half of each seminar's audience was female. Men, however, were over 2.5 times more likely to pose questions to the speakers—an action that may be viewed (rightly or wrongly) as a sign of greater competence.

This male skew in question-asking was observable, however, only in those seminars in which a man asked the first question. When a woman did so, the gender split in question-asking was, on average, proportional to that of the audience. Simply handing the microphone to a woman rather than a man when the floor is opened for questions may make a difference, however small, to one of academia's most intractable problems.

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A genome in the hand

# Taking DNA sequencing into the field

With small, portable devices that plug into laptops


Dec 7th 2017

DEVICES for analysing DNA used to be big, clunky and not very good. Hundreds were required for the initial sequencing of the human genome, a project that started in the late 1990s and took over a decade to complete at a cost of at least $500m. Since then, sequencing a human genome has become a routine process; prices have fallen to below $1,000. Although the machines that do the job have got better and more compact, they still cost several hundred thousand dollars. Various groups are trying to make them smaller and cheaper.

The first device small enough to put in your pocket is already on the market. It comes from Oxford Nanopore, a maker of DNA-sequencing equipment based in the eponymous English city. It is about the size of a chunky mobile phone. Although the machine is swathed in patents, other miniature devices are bound to follow in time.

The MinION, as the device is called, is first plugged into a laptop. It works by sucking strands of DNA through a "flow cell", made up of an array of tiny holes that are just a few nanometres (billionths of a metre) in diameter. The way that electricity flows across the surface of such a hole changes, depending upon the shape of the molecule passing through it. As strands of DNA are composed of four types of sub-unit, called bases, which have different shapes, nanopore sequencing permits the order of these bases to be determined—and with it the message carried by a gene.

Nanopore's device is not a direct competitor to the bigger, more complex machines able to deliver the high levels of accuracy demanded by busy laboratories. Rather, the MinION is designed to take gene-sequencing out into the field. The device itself costs $1,000 and the flow-cell cartridges it uses, each of which lasts a few months, cost around $500 if purchased in bulk. So far, MinIONs have been used to sequence the DNA of microbes scraped out of the snow in Antarctica, swabbed off glaciers in Svalbard or sucked out of stagnant ponds in the bowels of disused coalmines in Wales. The technology was also employed to profile the virus behind an outbreak of Ebola in west Africa in 2015.

It is not, though, as simple as popping a sample in one end and getting the answer. To provide a truly portable gene-sequencing device, it is necessary to miniaturise and automate the preparation of samples. To extract DNA, biological samples must have their cells broken open, a process called lysing. The extracted DNA needs to be of sufficient purity that the readings are not contaminated. This is a tricky task, and one that requires some biochemical training and often the use of centrifuges and expensive reagents. Although the firm is keeping the details close to its chest, Oxford Nanopore is working on a small device called Zumbador, which it claims will be able to prep samples automatically.

For now, many users are happy to prepare samples themselves, often because by using a MinION they do not have to wait for a laboratory to send back results. Mars, a large food company, is testing the device on production lines in China, looking for particular bacterial pathogens such as *Salmonella* and *E. coli*. It already scrutinises its equipment and products closely for such contamination, but according to Robert Baker, who is in charge of food safety at the firm, the current arrangements can take days or weeks to return results. His hope is that once automated preparation is available, real-time monitoring will be able to spot problems almost instantly. It will also extend the range of bugs that can be detected; current tests are for specific pathogens, whereas sequencing can identify whatever bug might turn up. Early results, says Mr Baker, are promising.

The provenance of food is also a good candidate for genomic investigation. Following a scandal in some British supermarkets, in which meat marked as beef was found to contain material from horses, there is demand for tests that can verify the origin and species of meat products. Cranswick, a British supplier of cooked meats, is working in partnership with the University of Warwick on the use of the hand-held sequencers to analyse samples of DNA extracted from packaged meat and confirm the species from which it hails.

The benefits of on-the-spot sequencing may be greater still in the developing world. Agricultural researchers in Tanzania and Uganda plan to use Oxford Nanopore's devices to help identify the viruses that plague cassava crops. Some 550m people, most of them African, rely on cassava as a staple, but scourges such as brown streak virus, spread by whitefly, can reduce yields by a factor of 40. Both the Mikocheni Agricultural Research Institute (MARI) in Dar es Salaam and the National Crops Resources Research Institute in Kampala already gather samples, in an effort to identify the strains of virus and to help farmers plant resistant crops. But these have to be sent abroad to laboratories in Australia, South Korea or Switzerland for sequencing—a process that can take months. In a pilot project in September, Laura Boykin, an agronomist at the University of Western Australia, and Joseph Ndunguru, MARI's director, used hand-held sequencers to return strain data to farmers within 48 hours.

As portable sequencing devices get even faster and more accurate, Clive Brown, Oxford Nanopore's chief technology officer, raises the prospect of a device that anyone can use to understand the genomic profile of the world around them. The user will merely touch the device to something, whether it is blood, spit or a supermarket chicken, and get a genomic profile in return. Gene sequencing used to be the work of years; soon enough it may be ubiquitous and quotidian.

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# Books and arts

**Wise words**

## Books of the Year 2017

The best books of 2017 are about music, nicotine and the tsunami in Japan


Dec 9th 2017

### Politics and current affairs

**The Retreat of Western Liberalism.** *By Edward Luce. Grove Atlantic; 234 pages; $24. Little Brown; £16.99*
Few doubt that something big has happened in Western politics over the past two years, but nobody is sure what. Turmoil in Washington and London contrasts with centrist stability in Paris and (mostly) in Berlin. In this grim diagnosis Edward Luce, a Washington-based commentator, argues that the liberal order cannot be fixed without a clear view of what has gone wrong.

**Refuge: Transforming a Broken Refugee System.** *By Alexander Betts and Paul Collier. Oxford University Press; 288 pages; $18.95. Allen Lane; £20*
Lost in the row over Europe's migration crisis in 2015 were the millions of refugees who stayed in the developing world, unwilling or unable to journey

to richer countries. Growing up in a refugee camp often means little education and no work. Two experts at Oxford University present the first comprehensive attempt in years to rethink from first principles a system that has long been hidebound by hand-wringing and old ideas.

**The Road to Somewhere: The Populist Revolt and the Future of Politics.** *By David Goodhart. Hurst; 278 pages; $24.95 and £20*
"Somewheres", David Goodhart writes, are rooted, socially conservative and suspicious of the constant churn. By contrast, "Anywheres" are cosmopolitan, socially liberal, internationalist and comfortable with change. In creating a new political taxonomy, the British journalist and founder of *Prospect* magazine provides a useful way to think about new cleavages in Britain and elsewhere in the West. Its influence is visible everywhere.

**Ghosts of the Tsunami: Death and Life in Japan's Disaster Zone.** *By Richard Lloyd Parry. Farrar, Straus and Giroux; 276 pages; $27. Jonathan Cape; £16.99*
Of the 18,500 people who perished in the Japanese tsunami in 2011, 75 were children who died at school. But a single school accounted for 74 of those deaths. This mesmerising account of the 120-foot-high wave and its aftermath, by the Asia editor and Tokyo bureau chief of the *Times*, explores the uncharacteristicly fierce reaction of the dead children's parents to official evasion. In the process it tells you more about Japan than any conventional history. The finest work of narrative non-fiction to be published this year.

## Biography and memoir

**Grant.** *By Ron Chernow. Penguin Press; 1,104 pages; $40. Head of Zeus; £30*
The historian who inspired "Hamilton", Lin-Manuel Miranda's hit musical, argues that America's most improbable president has been badly misunderstood. Instead of being seen as the overlord of a corrupt administration (though it never touched him personally), he should be lauded for the integration of the union after the civil war and his insistence on naming blacks, Jews and native Americans to federal positions.

**The Undoing Project: A Friendship that Changed Our Minds.** *By Michael Lewis. W.W. Norton; 362 pages; $28.95. Allen Lane; £25*

A fascinating intellectual biography of the Israeli psychologists Daniel Kahneman and Amos Tversky, two very different men whose work at the intersection of psychology and economics grows more influential by the year.

**Ali: A Life.** *By Jonathan Eig. Houghton Mifflin Harcourt; 630 pages; $30. Simon & Schuster; £25*
Muhammad Ali often claimed to be the greatest boxer of all time, and he was right. Only a handful of athletes reach the pinnacle of their discipline; he was the only one who threw it all away to do what was unpopular but principled. A fine account of why, when Ali died, he was remembered not only as boxing's most decorated and enthralling heavyweight, but also for his refusal to serve in the Vietnam war as a rebellion against white supremacy.

**The Dawn Watch: Joseph Conrad in a Global World.** *By Maya Jasanoff. Penguin Press; 400 pages; $30. William Collins; £25*
Brought up speaking Polish and French, Jozef Teodor Konrad Korzeniowski did not learn English until he was 21. But as Joseph Conrad he became one of the finest English writers. "Heart of Darkness" is his most famous book. More important, as Maya Jasanoff shows so well, he was the first novelist of globalisation.

**Chief Engineer: Washington Roebling, the Man Who Built the Brooklyn Bridge.** *By Erica Wagner. Bloomsbury; 365 pages; $28 and £25*
A biography about connections and disconnections—about the man who built what, at the time of its opening, was the longest suspension bridge in the world. Roebling also fought all his life to emerge from the shadow of a cold and domineering father. A masterful psychological study about duty and drive.

**Toscanini.** *By Harvey Sachs. W.W. Norton; 944 pages; $39.95 and £29.99*
Drawing on a wide range of new evidence, including unknown letters and the archives of many of the opera houses that Arturo Toscanini worked with, including La Scala, Harvey Sachs has written a weighty and highly enjoyable account of one of the greatest conductors, a man still renowned for his pursuit of perfection.

**Anthony Powell: Dancing to the Music of Time.** *By Hilary Spurling. Hamish Hamilton; 528 pages; £25*

Anthony Powell came from a brilliant generation of English writers, including George Orwell, Evelyn Waugh and Graham Greene—yet he may now be the least read of them all. Hilary Spurling's long-awaited life of one of Britain's most perceptive novelists of class, best known for the 12-volume "Dance to the Music of Time", is an exemplary literary biography. On virtually every page it is colourful, funny and pointedly aphoristic.

**The Hate Race: A Memoir.** *By Maxine Beneba Clarke. Corsair; 261 pages; £18.99*
The child of Jamaican/Guyanese parents who left Britain for Australia writes the book she wished she had been able to read when she was growing up in the Sydney suburbs, where "racism was as common as cornflakes". A bestseller when it first came out in Australia, it deserves to be more widely read.

**Fall Down 7 Times Get Up 8.** *By Naoki Higashida. Random House; 206 pages; $27. Sceptre; £14.99*
An unorthodox guide by a young Japanese man, who at 13 wrote a heartfelt account of how it feels like to be autistic. David Mitchell, an English novelist, and his wife, Keiko Yoshida, translated the text for their autistic son's carers and helped get the book published in over 30 languages, making Mr Higashida probably the most widely read Japanese author after the master-novelist, Haruki Murakami.

**History**

**Red Famine: Stalin's War on Ukraine.** *By Anne Applebaum. Doubleday; 496 pages; $35. Allen Lane; £25*
A meticulously researched analysis proving that the famine in Soviet Ukraine in the 1930s was part of a deliberate campaign by Josef Stalin and the Bolshevik leadership to crush Ukrainian political aspirations by starving the actual or potential nationalists into submission to the Soviet order.

**The Internationalists: How a Radical Plan to Outlaw War Remade the World.** *By Oona Hathaway and Scott Shapiro. Simon & Schuster; 608 pages; $30. Allen Lane; £30*
The post-war liberal order was underpinned by a movement to make the waging of aggressive war illegal. Two American academics argue that this principle is now seriously under threat.

**The Unwomanly Face of War.** *By Svetlana Alexievich. Random House; 384 pages; $30. Penguin Modern Classics; £12.99*
An oral history, first published in 1985 but only now translated into English, as told by women who enlisted in the Soviet army straight from school, learning to kill and die before they learned to live or give life. By one of the

most gifted writers of her generation.

**Six Minutes in May: How Churchill Unexpectedly Became Prime Minister.** *By Nicholas Shakespeare. Harvill Secker; 528 pages; £20*
It is hard to imagine Britain without the jowly Winston Churchill at the helm during the second world war. Yet in May 1940 Neville Chamberlain's government, with its majority of 213, seemed virtually unassailable. An eloquent study in how quickly the political landscape can change—and history with it.

**Enemies and Neighbours: Arabs and Jews in Palestine and Israel, 1917-2017.** *By Ian Black. Atlantic Monthly Press; 608 pages; $30. Allen Lane; £25*
A well-known British journalist offers a detailed account of how the Israelis and Palestinians are still haunted by their history. The Balfour Declaration was just the start of it.

**Belonging: The Story of the Jews, 1492-1900.** *By Simon Schama. Ecco; 800 pages; $39.99. Bodley Head; £25*
The story of the Jews between 1492 and 1900, told as a series of vivid biographies. In the hands of a master colourist, this is history as a portrait gallery. Roll on the final volume in the series.

**The House of Government: A Saga of the Russian Revolution.** *By Yuri Slezkine. Princeton University Press; 1,128 pages; $39.95 and £29.95*
The remarkable tale of an enormous block of flats that served as home to communism's true believers. A story that is as Russian in scope as it is symbolic of what Russia and the Russian revolution eventually became.

**Against the Grain.** *By James Scott. Yale University Press; 336 pages; $26 and £20*
An interesting summation of recent research into why the first states did not develop until a long time after humans stopped being nomads and agriculture had become the norm.

**Economics and business**

**The Great Leveller: Violence and the History of Inequality from the Stone Age to the Twenty-First Century.** *By Walter Scheidel. Princeton University Press; 528 pages; $35 and £27.95*
An Austrian-born historian, now at Stanford University, argues that only catastrophic events really reduce inequality. Depressing and convincing.

**Capitalism without Capital: The Rise of the Intangible Economy.** *By Jonathan Haskel and Stian Westlake. Princeton University Press; 288 pages; $29.95 and £24.95*
Businesses in rich countries are increasingly investing in “intangible” assets, including research and development, branding and public relations, and less in “tangible” ones, such as machinery. The growing importance of intangible assets plays a part in some of the big trends that are gripping rich economies, from rising income inequality to weak growth in productivity.

**Black Edge: Inside Information, Dirty Money and the Quest to Bring Down the Most Wanted Man on Wall Street.** *By Sheelah Kolhatkar.*

*Random House; 344 pages; $28*
The rise, fall and rise of Steven Cohen—a brief history of SAC Capital and how its boss inspired Bobby Axelrod of "Billions".

**Janesville: An American Story.** *By Amy Goldstein. Simon & Schuster; 368 pages; $27 and £18.99*
The riveting story of what happened to a company town and the families who lived and worked there when General Motors decided to shut down its assembly plant in a city in southern Wisconsin.

**Americana: A 400-Year History of American Capitalism.** *By Bhu Srinivasan. Penguin Press; 576 pages; $30*
A delightful tour through the businesses and industries that turned America into the world's biggest economy—by a hard-working immigrant who himself became an entrepreneur. A paean to progress.

**Clashing over Commerce: A History of US Trade Policy.** *By Douglas Irwin. University of Chicago Press; 832 pages; $35*
Trade-policy wonks are gluttons for punishment. In good times, their pet topic is dismissed as dull. In bad, they find trade being faulted for everything. A Dartmouth College professor sets the record straight, and in the process elegantly debunks a host of trade-policy myths.

**Culture**

**The Souls of China: The Return of Religion after Mao.** *By Ian Johnson. Pantheon; 448 pages; $30. Allen Lane; £25*
As ordinary people (and party leaders) are trying to workout what it means to be Chinese in the modern world, a Canadian-born academic shows how a resurgence of faith is quietly changing the country.

**Dream Hoarders: How the American Middle Class is Leaving Everyone Else in the Dust, Why That Is a Problem, and What to Do About It.** *By Richard Reeves. Brookings Institution Press; 196 pages; $24*
Which of America's social fault-lines is the most dangerous? Race? Culture? Wealth? This last offers part of an answer. Having grabbed their piece of prosperity, the upper-middle class are fighting to keep it. A British scholar, based in New York, argues in detail why it is this 10%—rather than the 1%

of lore—who are the main beneficiaries (and the principal cause) of inequality in America.

**Everybody Lies: Big Data, New Data, and What the Internet Can Tell Us About Who We Really Are.** *By Seth Stephens-Davidowitz. Dey Street; 288 pages; $27.99. Bloomsbury; £20*
Big data, says Seth Stephens-Davidowitz, a former data scientist for Google, provides new sources of information. It captures what people actually do or think, rather than what they choose to tell pollsters; it helps researchers home in on and compare demographic or geographical subsets; and it allows for super fast randomised controlled trials. This book argues that the web will revolutionise social science just as the microscope and telescope transformed the natural sciences.

**The Sum of Small Things: A Theory of the Aspirational Class.** *By Elizabeth Currid-Halkett. Princeton University Press; 254 pages; $29.95 and £24.95*
Rather than filling their garages with flashy cars, today's rich devote their budgets to less visible but more valuable ends: education, domestic services and cultural capital. A professor at the University of Southern California shows why it is so difficult to stop the privileged position of the elites becoming more entrenched.

**Nicotine.** *By Gregor Hens. Translated by Jen Calleja. Other Press; 176 pages; $16.95. Fitzcarraldo Editions; £12.99*
Cigarettes function as punctuation for life, argues Gregor Hens, a German author and translator. They make it coherent and add drama, inserting commas, semi-colons and ellipses (and, in the end, an inarguable and often premature full stop). Smoking is bad for you, but that doesn't mean it can't be fun.

**The Novel of the Century: The Extraordinary Adventure of "Les Miserables".** *By David Bellos. Farrah, Straus and Giroux; 336 pages; $27. Particular Books; £20*
From the humane treatment of ex-offenders to the care of street children Victor Hugo's epic novel, "Les Misérables", spearheaded calls for reform and contributed to "the future improvement of society". Few books really change the world. This one did, long before the musical broke box office records.

## Science and technology


**Inheritors of the Earth: How Nature is Thriving in an Age of Extinction.** *By Chris Thomas. PublicAffairs; 320 pages; $28. Allen Lane; £20*
Humans have consigned species to extinction at an alarming rate. But hybridisation and speciation is happening quickly, too. An ecologist at the University of York shows how humans are bringing about a great new age of biological diversity. Extinctions ain't what they used to be.

**Dawn of the New Everything.** *By Jaron Lanier. Henry Holt; 351pages; $30. Bodley Head; £20*
An eccentric, but visionary, tech pioneer recalls a life spent in virtual reality and reflects on the growing hubris of Silicon Valley.

**Tamed: Ten Species that Changed our World.** *By Alice Roberts. Hutchinson; 368 pages; £20*
For lovers of "Guns, Germs and Steel" and "Sapiens" comes a new,

deceptively simple book. Alice Roberts, an anatomist and palaeopathologist, uses the story of how apples, cattle, dogs, horses and rice came to be domesticated to tell a wider story about humans' long history.

**Fiction**

**Lincoln in the Bardo.** *By George Saunders. Random House; 368 pages; $28. Bloomsbury; £18.99*
Abraham Lincoln's son dies young and enters a multi-chorus Buddhistic underworld. One of the year's most original and electrifying novels.

**White Tears.** *By Hari Kunzru. Knopf; 288 pages; $26.95. Hamish Hamilton; £14.99*
A Londoner now living in New York, Hari Kunzru introduces two unforgettable characters to illustrate how black music came to be imbued with the spirit of the blues. His imagery resonates with the racial politics of modern life.

**Austral.** *By Paul McAuley. Gollancz; 288 pages; £14.99*
A chase thriller set in late 21st-century Antarctica that combines elements of Jack London, J.G. Ballard and William Gibson. A significant contribution to writing about the anthropocene.

**The Seventh Function of Language.** *By Laurent Binet. Translated by Sam Taylor. Farrar, Straus and Giroux; 368 pages; $27. Harvill Secker; £16.99*
A conspiracy thriller about the death of the French literary theorist, Roland Barthes, that draws on the work of Jacques Derrida and Dan Brown with tongue firmly in cheek—to hilarious effect.

**The Golden Legend.** *By Nadeem Aslam. Knopf; 319 pages; $27.95. Faber & Faber; £16.99*
Too much political exposition can be the death of fiction. Not so here. In his fifth novel, a British-Pakistani writer offers a richly imagined lesson in how to make great literature out of despotism.

**Stay with Me.** *By Ayobami Adebayo. Knopf; 272 pages; $25.95. Canongate Books; £14.99*
A gut-wrenching tale of how wanting a child can wreck a woman, a marriage

and a community. Only 29, Ayobami Adebayo is surely a writer to watch.

**Exit West.** *By Mohsin Hamid. Riverhead; 240 pages; $26. Hamish Hamilton; £14.99*
A sharply pointed story about migration that came within a whisker of winning the 2017 Man Booker prize for fiction. The author of “The Reluctant Fundamentalist” has written another novel of our time.

**Fever Dream.** *By Samanta Schweblin. Translated by Megan McDowell. Riverhead; 192 pages; $25. OneWorld; £7.99*
A slim novel about environmental disaster and the outer limits of love. Subtle, dreamy and indelibly creepy.

**Compass.** *By Mathias Enard. Translated by Charlotte Mandell. New Directions; 464 pages; $26.95. Fitzcarraldo Editions; £14.99*
Over one night a French scholar muses on the differences between West and East. The winner of the 2015 Prix Goncourt on love, longing and otherness.

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(2) Books of the Year

## Books by Economist writers in 2017

What we wrote when we weren't in the office


Dec 9th 2017

**The Wealth of Humans: Work, Power and its Absence in the Twenty-First Century.** *By Ryan Avent. St Martin's Press; 288 pages, $26.99. Allen Lane; £9.99*
The world of work is changing fast—and not as you would expect, by our Free Exchange columnist.

**Year of Wonder: Classical Music for Every Day.** *By Clemency Burton-Hill. Headline Home; 448 pages; £20*
Like a regular dose of meditation or mindfulness, a daily encounter with classical music enriches one's life in all kinds of ways. By a frequent freelance contributor.

**How Long Will Israel Survive? The Threat from Within.** *By Gregg Carlstrom. Oxford University Press; 256 pages; $24.95. Hurst; £20*

Our new Cairo correspondent counts the cost of acute social tensions in Israel and the occupation of the West Bank.

**Game Query: The Mind-Stretching Economist Quiz.** *Edited by Philip Coggan. With contributions from Geoffrey Carr, Josie Delap, John Prideaux and Simon Wright. Economist Books; 224 pages; £8.99*
The first quiz book in our 175-year history, with suggestions from the staff. Edited by our Buttonwood columnist.

**The Fate of the West: The Battle to Save the World's Most Successful Political Idea.** *By Bill Emmott. Economist Books; 272 pages; $28. Profile Books; £20*
What the world should do when faced with political instability and economic stress, by a former editor-in-chief.

**The Monkman and Seagull Quiz Book.** *By Eric Monkman and Bobby Seagull. Eyewear Publishing; 312 pages; £12.99*
Over 500 questions to test all knowledge, both general and specialised. By a former Marjorie Deane intern and his co-author—rival captains on "University Challenge", a British television show.

**Treasure Palaces: Great Writers Visit Great Museums. Edited by Maggie Fergusson.** *Economist Books; 221 pages; $16.99 and £8.99*
An anthology of meditations on museums that have moved great writers, edited by the literary editor of our former lifestyle magazine, *Intelligent Life*.

**Megatech: Technology in 2050.** *Edited by Daniel Franklin. Economist Books; $18.99 and £15*
Technology moves fast. Twenty experts identify where it will take us by 2050. Compiled by our executive editor.

**District VIII.** *By Adam Lebor. Head of Zeus; 358 pages; £18.99. To be published in June 2018 in America by Pegasus Books; $25.95*
A gritty crime thriller, set in Hungary. By a long-standing freelance contributor to our foreign pages.

**The Struggle for Catalonia.** *By Raphael Minder. Hurst; 256 pages; £15.99*
How Catalonia differs from Spain—and why. By a freelance contributor.

**Forgotten Continent: A History of the New Latin America.** *By Michael Reid. Yale University Press; 440 pages; $18 and £12.99*
A completely revised and updated edition of a book that was originally published in 2007, by our Bello columnist and former Americas editor.

**Superfast Primetime Ultimate Nation: The Relentless Invention of Modern India.** *By Adam Roberts. PublicAffairs; 336 pages; $28. Profile Books; £16.99*
How India joined the modern world, by our former Delhi bureau chief who is now Europe business correspondent.

**Here Comes Trouble.** *By Simon Wroe. Weidenfeld & Nicolson; 289 pages; £12.99*
A coming-of-age novel set in the secret fictional state of Kyrzbekistan, by a freelance contributor and the author of "Chop Chop", which was shortlisted for the Costa first novel award in 2014.

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# Obituary

- **Ali Abdullah Saleh: Snake-in-chief** [Fri, 08 Dec 17:10]

**Snake-in-chief**

## Obituary: Ali Abdullah Saleh was killed on December 4th

The first president of a united Yemen was 75


Dec 7th 2017

WHEN Houthi rebels broke into Ali Abdullah Saleh's house in Sana'a on December 4th to ransack it, they found several bottles of vodka and premium Lebanese arak. The unIslamic hoard cast doubt on the president's public shows of prayer and the great mosque, with six white minarets, looming beside his palace. It surprised no one who knew that, as a highlander from Yemen's northern mountains, he probably liked a chaser after a pleasant chew of qat in the afternoons. Others would have remembered how, as a young army officer in charge of a checkpoint on the main road to Taiz from the Red Sea, he would wave through whisky smuggled up from Africa if enough rials crossed his palm. That blind eye won him useful allies among the merchants of Taiz.

He needed such ruses because he was a nobody. His clan, the Sanhan, was a lowly, overlooked group in a society seething with wild and larger tribes heavily armed with pride and Kalashnikovs. His family contained no sheikhs, and his village, flyblown Bayt-al Ahmar, had no one rich enough to subsidise him through officers’ training school. To that end he was helped by a southerner and this, too, proved politically useful. In his rugged and chronically ungovernable country the short, bull-necked soldier, with his sharp sing-song northern accent, his heavy silver tribal ring and his mesmerising stare, turned out to have contacts all over the place.

Hence, in part, his dizzying rise to power. From tank commander he became president, in 1978, of North Yemen, which united with the communist south in 1991 with him, naturally, in charge. He went on to rule the new country, with maximum guile and graft, for the next 21 years. He rose, too, because no one else cared to rule North Yemen, where the two previous incumbents had been dispatched within nine months of each other: one shot while cavorting with foreign prostitutes, the other minced by an exploding briefcase. Mr Saleh did not want courage. He had his own close shaves, the closest in 2011 when his mosque was blown up with him inside it. The Saleh Museum, opened in Sana’a two years later, displayed his scorched trousers and the shrapnel taken out of him.

By then he had stepped down, but only after an extraordinary spell in power, bolstered first by a wall of relatives around him. When he became president of the whole country they assumed key posts in ministries and the army, while his nephew Tarek headed the elite Republican Guard; his son Ahmed was groomed to succeed him. His Sanhan clan was now important, and the tribal confederation it belonged to, the Hashid, the most powerful in the land. Other members, especially the al-Ahmar tribe (some of them cousins, from his own village), prospered too, and non-blood tribes were kept in line with handouts from oil revenues, gifts of new cars and a vast web of patronage controlled by his party, the General People’s Congress.

In the oil-rich 1990s he piled up and paid off freely, stashing billions of dollars’ worth of gold and property under different names in hidey-holes abroad. His palace in Sana’a boasted marble halls, gold-inlaid furniture and shelves of shiny, unopened books. (He relaxed not by reading, but by playing billiards or tooling round the hills about Sana’a in his luxury Toyota pickup.) His home village acquired, among the dust and dogs, a compound of Saleh family villas clad in coloured marble, and a swarm of security guards in shades. Not a lot of money trickled down to desperately impoverished Yemenis, especially in the south. But that was not his problem.

His problem was how to stay in power. He compared it to dancing on the heads of snakes: these reptiles lurking in his own party and the Hashid confederation, as well as in rival tribes, though he was snake-in-chief. When his security detail once failed to catch a rare wild black camel by roping and dragging it, he used that metaphor too: Yemen could not be governed by force. He broke that rule in 1978, when he killed 30 army officers for conspiracy, and in 2011, when his troops shot at least 50 protesters hoping for an Arab spring in Yemen. But they were stooges of al-Qaeda, he brusquely told the Western press.

### Plotting in the shadows

The West may not have noticed because his wiles were so subtle, and his shift of alliances so constant. When it suited him, he went soft on the jihadists and Salafists who increasingly infested the north. In 2005 he said he would retire, but in 2006 he changed his mind, because his people were urging him to stay. He said he would leave power “like kicking off my shoes”, but they proved tight-fitting. In 2012 he stepped down, but only in exchange for immunity from prosecution. He also never went away, plotting in the shadows, his portrait still on shop walls, for only he could hold his dissolving country together.

His half-secret marriage of convenience after 2014 with the Shia Houthi rebels, who had previously opposed him, was riven by mutual mistrust—over patronage in the north, and especially over his long off-on dalliance with Saudi Arabia, supposedly their common enemy, and with the United Arab Emirates, where his son Ahmed was under loose house arrest. The prospect of continuing the family’s rule through the good offices of the Sunni Gulf states was irresistible. That sealed his fate.

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# Economic and financial indicators

## Output, prices and jobs

Dec 9th 2017

## Output, prices and jobs

% change on year ago

| | Gross domestic product | | | | Industrial production | Consumer prices | | | Unemployment rate, % |
|---|---|---|---|---|---|---|---|---|---|
| | latest | qtr* | 2017† | 2018† | latest | latest | year ago | 2017† | |
| **United States** | +2.3 Q3 | +3.3 | +2.2 | +2.4 | +2.9 Oct | +2.0 Oct | +1.6 | +2.1 | 4.1 Oct |
| **China** | +6.8 Q3 | +7.0 | +6.8 | +6.5 | +6.2 Oct | +1.9 Oct | +2.1 | +1.6 | 4.0 Q3§ |
| **Japan** | +1.7 Q3 | +1.4 | +1.5 | +1.3 | +5.9 Oct | +0.2 Oct | +0.2 | +0.5 | 2.8 Oct |
| **Britain** | +1.5 Q3 | +1.6 | +1.5 | +1.3 | +2.6 Sep | +3.0 Oct | +0.9 | +2.7 | 4.3 Aug†† |
| **Canada** | +3.0 Q3 | +1.7 | +3.0 | +2.3 | +4.0 Sep | +1.4 Oct | +1.5 | +1.5 | 5.9 Nov |
| **Euro area** | +2.5 Q3 | +2.5 | +2.2 | +2.1 | +3.3 Sep | +1.5 Nov | +0.6 | +1.5 | 8.8 Oct |
| **Austria** | +3.2 Q3 | +1.4 | +2.7 | +2.3 | +3.7 Sep | +2.2 Oct | +1.3 | +2.1 | 5.4 Oct |
| **Belgium** | +1.7 Q3 | +1.0 | +1.7 | +1.8 | +5.9 Sep | +2.1 Nov | +1.8 | +2.2 | 6.9 Oct |
| **France** | +2.2 Q3 | +2.2 | +1.8 | +1.9 | +3.2 Sep | +1.2 Nov | +0.5 | +1.1 | 9.4 Oct |
| **Germany** | +2.8 Q3 | +3.3 | +2.4 | +2.3 | +3.5 Sep | +1.8 Nov | +0.8 | +1.7 | 3.6 Oct‡ |
| **Greece** | +1.3 Q3 | +1.2 | +1.0 | +1.8 | +2.4 Sep | +0.7 Oct | -0.5 | +1.1 | 20.6 Aug |
| **Italy** | +1.7 Q3 | +1.4 | +1.5 | +1.4 | +2.4 Sep | +0.9 Nov | +0.1 | +1.4 | 11.1 Oct |
| **Netherlands** | +3.0 Q3 | +1.8 | +3.2 | +2.5 | +5.2 Sep | +1.3 Oct | +0.4 | +1.3 | 5.4 Oct |
| **Spain** | +3.1 Q3 | +3.1 | +3.1 | +2.6 | +7.0 Oct | +1.6 Nov | +0.7 | +2.0 | 16.7 Oct |
| **Czech Republic** | +4.7 Q3 | +1.9 | +4.5 | +3.1 | +4.4 Sep | +2.9 Oct | +0.8 | +2.5 | 2.6 Oct‡ |
| **Denmark** | +1.2 Q3 | -2.6 | +2.2 | +2.1 | +1.2 Sep | +1.5 Oct | +0.3 | +1.1 | 4.3 Oct |
| **Hungary** | +3.9 Q3 | +3.8 | +3.8 | +3.4 | +7.8 Oct | +2.2 Oct | +1.0 | +2.4 | 4.0 Oct§†† |
| **Norway** | +3.2 Q3 | +3.0 | +2.1 | +2.5 | +10.5 Sep | +1.2 Oct | +3.7 | +2.0 | 4.0 Sep‡‡ |
| **Poland** | +5.1 Q3 | +4.9 | +4.6 | +3.4 | +12.3 Oct | +2.5 Nov | nil | +1.9 | 6.6 Oct§ |
| **Russia** | +1.8 Q3 | na | +1.9 | +2.1 | -0.1 Oct | +2.5 Nov | +5.8 | +3.8 | 5.1 Oct§ |
| **Sweden** | +2.9 Q3 | +3.1 | +3.0 | +2.8 | +6.0 Oct | +1.7 Oct | +1.2 | +1.9 | 6.3 Oct§ |
| **Switzerland** | +1.2 Q3 | +2.5 | +0.9 | +1.7 | +8.7 Q3 | +0.8 Nov | -0.3 | +0.5 | 3.1 Oct |
| **Turkey** | +5.1 Q2 | na | +5.0 | +3.3 | +13.4 Sep | +13.0 Nov | +7.0 | +10.0 | 10.6 Aug§ |
| **Australia** | +2.8 Q3 | +2.4 | +2.4 | +2.9 | +3.5 Q3 | +1.8 Q3 | +1.3 | +2.0 | 5.4 Oct |
| **Hong Kong** | +3.6 Q3 | +2.0 | +3.7 | +1.5 | +0.4 Q2 | +1.5 Oct | +1.2 | +1.6 | 3.0 Oct‡‡ |
| **India** | +6.3 Q3 | +8.7 | +6.5 | +7.4 | +3.8 Sep | +3.6 Oct | +4.2 | +3.4 | 5.0 2015 |
| **Indonesia** | +5.1 Q3 | na | +5.1 | +5.3 | +7.8 Sep | +3.3 Nov | +3.6 | +3.9 | 5.5 Q3§ |
| **Malaysia** | +6.2 Q3 | na | +5.8 | +5.3 | +4.7 Sep | +3.7 Oct | +1.4 | +3.9 | 3.4 Sep§ |
| **Pakistan** | +5.7 2017** | na | +5.7 | +5.0 | +2.6 Sep | +4.0 Nov | +3.8 | +4.1 | 5.9 2015 |
| **Singapore** | +5.2 Q3 | +8.8 | +3.1 | +2.4 | +14.6 Oct | +0.4 Oct | -0.1 | +0.6 | 2.1 Q3 |
| **South Korea** | +3.8 Q3 | +6.3 | +3.1 | +2.9 | -5.9 Oct | +1.3 Nov | +1.5 | +2.1 | 3.2 Oct§ |
| **Taiwan** | +3.1 Q3 | +6.8 | +2.5 | +1.5 | +2.8 Oct | +0.3 Nov | +2.0 | +0.6 | 3.7 Oct |
| **Thailand** | +4.3 Q3 | +4.0 | +3.5 | +3.1 | -0.1 Oct | +1.0 Nov | +0.6 | +0.5 | 1.3 Oct§ |
| **Argentina** | +2.7 Q2 | +2.8 | +2.8 | +3.1 | -2.5 Oct | +22.9 Oct | na | +25.2 | 8.7 Q2§ |
| **Brazil** | +1.4 Q3 | +0.6 | +0.8 | +2.5 | +5.2 Oct | +2.7 Oct | +7.9 | +3.4 | 12.2 Oct§ |
| **Chile** | +2.2 Q3 | +6.0 | +1.4 | +2.7 | +5.0 Oct | +1.9 Oct | +2.8 | +2.2 | 6.7 Oct§‡‡ |
| **Colombia** | +2.0 Q3 | +3.2 | +1.7 | +2.5 | -1.9 Sep | +4.1 Nov | +6.0 | +4.3 | 8.6 Oct§ |
| **Mexico** | +1.5 Q3 | -1.2 | +2.1 | +2.1 | -1.2 Sep | +6.4 Oct | +3.1 | +5.9 | 3.4 Oct |
| **Venezuela** | -8.8 Q4~ | -6.2 | -12.5 | -11.9 | +0.8 Sep | na | na | +931.2 | 7.3 Apr§ |
| **Egypt** | +4.9 Q2 | na | +4.2 | +4.8 | +15.6 Sep | +30.8 Oct | +13.6 | +26.8 | 11.9 Q3§ |
| **Israel** | +2.1 Q3 | +4.1 | +3.6 | +4.0 | +3.2 Sep | +0.2 Oct | -0.3 | +0.3 | 4.2 Oct |
| **Saudi Arabia** | +1.7 2016 | na | -0.7 | +1.1 | na | -0.2 Oct | +2.6 | -0.3 | 5.6 2016 |
| **South Africa** | +0.8 Q3 | +2.0 | +0.7 | +1.2 | -0.6 Sep | +4.8 Oct | +6.4 | +5.3 | 27.7 Q3§ |
| **Estonia** | +4.2 Q3 | +1.4 | +4.4 | +3.4 | +6.2 Oct | +3.8 Oct | +0.6 | +3.6 | 5.2 Q3§ |
| **Finland** | +2.8 Q3 | +1.5 | +2.8 | +2.1 | +4.6 Sep | +0.5 Oct | +0.5 | +0.8 | 7.3 Oct§ |
| **Iceland** | +3.4 Q2 | -4.4 | +4.7 | +3.9 | na | +1.7 Nov | +2.1 | +1.8 | 1.9 Oct§ |
| **Ireland** | +5.8 Q2 | +5.8 | +4.5 | +3.1 | +14.3 Oct | +0.6 Oct | -0.3 | +0.3 | 6.1 Nov |
| **Latvia** | +5.8 Q3 | +6.4 | +4.9 | +3.4 | +5.4 Oct | +2.8 Oct | +1.1 | +3.0 | 8.5 Q3§ |
| **Lithuania** | +3.1 Q3 | +0.5 | +3.5 | +3.4 | +6.7 Oct | +4.4 Oct | +0.9 | +3.6 | 7.7 Nov§ |
| **Luxembourg** | +2.3 Q2 | +2.6 | +2.7 | +3.2 | +1.2 Sep | +1.5 Nov | +0.5 | +2.1 | 5.7 Oct§ |
| **New Zealand** | +2.5 Q2 | +4.4 | +2.6 | +2.9 | +2.4 Q2 | +1.9 Q3 | +0.4 | +1.9 | 4.6 Q3 |
| **Peru** | +2.5 Q3 | +5.5 | +2.7 | +4.0 | -1.5 Aug | +1.5 Nov | +3.3 | +2.8 | 5.9 Oct§ |
| **Philippines** | +6.9 Q3 | +5.3 | +6.6 | +5.7 | -3.8 Sep | +3.3 Nov | +2.5 | +3.2 | 5.6 Q3§ |
| **Portugal** | +2.5 Q3 | +1.9 | +2.6 | +1.7 | +3.6 Oct | +1.4 Oct | +0.9 | +1.6 | 8.5 Q3§ |
| **Slovakia** | +3.4 Q3 | +0.6 | +3.2 | +3.4 | +2.4 Sep | +1.7 Oct | -0.3 | +1.3 | 6.1 Oct§ |
| **Slovenia** | +4.5 Q3 | na | +4.5 | +3.2 | +6.7 Sep | +1.2 Nov | +0.6 | +1.5 | 8.7 Sep§ |
| **Ukraine** | +2.1 Q3 | +9.3 | +2.1 | +1.5 | +0.4 Oct | +14.6 Oct | +12.4 | +14.5 | 1.1 Oct§ |
| **Vietnam** | +6.2 2016 | na | +6.3 | +6.5 | +17.2 Nov | +2.6 Nov | +4.5 | +3.5 | 2.3 2016 |

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.

## Trade, exchange rates, budget balances and interest rates

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## Trade, exchange rates, budget balances and interest rates

| | Trade balance | Current-account balance | | Currency units, per $ | | Budget balance | Interest rates | |
|---|---|---|---|---|---|---|---|---|
| | latest 12 months, $bn | latest 12 months, $bn | % of GDP 2017† | Dec 6th | year ago | % of GDP 2017† | 3-month latest | 10-year gov't bonds, latest |
| **United States** | -798.0 Oct | -460.9 Q2 | -2.5 | - | - | -3.5 | 1.52 | 2.37 |
| **China** | +417.5 Oct | +118.2 Q3 | +1.3 | 6.61 | 6.88 | -4.3 | 4.79 | 3.82§§ |
| **Japan** | +48.8 Sep | +194.4 Sep | +3.5 | 112 | 114 | -4.4 | -0.01 | 0.05 |
| **Britain** | -170.6 Sep | -128.9 Q2 | -4.0 | 0.75 | 0.79 | -3.3 | 0.44 | 1.33 |
| **Canada** | -13.3 Oct | -45.8 Q3 | -2.9 | 1.28 | 1.33 | -1.7 | 1.37 | 1.89 |
| **Euro area** | +265.3 Sep | +386.9 Sep | +3.1 | 0.85 | 0.93 | -1.3 | -0.33 | 0.30 |
| **Austria** | -5.9 Aug | +6.1 Q2 | +2.2 | 0.85 | 0.93 | -1.0 | -0.33 | 0.46 |
| **Belgium** | +21.8 Sep | -5.3 Jun | -0.3 | 0.85 | 0.93 | -2.1 | -0.33 | 0.55 |
| **France** | -68.0 Sep | -26.0 Sep | -1.5 | 0.85 | 0.93 | -2.9 | -0.33 | 0.63 |
| **Germany** | +270.0 Sep | +278.1 Sep | +7.9 | 0.85 | 0.93 | +0.6 | -0.33 | 0.30 |
| **Greece** | -21.5 Sep | -0.8 Sep | -0.6 | 0.85 | 0.93 | -0.8 | -0.33 | 4.80 |
| **Italy** | +51.3 Sep | +52.1 Sep | +2.6 | 0.85 | 0.93 | -2.3 | -0.33 | 1.73 |
| **Netherlands** | +63.7 Sep | +76.0 Q2 | +9.7 | 0.85 | 0.93 | +0.6 | -0.33 | 0.41 |
| **Spain** | -26.7 Sep | +23.4 Sep | +1.4 | 0.85 | 0.93 | -3.0 | -0.33 | 1.41 |
| **Czech Republic** | +18.0 Sep | +1.7 Q2 | +0.7 | 21.7 | 25.2 | -0.1 | 0.74 | 1.42 |
| **Denmark** | +9.5 Sep | +27.0 Sep | +8.3 | 6.31 | 6.93 | -0.6 | -0.30 | 0.38 |
| **Hungary** | +9.5 Sep | +6.2 Q2 | +3.7 | 267 | 292 | -2.5 | 0.03 | 2.08 |
| **Norway** | +22.1 Oct | +21.1 Q3 | +5.3 | 8.27 | 8.38 | +5.2 | 0.78 | 1.53 |
| **Poland** | +2.7 Sep | -0.4 Sep | -0.3 | 3.57 | 4.16 | -3.3 | 1.53 | 3.25 |
| **Russia** | +107.7 Sep | +36.9 Q3 | +2.3 | 59.1 | 63.9 | -2.1 | 11.3 | 8.13 |
| **Sweden** | -0.9 Oct | +21.1 Q3 | +4.4 | 8.42 | 9.13 | +1.0 | -0.61 | 0.69 |
| **Switzerland** | +36.2 Oct | +68.9 Q2 | +9.7 | 0.99 | 1.01 | +0.8 | -0.76 | -0.12 |
| **Turkey** | -73.1 Nov | -39.3 Sep | -3.5 | 3.86 | 3.44 | -2.0 | 14.4 | 12.0 |
| **Australia** | +15.6 Oct | -22.2 Q3 | -1.4 | 1.32 | 1.34 | -1.7 | 2.12 | 2.51 |
| **Hong Kong** | -59.4 Oct | +15.2 Q2 | +6.4 | 7.81 | 7.76 | +1.7 | 1.24 | 1.89 |
| **India** | -139.7 Oct | -29.2 Q2 | -1.5 | 64.5 | 67.9 | -3.1 | 6.12 | 7.03 |
| **Indonesia** | +13.8 Oct | -13.3 Q3 | -1.6 | 13,535 | 13,383 | -2.8 | 5.29 | 6.55 |
| **Malaysia** | +22.7 Oct | +9.2 Q3 | +2.5 | 4.08 | 4.44 | -3.0 | 3.44 | 3.95 |
| **Pakistan** | -35.6 Oct | -14.5 Q3 | -4.9 | 105 | 105 | -5.9 | 6.16 | 7.93††† |
| **Singapore** | +45.3 Oct | +57.4 Q3 | +18.3 | 1.35 | 1.42 | -1.0 | 0.38 | 2.04 |
| **South Korea** | +97.0 Nov | +81.9 Oct | +5.5 | 1,094 | 1,171 | +0.8 | 1.67 | 2.46 |
| **Taiwan** | +16.9 Oct | +74.1 Q3 | +13.5 | 30.0 | 31.9 | -0.1 | 0.66 | 0.96 |
| **Thailand** | +15.1 Oct | +46.9 Q3 | +11.3 | 32.6 | 35.6 | -2.5 | 0.75 | 2.31 |
| **Argentina** | -6.0 Oct | -19.7 Q2 | -3.9 | 17.3 | 15.9 | -6.3 | 22.4 | 5.31 |
| **Brazil** | +66.4 Nov | -9.6 Oct | -0.7 | 3.24 | 3.44 | -8.0 | 6.90 | 9.02 |
| **Chile** | +6.7 Oct | -4.6 Q3 | -1.3 | 654 | 660 | -2.7 | 0.40 | 4.64 |
| **Colombia** | -10.5 Sep | -12.4 Q2 | -3.7 | 3,008 | 3,018 | -3.3 | 5.31 | 6.48 |
| **Mexico** | -11.1 Oct | -16.1 Q3 | -1.9 | 18.9 | 20.4 | -1.9 | 7.39 | 7.32 |
| **Venezuela** | -36.2 Oct~ | -17.8 Q3~ | -0.7 | 10.2 | 10.0 | -19.4 | 14.5 | 8.24 |
| **Egypt** | -30.8 Sep | -15.6 Q2 | -6.4 | 17.8 | 17.9 | -10.8 | 18.5 | na |
| **Israel** | -14.5 Oct | +10.7 Q2 | +3.1 | 3.51 | 3.81 | -1.3 | 0.11 | 1.78 |
| **Saudi Arabia** | +43.4 2016 | +7.0 Q2 | +2.5 | 3.75 | 3.75 | -7.2 | 1.83 | 3.68 |
| **South Africa** | +4.7 Oct | -7.9 Q2 | -2.3 | 13.5 | 13.6 | -3.9 | 7.13 | 9.18 |
| **Estonia** | -2.1 Sep | +0.6 Sep | +1.6 | 0.85 | 0.93 | nil | -0.33 | na |
| **Finland** | -3.0 Sep | -0.5 Sep | +0.1 | 0.85 | 0.93 | -1.3 | -0.33 | 0.45 |
| **Iceland** | -1.5 Oct | +1.2 Q3 | +6.1 | 105 | 110 | +1.0 | 4.65 | na |
| **Ireland** | +51.2 Sep | +12.0 Q2 | +4.6 | 0.85 | 0.93 | -0.3 | -0.33 | 0.50 |
| **Latvia** | -2.9 Sep | -0.2 Sep | +0.2 | 0.85 | 0.93 | -0.7 | -0.33 | na |
| **Lithuania** | -2.6 Sep | nil Q2 | -0.8 | 0.85 | 0.93 | +0.1 | -0.33 | 0.70 |
| **Luxembourg** | -7.0 Sep | +2.3 Q2 | +4.3 | 0.85 | 0.93 | +0.8 | -0.33 | na |
| **New Zealand** | -2.2 Oct | -5.4 Q2 | -2.9 | 1.45 | 1.41 | +1.6 | 1.90 | 2.78 |
| **Peru** | +6.0 Sep | -1.8 Q3 | -1.6 | 3.24 | 3.42 | -2.7 | 2.62 | na |
| **Philippines** | -26.3 Sep | -0.8 Jun | -0.2 | 50.7 | 49.6 | -2.7 | 3.02 | 5.70 |
| **Portugal** | -14.6 Sep | +1.3 Sep | +0.4 | 0.85 | 0.93 | -1.5 | -0.33 | 1.88 |
| **Slovakia** | +3.2 Sep | -1.8 Sep | -0.9 | 0.85 | 0.93 | -1.6 | -0.33 | 0.85 |
| **Slovenia** | nil Aug | +3.0 Sep | +5.6 | 0.85 | 0.93 | -0.6 | -0.33 | na |
| **Ukraine** | -5.0 Sep | -3.6 Q3 | -3.4 | 27.1 | 26.1 | -2.9 | 13.5 | na |
| **Vietnam** | +2.2 Nov | +8.5 2016 | -1.1 | 22,715 | 22,725 | -5.5 | 4.80 | 5.37 |

Source: Haver Analytics. †*The Economist* poll or Economist Intelligence Unit estimate/forecast. ~2014 §§5-year yield. †††Dollar-denominated bonds.

## The Economist commodity-price index

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## *The Economist* commodity-price index

2005=100

| | Nov 28th | Dec 5th* | % change on one month | % change on one year |
|---|---|---|---|---|
| **Dollar Index** | | | | |
| All Items | 146.7 | 146.0 | -0.5 | +1.2 |
| Food | 149.6 | 150.3 | -0.8 | -4.0 |
| Industrials | | | | |
| All | 143.6 | 141.4 | -0.1 | +7.6 |
| Nfa† | 131.2 | 133.2 | +0.6 | -1.3 |
| Metals | 149.0 | 145.0 | -0.4 | +11.5 |
| **Sterling Index** | | | | |
| All items | 201.6 | 197.3 | -2.8 | -4.5 |
| **Euro Index** | | | | |
| All items | 153.7 | 153.4 | -2.6 | -8.3 |
| **Gold** | | | | |
| $ per oz | 1,294.4 | 1,263.7 | -0.8 | +7.9 |
| **West Texas Intermediate** | | | | |
| $ per barrel | 58.0 | 57.6 | +0.7 | +13.1 |

Sources: Bloomberg; CME Group; Cotlook; Darmenn & Curl; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Thomson Reuters; Urner Barry; WSJ. *Provisional
†Non-food agriculturals.

## The Economist poll of forecasters, December averages

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## *The Economist* poll of forecasters, December averages (previous month's, if changed)

| | Real GDP, % change Low/high range | | Real GDP, % change average | | Consumer prices % change | | Current account % of GDP | |
|---|---|---|---|---|---|---|---|---|
| | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 |
| Argentina | 2.4/3.1 | 2.5/3.6 | 2.8 (2.7) | 3.1 | 25.2 (25.1) | 18.3 (17.8) | -3.9 (-3.7) | -4.2 (-3.8) |
| Australia | 2.2/2.7 | 2.1/3.3 | 2.4 | 2.9 (2.8) | 2.0 | 2.2 | -1.4 (-1.3) | -1.8 |
| Austria | 2.5/2.9 | 1.6/2.7 | 2.7 (2.5) | 2.3 (2.2) | 2.1 (2.0) | 1.9 (1.8) | 2.2 | 2.4 (2.3) |
| Belgium | 1.7/1.8 | 1.6/2.0 | 1.7 | 1.8 (1.7) | 2.2 | 1.7 | -0.3 (-0.4) | nil (-0.1) |
| Brazil | 0.5/1.2 | 1.5/3.1 | 0.8 (0.7) | 2.5 (2.3) | 3.4 | 3.8 | -0.7 (-1.0) | -1.5 (-1.4) |
| Britain | 1.4/1.7 | 0.8/1.6 | 1.5 | 1.3 | 2.7 | 2.6 | -4.0 (-3.8) | -3.5 (-3.2) |
| Canada | 1.9/3.6 | 1.9/3.1 | 3.0 (2.9) | 2.3 (2.2) | 1.5 (1.6) | 1.8 (1.9) | -2.9 | -2.6 (-2.4) |
| China | 6.6/6.9 | 5.8/7.0 | 6.8 | 6.5 (6.4) | 1.6 | 2.3 (2.2) | 1.3 (1.4) | 1.4 |
| Denmark | 1.8/2.4 | 1.4/2.7 | 2.2 (2.4) | 2.1 (2.0) | 1.1 (1.2) | 1.5 (1.6) | 8.3 (8.1) | 7.9 (7.8) |
| France | 1.6/2.0 | 1.6/2.3 | 1.8 (1.7) | 1.9 (1.8) | 1.1 | 1.3 (1.2) | -1.5 (-1.2) | -1.4 (-1.2) |
| Germany | 2.1/2.6 | 1.7/2.7 | 2.4 (2.2) | 2.3 (2.0) | 1.7 | 1.6 (1.5) | 7.9 (7.1) | 7.8 (7.0) |
| India | 6.0/7.0 | 6.9/8.0 | 6.5 (6.6) | 7.4 (7.3) | 3.4 (3.5) | 4.5 (4.6) | -1.5 (-1.4) | -1.7 |
| Indonesia | 5.0/5.2 | 5.0/5.8 | 5.1 | 5.3 | 3.9 | 3.5 (3.7) | -1.6 | -1.8 (-1.9) |
| Italy | 1.4/1.6 | 1.0/1.8 | 1.5 | 1.4 (1.3) | 1.4 (1.3) | 1.0 | 2.6 (2.3) | 2.2 (2.0) |
| Japan | 1.2/1.8 | 0.6/2.1 | 1.5 | 1.3 | 0.5 | 0.9 (0.8) | 3.5 (3.6) | 3.5 (3.6) |
| Mexico | 1.9/2.3 | 1.5/2.5 | 2.1 | 2.1 | 5.9 | 4.0 (3.9) | -1.9 | -2.0 |
| Netherlands | 2.9/3.3 | 1.9/3.4 | 3.2 (2.9) | 2.5 (2.1) | 1.3 | 1.4 | 9.7 (9.6) | 9.4 |
| Russia | 1.6/2.2 | 1.5/3.3 | 1.9 (1.8) | 2.1 (2.0) | 3.8 (3.9) | 3.7 (3.8) | 2.3 (2.4) | 2.0 (2.1) |
| South Africa | 0.5/1.0 | 0.9/1.5 | 0.7 (1.1) | 1.2 (1.5) | 5.3 (4.7) | 5.1 (4.4) | -2.3 (-0.5) | -2.7 (-0.8) |
| South Korea | 2.7/3.3 | 2.3/3.3 | 3.1 (2.9) | 2.9 (2.8) | 2.1 (2.0) | 2.0 | 5.5 (4.3) | 5.2 (4.3) |
| Spain | 2.9/3.1 | 2.1/3.2 | 3.1 | 2.6 (2.7) | 2.0 | 1.4 | 1.4 (1.3) | 1.4 |
| Sweden | 2.7/3.2 | 2.6/3.0 | 3.0 (3.1) | 2.8 (2.7) | 1.9 (1.8) | 1.9 | 4.4 (4.6) | 4.3 |
| Switzerland | 0.6/1.0 | 1.3/2.1 | 0.9 (0.8) | 1.7 (1.6) | 0.5 | 0.7 | 9.7 (9.9) | 9.4 (10.1) |
| Turkey | nil/6.4 | nil/4.7 | 5.0 | 3.3 (3.5) | 10.0 (10.8) | 8.3 (8.7) | -3.5 (-4.7) | -2.4 (-4.5) |
| United States | 2.1/2.3 | 1.9/3.0 | 2.2 | 2.4 | 2.1 (2.0) | 2.1 (2.0) | -2.5 | -2.5 (-2.4) |
| Euro area | 2.1/2.3 | 1.6/2.6 | 2.2 | 2.1 (2.0) | 1.5 | 1.4 (1.3) | 3.1 | 3.0 |

Sources: Bank of America, Barclays, BNP Paribas, Citigroup, Commerzbank, Credit Suisse, Decision Economics, Deutsche Bank, EIU, Goldman Sachs, HSBC Securities, ING, Itaú BBA, JPMorgan, Morgan Stanley, RBS, Royal Bank of Canada, Schroders, Scotiabank, Société Générale, Standard Chartered, UBS

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## Markets

Dec 9th 2017

## Markets

| | | % change on | | |
|---|---|---|---|---|
| | | | Dec 30th 2016 | |
| | Index Dec 6th | one week | in local currency | in $ terms |
| United States (DJIA) | 24,140.9 | +0.8 | +22.2 | +22.2 |
| United States (S&P 500) | 2,629.3 | +0.1 | +17.4 | +17.4 |
| United States (NAScomp) | 6,776.4 | -0.7 | +25.9 | +25.9 |
| China (SSEA) | 3,449.8 | -1.3 | +6.2 | +11.5 |
| China (SSEB, $ terms) | 334.5 | -2.1 | -2.1 | -2.1 |
| Japan (Nikkei 225) | 22,177.0 | -1.9 | +16.0 | +20.5 |
| Japan (Topix) | 1,765.4 | -1.2 | +16.3 | +20.8 |
| Britain (FTSE 100) | 7,348.0 | -0.6 | +2.9 | +11.4 |
| Canada (S&P TSX) | 15,910.6 | -0.4 | +4.1 | +9.3 |
| Euro area (FTSE Euro 100) | 1,224.8 | -0.5 | +10.1 | +23.1 |
| Euro area (EURO STOXX 50) | 3,561.6 | -0.8 | +8.2 | +21.0 |
| Austria (ATX) | 3,314.6 | -0.5 | +26.6 | +41.5 |
| Belgium (Bel 20) | 3,979.8 | -0.5 | +10.4 | +23.3 |
| France (CAC 40) | 5,374.4 | -0.4 | +10.5 | +23.5 |
| Germany (DAX)* | 12,998.9 | -0.5 | +13.2 | +26.5 |
| Greece (Athex Comp) | 727.5 | -1.5 | +13.0 | +26.3 |
| Italy (FTSE/MIB) | 22,307.3 | -0.1 | +16.0 | +29.6 |
| Netherlands (AEX) | 542.8 | +0.2 | +12.3 | +25.6 |
| Spain (Madrid SE) | 1,029.6 | -0.9 | +9.1 | +22.0 |
| Czech Republic (PX) | 1,053.2 | nil | +14.3 | +34.7 |
| Denmark (OMXCB) | 903.4 | -0.2 | +13.1 | +26.3 |
| Hungary (BUX) | 37,591.5 | -3.2 | +17.5 | +28.9 |
| Norway (OSEAX) | 875.3 | -1.0 | +14.5 | +19.1 |
| Poland (WIG) | 62,165.2 | -1.3 | +20.1 | +40.3 |
| Russia (RTS, $ terms) | 1,131.4 | -1.2 | -1.8 | -1.8 |
| Sweden (OMXS30) | 1,595.4 | -1.1 | +5.2 | +13.4 |
| Switzerland (SMI) | 9,310.0 | +0.1 | +13.3 | +16.3 |
| Turkey (BIST) | 105,303.9 | +2.9 | +34.8 | +23.0 |
| Australia (All Ord.) | 6,029.9 | -1.1 | +5.4 | +11.1 |
| Hong Kong (Hang Seng) | 28,224.8 | -4.7 | +28.3 | +27.3 |
| India (BSE) | 32,597.2 | -3.0 | +22.4 | +28.8 |
| Indonesia (JSX) | 6,035.5 | -0.4 | +13.9 | +13.4 |
| Malaysia (KLSE) | 1,718.3 | -0.1 | +4.7 | +15.2 |
| Pakistan (KSE) | 39,907.3 | +0.6 | -16.5 | -17.4 |
| Singapore (STI) | 3,397.2 | -1.2 | +17.9 | +26.3 |
| South Korea (KOSPI) | 2,474.4 | -1.5 | +22.1 | +34.8 |
| Taiwan (TWI) | 10,393.9 | -3.0 | +12.3 | +20.7 |
| Thailand (SET) | 1,694.4 | -0.6 | +9.8 | +20.6 |
| Argentina (MERV) | 26,470.5 | -1.6 | +56.5 | +43.4 |
| Brazil (BVSP) | 73,268.4 | +0.8 | +21.7 | +22.4 |
| Chile (IGPA) | 24,613.8 | -2.4 | +18.7 | +21.5 |
| Colombia (IGBC) | 10,843.4 | nil | +7.3 | +7.1 |
| Mexico (IPC) | 47,000.5 | -1.3 | +3.0 | +12.3 |
| Venezuela (IBC) | 1,354.4 | +16.0 | -95.7 | na |
| Egypt (EGX 30) | 14,345.6 | -1.6 | +16.2 | +18.3 |
| Israel (TA-125) | 1,318.2 | -0.5 | +3.2 | +13.0 |
| Saudi Arabia (Tadawul) | 7,026.1 | +0.8 | -2.9 | -2.9 |
| South Africa (JSE AS) | 58,010.2 | -4.0 | +14.5 | +15.8 |
| Europe (FTSEurofirst 300) | 1,520.3 | -0.4 | +6.4 | +19.0 |
| World, dev'd (MSCI) | 2,063.6 | -0.1 | +17.8 | +17.8 |
| Emerging markets (MSCI) | 1,117.7 | -2.1 | +29.6 | +29.6 |
| World, all (MSCI) | 502.3 | -0.4 | +19.1 | +19.1 |
| World bonds (Citigroup) | 946.8 | +0.1 | +7.1 | +7.1 |
| EMBI+ (JPMorgan) | 834.0 | +0.3 | +8.0 | +8.0 |
| Hedge funds (HFRX) | 1,264.3[§] | nil | +5.1 | +5.1 |
| Volatility, US (VIX) | 10.9 | +10.7 | +14.0 | (levels) |
| CDSs, Eur (iTRAXX)[†] | 48.6 | +0.4 | -32.6 | -24.7 |
| CDSs, N Am (CDX)[†] | 52.3 | -1.4 | -22.9 | -22.9 |
| Carbon trading (EU ETS) € | 7.3 | -5.6 | +10.6 | +23.7 |

Sources: IHS Markit; Thomson Reuters. *Total return index.
[†]Credit-default-swap spreads, basis points. [§]Dec 4th.

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