The Economist

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FEBRUARY 17TH – 23RD 2018

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Congo in peril

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Politics this week

Print edition | The world this week Feb 17th 2018

Jacob Zuma resigned as **South Africa's** president, the evening before a no-confidence vote was scheduled in parliament. The rand surged. Mr Zuma is beset by corruption allegations. The new president, Cyril Ramaphosa, a former union boss and tycoon, is not. See article .

Morgan Tsvangirai died from cancer, aged 65. He led the opposition to Zimbabwe's Robert Mugabe even after regime thugs tried to throw him off a tall building. He won a presidential election in 2008, but Mr Mugabe won the count.

Ellen Johnson Sirleaf, a former president of **Liberia**, was awarded the $5m Ibrahim prize for African rulers who govern well and retire when their time is up. It is only the fifth time that the prize has been awarded since it was established in 2007, because of a lack of suitable recipients.

Police in **Israel** concluded two investigations into Binyamin Netanyahu, the prime minister, with a recommendation that he face charges of bribery and fraud. The attorney-general has to decide whether to press charges. Mr Netanyahu, who criticised the police, has denied wrongdoing. See article .

The political crisis in Israel came just a few days after an aerial battle over **Syria**, caused byan **Iranian** drone that crossed into Israeli territory. Israel shot down the drone and bombed its control station in Syria. It launched a second wave of attacks against Syrian air defences after an Israeli jet was shot down, injuring its two pilots. See article .

Russian whispers

Halbe Zijlstra stepped down as **Dutch** foreign minister, after admitting he had fabricated a story about overhearing Vladimir Putin explaining his ambition to create a "greater Russia" at his dacha in 2006. Mr Zijlstra said the story had been relayed to him by the former boss of Shell, Jeroen van der Veer. Mr van der Veer said he had been misunderstood.

MPs from **Italy's** Five Star Movement were accused of reneging on a pledge to donate part of their salaries to a fund for small businesses. Two MPs resigned. The party's candidate for prime minister pledged to throw out the "bad apples". See article .

Ukraine deported Mikheil Saakashvili, a former president of **Georgia**, to **Poland**. In 2015 Mr Saakashvili was enlisted by Ukraine's president, Petro Poroshenko, to fight corruption, but they fell out and he accused the president of abetting corruption himself. Mr Saakashvili is stateless, having been stripped of Georgian and Ukrainian citizenship.

A **plane** crashed soon after taking off from Moscow's Domodedovo airport, killing all 71 people on board. It was the world's first fatal crash of a passenger jet airliner since November 2016.

No succour

Colombia announced a tightening of border security to halt the flow of thousands of Venezuelans fleeing the economic and political crisis in their country. Peru disinvited **Venezuela's** authoritarian socialist president, Nicolás Maduro, from a regional summit, expressing concerns that elections scheduled for April 22nd will be neither free nor fair.

Former fighters from the FARC in **Colombia** said they were suspending all campaigning for elections over fears for their safety. The FARC, a rebel army which remade itself as a political party after signing peace accords with Colombia's government, denounced a "co-ordinated plan" of attacks and threats, including the murder of one former rebel.

Police in **Guatemala** arrested Álvaro Colom, a former president, and most of his former cabinet in a fraud case involving a new bus system in the capital. The accused include Juan Alberto Fuentes Knight, a former finance minister who is the chairman of **Oxfam International**. It has not been a good week for the charity, which has been damaged by revelations that its aid workers paid for sex with prostitutes in Haiti. See article .

A cloud over Mr Sun

Sun Zhengcai, a former member of **China's** Politburo who was once tipped as a successor to Xi Jinping, was charged with taking bribes. Mr Sun was purged by the Communist Party last year when he was leader of Chongqing, a region in the south-west. He was the most senior serving politician to face allegations in Mr Xi's anti-corruption campaign. It is unclear whether his trial will be open to the public.

Malcolm Turnbull, **Australia's** prime minister, issued an edict banning sex between ministers and their staff. His coalition government, which holds a one-seat majority in parliament, has been hurt by revelations that Barnaby Joyce, the deputy prime minister and a campaigner for family values, had an affair with an aide who is now carrying his baby.

In **Sri Lanka** the new party led by Mahinda Rajapaksa, a controversial former president, claimed a landslide victory in local elections. It was a remarkable comeback for a politician who was defeated at the polls in 2015, tainted by allegations of overseeing war crimes when he crushed Tamil rebels in the country's civil war, and of corruption. See article .

A court in **South Korea** sentenced the confidante linked to last year's downfall of Park Geun-hye as president to 20 years in prison. Choi Soon-sil was convicted of various corruption charges.

America's vice-president, Mike Pence, said that the United States would increase pressure on **North Korea** over its missile programme, but suggested that talks were not off the agenda. Mr Pence met South Korea's president, Moon Jae-in, at the Winter Olympics. Pundits praised the stylish outfits of Kim Yo Jong, the sister of North Korea's blood-drenched dictator. See article .

The steady drumbeat of death

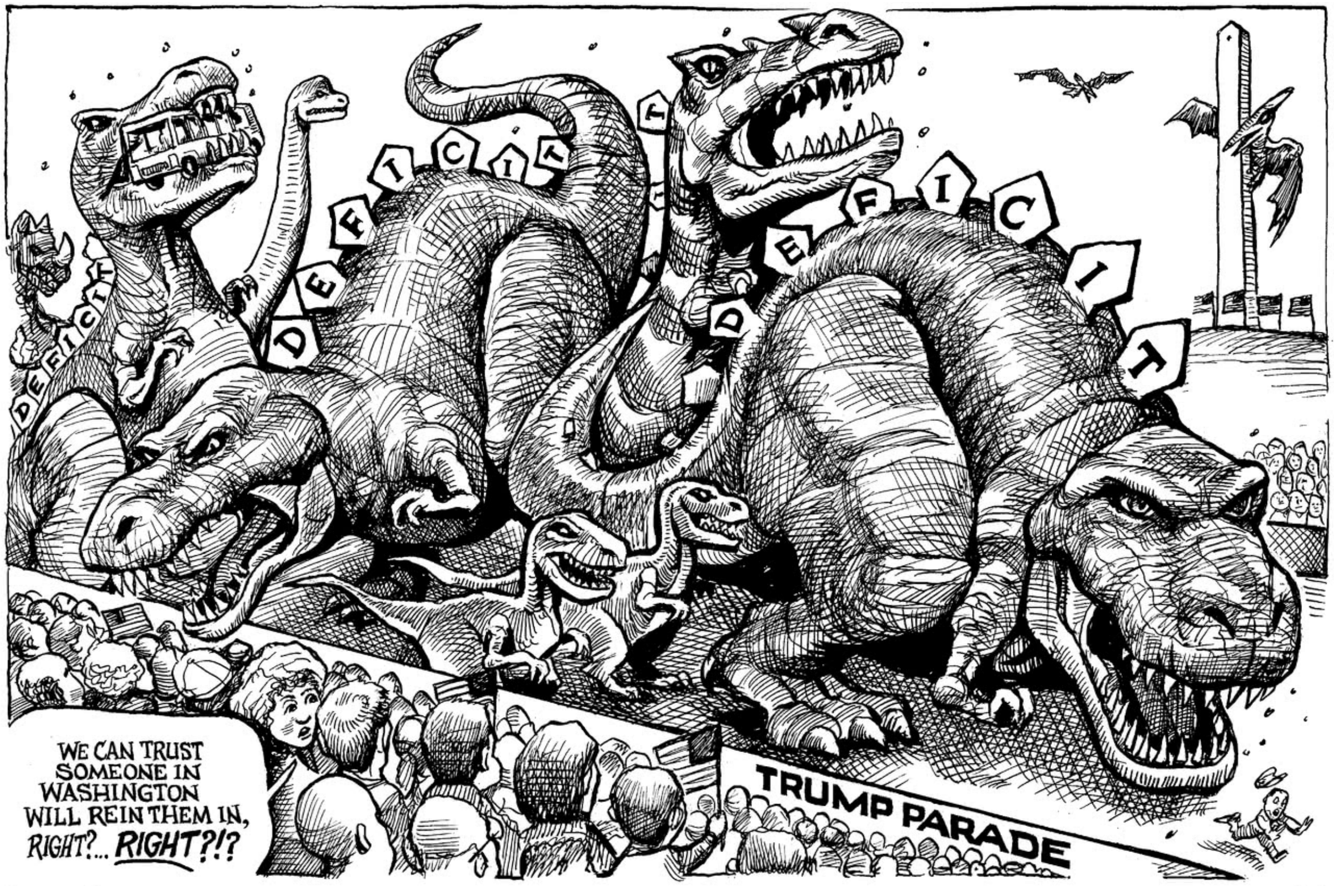
At least 17 people were shot dead at a school in Florida. A 19-year-old pupil, who had been expelled, was arrested. It was America's worst **school shooting** since the Sandy Hook massacre in 2012. See article .

The handling of allegations of domestic abuse against a **White House** aide reportedly caused John Kelly to consider resigning as chief of staff. Rob Porter stepped down from his job as staff secretary after both his former wives accused him of physical abuse. Mr Porter denies the accusations. See article .

Dan Coats, the director of national intelligence, warned that Russia is preparing to interfere in this year's mid-term **elections**, describing its meddling as "pervasive". Mr Coats told senators that: "Frankly, the United States is under attack."

KAL's cartoon

Print edition | The world this week Feb 17th 2018



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Business this week

Print edition | The world this week Feb 15th 2018

All eyes were on America's latest **inflation** report, following the turmoil in **markets** that was fed in part by worries that central banks will step up increases to interest rates in response to inflationary pressures. Consumer prices rose by 0.5% in January, or 2.1% on an annual basis, more than had been forecast in surveys of economists, but wage inflation was subdued. Investors remain skittish; the yield on American ten-year government bonds jumped to 2.9%, a four-year high. A few days earlier the **Bank of England's** statement that it would have to raise rates "somewhat earlier and by a somewhat greater extent" than it had expected had sparked another sell-off. See article .

A bright fracking future

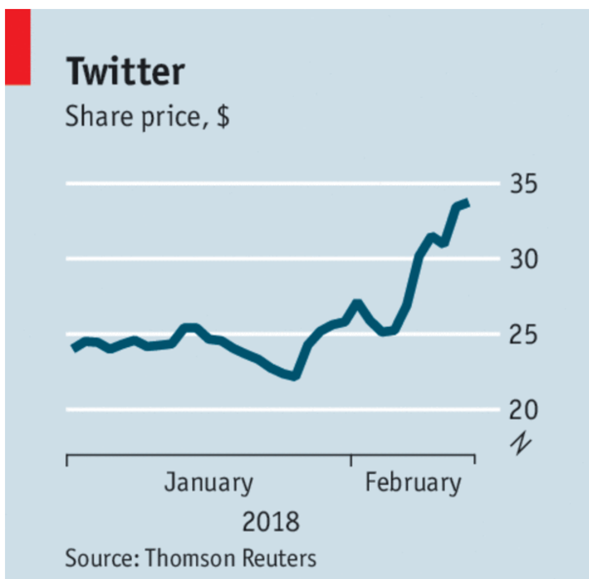
America could soon overtake Saudi Arabia and Russia to become the world's **biggest oil producer**, according to the International Energy Agency. After cutting costs during the oil-price crash, American shale fields have increased output at a pace "so extraordinary" that it could equal growth in the world's demand for oil. After rising steadily for six months, oil prices have fallen back. Brent crude traded as low as $62 a barrel this week, down from $70 in mid-January.

General Dynamics expanded its business providing IT services and cyber-security systems to the government when it agreed to buy **CSRA**, a smaller defence contractor, in a transaction valued at $9.6bn.

The recent deal by which **Fujifilm** agreed to take a 50.1% stake in **Xerox** ran into difficulties. The pair operate a long-standing joint venture in Asia. But Xerox's third-largest shareholder has filed a lawsuit trying to block the offer, arguing that Xerox did not seek out other buyers that could have proposed better terms.

New York state's attorney-general filed a lawsuit against the **Weinstein Company** in relation to the allegations of sexual harassment levelled at Harvey Weinstein, who founded the film studio with his brother, Bob. The suit has halted the sale of the company to an investor consortium led by Maria Contreras-Sweet, who used to work in the Obama administration.

Tweet that



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After reporting its first ever quarterly profit, **Twitter's** share price traded at its highest level in nearly three years. The social network's stock soared after it posted a net profit of $91m for the last three months of 2017. Although sales in America fell by 8% in the quarter compared with the same period a year earlier, foreign revenues grew by 17%.

Blackstone became the latest big private-equity firm to designate a successor to an ageing chief executive. Stephen Schwarzman, one of the firm's co-founders in 1985, who turned 71 this week, anointed Jon Gray as president and chief operating officer, making him the clear choice to replace Mr Schwarzman when he decides to retire. Mr Gray built up Blackstone's mighty property empire, which today accounts for around a quarter of the firm's assets.

ArcelorMittal submitted a bid for **Essar Steel**, one of India's biggest steelmakers. Essar is being sold off under India's new insolvency law, which compels distressed companies to declare bankruptcy. ArcelorMittal, the world's biggest steelmaker, is run by Lakshmi Mittal, an Indian-born industrial mogul whose family trust owns 37% of its shares. He faces a rival bid for Essar from a consortium led by VTB, a Russian bank.

The run of bad news resumed at **India's state banks**. Punjab National Bank, one of the country's biggest lenders, disclosed that fraudulent customer payments amounting to $1.8bn had been uncovered at one of its branches in Mumbai, raising more questions about banking oversight. A few days earlier, State Bank of India posted its first quarterly loss in 17 years. Last October the government announced a $32bn plan to recapitalise state-controlled banks. This week the central bank reinforced its clampdown on bad loans in the industry. See article .

Credit Suisse reported a net loss of SFr983m ($1bn) for 2017, its third consecutive annual loss. But that was mostly because the Swiss bank wrote down SFr2.7bn in assets to adjust to America's new lower corporate tax. Tidjane Thiam, the CEO, was positive about the prospects for 2018 after three years of restructuring, noting that the cost-cutting had been "relentless".

Bad blood

A judge dismissed a case against Taylor Swift brought by two songwriters, who argued that the lyrics in her single, "Shake it Off", infringed on their **copyright**. The judge ruled that the phrase "haters gonna hate", lacked "the modicum of originality and creativity required for copyright protection", observing that American popular culture was already "heavily steeped in the concepts of players, haters and player haters".

Democratic Republic of Congo
Africa's great war reignites

Africa's broken heart

Congo is sliding back to bloodshed

How to stop a catastrophe

Print edition | Leaders Feb 15th 2018


Polaris / eyevine

NO CONFLICT since the 1940s has been bloodier, yet few have been more completely ignored. Estimates of the death toll in Congo between 1998 and 2003 range from roughly 1m to more than 5m—no one counted the corpses. Taking the midpoint, the cost in lives was higher than that in Syria, Iraq, Vietnam or Korea. Yet scarcely any outsider has a clue what the fighting was about or who was killing whom. Which is a tragedy, because the great war at the heart of Africa might be about to start again.

The cause of the carnage

To understand the original war, consider this outrageously oversimplified analogy. Imagine a giant house whose timbers are rotten. That was the Congolese state under Mobutu Sese Seko, the kleptocratic tyrant who ruled from 1965 to 1997. Next, imagine a cannonball that brings the house crashing down. That cannonball was fired from Rwanda, Congo's tiny, turbulent neighbour. Now imagine that every local gang of armed criminals comes rushing in to steal the family jewels, and the looting turns violent. Finally, imagine that you are a young, unarmed woman who lives alone in the shattered house. It is not a pleasant thought, is it?

Mobutu and his underlings looted the Congolese state until it could barely stand. When a shock struck, it collapsed. The shock was the Rwandan genocide of 1994. The perpetrators of that abomination, defeated at home, fled into Congo. Rwanda invaded Congo to eliminate them. Meeting almost no resistance, since no one wanted to die for Mobutu, the highly disciplined Rwandans overthrew him and replaced him with their local ally, Laurent Kabila. Then Kabila switched sides and armed the *génocidaires,* so Rwanda tried to overthrow him, too. Angola and Zimbabwe saved him. The war degenerated into a bloody tussle for plunder. Eight foreign countries became embroiled, along with dozens of local militias. Congo's mineral wealth fuelled the mayhem, as men with guns grabbed diamond, gold and coltan mines. Warlords stoked ethnic divisions, urging young men to take up arms to defend their tribe—and rob the one next door—because the state could not protect anyone. Rape spread like a forest fire.

The war ended eventually when all sides were exhausted, and under pressure from donors on the governments involved. The world's biggest force of UN blue helmets arrived. Kabila's son, Joseph, has been president since his father was shot in 2001. He has failed to build a state that does not prey on its people. Bigwigs still embezzle; soldiers mug peasants; public services barely exist. The law counts for little. When a judge recently refused to rule against an opposition leader, thugs broke into his home and raped his wife and daughter.

Mr Kabila was elected for a final five-year term in 2011. His mandate ran out in 2016, but he clings to the throne. He is pathetically unpopular—no more than 10% of Congolese back him. His authority is fading. He can still scatter protests in the capital, Kinshasa, with tear gas and live bullets. And few Congolese can afford to take a whole day off to protest, in any case. But in the rest of this vast country, he is losing control (see Briefing). Ten of 26 provinces are suffering armed conflict. Dozens of militias are once again spilling blood. Some 2m Congolese fled their homes last year, bringing the total still displaced to around 4.3m. The state is tottering, the president is illegitimate, ethnic militias are proliferating and one of the world's richest supplies of minerals is available to loot. There is ample evidence that countries which have suffered a recent civil war are more likely to suffer another. In Congo the slide back to carnage has already begun.

Beyond Africa, why should the world care? Congo is far away and has no discernible effect on global stockmarkets. Besides, its woes seem too complex and intractable for outsiders to fix. It has long had predatory rulers, from the slave-dealing pre-colonial kings of Kongo to the Kabila family. Intrusive outsiders have often made matters worse, from the rapacious Belgian King Leopold II in the 19th century to the American cold warriors who propped up Mobutu for being anti-Soviet.

Nonetheless, the world should care and it can help. Congo matters mainly because its people are people, and deserve better. It also matters because it is huge—two-thirds the size of India—and when it burns, the flames spread. Violence has raged back and forth across its borders with Rwanda, Uganda, Angola, South Sudan and the Central African Republic. Studies find that civil wars cause grave economic harm to neighbouring states, which in Congo's case are home to 200m people. Put another way, if Congo were peaceful and functional, it could be the crossroads of an entire continent, and power every country south of it with dams on its mighty river.

If outsiders engage now, the slide back to war may yet be held in check. First, cuts to the UN peacekeepers' budget, made partly at President Donald Trump's behest, should be reversed. The blue helmets are not perfect, and cannot protect remote villages. But they can protect cities and are the only force that Congolese trust not to slaughter and pillage. Second, Mr Trump's welcome sanctions against Mr Kabila's moneymen—building on earlier embargoes on conflict minerals—should be extended. Donors should press Mr Kabila to keep his promise to hold elections by the end of the year, and not to flout the constitution by running again. In this, they should make common cause with sensible African leaders. The Congolese opposition should take part in the vote, instead of boycotting it.

A flicker of hope

The omens are not all bad. South Africa has just dumped Jacob Zuma (see article), who indulged Mr Kabila's claim that Western pleas to uphold Congolese law were imperialism. (Mr Zuma's nephew reportedly has oil interests in Congo.) Cyril Ramaphosa, Mr Zuma's successor, is honest and pragmatic. Just as Nelson Mandela was repelled by Mobutu, and hastened his departure, so Mr Ramaphosa is surely repelled by Mr Kabila. He has experience negotiating the end of bad things, including apartheid, Northern Ireland's troubles and Mr Zuma's presidency. He must not let Congo go back to hell.

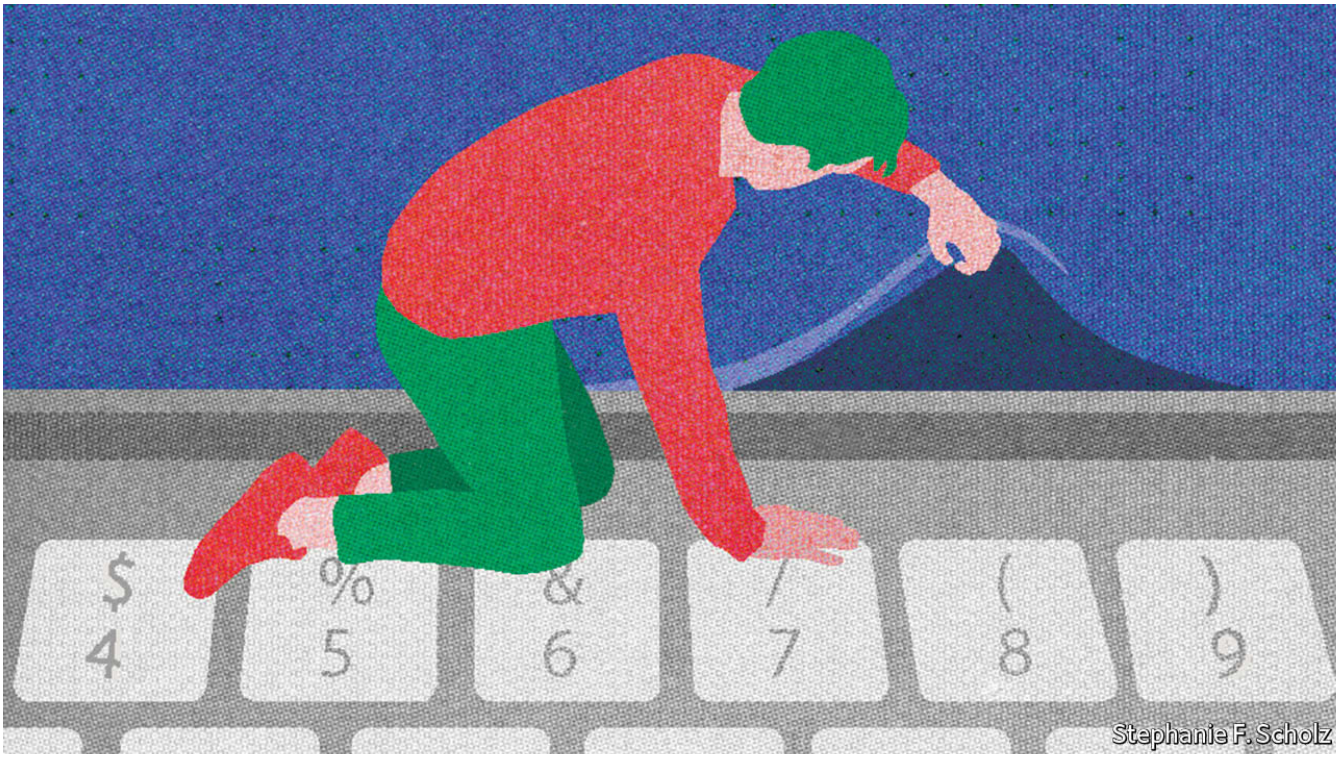
This article appeared in the Leaders section of the print edition under the headline "Africa's great war reignites"

Inside the black box

Humans may not always grasp why AIs act. Don't panic

Humans are inscrutable too. Existing rules and regulations can apply to artificial intelligence

Print edition | Leaders Feb 15th 2018



THERE is an old joke among pilots that says the ideal flight crew is a computer, a pilot and a dog. The computer's job is to fly the plane. The pilot is there to feed the dog. And the dog's job is to bite the pilot if he tries to touch the computer.

Handing complicated tasks to computers is not new. But a recent spurt of progress in machine learning, a subfield of artificial intelligence (AI), has enabled computers to tackle many problems which were previously beyond them. The result has been an AI boom, with computers moving into everything from medical diagnosis and insurance to self-driving cars.

There is a snag, though. Machine learning works by giving computers the ability to train themselves, which adapts their programming to the task at hand. People struggle to understand exactly how those self-written programs do what they do (see article). When algorithms are handling trivial tasks, such as playing chess or recommending a film to watch, this "black box" problem can be safely ignored. When they are deciding who gets a loan, whether to grant parole or how to steer a car through a crowded city, it is potentially harmful. And when things go wrong—as, even with the best system, they inevitably will—then customers, regulators and the courts will want to know why.

For some people this is a reason to hold back AI. France's digital-economy minister, Mounir Mahjoubi, has said that the government should not use any algorithm whose decisions cannot be explained. But that is an overreaction. Despite their futuristic sheen, the difficulties posed by clever computers are not unprecedented. Society already has plenty of experience dealing with problematic black boxes; the most common are called human beings. Adding new ones will pose a challenge, but not an insuperable one. In response to the flaws in humans, society has evolved a series of workable coping mechanisms, called laws, rules and regulations. With a little tinkering, many of these can be applied to machines as well.

Be open-minded

Start with human beings. They are even harder to understand than a computer program. When scientists peer inside their heads, using expensive brain-scanning machines, they cannot make sense of what they see. And although humans can give explanations for their own behaviour, they are not always accurate. It is not just that people lie and dissemble. Even honest humans have only limited access to what is going on in their subconscious mind. The explanations they offer are more like retrospective rationalisations than summaries of all the complex processing their brains are doing. Machine learning itself demonstrates this. If people could explain their own patterns of thought, they could program machines to replicate them directly, instead of having to get them to teach themselves through the trial and error of machine learning.

Away from such lofty philosophy, humans have worked with computers on complex tasks for decades. As well as flying aeroplanes, computers watch bank accounts for fraud and adjudicate insurance claims. One lesson from such applications is that, wherever possible, people should supervise the machines. For all the jokes, pilots are vital in case something happens that is beyond the scope of artificial intelligence. As computers spread, companies and governments should ensure the first line of defence is a real person who can overrule the algorithms if necessary.

Even when people are not "in the loop", as with an entirely self-driving cars, today's liability laws can help. Courts may struggle to assign blame when neither an algorithm nor its programmer can properly account for its actions. But it is not necessary to know exactly what went on in a brain—of either the silicon or biological variety—to decide whether an accident could have been avoided. Instead courts can ask the familiar question of whether a different course of action might have reasonably prevented the mistake. If so, liability could fall back onto whoever sold the product or runs the system.

There are other worries. A machine trained on old data might struggle with new circumstances, such as changing cultural attitudes. There are examples of algorithms which, after being trained by people, end up discriminating over race and sex. But the choice is not between prejudiced algorithms and fair-minded humans. It is between biased humans and the biased machines they create. A racist human judge may go uncorrected for years. An algorithm that advises judges might be applied to thousands of cases each year. That will throw off so much data that biases can rapidly be spotted and fixed.

AI is bound to suffer some troubles—how could it not? But it also promises extraordinary benefits and the difficulties it poses are not unprecedented. People should look to the data, as machines do. Regulators should start with a light touch and demand rapid fixes when things go wrong. If the new black boxes prove tricky, there will be time to toughen the rules.

This article appeared in the Leaders section of the print edition under the headline "Peering into the black box"

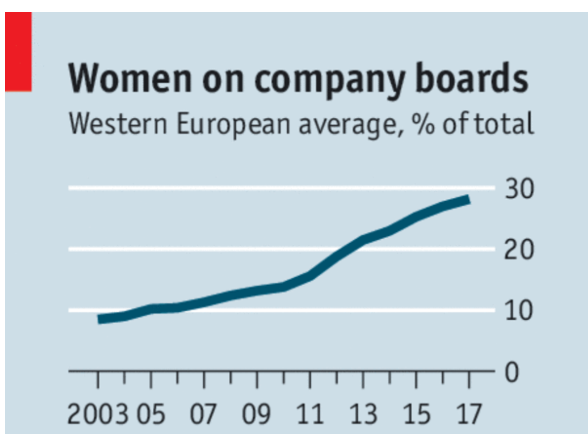
Skirting boards

Why board quotas are no friend to women workers

They distract from the bigger challenge of helping women rise on their merits

Print edition | Leaders Feb 15th 2018

SINCE the days of the Vikings, when they farmed while men marauded, Norwegian women have played a big role in their community's economy. So it was fitting that, ten years ago, Norway pioneered a policy to deal with a stubborn gender gap: the dearth of women directors on company boards.



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Amid objections from shareholders, Norway introduced compulsory quotas requiring stockmarket-listed companies to give women at least 40% of their board seats (up from less than 8% in 2002), or face dissolution. Critics, including this newspaper, decried mandatory quotas as the wrong way to promote women. But they have caught on. In Belgium, Germany and France women make up 30-40% of board directors in large listed firms, three to five times the share of a decade ago. In America, which has no quotas, representation has inched up to 20%. It is no surprise that companies follow the rules rather than face punishment. But does the spread of women in the boardroom justify the quota system itself?

The good news is that quotas have not borne out their critics' fears. Those who opposed them said the idea of token non-executives was demeaning for women, who would prefer to rise on the basis of merit rather than sex. It also jeopardised corporate governance, the sceptics warned, by putting women in positions for which they were possibly underqualified, or staffing several boards with the same clique of high-achievers—known disparagingly as "golden skirts".

The evidence suggests otherwise. In large listed European companies "golden trousers" are almost as common: 15% of male directors sit on three or more boards; 19% of women directors do. Compared with the clubby, white-maned boards of old, women bring youth and foreign experience.

Yet, the evidence so far also undermines the business case for quotas. Studies from at least six countries on companies' performance, decision-making and stockmarket returns fail to show that quotas make a consistent difference, good or bad. That has not stopped pension funds lobbying for more inclusiveness. In Britain they are urging some listed companies to give women 30% of boardroom and senior-executive jobs.

Ms-ing the point

That highlights a problem with boardroom quotas. They are a distraction from the task of advancing the prospects for women further down the career ladder—which really could make a difference to women and the companies that employ them. In Norway only 7% of the biggest companies have female bosses. In Britain, France, Germany and the Netherlands 80-90% of senior-management jobs are still held by men. In rich countries the median full-time wage for women is less than for men, because more women have lower-paid jobs. You might think that a larger number of women on boards would help right these imbalances. So far they have not.

The wrong response to this would be more mandatory prescriptions, such as quotas. The workplace is too complicated for that. At the very most they should be voluntary and temporary tools to accelerate progress, not permanent fixtures. Other proven policies are a better bet. Fathers should be encouraged to take parental leave, so that child-bearing does not harm a mother's chance of making it to the top. Variable working hours should become the norm. High-quality child care, and more accommodating school calendars, would help.

Time may yet prove that boardroom quotas are good for the business as a whole. So far, they have been a sideshow. The more important task is to make it easier for more women lower down the company to keep good jobs and fight their way to the top on their own merits.

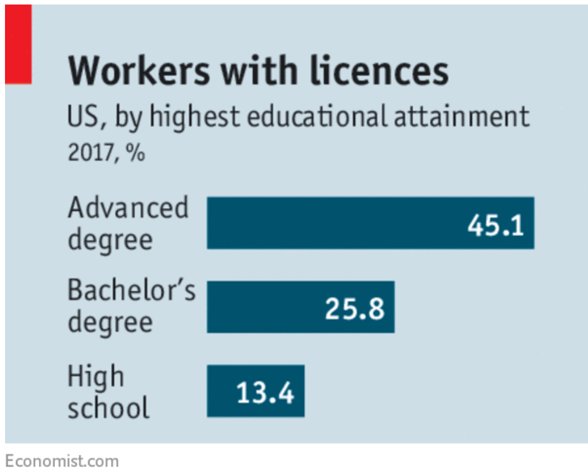
This article appeared in the Leaders section of the print edition under the headline "Skirting boards"

Licence to kill competition

America should get rid of oppressive job licensing

Too many states have let rent-seekers run amok

Print edition | Leaders Feb 17th 2018



SOME rush to blame free markets for America's income inequality and its lack of social mobility. Among rich Western countries, America is where the top 1% of earners have become most detached from their compatriots. Yet those who blame this on unfettered competition or globalism run wild in the home of capitalism ignore an awkward fact. Far from being laissez-faire, America's labour markets are grossly over-regulated by state governments. The resulting lack of competition drives up earnings—especially for the most exclusive professions, including medicine and the law. That is a tax on everyone else.

Fully 22% of American workers must hold licences simply to do their jobs, up from just 5% in 1950. Bartenders must have licences in 13 states; manicurists are licensed everywhere but Connecticut. Louisiana licenses florists.

Licences make it harder to enter a profession. Not everyone can afford to pay a registration fee or take time to study for an exam before being allowed to pull pints or paint nails. The beneficiaries from such barriers to entry are incumbent workers, whose wages rise when competition is chilled.

For unskilled workers this rise is only 4-5%. By contrast, licensing raises the incomes of the highest earners by as much as a quarter (see article). Doctors, dentists and lawyers all benefit from rules preventing lower-skilled competitors from providing even basic services.

These rules are promulgated in the name of consumer protection. But tasks like issuing some prescriptions or drafting routine legal documents rarely require years of expensive postgraduate education. They may even be done better by a specialist who has fewer formal qualifications. The evidence from states where highly trained nurses can operate freely suggests that they provide just as good primary care as doctors do. Yet more than half of states restrict their practice, often requiring them to operate under supervision from doctors, who, naturally, charge a hefty fee for the privilege.

Some labour-market regulation makes sense. When buyers cannot easily judge quality, the state may need to step in. But there are pitfalls. Because lawmakers also lack the expertise to judge who can safely perform, say, a dental procedure, they often ask professions to regulate themselves. Inevitably, state bar associations charged with deciding what tasks should count as "practising law" tend to shut out non-lawyers.

There are better ways to help consumers. The government can issue qualifications and titles—"accredited interior designer", say—but leave consumers to decide whether such diplomas are a valuable signal of quality. This works well in finance, where many optional qualifications are available (think "chartered financial analyst").

Or the government can use inspections instead of licences. Which is better: requiring cooks and waiters to take a government-designed training course, or once in a while checking that restaurants are clean? Inspections can tie in with credentials, as when restaurants receive health-and-safety certificates to display to customers.

Market forces are often best of all, in spite of information asymmetries. Brain surgery may be complex, but it is unlicensed, beyond the need for surgeons to have medical degrees. In Britain anyone can provide legal advice outside the courtroom. People tend to make better choices for themselves than governments, more so in a world of online reviews and price-comparison websites. The state should favour the flow of information by requiring transparent contracts. If buyers are exploited, they should have recourse through the courts.

Bring down the bar

Milton Friedman said that you can tell who benefits from licensing by watching who lobbies for it—and rarely is that consumers. Letting professions wield the power of government against potential competitors is foolish and costly. When licensing is inevitable, regulators should aim to promote competition as well as protect consumers. Licensing run amok not only poisons markets, it also poisons sentiment towards markets that misfire. States should sweep away the rules, so that America really can be the home of free markets.

This article appeared in the Leaders section of the print edition under the headline "Licence to kill competition"

Putin's Syrian gambit

It is not going well

As Israel and Iran clash in Syria, Russia finds itself increasingly in a bind of its own making

Print edition | Leaders Feb 15th 2018

IN DECEMBER last year Vladimir Putin used a surprise visit to Syria to declare that Russia's mission there was "basically accomplished". His troops had saved the regime of Bashar al-Assad. And Russia had played the decisive part in a conflict that America had failed to control. Coming after the annexation of Crimea in 2014, his message was clear. Russia is back.

Just ten weeks later, Mr Putin's boast looks premature. Within a few hours last weekend Iran first sent a large surveillance drone from deep inside Syria into Israeli airspace and Israel responded by shooting it down and destroying its controlling infrastructure near Palmyra. When an Israeli F-16 fighter jet, on its way home from the raid, was brought down by a salvo of Syrian air-defence missiles, Israel hit back by destroying around a third of Syria's anti-aircraft batteries. Russian military advisers may have been among those killed.

The skirmishes hold two messages. Far from winding down, the war in Syria is entering a new and possibly more dangerous phase. And while fighting rages, Russia must stay.

Easy in, hard out

The air strikes were the most significant Israel has carried out in Syria since 1982. Neither Iran nor Israel, despite their bitter enmity, wants all-out war, but each is testing where the other's limits lie. Fresh confrontations have become a near-certainty now that the Assad regime and the Iranian-backed militias that are its most effective ground troops have pushed rebel groups out of an area close to the Israeli-controlled Golan Heights. Israeli commanders say they are braced for attacks launched by Iran from a growing number of bases in Syria.

This puts Russia in a bind. An escalating conflict between Israel and Iran itself may force it to choose sides. Russia and Iran have become close allies in saving Mr Assad. Yet Mr Putin and Binyamin Netanyahu, Israel's prime minister, who is fighting for his political career (see article), are also on cordial terms. Russia has acquiesced in Israeli strikes on Iran's Hizbullah proxy, as long as they did not threaten the regime's survival.

Although Mr Putin poses as the arbiter of Syria's fate and the convener of the peace process, he has little control over other actors, with their own competing agendas. Russian-sponsored peace talks last month in Sochi were a flop. Barely any opposition representatives showed up and the delegation from Damascus rejected calls from the UN and Russia itself for a new constitution. Tension between the other co-sponsors of the conference, Iran and Turkey, reached breaking point when

Iranian-backed militias shelled a Turkish convoy in Syria with Russia's reluctant consent. Turkey and the Syrian Kurds, both of whom Russia has wooed, are now at each other's throats. Mr Putin attempted to dissuade his Turkish opposite number, Recep Tayyip Erdogan, from charging in, but was ignored.

Meanwhile, casualty-averse Russian voters are wearying of the war. A recent poll suggested that less than a third support continuing military operations. Their mood will not have been helped by reports that scores of Russian contract soldiers may have been killed fighting American-led anti-Islamic State forces in eastern Syria last week. The Kremlin would dearly love to find an exit. But that looks a remote prospect.

Russia achieved a lot in Syria with a small commitment of forces, but it now finds that it is too weak to bang heads together. It may be too soon to talk of Russia getting stuck in a Syrian quagmire, as Barack Obama once glibly predicted, but Mr Putin looks a long way from being able to extricate himself.

If Russia's Syria gambit unravels, America should take little comfort. The myopic policy shared by both Mr Obama and President Donald Trump of seeing Syria almost solely in terms of defeating Islamic State has left America without influence there against Iran and torn between Turkey, its prickly NATO ally, and its most effective ground forces, the Syrian Kurds.

Russia is finding the going more difficult than it thought. America has made itself, at best, peripheral. Meanwhile, the suffering of ordinary Syrians drags remorselessly on.

This article appeared in the Leaders section of the print edition under the headline "The Syrian gambit"

On the future of war, education, the Maldives, Switzerland, opera
Letters to the editor

Letters

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On the future of war, education, the Maldives, Switzerland, opera

Print edition | Letters Feb 17th 2018


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

Vanishing massed ranks

Your special report on the future of war (January 27th) noted the prevalence of urban warfare in the 21st century. It identified rapid urbanisation and the asymmetric advantages that cities offer opponents as the two principal causes of this shift. There is a third reason: the smaller size of the armed forces today. As armies have contracted they have become simply too small to form the large fronts that characterised so much inter-state warfare in the 20th century. Instead of surrounding cities, downsized armies are forced to fight inside them.

ANTHONY KING
Chair of war studies
University of Warwick
Coventry

Concerns about malfunctioning autonomous military systems reminded me of this (probably apocryphal) story from several decades ago. I think it was America's Defence Advanced Research Projects Agency, or its British equivalent, that apparently tested software to find the optimum strategy for the commander of a naval escort shepherding a convoy through waters patrolled by enemy submarines.

When they simulated actual convoys from the second world war they found that the software achieved fewer losses and faster travel times than had actually happened. When they examined the results they realised that in each case the software had dispatched a destroyer to sink the slowest merchant ship, the vessel that had held the convoy back. The logic was faultless, potentially saving more ships and their crews, but is not something that most human commanders would contemplate.

TONY BUDD
Wickford, Essex

It is conceivable that once the AI war machines reach a certain level of intelligence they may decide not to fight at all, realising that peace is the better way for reaching what they were programmed to do. Much will depend on the goals that the autonomous robots are given. If they were set a goal of world peace, they might turn to attacking their owners if they perceive them to be a hindrance to achieving that objective.

MATTHIAS HILLER

Berlin

Grade inflation

It is not just younger people who have to deal with the aggrandisement of academic degrees ("Time to end the academic arms race", February 3rd). I am approaching the mandatory retirement age set by my employer, yet I am ineligible to apply for a position within an organisation that boasts it is "an equal opportunities employer" because I did not attain GCSE grade C or above in English and maths. GCSE exams became part of the curriculum two decades after I left school. Surely my employer is not using them to circumvent the anti-age discrimination provisions of the 2010 Equality Act? Or does academic inflation mean that the GCSEs taken by today's 15 and 16 year olds are of a higher standard than the master's degree I took in the 1980s?

There might even be some retired army colonels who completed the old two-year course at Sandhurst in the 1970s but will be considered by human-resources departments to be less educated than a police constable with basic recruit training. Perhaps we should award retroactive degrees to older people with professional qualifications.

RICHARD ACLAND

Shrewsbury, Shropshire

You listed nursing among the disciplines that do not require a university education. It used to be a career that never required a college degree, but it is also a profession that has changed radically over time. Britain's Institute of Medicine identifies five core competencies for nurses that would be difficult to develop without the benefit of a university education, an education during which nurses today spend half their time honing their skills in clinical practice.

There is evidence from studies demonstrating lower mortality among surgical patients in hospitals that employ a higher proportion of graduate nurses. One systematic review of research studies found that a 10% increase in the number of nurses with a university degree could reduce patient deaths by 1 per 1,000 patients.

PROFESSOR IAN NORMAN

King's College

London

Environment and energy policy

*** Lexington does a serious injustice to the past Republican legacy of environmental and public health protection in America (January 27th). The Environmental Protection Agency (EPA) was established by President Richard Nixon in 1970, and its impact firmly established in its early years by its first administrator, William Ruckelshaus. It was also Mr Ruckelshaus to whom the Reagan administration turned in 1983 to put EPA back on track after the Gorsuch debacle.**

Lee Thomas, the EPA administrator during Reagan's second term, lead the negotiations that resulted in the first international treaty dealing with a global environmental problem. The Montreal protocol successfully addressed the threat to the

ozone layer posed by chlorofluorocarbon aerosols (CFCs). George Bush senior's EPA administrator, William Reilly, presided over the first major changes in the Clean Air Act since its passage in 1970. The result was a cap-and-trade system that lowered sulphur dioxide emissions (which cause acid rain) from power plants. It did this faster and significantly cheaper than a command and control approach. It was also this Bush administration that acknowledged the threat of climate change.

Virtually every Republican EPA administrator has decried the Trump administration's environment and energy policies and have forcefully condemned Scott Pruitt, the current EPA administrator, and his destructive conduct at EPA.

PHILIP ANGELL

Annapolis, Maryland

The situation in the Maldives

Banyan mischaracterises the politics of the Maldives (February 10th). Calling the state of emergency was a necessity. The institutions of the nation were imperilled. Corruption had visited the supreme court. Bribes were buying unconstitutional acts, such as a motion to remove a democratically elected president, a right only parliament reserves. Rather than the facts, your article reveals a penchant for the judiciary over the executive.

It also casts gratuitous suspicion on the relationship between the Maldives and China. The Maldives is a sovereign country, not a geopolitical football. The former president referred to in your article might do well to remember this when calling for foreign military intervention to resolve an internal dispute, particularly given there have been no civilian injuries, let alone fatalities. This administration is committed to working with all international partners who wish to engage in a constructive manner in the consolidation of democracy in the Maldives.

AHMED SHIAAN

Ambassador of the Maldives to Britain and the European Union

London

Here's to boring politics

Your leader on the potential coalition government in Germany describes the probable result as a "dreary sort of continuity that has left everyone unhappy" (" Reheating the GroKo ", February 10th). By "everyone" you seem to be referring to the political parties, though surely it is the nature of successful negotiations to leave the participants partially unhappy.

But what of a "dreary sort of continuity"? Wouldn't both America and Britain have been well advised to espouse such a political line over the past two years? Here in Switzerland we have a permanent coalition, the dreariest continuity imaginable, and it is a big factor in our stability, resulting in long-term business confidence.

Long live dreariness in politics!

BRUCE MATHERS

Zug, Switzerland

Sing it loud and proud

"Rope, knife, rose" (February 3rd) got the basic operatic storyline all wrong. Contrary to the thrust of your article, it is the great voices that fill opera houses, not radical directors. Try finding a ticket for the forthcoming "La Traviata" at the Opera de Bastille, featuring Anna Netrebko and Placido Domingo. The plot has lost none of its thrill since the early days of the genre and needs no props in the form of disruptive, distracting stage effects.

As George Bernard Shaw famously put it, opera is when "a tenor and a soprano want to make love, but are prevented from doing so by a baritone".

OLGA BERARD

Paris

**** Letters appear online only***

The Democratic Republic of Congo
Waiting to erupt

Waiting to erupt

Congo's war was bloody. It may be about to start again

President Joseph Kabila is in the seventh year of a five-year term. He is struggling to hold the country together

Print edition | Briefing Feb 15th 2018

WHEN change comes to Congo, it can come fast. The previous president, Laurent Kabila, lost power when a bodyguard shot him in 2001. The president before that, Mobutu Sese Seko, was overthrown by Rwandan-backed rebels who marched 1,600km through the rainforest in a mere six months, wearing gumboots. Mobutu did not pay his troops. "You have guns," he told them. "You don't need a salary." Faced with a serious enemy, they ran away. A tyrant who had ruled for 32 years was suddenly unemployed.

Could it be about to happen again? Congo's ruler today, Joseph Kabila, who inherited the job from his late father, is beleaguered. Like Kabila *père*, he has many enemies. Like Mobutu, he has presided over a violent kleptocracy, which few Congolese would lift a finger, let alone a rifle, to defend. His presidential guards remain loyal because they, at least, are well-paid and he maintains a large network of cronies who benefit from corruption. But he is wobbly.

President Kabila is in the seventh year of a five-year term and is constitutionally barred from standing again. He was supposed to call an election in 2016 but found excuses to delay it over and over. He has no legitimacy. His authority is disintegrating. And with it, central Africa faces once again the possibility of a slide into war.

After Mr Kabila broke a vow to hold elections by the end of last year, there were protests at Catholic services in Kinshasa, the capital, and 12 other cities. Mr Kabila cracked down hard. Police surrounded 134 churches in Kinshasa alone, beat and tear-gassed churchgoers, and shot live rounds into fleeing congregations. At least eight people died and probably many more. Human Rights Watch reports that bodies were dumped into the Congo river.

In rural areas the violence is worse. More than 70 rebel groups trade bullets with the army or, more commonly, prey on civilians. The security forces are equally vicious. Some 2m people fled their homes in 2017, bringing the total internally displaced to 4.3m. The UN predicts that an army offensive launched last month against Islamist guerrillas near the border with

Uganda will drive another 370,000 from their homes. At least ten of Congo's 26 provinces are in the grip of armed conflict. Refugees are flocking into Uganda, Tanzania, Angola and Zambia. Recent history suggests that things could get much bloodier.

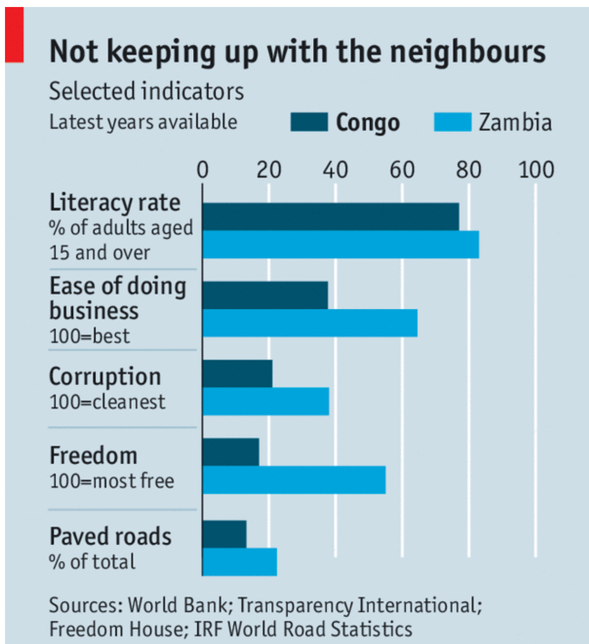
The great Congo war of 1998-2003 was the most lethal on any continent in most people's lifetimes. It sucked in soldiers from eight other countries. Mass rape became routine. No one knows how many people died of machete wounds, hunger and disease. Estimates range from 1m to over 5m. Four factors fed the war: an external shock to start it; a state too rotten to hold Congo together; vast mineral wealth that paid for weapons and was worth fighting over; and a tangle of ethnic and tribal grievances for warlords to exploit.

The external shock was the Rwandan genocide of 1994. In its aftermath 2m refugees fled into eastern Congo. They were not the victims, but the perpetrators, along with their families and weapons. The forces of Paul Kagame, Rwanda's Tutsi strongman, had chased them into the rainforests of what was then called Zaire. When they used the forest as a base to attack Rwanda, he invaded his giant neighbour, twice, to slaughter them. The first time he overthrew Mobutu and put Laurent Kabila in the palace. The second he tried to overthrow Kabila, who had double-crossed him and started to aid the genocidal Hutus. Only swift military intervention by Angola, Zimbabwe and Namibia saved Kabila's life.

Scramble in Africa

The war then degenerated into what Joseph Conrad once called a vile scramble for loot. Armies and militias seized mines and helped themselves. Gunmen plundered villages and raped every woman they could catch. The carnage ended, more or less, in 2003, when all sides were exhausted and donors were leaning on them to make peace. Today the world's largest UN peacekeeping force, numbering 18,000 blue helmets, tries to enforce a measure of calm in the east of the country.

Paul Collier of Oxford University estimates that when a civil war ends, it has a 40% chance of reigniting within a decade. Congo has so far avoided a full relapse. But it still has three of the four factors that fed a conflict last time—a rotten state, mineral wealth and warlords stirring up animosities. It also has an illegitimate president. Small wonder Congolese are nervous.



Economist.com

Congo is four times the size of France but has less paved road than Luxembourg. Its population is estimated at 80m but no one is sure (the latest census was in 1986). Whatever the true figure, it is soaring. The average Congolese woman has six children, the third-highest rate in the world; nearly half of Congolese are under 14. And they are grindingly poor. Only one in seven earns more than $1.25 a day. Life expectancy is just 58. Britain, which provides aid to Congo, estimates that by 2030 it could be home to more absolutely poor people than any other country. It lags far behind even neighbouring Zambia on many indicators of development (see chart).

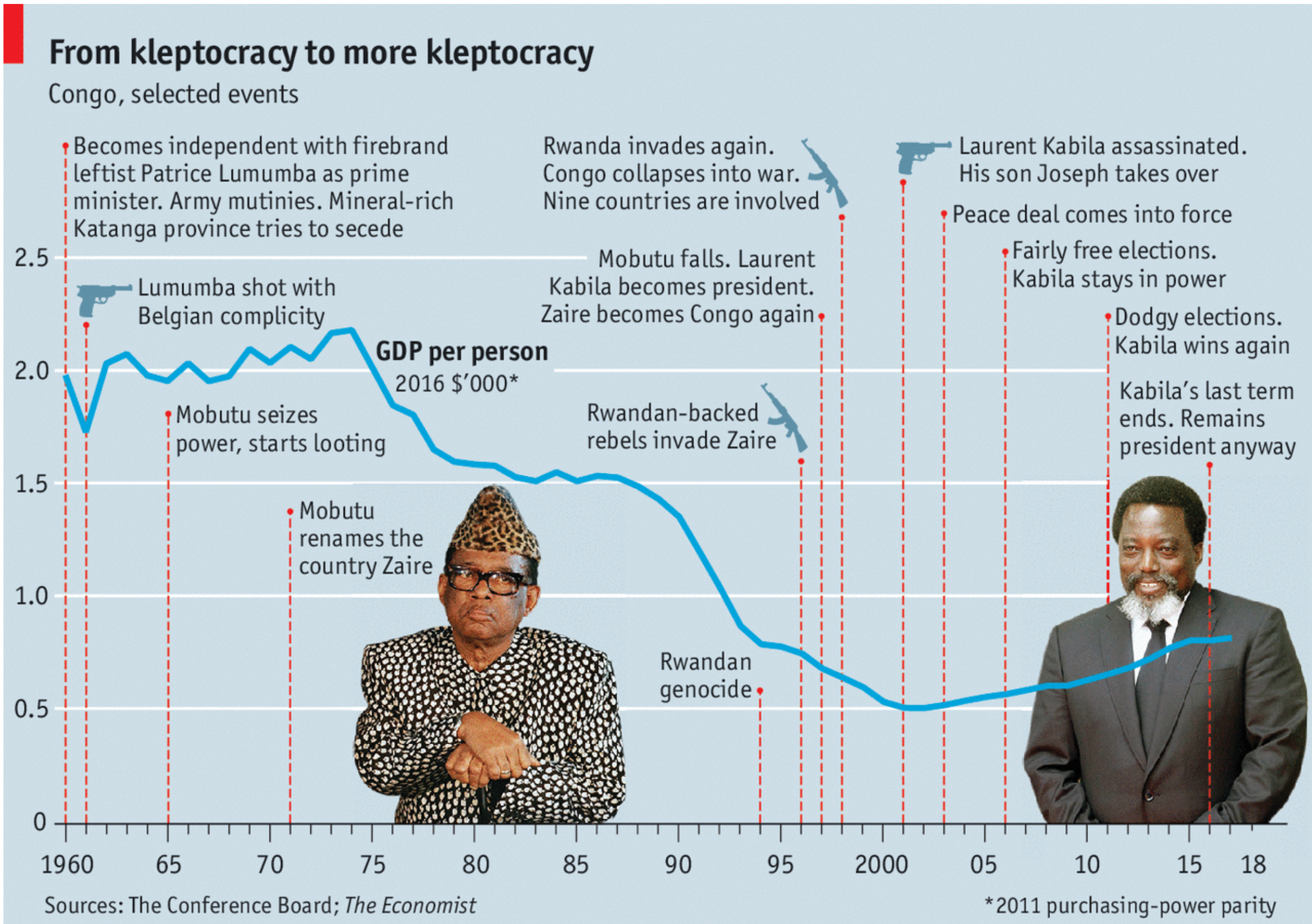
Yet there is more to Congo than misery. Its capital is a megacity of 12m. It is the birthplace of rumba lingala, dance music that has spread beyond Africa. Its artists exhibit across the world. Its people speak hundreds of languages. Despite this diversity, the Congolese are a single people. Crossing from Rwanda into the Kivus, you go from order to chaos, from stultifying conformity to exuberant individualism.

Africa's beating heart

Congo's potential is colossal. It is at the heart of Africa, and could connect north, south, east and west, if only it had roads. Underneath its soil lies enough copper, cobalt, zinc, tin, diamonds and gold to transform its fortunes, if only the wealth could be used wisely. Its rainforests teem with wild animals and unfamiliar plants. Binding it together is the great river, which flows so hard into the Atlantic that Portuguese sailors in the 16th century could drink fresh water 160km out to sea. The Congo could, if harnessed, power much of Africa. Yet chronic misrule and insecurity prevent any of this potential from becoming reality.

Somehow, with a bit of ingenuity and a lot of hustle, its people get by. On Lake Kivu a curious industry has grown up. On a beach, crude rails–seemingly pilfered from a railway–descend into the water. Mounted on top is a half-built ferry. Young men crowd around it, wearing cheap sunglasses in place of safety goggles, as they weld parts onto the hull. According to Baby Masuo Hamadi, the 39-year-old chief engineer, the boat will have cost just $800,000.

For $50, a speedboat will take you across the lake in two hours. The slower boats, which take 12 hours, have pulsing on-board nightclubs. Your correspondent travelled on a ship with four classes of travel, from a crowded and sweaty third-class compartment in the hold to a VIP cabin on the roof, occupied by a splendidly regal government minister.



Economist.com

The boats thrive because no one wants to travel by road. The journey from Bukavu to Goma, on the other end of the lake, is infested with rebels. Though the boats occasionally sink (and contain precisely zero safety equipment), they are still far safer. "Cars don't move how they used to, because of the insecurity," says Bebe Kasi, a soldier's wife travelling from Kalemie, on Lake Tanganyika. She left her husband there after fighting broke out nearby, to take her children out of danger.

It is in the green hills of North and South Kivu that Congo's wars have been most bloody. Bukavu and Goma, the two main cities, have changed hands several times. The hills are densely populated and fertile. Conflict over land, grazing and water is common. Analysts talk in an alphabet soup of acronyms of different armed groups. The last major offensive took place in 2012, when a new Tutsi group, M23, reportedly sponsored by Rwanda, marched into Goma unopposed. It was eventually thrown out by the Congolese army, supported by the UN. But war has continued.

Local rebel groups are nearly all ethnically based. The government will not protect you, they tell villagers, so you must rely on your tribe. They make money from logging, extortion and smuggling. They terrorise civilians but have not yet seriously challenged Mr Kabila's rule.

Some rebel groups seem to be coming together and may once again threaten the state. In September a group called Mai Mai Yakutumba, led by William Amuri Yakutumba, an ageing Babembe rebel who likes to wear a Nazi SS symbol on his uniform, attacked Uvira, a lakeside city in South Kivu. The Congolese army fled. With machineguns mounted on speed boats, the rebels would have taken the city had they not been repelled by Pakistani peacekeepers. Mr Yakutumba says his aim is to overthrow the government in Kinshasa.

In the past year several cities have seen prison breaks. One in Kinshasa, led by a Christian cult, freed perhaps 4,000 people. In Beni, a city in North Kivu, massacres of civilians and attacks on UN bases have killed hundreds. In Kasai, in the south-west, a major insurgency that began late last year has displaced hundreds of thousands and led to the deaths of thousands, including two UN experts, one of whom was apparently decapitated by rebels.

State of collapse

Making sense of it all is hard. Mr Kabila's foes say he has deliberately stoked violence so that holding elections is impossible and he can stay in power. Others mutter conspiratorially that the West keeps Congo in chaos so as to extract its minerals.

What seems more likely is that Mr Kabila's authority is draining away and with it the Congolese state's ability to maintain even a basic monopoly of violence. Soldiers and police are barely paid. In Beni, the front line in the battle against the rebels allegedly responsible for the massacres, soldiers live in miserable dugouts protected from the elements by tree branches and tarpaulins, and complain that there is no food. They rarely fight.

In the east Mr Kabila has never really been in control. Instead he has forged alliances with warlords and regional power-brokers, with the tacit support of Mr Kagame over the border in Rwanda. Army commanders, of which Congo has far too many, are bought off with lucrative postings where they can smuggle or extort.

The UN provides a hefty monitoring operation and has so far prevented any rebel movement from growing large enough to threaten Mr Kabila. That now risks breaking down. Nikki Haley, Donald Trump's ambassador to the UN, accuses it of propping up a corrupt government. Even as conflicts spread, the peacekeeping mission is being cut back, to save money. Meanwhile, Rwanda and Burundi are quietly fighting a proxy war on Congolese territory. Neighbours abhor a power vacuum.

Dig for victory

Mineral wealth finances the instability. Take, for instance, a gold mine in a hill at a place called Nzibira, 80km from Bukavu. All of the vegetation has been stripped away. Tunnels have been cut deep into the rock and propped up with logs. A generator hums, pumping air down the shafts. Men with cheap head-torches scurry around the surface. Underground, at the end of a steep tunnel too small even to crouch in, miners bash chisels into the rock to free the precious ore.

This kind of mining is "artisanal", meaning primitive and dangerous, not expensive and handmade. Industrial mining all but stopped in the 1980s in this part of Congo. Instead, 400 workers dig, carry, wash, break and filter the ore by hand. They break lumps of mud and rock not with hammers but with bigger rocks. Congo has perhaps 2m such miners.

Their unmeasured output may exceed that of Congo's industrial mines, which are run mostly by Western and Chinese firms and provide 95% of formal exports. Without mining, villagers around Bukavu and Goma would struggle to afford tin roofs or mobile phones. But the men with guns would have less to fight over. Many mines are run or taxed by warlords.

Augustin Baderhekuguma has been mining for 31 years. In a good week his team of around 50 workers can bring out around 50 grammes of gold, earning $2,300 from the local *négociants* (middlemen). Recent years have been hard. Since 2010 the Dodd-Frank law has required American firms to prove their products do not contain "conflict minerals". So that an embargo did not affect all Congolese minerals, Mr Kabila ordered the shutdown of mining in eastern Congo, the most conflict-ridden region. Soldiers swarmed over the sites, forcing miners off the hills. Mr Baderhekuguma went to Kolwezi, in the former province of Katanga, to find work. Others went back to subsistence farming. A few joined rebel groups.

Fidel Bafilemba, who runs an NGO in Goma, says the law has made it harder for armed groups to fund themselves. But not impossible. Several complex systems of verification, using bags and tags to track minerals, have grown up. That gives sellers the paperwork to "prove" that minerals can be certified as coming from conflict-free artisanal mines.

Yet many are sceptical that the system stops fraud. “Here, there is so much gold, it is sold in all of the neighbourhoods,” says Apollinaire Bulundi, a former South Kivu minister of mines. Almost all of it is mined by hand and smuggled out, mostly into Rwanda, Uganda and Burundi, often wrapped in women’s clothes. Pascal Buyoya, a smuggler in a flamboyant red suit, says he takes the gold to Rwanda. From there, it is flown to Dubai, and becomes indistinguishable from any other gold. The Congolese state receives no taxes from this trade but bigwigs on both sides of the border have grown fat on it.

War threatens Congo’s natural splendours. Fly over Virunga national park in a helicopter, and you can see great black patches where the trees have been burned. Smoke rises ominously. The forest is burnt down for charcoal, with which most Congolese cook. Much of the trade is controlled by the FDLR, a Hutu militia which grew out of the *génocidaires*.

Congo’s forests contain gorillas, bonobos and chimpanzees, as well as the elusive okapi, which looks as if it is half-giraffe, half-zebra. Forest elephants and lions also hide in its depths. It is vast and poorly understood. Last year, scientists discovered an area of peatland around the size of England, containing as much trapped carbon dioxide as America emits in 20 years.

Daring tourists visit Virunga to climb Nyiragongo, an active volcano, and to track gorillas. They need an armed escort. The park’s Belgian boss, Emmanuel de Merode, reckons that the illegal economy there—charcoal, logging, fishing—is worth $100m a year. His rangers try to prevent some of it. Over 100 have been killed. Mr de Merode has been shot while doing his job, too.

He recognises that the park cannot deprive desperately poor locals of 2m acres of land without offering them something. So the park is building hydroelectric power plants–some of which are paid for by money from the Howard Buffett foundation, an American charity. Running any kind of enterprise in Congo is costly, however. Half of the park’s revenues go to Kinshasa, supposedly to fund the national park service. What happens to the money, Mr de Merode is unsure.

Go with the flow

Nothing illustrates Congo’s missed opportunities better than the river itself. Under brutal Belgian colonialism, it was the country’s main artery. Stanleyville, later renamed Kisangani, 1,500km inland, became the country’s second-biggest city. A series of cataracts upriver means that the capital, Kinshasa, is where the river starts to become navigable.

“You could go all over this country by river,” says the director of the national transport office, Daniel Mukoko Samba, pointing to an old map. Tributaries of the Congo and the Kasai rivers used to carry palm oil, beer, coffee and other goods from factories to the coast. Now the factories are derelict, and the grand shipping company the Belgians built has no functioning boats. The latest statistics Mr Mukoko Samba can produce for traffic date from 1979.

Trade on the river now moves on small barges. In Kisangani ladies in multicoloured wraps cook on open fires, waiting for a boat. There are no cabins. Instead, passengers sit in a floating shanty town on top of the cargo, with tarpaulins to shield them from the rain. There are no fixed timetables. Whenever the rumour spreads that a barge is leaving, people rush to it. Therèse Basea Abedi, a 43-year-old trader, is waiting to travel to Kinshasa, where her mother has just died. It could take ten days, or a month. Coming back against the flow could take six weeks. Ms Abedi has made the journey 30 times or so. Each time it has got worse, she says. The rich fly.

The river’s hydroelectric potential is barely tapped. Kinshasa is powered by two large dams, built in the Mobutu era. There are plans for a third, which could generate 39,000MW, or twice as much as China’s Three Gorges dam. That is enough to power not just Congo but much of southern Africa. Yet, despite a South African promise to buy the power, the project has gone nowhere. In 2016 the World Bank withdrew its support, having been put off—those with knowledge of the project say—by Mr Kabila’s insistence that he take personal charge of it.

Kin La Poubelle

Kinshasa is the centre of Congolese cultural life and politics. Its glitzy hotels and restaurants are where the money looted from the rest of the country is spent. It boasts grandiose architecture (including an enormous Chinese-built parliament) and some of the best-dressed people in the world (known as *sapeurs*, or members of the Society for the Advancement of Elegant People). It is also filthy and lawless. The buses are known as “spirits of death”. The potholes are the size of buses. Traffic is regulated by gun-toting cops who will happily pull a motorist out of his car and beat him up in broad daylight.

The city is one of the least connected in the world. The airport on the English channel island of Guernsey, with a population of 63,000, handles more passengers than Kinshasa’s. Perhaps one in 20 Kinois has a formal job. Nonetheless they pay dearly to live in the metropolis. A room in a slum, without dependable electricity or clean water, can go for $100 a month.

In December 2016, on the streets of Kinshasa, Mr Kabila met his biggest test as his term as president drew to a close. He faced Étienne Tshisekedi, a veteran of the anti-Mobutu struggle in the early 1990s, who is revered in much of the city. On the final day of the year, with riots brewing, Mr Kabila agreed that elections would be held by the end of 2017 and that, in the meantime, a national unity government would bring in parts of the opposition.

In February 2017, however, Tshisekedi died and the deal began to implode. Without its charismatic leader, the opposition alliance, *le rassemblement*, is weak. Martin Fayulu, the co-ordinator of the group, says Mr Kabila “wants to stay in power eternally”. An election is scheduled for December 23rd. Voter registration has progressed but few expect it to happen on time. On January 31st Mr Kabila’s spokesman said his boss would not run for another term and would name a preferred successor by July. The opposition do not believe him.

According to polling by the Congo Research Group, of New York University, Mr Kabila is unpopular. If he changed or ignored the constitution and ran again, just 10% of the population would vote for him. However, his rivals are weak, too. Moïse Katumbi, a wealthy former governor of Katanga, came first in that poll, with 38%. But he is in Brussels, having been exiled and then convicted of (almost certainly) trumped-up charges of illegally selling property. Tshisekedi’s son Félix lacks his father’s charisma. No Congolese politician has a truly national following.

Mr Kabila has amassed great wealth in office but shows little interest in governing. According to a friend, he is indecisive and introspective. He likes to collect motorbikes and old cars. He spends a lot of time on a farm he owns in Katanga, where he also has plenty of businesses. Some say he plays a lot of video games.

He rarely appears in public or gives speeches. Having been raised in Tanzania, he speaks little Lingala, the language of Kinshasa's streets. Having taken power at 29—he is now just 46 years old—he cannot reasonably hope to die peacefully in office. Yet there is almost nobody he could turn into a *dauphin*, trusted to protect his affairs. Jaynet, his sister, and Zoe, his brother, both members of the national assembly, are his closest allies. He thinks tactically, not strategically. Each promise seems designed to buy him another few months in power. He cannot keep it up for ever.

Congo is a bit like Mount Nyiragongo. In 2002 it erupted and a river of molten rock, 200 metres wide, poured down towards Goma. Some 400,000 people were evacuated—at the last minute, because the rebels controlling the city thought that the warning of the impending eruption was a trick to make them flee.

Even as Nyiragongo's crater still bubbles, 50 metres under the surface of nearby Lake Kivu lies 60bn cubic metres of methane. If lava sinks to the bottom, the explosion will release enough gas to suffocate everyone for miles around—millions of people. The city avoided this catastrophe in 2002, says Abel Minani of the local volcanology centre. Next time, it might not.

Bubbling under

As with the volcano, so with politics. A new war could spread far beyond Congo's borders, sucking in neighbours as happened 20 years ago. By contrast, if Congo were peaceful and growing, it would give a huge boost to the continent of Africa.

There are reasons to hope. Among them is Lucha, a movement of young middle-class activists that started in Goma and has now spread across the country. Ghislain Muhiwa, one of the founders, explains the group's tactics. Instead of engaging in ethnic politics, they protest against the government's failure to provide services. "People here think it is normal to have no water, no electricity, to be killed by militias. Our job is to convince them it is not normal."

No more than a few hundred people in size, Lucha has nonetheless scared the government. That is because it cannot be bought off. Dozens of its activists have spent time in prison; others have disappeared. Mr Muhiwa spent six months in prison—he devoted it to teaching the other inmates how to read and write. Lucha is a long way from bringing about a revolution. But it is a hint of what the people of Congo could produce, given a chance.

This article appeared in the Briefing section of the print edition under the headline "Waiting to erupt"

Regulation
How to rig an economy

How to rig an economy

Occupational licensing blunts competition and boosts inequality

How high earning professions lock their competitors out of the market

Print edition | United States Feb 17th 2018


Satoshi Kambayashi

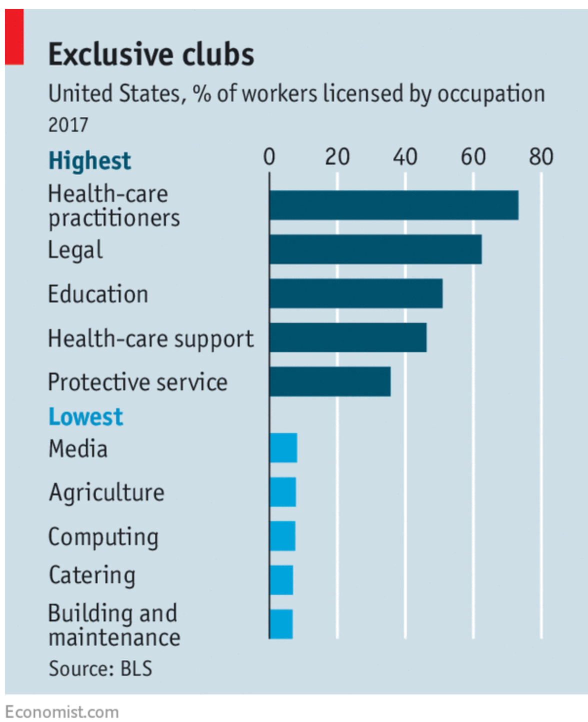
EVERY month Debbie Varnam of Shallotte, North Carolina, must pay a doctor's bill. It is not for treatment. Ms Varnam is a "nurse practitioner", a nurse with an additional postgraduate degree who is trained to deliver primary care. North Carolina, like many states, does not allow nurse practitioners to offer all the services they are trained to provide. Ms Varnam cannot, for example, prescribe the shoes diabetics often need to prevent the skin on their feet from breaking down. To do so, she needs the approval of a doctor. So Ms Varnam employs one. For about $1,000 a month, the doctor reviews and signs forms that Ms Varnam sends him. The doctor, she says, has a similar arrangement with five other offices.

Occupational licensing—the practice of regulating who can do what jobs—has been on the rise for decades. In 1950 one in 20 employed Americans required a licence to work. By 2017 that had risen to more than one in five. The trend partly reflects an economic shift towards service industries, in which licences are more common. But it has also been driven by a growing number of professions successfully lobbying state governments to make it harder to enter their industries. Most studies find that licensing requirements raise wages in a profession by around 10%, probably by making it harder for competitors to set up shop.

Lobbyists justify licences by claiming consumers need protection from unqualified providers. In many cases this is obviously a charade. Forty-one states license makeup artists, as if wielding concealer requires government oversight. Thirteen license bartending; in nine, those who wish to pull pints must first pass an exam. Such examples are popular among critics of licensing, because the threat from unlicensed staff in low-skilled jobs seems paltry. Yet they are not representative of the broader harm done by licensing, which affects crowds of more highly educated workers like Ms Varnam. Among those with only a high-school education, 13% are licensed. The figure for those with postgraduate degrees is 45%.

More educated workers reap bigger wage gains from licensing. Writing in the *Journal of Regulatory Economics* in 2017, Morris Kleiner of the University of Minnesota and Evgeny Vorotnikov of Fannie Mae, a government housing agency, found that licensing was associated with wages only 4-5% higher among the lowest earning 30% of workers. Among the highest 30% of earners, the licensing wage boost was 10-24% (see chart 1). Forthcoming research by Mr Kleiner and Evan Soltas, a graduate student at Oxford University, uses different methods and finds no wage boost at the bottom end of the income spectrum, but a substantial boost for higher earners.

One way of telling that many licences are superfluous is the sheer variance in the law across states. About 1,100 occupations are regulated in at least one state, but fewer than 60 are regulated in all 50, according to a report from 2015 by Barack Obama's White House. Yet a handful of high-earning professions are regulated everywhere. In particular, licences are more common in legal and health-care occupations than in any other (see chart 2).



These professions share two characteristics. First, it takes years of study—and often lots of student debt—to join them. Becoming a doctor takes a four-year undergraduate degree, a four-year postgraduate degree, and then a multi-year medical residency. Those barriers to entry mean that once the law requires the involvement of a doctor, costs soar. Yet it surely does not take all that training, argue nurse practitioners, to know when to prescribe diabetic shoes. The evidence is on their side. A review of the literature in 2012, paid for by the federal government, found that no study raised concerns about the quality of care offered by nurse practitioners. There are plenty of comparison points, because 22 states have overcome doctors' objections and given nurse practitioners so-called "full practice authority".

Second, it is often practitioners themselves who define—and expand—the boundaries of the regulated profession. For example, in North Carolina a board of dentistry, mainly elected by dentists themselves, regulates the profession. In 2006 it tried to stop hygienists and beauticians from whitening customers' teeth, after dentists complained that they were being undercut on price. (The Federal Trade Commission (FTC) objected, and in 2015 the Supreme Court put a stop to the practice by ruling that the board was not exempt from competition law.)

Occupy K Street

Both problems are acute in the legal industry. Almost every American state forbids those who do not have a three-year law degree from providing most legal services. Bar associations—composed of lawyers themselves—often define what counts as legal practice. In 2000 the American Bar Association, after rejecting a proposal to allow lawyers to split fees with non-lawyers, asserted that "the maintenance of a single profession of law" was a core priority. "In no other country does the legal profession exert so much influence over its own regulatory process," writes Deborah Rhode of Stanford University in her book "The Trouble with Lawyers". Outsiders typically cannot even invest in law firms, limiting funding for innovative new business models, such as providing fixed-fee legal advice over the internet, or through retailers. Even those who are qualified can struggle to compete across state boundaries, because of the need to pass a separate bar exam.

Advocates for reform compare America's model unfavourably with that of Britain. There, non-lawyers have a built in majority on legal regulatory bodies, which are tasked with promoting competition as well as protecting consumers. Outside court, anyone can offer legal advice, or provide basic legal services like drafting documents. The result seems to be cheaper access to justice, and more innovation. The World Justice Project ranks America 96th of 113 countries for access to and affordability of justice, sandwiched between Uganda and Cameroon. (It does not help that there is hardly any legal aid.)

American policymakers are increasingly aware of licensing's potential to chill competition. In 2017 the FTC launched a task force on "economic liberty" to campaign against unnecessary licensing. Some states have implemented reforms in recent years. Arizona rolled back some licensing requirements in 2016 and has since made it easier to challenge regulations in court. Last year Mississippi brought its licensing boards under closer supervision. Delaware, Nebraska and Wisconsin are considering proposals for reform.

State courts can also intervene. In 2015 the Texas Supreme Court struck down a law requiring eyebrow-threaders to obtain expensive and unnecessary training in cosmetology. The judges found that the Texas constitution guarantees a minimum level of economic freedom from regulation. Some scholars think such a right can be found in the federal constitution, implicit in the right to "due process". The federal courts have mostly resisted this idea since a Supreme Court ruling in 1955 gave states plenty of room to regulate their economies as they themselves saw fit. But President Donald Trump's appointments to the federal courts might help "shift the centre of gravity" on the issue, says Dick Carpenter of the Institute of Justice, a libertarian legal charity, optimistically.

When it comes to medicine and law, however, it can be hard to convince the public that some licensing requirements are frivolous. California not only requires that nurse practitioners are supervised by doctors, but also bans doctors from overseeing more than four. Three liberalising bills, which would have given nurse practitioners full-practice authority, have failed since 2007. The California Medical Association, a trade group for doctors, has campaigned hard against reform.

The medical and legal professions account for around a quarter of the top 1% of earners, whose incomes have grown faster in America than in other rich countries in recent decades. A study published in *Health Affairs*, a journal, in June 2015 found that the average doctor earns about 50% more than comparably educated and experienced people in other fields. Another study, from 2012, put the wage premium from working in law at 23%.

Doctors are also unusually well-paid compared with those in other countries. The average general practitioner earns $252,000 and the average specialist $426,000, according to the Bureau of Labour Statistics. According to OECD data on a handful of other rich countries, the averages there were $130,000 for generalists and $273,000 for specialists in 2014. (These figures adjust for differences in living costs, and include only self-employed doctors, who tend to earn more.)

More competition would surely bring both wages and prices down. And less licensing across the board would make entrepreneurship easier. It might even palliate populism, which is partly driven by voters' sense that the economy is rigged to benefit the rich and powerful—a hypothesis which the evidence on licensing plainly supports. Politicians in distant Washington are usually the target of populist anger. But most licensing laws are local. Those looking to level the economic playing field could start closer to home.

This article appeared in the United States section of the print edition under the headline "How to rig an economy"

School shootings, again

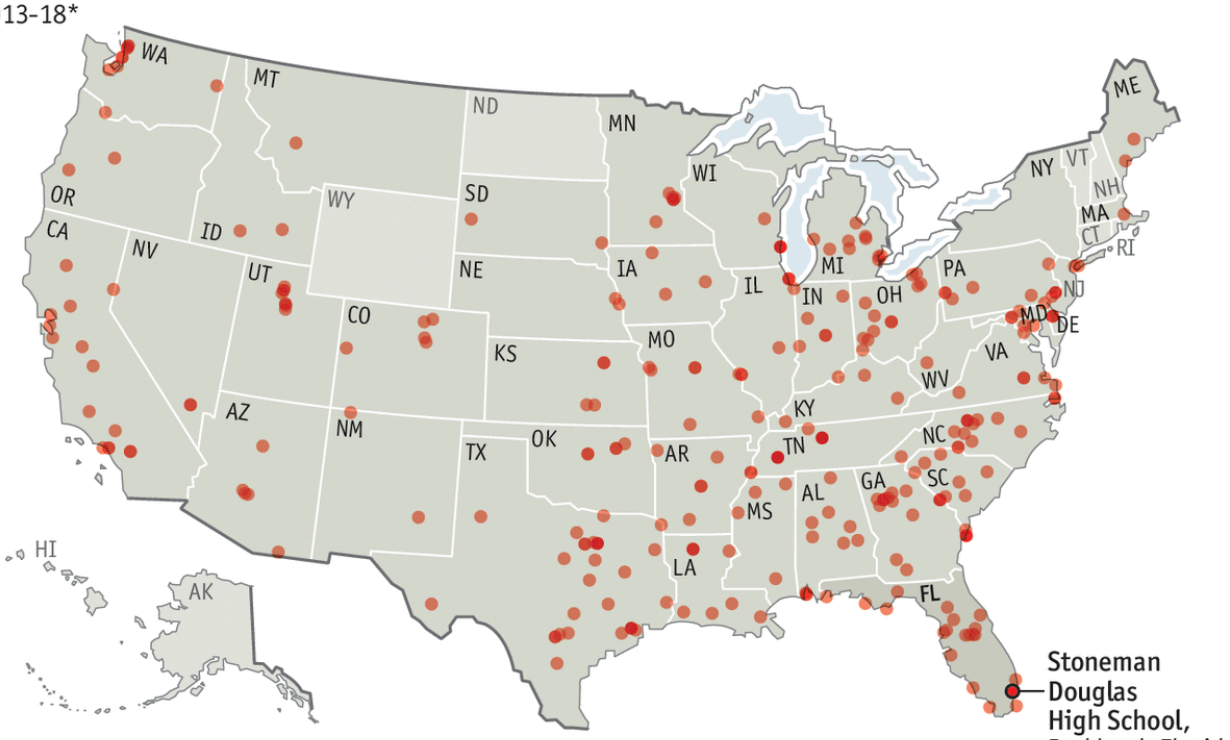
America seems unable to solve a scourge that exists nowhere else

There is nothing surprising in this article, unfortunately

Print edition | United States Feb 17th 2018

JUST before the end of the school day on February 14th at Marjory Stoneman Douglas high-school in Parkland, Florida, the fire alarm rang out. Most of the pupils and teachers thought it was just a drill. It was not: a gunman had pulled the alarm to draw out the maximum number of targets. The gunman killed 17 and injured more than a dozen, some critically. Local television stations reported that the slaughter appeared to be the worst mass murder in the history of Broward County, an affluent area north of Miami.

School shootings
2013-18*



Source: Everytown for Gun Safety *At 8am EST, February 15th

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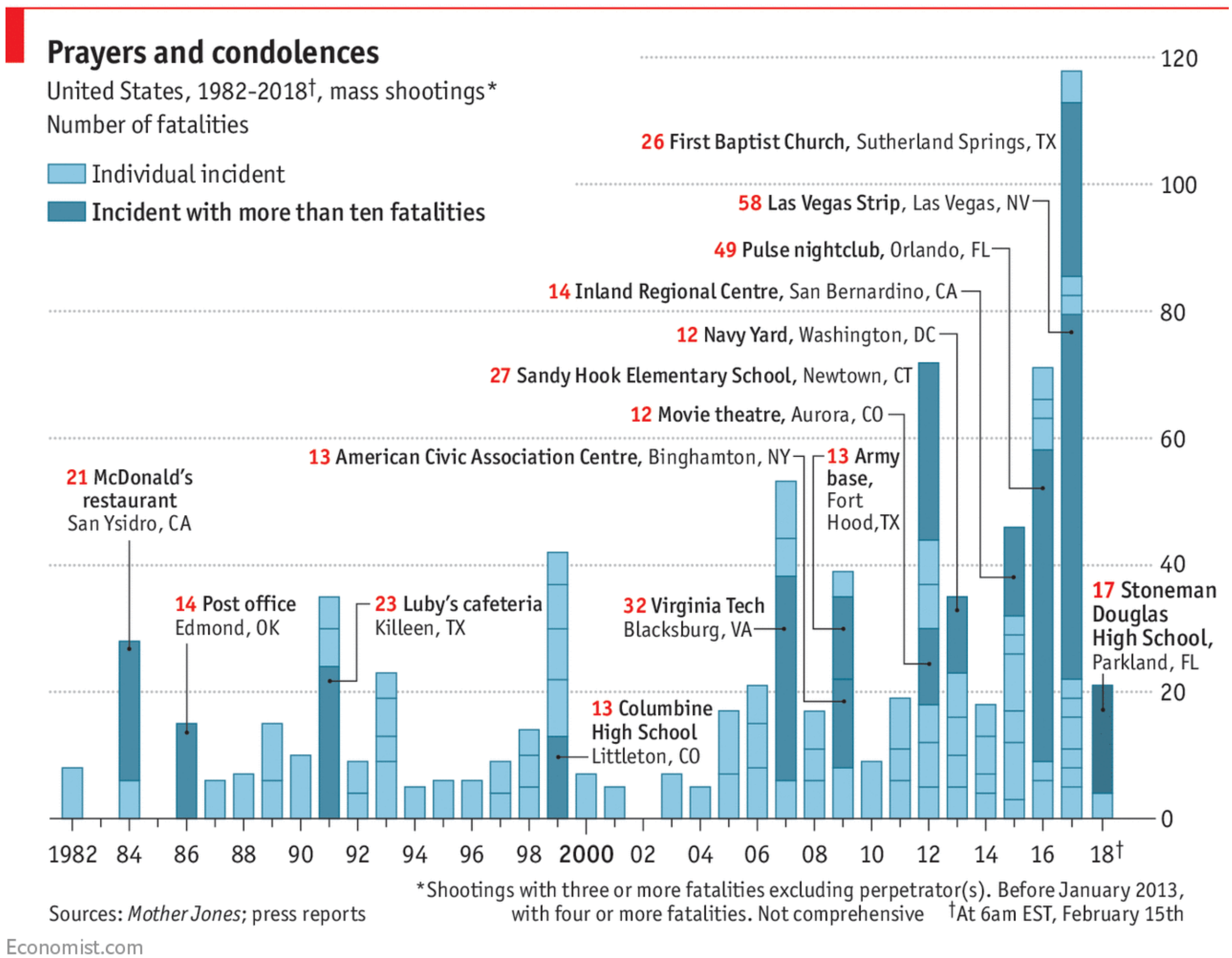
As that might suggest, America is running out of superlatives to describe its frequent gun massacres. The killing in Florida, whose perpetrator was later arrested, was a bad one. It was America's deadliest school shooting in five years—since a man killed 20 children, six adults and himself at Sandy Hook Elementary School, in Connecticut. Then again, looked at another way, it was merely America's 18th school shooting this year. By the reckoning of the Gun Violence Archive, the killing in Florida was the country's 1,607th mass shooting since Sandy Hook. In other words, America has had more than one mass shooting every day since then, costing 1,846 lives. (The database includes mass woundings in its count, which is why the numbers of mass shootings and killings are roughly even.)

Police identified the gunman as Nikolas Cruz, a 19-year old former pupil of the school expelled a year ago for disciplinary problems. He was described as a strange kid who liked guns. Unlike many mass shooters, Mr Cruz did not intend to die. He slipped out of the school by blending in with evacuating pupils. Police caught him in a nearby town soon after the shooting. Scott Israel, the county sheriff, said his officers are investigating the shooter's digital profile. What they have found so far, he said, is "very, very disturbing."

The superintendent of Broward County's public schools, Robert Runcie, appeared to blame the killing on the poor state of Americans' mental health. "What I'll tell you is that mental health issues in this country are growing and it's a challenge." That is an explanation favoured on the right. It does not take account of the fact that the toll of gun violence in other rich countries, with comparable health indicators, is negligible by comparison. America's gun-related murder rate is 25 times higher than a group of 22 other developed countries, according to the *American Journal of Medicine*. This is mainly because America has so many more guns than those other countries. It has less than 5% of the world's population and almost half of the world's civilian-owned firearms.

Not convinced of a connection there? There is more. Florida, where more than 1.4m people have licences to carry concealed weapons, has some of the laxest gun laws. To buy an AR-15 rifle, the model used by Mr Cruz, which is based on the M-16 assault rifle, requires a background check so cursory the authorities almost might as well not bother. It takes a few minutes. And if you happen to be on the FBI's terrorist watch-list at the time, no problem. Similar laws put guns in the hands of shooters who killed 14 people during an office Christmas party in California in 2015, 49 people in a Florida nightclub in 2016, and 58 people at a country music festival in Las Vegas in 2017.

Most federal gun legislation is not about banning guns, but allowing them in more places, including college campuses and churches. Indeed a bill making its way through Congress now relates to extending concealed carry laws to states which outlaw concealed weapons. Chris Murphy, a Democrat who represents Connecticut, happened to be on the Senate floor when news of the shooting broke. "We are responsible for a level of mass atrocity that happens in this country with zero parallel anywhere else," he said.



In response to this latest, wholly predictably, almost habitual, tragedy, President Donald Trump tweeted his "prayers and condolences". He added: "No child, teacher or anyone else should ever feel unsafe in an American school." That is true. And if he would like to make them safer, he knows what to do. He simply needs to demand the stricter gun controls Republicans recoil from but which, back in his Democratic years, Mr Trump used to favour.

Clarification (February 19th 2018): *This piece says that the event was America's 18th school shooting this year. The figure comes from Everytown for Gun Safety, a gun-control advocacy group. The group counts any time a firearm discharges a live round inside or into a school, on or onto a school campus or grounds, regardless of whether the shooting results in injury or death.*

This article appeared in the United States section of the print edition under the headline "How many more?"

Land of the flee

Staffing the White House

Donald Trump's first year has seen record turnover

Print edition | United States Feb 15th 2018

AS A candidate, President Donald Trump promised to hire only "the best people". That vow went the way of many campaign promises. Some steered clear of his administration, wary of his instincts and his let-chaos-reign management style. Others were passed over for having been insufficiently loyal. Hundreds of senior administration posts—including seven of nine top jobs at the State Department—remain unfilled. And positions that get filled often don't stay that way. A paper by Kathryn Dunn Tenpas, a fellow at the Brookings Institution, a think-tank, found that none of the previous five presidents had a higher rate of turnover among senior staff in their first year (34%) than Mr Trump.

The most recent high-profile leaver is Rachel Brand, third-in-command at the Justice Department, who abruptly quit on February 9th just nine months after being confirmed. She reportedly feared having to oversee Robert Mueller's investigation if, as seems possible, her immediate superior, Rod Rosenstein, were sacked (to Mr Trump's consternation Jeff Sessions, the attorney-general, has recused himself).

The president has quickly tired of some of the people he hired: Reince Priebus, his first chief of staff, Steve Bannon, his chief strategist, Sean Spicer, his press secretary, Sebastian Gorka, an assistant, among them. But a surprisingly large number have left for being ethically deficient. They include a cabinet secretary with a penchant for taxpayer-funded private jets, a national-security adviser who opened his own communications channel with Russia and then lied about it, a public-health official who bought tobacco shares a month after being appointed head of an agency charged with cutting smoking rates, and, on February 7th, Rob Porter—a staff secretary accused of physically and emotionally abusing two wives.

Who in the White House knew what, and when, remains unclear. Friends of John Kelly, Mr Trump's chief of staff, say he sacked Mr Porter less than an hour after learning of the allegations. But Christopher Wray, the FBI director, said his agency filed a first report on Mr Porter in March 2017, and completed its background check in July (Mr Porter was one of 130 White House officials, including the president's son-in-law, Jared Kushner, who handled sensitive information without permanent security clearances, according to documents obtained by NBC News). Sarah Huckabee Sanders, the White House press secretary, said Mr Porter resigned of his own accord; several officials reportedly encouraged him to stay and fight.

Why the confusion? It is a cliché of management-speak that culture is set at the top. On Twitter Mr Trump wrote that "lives are being shattered and destroyed by a mere allegation", and told reporters it was a "tough time" for Mr Porter, who has "a great career ahead of him". At least six administration or campaign officials have been accused of violence against women. Including, of course, the president himself.

This article appeared in the United States section of the print edition under the headline "Land of the flee"

No Ban on Bannon

The University of Chicago puts its principles to the test

When faced with a controversial speaker, invite and then ignore may be the best policy

Print edition | United States Feb 15th 2018

Alamy

"THIS reminds me of my school days in Italy in the 1970s," says Luigi Zingales, a professor at the University of Chicago's Booth School of Business. That was a time of political and social turmoil when graffiti proclaimed that "killing fascists is an act of love" and high-school teachers were almost uniformly committed socialists or communists. One of Mr Zingales's teachers encouraged his pupils to bring daily papers to school, except for *Il Giornale*, a conservative daily founded by Indro Montanelli, one of Italy's most brilliant journalists—and an acerbic critic of the left. Since his father was an avid reader of *Il Giornale*, it was the only paper Zingales junior turned up to school with.

Forty years later, Mr Zingales is making himself unpopular again, going against the grain by inviting Steve Bannon, the president's former chief strategist, to a debate at the University of Chicago on globalisation and immigration. Students, teachers and alumni have been up in arms since news of the invitation leaked at the end of January. Students staged a sit-in at one of M Zingales's classes. More than 100 members of the faculty signed a letter to the university's president and its provost arguing that "the defence of freedom of expression cannot be taken to mean that white supremacy, anti-Semitism, misogyny, homophobia, anti-Catholicism and islamophobia must be afforded the rights and opportunity to be aired on a university campus." That letter stopped short of a call to rescind the invitation to Mr Bannon. But more than 1,000 alumni did sign another letter asking the university to do just that.

In recent years the University of Chicago has styled itself the academy's leading defender of free speech. In 2015 a committee chaired by Geoffrey Stone of Chicago's law school restated its principles on the matter. "It is not the proper role of the university to attempt to shield individuals from ideas and opinions they find unwelcome, disagreeable, or even deeply offensive," says the statement. "Concerns about civility and mutual respect can never be used as justification for closing off discussion of ideas, however offensive or disagreeable." The statement has since been adopted by more than 30 other universities. In 2016 the dean of students said in a letter to freshmen that "Our commitment to academic freedom means that we do not support so-called 'trigger warnings', we do not cancel invited speakers because their topics might prove controversial, and we do not condone the creation of intellectual 'safe spaces' where individuals can retreat from ideas and perspectives at odds with their own." Trigger warnings alert students to potentially distressing passages in texts or speeches.

Mr Stone says he is proud that the debate about Mr Bannon's visit has so far been civilised. Those unhappy with the presence of a champion of the alt-right on campus are welcome to challenge him at the debate with tough questions, or to protest peacefully. Alt-right celebrities know their cause is helped by news footage of large jeering crowds, heated confrontations and outright violence at their events, notes a recent report by the Southern Poverty Law Centre, a watchdog. Does this suggest the debate over free speech on campus is becoming more civilised?

Nicholas Christakis, a professor at Yale University, is not so sure. He and his wife Erika were hounded after Mrs Christakis said in an e-mail written in 2015 that students might be allowed to pick and police their own Halloween costumes. “Young people’s illiberal opinions about freedom of expression and their incredible identitarianism are on the rise,” says Mr Christakis, who fears a “total loss of nuance”.

Yet data from the General Social Survey suggest there has been no overall rise in intolerance among students. Rather, it seems that about a fifth of students think that unfettered free speech is something to fight against, and that on some campuses (including Yale’s), their activism has a chilling effect on everyone else. This can mystify those who grew up in places where speaking freely really is dangerous. Mr Zingales says colleagues who come from countries with illiberal regimes wholeheartedly backed his invitation to Mr Bannon.

This article appeared in the United States section of the print edition under the headline ”No ban on Bannon”

Quaker notes

Pennsylvania still needs a new electoral map

The state's congressional districts may have to be redrawn again, this time by a "special master"

Print edition | United States Feb 15th 2018

THE nicest thing that can be said about a new Republican-drawn congressional map for Pennsylvania is that none of the districts resembles a cartoon character. But erasing the lines of a comically gerrymandered district nicknamed "Goofy kicking Donald Duck" is not enough to satisfy an order from Pennsylvania's Supreme Court. So said Tom Wolf, the state's Democratic governor, on February 13th.

When the court ruled that the map in use since 2011 was an extreme partisan gerrymander that violates Pennsylvania's constitution, it gave legislators until February 9th to devise a new one. The redrawn districts, the court advised, should be "composed of compact and contiguous territory" and should not gratuitously divide cities and counties.

Hewing to the court's words while subverting their spirit, Republican state lawmakers set to redrawing the map with no input from Democrats. The resulting map is "prettier", in the eyes of Sam Wang, a professor at Princeton, but can still conceal ill intent. In rejecting the proposal, the governor said it "clearly seeks to benefit one political party". Moon Duchin of Tufts University ran the numbers. "There is no more than a 0.1% chance", she wrote, that a plan meeting the court's requirements "would have been as favourable to Republicans" as the new map. It is, she concluded, "extremely, and unnecessarily, partisan".

At the close of his letter berating Republicans for their cartography, Mr Wolf extended a hand. "I remain hopeful", he wrote, "that the General Assembly...can submit a fair map to me for my consideration." Hours later, two Republican leaders bit that hand. "With all due respect", they wrote, "your pronouncements are absurd." Joseph Scarnati, president pro tempore of the Senate, and Mike Turzai, the House Speaker, challenged Mr Wolf to produce a "fair" map of his own for legislators to consider.

With lawmakers and the governor at loggerheads, the court will probably put Plan B in motion, redrawing the map with help from a so-called special master, Nathaniel Persily of Stanford University. More lawsuits are likely, as Republicans say the court is not authorised to redistrict all by itself. Whichever map ends up sticking, it will have a brief life. After the 2020 census, legislators in all 50 states will again reshuffle district lines, beginning the squabbling anew.

This article appeared in the United States section of the print edition under the headline "Quaker notes"

Snakes and leaders

Travels with General Dunford

What nine days travelling with the chairman of the joint chiefs reveals about American alliances

Print edition | United States Feb 15th 2018

IT IS one of the spectacles of soldiering in the democratic world: the moment when a four-star general fields a hard question from a lowly grunt. The chairman of the joint chiefs of staff, General Joseph Dunford, had his turn while visiting US marines in Australia's tropical north this month. As ceiling fans stirred the soupy air of a mess hall in Darwin, a marine asked how conflict with North Korea might unfold, and what had changed since the Korean war, so that: "We don't get as many casualties as we did in the 1950s." The general, America's most senior uniformed officer, replied that he is "painfully aware" of that history, because his father fought in Korea as a marine rifleman. He assured the assembled marines and their hosts, burly Australian officers in berets and slouch hats, that isolating North Korea diplomatically and economically remains the priority. Then he offered a warning. For all America's modern weaponry, any new Korean fight would be "nasty". If troops wake each morning believing this might be their last day at peace, he went on, they will be mentally "in the right place".

The marines in Darwin—an advance party preparing for over a thousand comrades to arrive in April for six months' training in Australia's crocodile- and snake-infested Top End—are entitled to ask about war and peace. Their home base in Japan would quickly be dragged into a Korean fight. In Australia they serve as a tripwire force, deployed under an agreement reached in 2011 during President Barack Obama's "Asia rebalance". In these war-clouded times, there are military reasons to cherish this barren outpost. The training opportunities are "spectacular", says a colonel. "You can fire just about anything you want." But to an extent that might surprise Americans back home, the marines in Darwin matter most as soldier-diplomats.

They are a flesh-and-blood guarantee to a treaty ally that America First does not mean America Alone. They are also a rebuke to a rising China that wants to dismantle an American-led order which has prevailed in the region since the second world war. A nine-day tour of Asia aboard General Dunford's military jet is filled with such political moments. Though headlines shout about nuclear stand-offs with North Korea, commanders are as worried by a colder Asian clash: a long-term contest for influence with China.

The marine rotation in Darwin sends a "powerful message" of enduring commitment to allies, amid "concerted" efforts "in some quarters" to portray America as a declining Pacific power, says General Dunford, as his blue and white plane is refuelled. He does not name China, but does not need to. The general, a combat veteran dubbed "Fighting Joe" for his hard-driving ways during the invasion of Iraq in 2003, had just told his marines that America's great defining strength lies in its networks of alliances. As a result, his country's credibility as an ally is "the first target" for any power "trying to undermine the United States politically, diplomatically and from a security perspective".

Seen from Asia, America is an unhappy, distracted democracy locked in competition with a confident, single-minded autocratic regime in China. A recent Australian government white paper expresses hope that America will continue to lead a global "rules-based order", even as Australia seeks "strong and constructive ties" with China, its largest trading partner. But the same paper sadly notes "greater debate and uncertainty" among Americans about the costs and benefits of that leading role. "Without America", an essay by Hugh White, an Australian writer and former government strategist, has shaken elite opinion by predicting that the Asian contest comes down to a test of resolve, which "America will lose, and China will win."

American officers and diplomats reject this, noting that 60% of the American air force and almost as great a proportion of the navy is now in the Pacific, including the most modern weapons platforms. They point to the clamour from allies for American ship visits, joint exercises and intelligence-sharing. But they do not deny that America's democratic model is being tested, just as much as its strength of arms.

Allies want a rules-based order, says General Dunford. "They don't want might to equal right." During another stop he argues that liberal democracies gain an edge over autocracies by educating and giving the power of initiative to non-commissioned officers—the sergeants and senior enlisted troops who wield real clout in America's armed forces—creating flexible units that adapt to the "chaos of combat."

China has long invested in planes, ships and other weapons needed to deny America easy access to its neighbourhood. But a more recent political challenge may prove as serious. Chinese generals and political leaders chide American counterparts that its alliances are a holdover from the cold war and an attempt to hold China down.

Captain Joseph Trench Niez, the 28-year-old navigator on a B-52 bomber stationed on the Pacific island of Guam, enthuses about reassuring allies with sorties around the Philippines and Japan. Three generations of pilots have flown his B-52, a scarred old whale of a plane built in 1960. It has seen service in wars from Vietnam to today's conflicts in Syria and Afghanistan, as shown by fresh bomb stickers on its nose. That history is "incredible", he says.

It is that earnest certainty that America stands for right as well as might that China is now challenging. American officials retort that China uses economic coercion to turn neighbours into tribute nations. The Asian power contest is increasingly a contest of values. America's generals are not ready to concede. They must hope their country is up for the same fight.

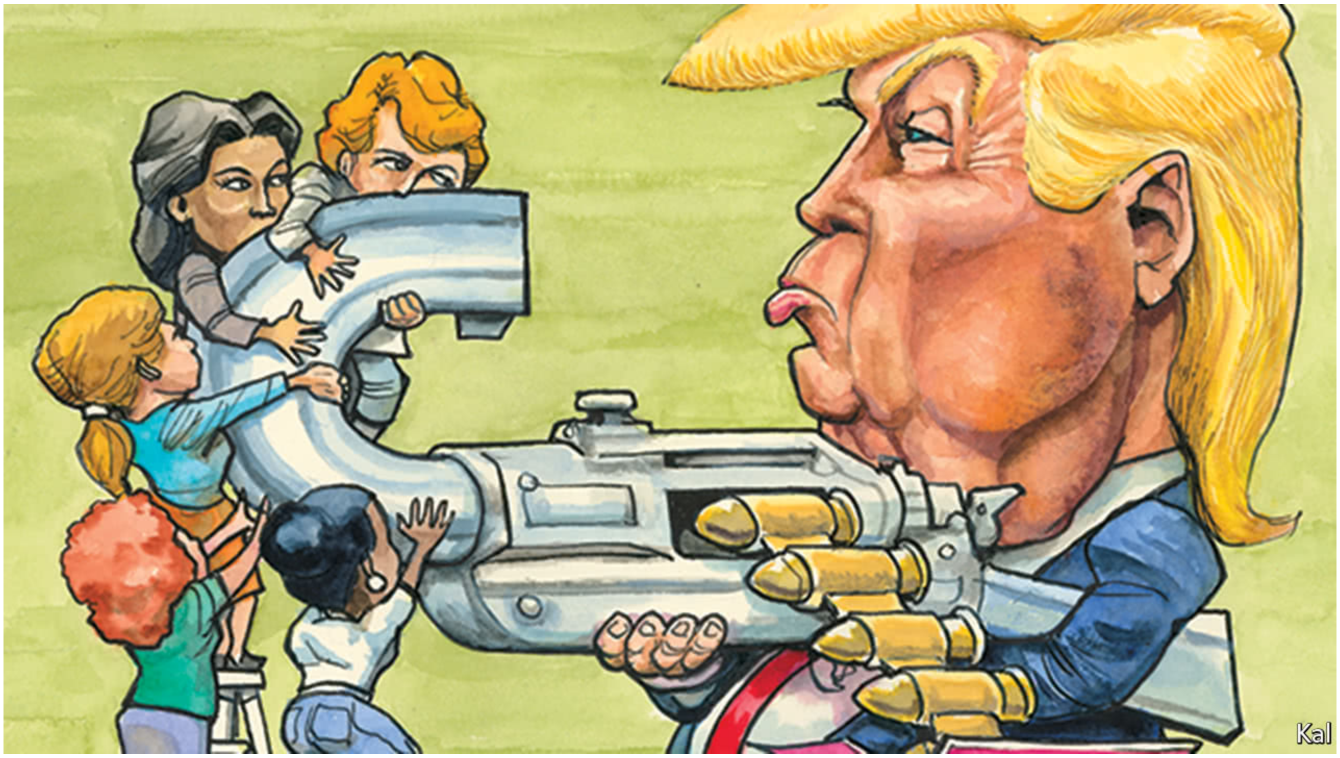
This article appeared in the United States section of the print edition under the headline "Snakes and leaders"

Lexington

Women could be the undoing of Donald Trump

Many of the cultural clashes the president has engineered work to his advantage. Not this one

Print edition | United States Feb 17th 2018



IF DEMOCRATIC strategists could build a candidate for Pennsylvania's sixth congressional district, she would probably look something like Chrissy Houlahan. A 50-year-old former air-force captain, entrepreneur and chemistry teacher with Teach for America, Mrs Houlahan appears, crucially, to have been none of those impressive things for political effect. Until recently she had not contemplated running for anything. And if she had, she says, speaking on the fringe of a small gathering of voters in Valley Forge, a wealthy suburb northwest of Philadelphia, she would have considered herself unsuitable: "I'm a very private person and have never asked anything from anyone before." The Damascene moment that brought her, and hundreds of Democratic women candidates like her, on to the campaign trail was Donald Trump's election. "I was raised to respect democracy," she says. "But I felt on this occasion the people had got it wrong."

While struggling to reassure her gay daughter and Holocaust-survivor father, both of whom questioned whether America was still safe for them, Mrs Houlahan sent her CV to Emily's List, an organisation that tries to get pro-choice women elected. It seemed like the best way to honour her family motto, "Highest, best use"—meaning, she explains, "Do the hardest thing you can to make best use of your abilities." Calm, purposeful, but with a hint of her old diffidence, Mrs Houlahan is now working her tail off to flip a district whose Republican incumbent, Ryan Costello, romped home in 2016, but which chose Hillary Clinton over Mr Trump. There are 23 such districts, mostly dominated by the sorts of cautious suburban conservatives who live in Valley Forge. If the Democrats win them, in mid-term elections that are traditionally a referendum on the president, they will probably take back the House of Representatives.

Amid the rancour of American politics, the large number of first-time women candidates the Democrats will field is unequivocally positive. Around 400 women, mostly Democrats, are planning to run for the House, at least 50 for the Senate and 79 for governor. That is far more than have previously stood for any of those offices. At state and local levels, the picture is the same. In 2015 and 2016 around 900 women consulted Emily's List about standing for office; since Mr Trump's election, over 26,000 have.

That such numbers are extraordinary is in part testament to how far America lags on this issue. Less than 20% of members of the current House of Representatives are women. That puts America 99th in an international ranking of women's representation. This is despite a couple of previous "years of the women", as the current cycle is inevitably being called. The most recent, 1992, saw a smaller spike in women candidates—as now, mainly on the left—sparked by the chauvinist handling of Anita

Hill, who had accused Justice Clarence Thomas of sexual harassment, during his confirmation hearing. In turn, this led to a rise in the number of congresswomen. But it has since levelled off because of rising barriers to entry, including a decline in the number of competitive seats and soaring campaign costs, which are especially forbidding to political outsiders.

To generate a new surge, that example suggested, was likely to require another high-profile case of chauvinism. Mr Trump provided so many, both in his private behaviour and his behaviour towards Mrs Clinton, that over 2m women marched in protest the day after his inauguration. The #MeToo meme has since turned the marches into a grander cultural movement. And still Mr Trump keeps doubling down. In the past week he has defended a senior aide and alleged wife-beater, Rob Porter, and also suggested the backlash against sexual harassment has gone too far. Of the many culture clashes America's patriarch-in-chief has engineered over the past year—with black footballers, Hispanic migrants, transgender soldiers and other emblems of the socioeconomic changes his supporters fear—this is by far the riskiest.

If Mr Trump has a calculation, it is that sticking it to a lot of self-righteous Democratic women will cost him little support among women who vote Republican, while delighting their husbands. That is logical. His defeat of Mrs Clinton showed the great extent to which partisan loyalty trumps genders. Hardly any Republican women, who tend to be older than Democrats and more conservative in their views on gender relations, among other things, voted for her. Yet mid-terms are not won by wooing the other side's supporters, but by whichever party turns out its own voters. On that basis Mr Trump appears to have handed the Democrats an enormous advantage. By inspiring so many new candidates to come forward—as "an outraged sorority", in Mrs Houlahan's phrase—he has helped the party remedy one of its biggest weaknesses, the shallowness of its bench. In the process, the confusion of left-wing groups that have been leading the opposition to Mr Trump, including Emily's List and Indivisible, a grass-roots group which introduced many of the newbie candidates to activism, has started to coalesce. Moreover, as the surge in women candidates also suggests, Mr Trump's chauvinism may have stirred up Democratic voters across the board.

Nice to #MeToo

There are reasons to wonder whether they will remain energised. Whereas Democratic voters turned out in droves for Virginia's recent legislature elections, and elected many women candidates there, they showed less enthusiasm for New Jersey's elections, held the same day. That was because its governor's race (won by Phil Murphy, a bland Democrat) was uncompetitive. This suggests the gender war is not sufficient to motivate many Democratic voters. Yet in the mid-terms, a more straightforward verdict on Mr Trump, that will be a lesser problem. And no one should bet against the president causing more chauvinist scandals to refresh Democrats' sense of outrage. If there is an issue on which Mr Trump's unreconstructed personality could backfire, it is this.

This article appeared in the United States section of the print edition under the headline "The backfire effect"

Brazil
Parading towards disaster

Parading towards disaster

Michel Temer is trying to fix Brazil's pension systems

But he has tried harder to avoid prosecution

Print edition | The Americas Feb 15th 2018

POLITICS is no novelty at Brazil's carnival celebrations, but some themes are more danceable than others. Beija-Flor, one of Rio de Janeiro's most famous samba schools, won this year's carnival competition with a lament about corruption and crime and a celebration of tolerance. Pension reform seems less carnivalesque. That did not discourage some *blocos*, or street parades, from taking up the cause at this month's festivities. One, in Brasília, the capital, marched to the up-tempo "Don't go touching our pensions". Retirees in São Paulo performed the catchy samba, "Those who have worked their entire lives deserve more respect".

That lyric will be ringing in the ears of legislators when they return from their carnival break. On February 19th they will begin debating a proposal by the government to reform pensions. It is congress's most important task. Without change, the publicly financed pension systems for private- and public-sector workers will overload the government with debt, sap spending on other priorities, such as reducing poverty, and crimp economic growth.

Yet prospects are dim. Reform requires a constitutional amendment, which must be passed by three-fifths majorities in both houses of congress. With a general election due in October, many legislators are scared to back a measure that provokes samba scorn. The lower house is expected to vote by the end of February. The government is at least 40 votes short of the 308 needed.

That congress is even contemplating pension reform is testimony to the virtues of Brazil's centrist, pro-business president, Michel Temer. If it fails it will be in part because of his weaknesses.

Mr Temer took office after his left-wing predecessor, Dilma Rousseff, was impeached in 2016. The economy was in the midst of its longest and deepest recession on record. Mr Temer started well. Unlike Ms Rousseff, he knows how to marshal a congressional majority. In December 2016 he secured a constitutional amendment to freeze public spending in real terms for 20 years. Last July he signed the biggest overhaul of the Mussolini-inspired labour laws in more than 70 years.

These confidence-building measures helped spark an economic recovery. The IMF expects the economy to grow by 1.9% in 2018. An abundant harvest helped bring down inflation to 2.95% in 2017. That is the lowest rate for any year since 1998. This month the central bank reduced its benchmark interest rate to 6.75%, an all-time low.

Lately, though, Mr Temer has concentrated more on his political survival than on the economy. Last May *O Globo*, a newspaper, published an excerpt of an audio tape in which he seems to endorse payment of hush money to a politician convicted of taking bribes. That dragged him into the vast Lava Jato (Car Wash) corruption investigation that has ended the careers of many of the most prominent politicians and led to the conviction of Luiz Inácio Lula da Silva, a former president.

Mr Temer persuaded the lower house of congress not to refer the case to the supreme court for trial. He has little pork or patronage left to offer congressmen to support his legislative programme. They have no incentive to back a president with an approval rating of 6%.

His unpopularity does not make it any less necessary to fix the pension systems. Under the current ones, the average retirement age is 54. That compares with 65 in the OECD, a group of mainly rich countries. A Brazilian man who retires at 55 gets a pension that pays on average 70% of his pre-retirement earnings; in the OECD, a worker can expect a little more than half.

Goodies for oldies

Pension spending consumes a third of federal spending before interest payments. It accounts for 9.1% of GDP. With the number of Brazilians older than 65 expected to rise from 17m to 58m by 2060, pension spending is set to rise to a fifth of GDP.

In December 2016 Mr Temer's government sent its first reform proposal to congress. It would have established a minimum retirement age of 65 for men and women. Widows and widowers would have inherited half their spouses' pensions rather than the full amount, as now. Even this ambitious-sounding plan would not have solved the problem. It would have saved 800bn reais ($240bn) over ten years, but debt would have continued to rise from its alarming level of 74% of GDP.

When *O Globo*'s scoop came out, the government cancelled a vote on the proposal. It returned with a more modest one last November that would have let women retire at 62. That, too, failed to get support in the lower house. Mr Temer has now tweaked the reform again. Rural workers and spouses of police officers killed in the line of duty will continue to benefit from the current rules. The new proposal would save just 400bn reais over ten years.

The president is touting the diluted reform on television variety shows as if it were an economic elixir. The government has launched a campaign with the slogan, "Everyone for pension reform. Don't let Brazil go bust". Voters are unimpressed. According to a poll commissioned by the president's office, 14% back the reform.

As it becomes feebler and takes longer, the cost to the economy will rise. In January S&P downgraded Brazil's credit rating, citing the government's slow progress in reducing expenditure. Other rating agencies may follow if the watered-down reform does not pass. And that will not be enough. Without more reforms next year, "Brazil could fall back into crisis," wrote Tony Volpon of UBS, a bank, in a note.

Some analysts hope that congress will do nothing now, leaving the problem to Mr Temer's successor. Inadequate reform would give Brazilians a false sense that they have fixed the problem, says Monica de Bolle of the Peterson Institute for International Economics in Washington. With no reform, the next president will face a severe squeeze on discretionary spending, giving him or her little choice but to overhaul the system quickly. "It's better to have the crunch," says Ms de Bolle.

But no one knows who will govern Brazil starting next January. Lula is ahead in polls, despite the corruption conviction that may bar him from running. He is a fierce critic of pension reform. His nearest competitor is Jair Bolsonaro, a right-wing demagogue, whose views on pensions are vague. Mr Temer, who understands how destructive the current pension system is, has wasted a golden opportunity to fix it.

This article appeared in the The Americas section of the print edition under the headline "Parading towards disaster"

Bello

Why it's hard to reduce informality in Latin America's labour market

Solving a problem that holds back growth and productivity

Print edition | The Americas Feb 15th 2018

HER business occupies a small concrete patch in a distant corner of Lima's wholesale market. There Dora Iparraguirre sells herbs, spinach, cauliflower and cabbage. Her aim is to go up in the world—to the raised, roofed platforms that house bigger stands where lorries can unload directly. Getting one would help her business expand. The platforms are auctioned periodically by the market authority. But to bid Ms Iparraguirre would need a tax-registration certificate.

She says she will try to get one, but it is "complicated" and she doesn't have the time. "I need to have all the papers, and I don't know which ones." She works on her own and says she would need an accountant, but can't afford to pay one.

Ms Iparraguirre is one of around 135m Latin Americans—or around half of all workers—who, according to the International Labour Organisation (ILO), toil in what economists call the "informal sector". Remarkably, in most countries this proportion has fallen only slightly, even as people have become more educated and economies have modernised. Since a large informal sector is associated with slower economic growth and low incomes, this points to a colossal failure of public policy. Yet there is little agreement as to what explains informality.

The term itself is vague. It applies to firms and workers that stand outside a country's tax and regulatory systems but is not synonymous with illegality. In Peru, for example, it is not obligatory to register in the social-security system. According to the ILO, half of informal workers are self-employed. Others work in businesses that may be formal or informal, or are domestic servants. Many businesses are partly formal and partly not. Workers sometimes drift in and out of informality.

Some economists say that informality is a result of low growth—but it may be cause as well as consequence. Libertarians blame business taxes. They and "institutionalists" point to coils of red tape. Anthropologists note that some workers choose informal self-employment, for its flexibility and because they resent bad treatment by formal firms. For Ms Iparraguirre, it is the only steady work available.

In fact, all these explanations may be true. The biggest problem, says Santiago Levy at the Inter-American Development Bank, is that Latin America has so many very small, not-very-productive family businesses, which tend to be informal. The reason, he says, is the interaction of regulations, taxes and social-protection schemes, which means that businesses have no incentive to grow. The preponderance of low-productivity firms means that the region is not getting the return it should from its big investments in education.

Take Mexico, where 57% of the workforce is informal, according to the statistics institute. Mr Levy notes that the typical Mexican business limits itself to a few members of an extended family who do not receive a contractual wage. If the business does well and starts hiring outside workers, its costs and risks shoot up. Social-security and other labour costs add 40% or more to wages. If trade dips, by law salaried workers cannot be laid off. Official application of regulations can amount to “extortion”, says Luis de la Calle, another Mexican economist.

Piecemeal reforms haven’t worked. In Peru, the share of the workforce in informal jobs fell from 80% in 2002 to a still huge 70% in 2013. The reason for that modest decline was faster economic growth, especially in sectors with labour-intensive businesses, according to research by Juan Chacaltana of the ILO. A new, low tax for small businesses had almost no effect. Such tax reforms, which are popular among politicians, discourage firms from growing. Colombia’s government slashed labour taxes, which seemed to work better. Formal employment rose from 44% of the urban workforce in 2013 to 51% last year.

Latin America is paying a high price for having imported Bismarckian social-security structures to the tropics. Workers and politicians resist labour flexibility in the formal sector because losing a job also once meant losing health care and pensions. But rigid labour rules and high costs keep the formal sector small. Governments, in turn, have launched a patchwork of non-contributory benefits for the mass of informals, undermining the point of enrolling in social security.

What is missing is political ambition. A serious effort to reduce informality requires a shift to universal social protection combined with flexible labour laws and simpler tax and business regulations. That was what the government of Pedro Pablo Kuczynski promised when it came into office in Peru in 2016. It drew up a bold plan. And then it shelved it.

This article appeared in the The Americas section of the print edition under the headline ”Bismarck’s tropical misadventures”

Fleeing Maduro

Fending off the flood from Venezuela

The rise in migration has alarmed Latin American governments

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EVERY morning crowds gather on the Venezuelan side of the Simón Bolívar bridge to cross over into Colombia. Many just want to shop for basic goods, which are scarce at home. But growing numbers are staying, at least until the political and economic crisis in their country passes. Colombian immigration officials counted 550,000 Venezuelans in the country at the end of last year. That is an increase of 210,000 from the middle of the year.

On February 8th Colombia's president, Juan Manuel Santos, on a visit to the border town of Cúcuta, tried to stanch the flow. In a warehouse used by the disaster-relief arm of the government of Norte de Santander, Cúcuta's province, he announced that Colombia would stop issuing one-day entry cards for Venezuelans and deploy 3,000 more guards along the countries' 2,200km (1,400-mile) border. "Colombia has never before experienced a situation like this," he said. On February 14th he said the country needs international help to cope with it.

Mr Santos is not the only Latin American leader to be unnerved by the influx of Venezuelans. Brazil's president, Michel Temer, went on February 12th to Boa Vista, an Amazonian town of 330,000 people that is hosting 40,000 Venezuelans. Fewer have entered Brazil than Colombia in part because the border region is a jungle. Brazil plans to double the number of border guards and help Venezuelans resettle to other cities in the country's interior. The point is not to stop migrants from coming but to "discipline and co-ordinate" their arrival, Mr Temer said.

More than 200,000 Venezuelans entered Ecuador from January 2016 to September 2017, according to the UN High Commissioner for Refugees. Three-quarters of them went on to Peru and to Chile, where requests for residency permits from Venezuelans last year were on track to double those in 2016. Some 27,000 pitched up in Argentina in 2017 and perhaps 40,000 are in Trinidad and Tobago. Some 2.7m of Venezuela's 34m people are abroad.

Colombia, the most accessible neighbour, has borne the brunt. As the numbers have risen, its easy-going attitude has toughened. Unemployment and crime are rising in Cúcuta and other border towns, say local officials. People who had good jobs in Venezuela now beg and sleep on Cúcuta's streets with their families.

Colombia is trying to balance border control with compassion for people fleeing a country where inflation is expected to reach 13,000% this year and the economy will shrink by 15%. Mr Santos reminded Colombians that Venezuela received 1m of their countrymen during Colombia's decades of armed conflict, which subsided in the early 2000s. Colombia's foreign minister, María Ángela Holguín, says her government has been learning tips from Turkey, a destination for Syrians fleeing war, on how to deal with migrants from Venezuela. It has been working with the UN to set up reception centres for them.

To Venezuelans in Cúcuta, the new policy feels more like a crackdown. Those in the country are being required to register with immigration offices. They will be able to work, but only if they have stamped passports. A shortage of paper for passports is one of many that are causing Venezuelans to flee.

A new task force will keep Cúcuta's growing homeless population out of squares and parks. Last month, immigration officials raided a basketball court that 900 migrants had turned into a shelter. Hundreds were deported.

But such measures will not stop the flow of Venezuelans and may not slow it much. The long border is easily crossed. Venezuela's president, Nicolás Maduro, has called a presidential election for April 22nd. He is unlikely to face an effective rival. As long as he is in charge, the Venezuelans will keep coming.

This article appeared in the The Americas section of the print edition under the headline "Fending off a flood"

Indigenous rights

Canada's Trayvon Martin moment

An acquittal in a murder trial divides the country

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REX/Shutterstock

ON FEBRUARY 9th an all-white jury acquitted a white farmer of murder in the shooting death of an indigenous man in Saskatchewan, in western Canada. Several people in the courtroom shouted "murderer". Anger has continued to rise. Some liken the man who died, a 22-year-old Cree named Colten Boushie, to Trayvon Martin, a black American teenager killed by a Hispanic man in Florida in 2012. In that case, the killer pleaded self-defence and was controversially acquitted by a nearly all-white jury.

In Canada's case, activists who represent the country's 1.7m indigenous people, who are customarily divided into First Nations, Métis (a mix of First Nations and Europeans) and Inuit, hope the verdict will lead to changes to judicial procedures. On February 14th Justin Trudeau, the prime minister, said Canada would reform the criminal-justice system to protect indigenous rights. But such promises have been made before.

Mr Boushie was killed after he and four friends, who had been drinking, drove onto the property of Gerald Stanley near Biggar, Saskatchewan. One or two of them tried to steal a vehicle. Mr Stanley grabbed a semiautomatic handgun and fired two warning shots. He said the third, fatal shot was accidental. The jury believed him. It acquitted him of second-degree murder and of the lesser charge of manslaughter.

Defenders of indigenous rights saw the verdict as warped by racism. Defence lawyers used peremptory challenges to dismiss five prospective jurors who appeared to be indigenous. That is perfectly legal. But activists claim it is one way that the criminal-justice system discriminates against indigenous people. Although they make up 4% of Canada's adult population, they account for more than a quarter of inmates in federal prisons.

Mr Stanley's supporters say he was merely defending his home. "For farm people, your yard is your castle," his lawyer contended. The two sides have set up rival crowd-funding pages. The "Gerald Stanley Support Fund" had raised C$180,000 ($144,000) to pay his legal bills by February 14th. "Justice for Colten Boushie" had raised C$166,000 for his family.

After meeting Mr Boushie's family, Mr Trudeau promised legislation to make Canada's courts more friendly to indigenous people. It will be enacted before the next national election, which is due in 2019. He did not provide much detail, though it is likely that the reform will change the rules under which lawyers can dismiss potential jurors.

Many indigenous Canadians doubt that Mr Trudeau will bring about big changes. Past declarations of good intentions include one by a Royal Commission on Aboriginal Peoples in 1996 and one by a Truth and Reconciliation Commission in 2015. “We need to make sure this time it’s for real,” said Romeo Saganash, a Cree member of parliament from Quebec.

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Japanese youth
Seventh heaven at 7-Eleven

Seventh heaven at 7-Eleven

Young Japanese are surprisingly content

They are less so when they think about the future

Print edition | Asia Feb 17th 2018

KOJI TANAKA enjoys his work for a tech company in Tokyo. In his free time he goes for a workout or to receive a form of massage known as *shiatsu* that relieves his aching muscles with gentle finger pressure. He likes to eat out with his friends. “I guess I’d like to have a family at some point, but I am not ambitious about my career,” he says. “I am happy with my current life.”

Japan’s youth is perking up. Surveys suggest that the country’s young people are less happy than their peers in other developed countries. Suicide remains the leading cause of death for those aged 15 to 39. But compared with their elders in Japan when they were young, a higher proportion of 15- to 29-year-olds describe themselves as content. That is good news for a country where the word “youth” tends, with good reason, to conjure up images of gloomy misfits: *hikikomori*—people who shun society—and *otaku*—nerds.

There are several reasons why satisfaction is rising. Partly because of the cost of housing, more young people live with their parents. Masahiro Yamada, a sociologist, calls them “parasite singles”. Not having to pay for accommodation means they have more disposable income. “It’s great not having to cook for myself,” says Kosuke Yamawaki, who works for Japan Agriculture, a farming co-operative, in the rural town of Shimanto-cho on Shikoku, the smallest of Japan’s four main islands.

Living with one’s parents well into adulthood may not be ideal. But relationships between family members appear to be improving. “Family is no longer about male figures scolding you,” says Masayuki Fujimura, a (greying) sociologist at Sophia University in Tokyo. “Parents are becoming softer, especially this lot who were born during the liberal 1960s.”

On easy street

Life is pleasanter in other ways too. On every street corner is a 7-Eleven or similar convenience store where young people can buy everything from stationery to ready meals (and heat and eat them on the spot), flick through manga comics, and buy tickets to baseball matches. Although rapid economic growth is history, they appreciate that living standards remain high, and that life (apart from housing) is affordable. They shun designer wear, preferring clothes from UNIQLO, a Japanese low-cost brand. Their dream is not to own a BMW or to go skiing but to enjoy a dessert—as long as it is photogenic enough to post on Instagram. Young people often mention their smartphones when they talk about what makes them content. "I can look up anything, whenever, wherever," says Yuri, an 18-year-old university student.

Japanese youth, like young people the world over, drink less and have less sex than previous cohorts of their age. They are far less likely to be sexually active than their American counterparts. Around 40% of unmarried Japanese are still virgins at the age of 34.

But few young people in Japan appear to be bothered. Japanese men often describe having girlfriends as too much trouble, since women expect them to pay for everything and engage emotionally. Women say men are unambitious. Mayu Kase, a 22-year-old single woman, says having a boyfriend "would be a good thing if it comes along". But, she adds, "I'm not desperate." Like preceding cohorts of their age, young Japanese still talk of being lonely. But Noritoshi Furuichi, a sociologist, says that friends appear to make young people more content than partners do.

Japanese society is still bound by elaborate rules and conventions. But these are becoming more relaxed. For some, this is disorientating. "There is no clear track for us, because there are so many options," says Rie Ihara, a 25-year-old from Shikoku island, who says she aspires to a "stable, ordinary life". But few envy the strictures of their parents' generation. "Men had no choice but to be economic animals then," says Saku Yanagawa, a 25-year-old comedian. Sho Yamazaki, a 28-year-old baker who recently set up his own catering company in Tokyo, sees creeping individualism in Japan as a good thing for the young. "We can realise our dreams," he says.

Yet this silver lining comes with a dark cloud. Mr Furuichi believes that one reason why young people are becoming more satisfied with their current lives is precisely because they see little to look forward to. They focus on enjoying the here and now. According to a survey in 2013, only two-thirds of Japanese 13- to 29-year-olds thought they would be happy when they are 40, compared with over 80% in six other developed countries.

Japanese youth certainly face greater insecurity than preceding generations. Jobs are still fairly easy to come by, not least because the population is falling. But the once-common system of lifelong employment is becoming rarer. A much greater share of working-age Japanese can expect to toil in part-time or non-permanent jobs.

They are also likely to struggle to get married and have children, despite the vast majority wanting both. (Marriage remains the dominant family structure in Japan and very few children are born outside wedlock.) The proportion of people never married by the age of 50 has risen from 5% in 1970 to 19% in 2015.

Young people are all too conscious of the social and economic burdens they will have to shoulder. Over-65s already account for 28% of the population, almost double the proportion of 15- to 29-year-olds. By 2065 they are projected to rise to nearly 40%. The welfare system is struggling to keep up. A study in 2015 by Dentsu, an advertising company, found that people in their late 20s worried about life after retirement more than about employment.

Mr Yanagawa, the comedian, frets that his contemporaries are settling for less than they should. "People just want an average life here; they conform," he says. "We need to be more willing to take risks and be messy, especially when we are young."

Yohei Harada of the Youth Research Centre at Hakuhodo, an advertising firm, has a rosier view. He calls today's young men and women the *satori sedai*, or enlightened generation, meaning that Buddha-like, they eschew big aspirations and seek happiness in simple things. That may indeed be the path to nirvana.

Correction (February 22nd 2018): *The original version of this article said that around 40% of Japanese were still virgins at the age of 34. In fact, that only applies to unmarried Japanese.*

This article appeared in the Asia section of the print edition under the headline "Seventh heaven at 7-Eleven"

The sad truce

Myanmar's peace process is not living up to its billing

Life is still rough in areas where ethnic militias and the army have agreed to ceasefires

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The Economist/C.M.

"AS FAR as I remember, we've always been at war with the Burmans," says Nya Ter, the leader of Ei Tu Hta, a camp for displaced people on the border between Myanmar and Thailand. He and the other 2,600 or so residents are Karens, one of Myanmar's many ethnic minorities. Burmans are the country's dominant ethnic group. Over a decade ago the camp's residents fled the atrocities of the Burmese army, seeking refuge in territory under the Karen National Union (KNU), a militia.

Stuck between the Salween river and jungle roamed by Karen rebels and Burmese soldiers, the camp mostly relies on handouts. But in September rice from foreign donors stopped arriving. Mr Nya Ter blames the peace process between the central government and more than a dozen ethnic militias like the KNU. "The outside world believes we have peace," he says with a resigned expression. "We don't."

What the Karens have is more of an armistice. Soon after independence in 1948, the country then known as Burma descended into ethnic conflict. Some observers believe that about 1m Karens have been displaced over the past 70 years. Around 100,000 still live in camps in Thailand. But in 2012 the KNU signed a truce with the army. It later joined the peace process, progress on which has been touted by Aung San Suu Kyi as her priority since she became Myanmar's de facto leader in 2015.

The end of the shooting was a relief for many. People in Ei Tu Hta may still be too scared to return to their villages, but since 2012 some 18,000 of their fellow Karens have left various camps to do so. Hayso Thako of the Karen Refugee Committee, an NGO in Thailand, says that when he first went home, he was startled: "People smiled, laughed and watched TV."

Money also followed. The number of tourists in Karen state soared from 10,000 to 150,000 a year. Trade with Thailand increased too. For Tin Tin Htwe, a 20-year-old Karen woman working in a bustling shopping mall in Hpa-an, the state capital, war is now unthinkable. She says she gets along fine with her Burman colleagues—in fact, it is the memory of Karen rebels who used to storm into her house asking for food, money and recruits that spooks her the most. Areas affected by conflict are only marginally less well-off than peaceful ones. Some even have higher living standards.

But ceasefire dividends do not necessarily trickle down. A new stretch of highway cut down travel time within Karen state, but it came with its share of land grabs. Locals complain that big infrastructure projects lack transparency and accountability. In the hamlet of Thone Eain, an hour's drive from Hpa-an, every bamboo hut or tin-roofed house displays protest signs (one is pictured).

Villagers are worried about a Thai-Japanese power plant that threatens to flatten their homes. A small delegation of locals who went on a company-sponsored trip to Japan says the technology is to be trusted, but the regional minister championing the project, not so much—she was after all appointed by the Burmese government and remains elusive about the terms of the deal. “Life only started to be normal and now there is this,” sighs Than Than Nwe, a 46-year-old rice farmer. She says the money she was offered to move will not compensate for the loss of her crop.

The KNU is backing the project and also has schemes of its own, such as a planned industrial zone. Chinese investors were found and contracts inked, but things have stalled since the election of a civilian government. That peeves a mid-ranking KNU officer. He wants to become a businessman, and quick. If the government does not allow the project to go ahead, he warns, the KNU may take up arms again.

It is difficult for villagers to obtain clear title to their land, because the KNU and the government do not recognise each other’s authority on the matter. The ceasefire accord says the KNU and the army should work together to remove landmines, but nothing has happened. “There is no trust,” says Nan Moe Thidar Shwe, a local worker of Handicap International, an NGO.

How could there be any? Ahead of the next round of peace talks (forever around the corner), the Burmese army has stepped up attacks on a Kachin armed group, which once also had a ceasefire. Shan rebels, who also joined the truce signed by the Karens, still report clashes with the army. A Mon militia was recently bullied into accepting the pact, too. For now Myanmar’s ethnic minorities may have a peace process, but they have no peace of mind.

This article appeared in the Asia section of the print edition under the headline ”The sad truce”

Beasts and monsters

In Sri Lanka, local elections have rattled the government

It still has crumbs of comfort

Print edition | Asia Feb 17th 2018

Reuters

TO CRITICS of Mahinda Rajapaksa, local-council elections that were held in Sri Lanka on February 10th felt like a horror film, as the controversial ex-president rose from his silk-lined political coffin to declare victory. And what a victory it was for Mr Rajapaksa, a brash populist whose exit in 2015 after ten bloodstained and corruption-tainted years in power was widely heralded as a bright new dawn for the civil-war-battered island republic. His party won no fewer than 239 out of 340 contests. Some commentators have described it as the biggest electoral upset in Sri Lankan history. Mr Rajapaksa swiftly declared that the current national government had lost its legitimacy and should resign.

That is unlikely. The coalition headed by the prime minister, Ranil Wickremesinghe, may be ineffectual and unpopular, but it still holds a solid majority in parliament. Elections for the legislature are not due before 2020. Even if Mr Wickremesinghe's conservative United National Party (UNP) gets jilted by its junior partner, the centrist Sri Lanka Freedom Party (SLFP)—which happens once to have been Mr Rajapaksa's own party—it could probably hang on as a minority government, reliant on smaller parties that loathe the former president even more than they dislike Mr Wickremesinghe.

Most likely the coalition government will continue to bumble along in clumsy cohabitation with President Maithripala Sirisena, a former minister under Mr Rajapaksa who in 2015 split the SLFP to challenge and narrowly defeat his boss. Fortunately for the prime minister, changes to the constitution that were designed to prevent a repeat of Mr Rajapaksa's excesses have stripped Sri Lankan presidents of most powers. That means Mr Sirisena has only the wherewithal to obstruct, not to topple, Mr Wickremesinghe's government.

Humiliating though its electoral drubbing appears, the coalition may take comfort from something else. The council polls were the first to be held under a new system that combines first-past-the-post with proportional representation. Under the old rules Mr Rajapaksa's new party vehicle, the Sri Lanka Podujana Peramuna (SLPP), could indeed claim to have won a crushing victory even though it got just 44.6% of votes. In practice, under the new rules it will have to find partners to run any council where it has less than 50% of seats. Government supporters are also keen to point out that both in percentage and in total numbers, Mr Rajapaksa got fewer votes to "win" this election than he did in the election in 2015 that he lost to Mr Sirisena.

But the ruling coalition cannot afford to be complacent. Its poor showing, particularly for Mr Sirisena's SLFP, reflects more than a surprise groundswell of support for Mr Rajapaksa. Many of those who voted to oust the former president in 2015 have been so disappointed by his replacement that this time they did not bother to vote. Critics of the *yahapalanaya* or "good governance" coalition cite numerous weaknesses, from its failure to enact a promised new constitution and its lack of progress in punishing crimes dating from the civil war of 1983-2009, to its abstinence from economic reforms and its failure to investigate Mr Rajapaksa or his extended family despite widespread allegations of corruption and human-rights abuse.

Still, it may be that the next time Sri Lankans vote, fear of Mr Rajapaksa's return could prompt even critics of the government to turn against him. "Those who chose not to cast their lot with imperfect beasts have now to contend with monsters," commented a human-rights lawyer, Gehan Gunatilleke, in a local newspaper.

There are many Sri Lankans who do not regard Mr Rajapaksa as a monster but rather as a hero, particularly among the island's Buddhist, ethnically Sinhala majority. He was the person who led them to victory in the long civil war with the Tamil minority. They want a strong man like him back at the helm. In fact, says Alan Keenan of the International Crisis Group, a think-tank, the former president never really went away. His grassroots support remained, nurtured by the well-financed family political machine. "He has a strong core constituency, a clear narrative and a good set of issues," says Mr Keenan, "whereas the government has to pull together a range of minority constituents—Tamils, Muslims, Sinhala liberals—and find something to deliver to each one."

The prognosis: Sri Lanka is set on a bumpy course. With Mr Rajapaksa gleefully stoking Sinhala chauvinism, the country could slip backwards into the kind of polarisation that led to its long civil war.

This article appeared in the Asia section of the print edition under the headline "Beasts and monsters"

Banyan

Detente on the Korean peninsula is a relief

It does little to alter the fundamental crisis

Print edition | Asia Feb 17th 2018

Michael Morgenstern

YOU have to pinch yourself when thinking about the change. Barely three months ago the Korean peninsula appeared to teeter on the brink. As Kim Jong Un hurled ballistic missiles into the seas around him, having recently tested a nuclear bomb (the sixth), hawks serving President Donald Trump seemed to be pushing to give North Korea a bloody nose. They argued that strikes would destroy Mr Kim's nuclear ambitions. More likely, they would plunge the peninsula into appalling conflict.

And now? A member of the Kim dynasty has visited South Korea for the first time since the end of the Korean war in 1953. South Korean and other Western coverage in the past few days has breathlessly reported how, at the opening of the Winter Olympics in Pyeongchang, Mr Kim's sister, Kim Yo Jong, stole the show—along with an escort of North Korean cheerleaders described by the South's press as an "army of beauties". Ms Kim's modest if fetching outfit, her demure smiles, the touching deference to her (unrelated) nonagenarian travelling companion, Kim Yong Nam, the North's titular head of state: all were seized upon as evidence of a delightful charm offensive. The "princess of Pyongyang" had done much to put a human face on an impenetrable regime. She was North Korea's very own Ivanka Trump.

The blood line

What to conclude from the reaction? North and South Korea remain, after all, separated by the world's most heavily armed border. Ms Kim herself appears the most trusted accomplice to a young dictator who a UN inquiry recommends be indicted for crimes against humanity. He runs gulags and orders public executions. Just a year ago he arranged for the assassination in a Malaysian airport of his own half-brother. Ms Kim is complicit in all this. She has a key job in the propaganda apparatus of a highly repressive state that, in service to a family mafia, sits atop an edifice of lies and grinds most of its people into misery. Yet in South Korea she not only charmed, she pulled off a coup. Invited to the Blue House in Seoul, on which her beloved grandfather had ordered a bloody commando raid 50 years ago, she delivered to the South's president, Moon Jae-in, an invitation to a summit in Pyongyang with her big brother. Mr Moon will not lightly refuse.

The most obvious conclusion is that the regime, for all the crudity of its politics, remains a master of the diplomatic stroke. The detente that North Korea's leader appeared to seek in his new-year address, when he suggested sending athletes to the Winter Olympics, has, from his perspective, accomplished much. Stealing the Olympic show has been an added bonus.

Perhaps the talk in Washington about a willingness to risk war is merely part of a psychological ploy to curb Mr Kim's nuclear ambitions. You would like to hope so. But it may be that Mr Kim really did believe that Mr Trump would launch a first strike. If so, the detente buys time—America can hardly strike while its South Korean ally tries to revive long-frozen dialogue. It may also be that UN sanctions are badly hurting the regime (it suspended recent military exercises, apparently because of a lack of fuel). In which case, warming to the South is Mr Kim's best chance. The two previous occasions when a South Korean president travelled north, in 2000 and 2007, proved to be extraordinarily lucrative shakings of the money tree for North Korea. And it pursued its nuclear ambitions regardless.

All the while, Mr Kim is even exerting influence over the two allies' military relations. America agreed to Mr Moon's request to postpone planned joint military exercises until after the games—the Winter Paralympics end in mid-March. Now, with a summer summit in prospect, he will argue for further deferment, to generate goodwill. Mr Kim will look like the puppet master.

That speaks to a broader aim to drive a wedge between South Korea and the United States, guarantor of its security, as well as Japan. Is it working? Mike Pence, Mr Trump's vice-president, came in for criticism at the opening of the games. He refused to acknowledge the presence of Ms Kim right behind him. He wouldn't stand when the joint Korean team came into the stadium—some South Koreans saw that as boorish. Remarkably, when he visited a South Korean military base on the same trip, no one from the Blue House accompanied him.

That came across as a snub. As for Japan's prime minister, Shinzo Abe, when he urged Mr Moon in Pyeongchang to keep up the pressure on North Korea, he was told to keep Japan's nose out of internal matters. Hawks in Washington and Tokyo are alarmed. The fear is that the left-leaning Mr Moon, who has long called for dialogue, will fall under the North's sway, undermining the strategy of deterrence and international sanctions that America and Japan badly want to keep in place.

These concerns are overdone. Assuming he goes to Pyongyang, Mr Moon will not fall for the same old tricks again, argues Cheon Seong Whun of the Asan Institute in Seoul. Nor would public opinion allow him. Young South Koreans, especially, are far more cynical about the North's intentions than their elders were even a decade ago. Besides, Mr Moon is an assiduous supporter of UN sanctions. He appears to have reassured Mr Pence that South Korea will not let up until the North is ready to dismantle its nuclear programmes. And Mr Pence, according to the *Washington Post*, agreed with him that, as long as "maximum pressure" was sustained, there would be no harm in a summit.

Detente is far from pointless. With the stakes so high, talking lessens risks of misunderstanding in an alarming game of chicken. The whole region needs a breather after recent tensions. But if a summit happens, it will produce little. Nothing suggests that Mr Kim will give up trying to build a capability to flatten an American city. The problem is obvious. With no fundamental change in the nuclear stand-off between America and North Korea, once the jaw-jaw subsides then war-war looms again.

Correction (February 20th 2018): *A previous version of this article said that North Korean commandos had staged a raid on the Blue House 40 years ago. In fact the raid occurred 50 years ago.*

This article appeared in the Asia section of the print edition under the headline "Two cheers for jaw-jaw"

Chinese property
Stop speculating, start living

Stop speculating, start living

China is trying new ways of skimming housing-market froth

The party wants people to rent

Print edition | China Feb 15th 2018

PAN JINGYUAN has little time for traditional family values. The 26-year-old says she has no intention of ever getting married and loves living far from her parents. But Ms Pan is traditional in one way—she sees a home as the best investment for her savings. She plans to buy a small flat in the southern city of Shenzhen, where she works at the headquarters of a restaurant chain. "There is no way the government would ever let prices really fall," she says.

Such confidence has long been rewarded. Property prices in cities have roughly quadrupled this century, a rate of growth far exceeding that of the American housing bubble of the early 2000s, albeit from a lower base. This has led to a series of concerns: that homes are increasingly unaffordable, that the economy is too reliant on property and that housing prices, having gone up and up, might someday crash.

The government has, until now, tried to reduce the risk by periodically applying brakes on the market. Whenever real estate overheats, the authorities restrict funding to developers and make it difficult for people to buy new homes—for example, by increasing mandatory down-payments. When prices stabilise, they relax the controls. But such measures create volatility. Every three years or so, prices surge again.

So officials have started talking about a "long-term mechanism" to calm the housing market. Several times during the past year China's leader, Xi Jinping, has said that "homes are for living in, not for speculating on." The government appears to be adopting three main approaches. Together these could reshape the architecture of China's housing market.

The most promising is a push to develop a market for good-quality rental housing. Only about a fifth of urbanites rent homes in China, compared with a third in the rich world. In some countries, such as France and Germany, the proportion of renters is much higher still. China's rental housing is often shabby because it is aimed at low-income households. Rosealea Yao of Gavekal Dragonomics, a research firm, estimates that only around half of rental units in Beijing, the capital, and Shanghai have their own kitchens and bathrooms.

No dogs or migrants

A big reason for the slow development of the rental market is that there is not much profit in it. Cities tend to give more benefits to homeowners, such as the right to send children to local schools, so families far prefer to buy homes. It is mainly migrants from the countryside who rent, choosing dingy digs shunned by urbanites. Annual rents are about 1% of house prices, a low yield by global standards. Instead of taking a chance with messy tenants, many investors keep their properties empty, waiting for their values to rise.

One of the government's new approaches is to offer incentives to developers to build decent rental properties. It is doing this by selling land for rental projects at steep discounts, in effect guaranteeing hefty yields for developers. In some big cities, plans call for these discounted plots to account for about a quarter of future land supply. The government has promised to give renters the same rights as homeowners, though some doubt that it will actually do this. Many urbanites would resent additional competition for school places.

Shenzhen, which borders on Hong Kong, is among the first cities in China to sell large-scale plots for rental housing. The boomtown hopes that good-quality rental homes will attract the skilled workers it needs for high-tech industries. On the city's edge, Vanke, China's biggest developer, recently took over an apartment complex and began converting each unit into four or five tiny flats with living space little bigger than a bed. (One of Vanke's rental projects in Guangzhou, another southern city, is pictured.) The flats may be cramped, but they are clearly superior to other, mostly squalid, rental flats in Shenzhen. For officials, what matters is that Vanke has nearly quintupled the number of apartments available for rent in the complex.

A second approach will be the introduction of a property tax. Officials have talked for years about raising an annual levy on homeowners based on the value of their housing, as is commonly done in other countries. A possible benefit would be to nudge speculators to sell or at least rent out homes that they would otherwise leave unoccupied. At the same time it would give local governments a new revenue source, reducing their unhealthy dependence on land sales.

Yet apart from two small trials of such a tax in Shanghai and the south-western city of Chongqing, the government has dragged its feet. It has worried that a full property tax, implemented suddenly, would depress sales, says Eva Lee of UBS, a bank. But with the economy now in good shape, there seems to be less inhibition. The boss of a large developer predicts that a tax will be announced later this year. Still, required legislation could take up to two years to implement.

The third approach to the house-price problem involves striking a better balance between supply and demand. One way of doing this is sensible: expanding the availability of land where demand for housing is strongest. Because China wants to preserve land for farming, cities face strict limits on rezoning agricultural plots. But since last year, the government has let cities swap their land-use quotas—a potential boon to the fastest-growing urban areas.

The other way is more destructive. By imposing population limits on China's largest cities, officials hope to combat what they call "big-city disease": congestion, pollution and excessive pressure on urban resources (including, by implication, housing). Beijing aims to keep its population to 23m by 2020, while Shanghai wants no more than 25m people by 2035. Both are incremental increases over their current sizes and far below where, left unchecked, they would wind up. Population caps may help to calm the property market, but only by stunting the growth of the most productive cities. That would be a heavy economic price to pay for a stable housing market.

There are plenty of moving parts, too. Capital controls have trapped cash inside China, making property all the more alluring for investors. Rising incomes and changing lifestyles add to upward pressure on prices. Families want bigger apartments; more unmarried people also want their own homes. Mr Xi might succeed in skimming some froth from a bubbly market. But speculators are a hardy bunch. China has surely not seen the last of them.

This article appeared in the China section of the print edition under the headline "Stop speculating, start living"

Core upgrade

Xi Jinping is no longer any old leader

Mao would be proud

Print edition | China Feb 17th 2018

Except for "Debrett's Peerage", no institution pays as much attention to titles as China's Communist Party. It has already conferred a lot of them on its leader, Xi Jinping. Recently it has topped them off with a description hitherto mainly applied to Mao: lingxiu. It means leader, but conveys far more reverence than the usual word, lingdao. Last month two of the country's most authoritative newspapers described Mr Xi as lingxiu. Now comes the video. On February 9th state media released a five-minute film called "The People's Lingxiu" on WeChat, a social-media platform. It shows a portly Mr Xi greeting admirers (some are pictured), eating dumplings and inspecting a toilet. In 2016 Mr Xi was officially anointed as the "core" of the leadership, a moniker never conferred upon his predecessor, Hu Jintao. This was partly intended as a warning to recalcitrant officials that Mr Xi must be obeyed. If the party chief feels the need for further title inflation, perhaps the lower-downs are still not getting the message.

No longer just catch-up

China will soon have air power rivalling the West's

In some technologies, it has surpassed it

Print edition | China Feb 15th 2018

PA

THERE is no question which country gets the starring role in "The Military Balance", the latest annual review of the world's armed forces by the International Institute for Strategic Studies (IISS), a London-based think-tank. Amid renewed jostling between the world's great powers, it is the pace of military modernisation in China that stands out.

China's president, Xi Jinping, wants to be able to challenge America's military might in the western Pacific. He is making big progress. China's once bloated armed forces are becoming leaner and a lot more capable. They are also benefiting from a defence budget that is growing at a steady 6-7% a year, in line with GDP. The IISS declares that China has become an innovator in military technology and is "not merely 'catching up' with the West".

For some of the most advanced science, Mr Xi is tapping the private sector. Non-state firms are helping the armed forces to develop quantum technologies that will boost their ability to make use of artificial intelligence and big data, as well as to develop unhackable communications networks. A potential advantage that China has over the West is that its tech firms have little choice about working on military projects. The Pentagon has to woo sceptical Silicon Valley companies. Firms in China do what the government tells them to do.

Such exotic technologies will take time to be deployed on the battlefield. But China's focus on them may cause the West's already eroding military edge to disappear entirely. "The Military Balance" offers a striking example of the progress China has made: in two years' time, if not before, America is likely to lose its monopoly of radar-beating stealth combat aircraft with the introduction into service of China's Chengdu J-20. This has a much longer range than America's new F-35 fighter and will be a serious threat to American warships in the Pacific.

At least as worrying for American commanders in the region is the dramatic upgrading of China's inventory of air-to-air missiles (AAMs). The short-range PL-10, which was introduced in 2015, is regarded by military analysts as comparable in performance to Western equivalents, such as the *Sidewinder* II. This year, the PL-15, a radar-guided "beyond visual range" missile (BVRAAM), should enter service. Carried by a J-20, the PL-15 can destroy an aircraft 50km away that is trying to evade it. "The Military Balance" believes that a version of the missile is in the works that will have a cruise speed of Mach 3. It is similar in design to the European *Meteor*, the best BVRAAM in the West's inventory, which is only just entering service.

Another system, yet to be named, would provide China with an ability to knock out targets as far away as 400km, a far greater range than any other air-to-air weapon in service. It would threaten aircraft that currently operate safely from a considerable distance, such as tankers and planes used for airborne surveillance and control. China's message to its adversaries with these new missiles is clear. As "The Military Balance" puts it, air superiority "will have to be won—and likely only temporarily—with the commitment of a level of 'blood and treasure' not required since the end of the cold war."

This article appeared in the China section of the print edition under the headline "No longer just catch-up"

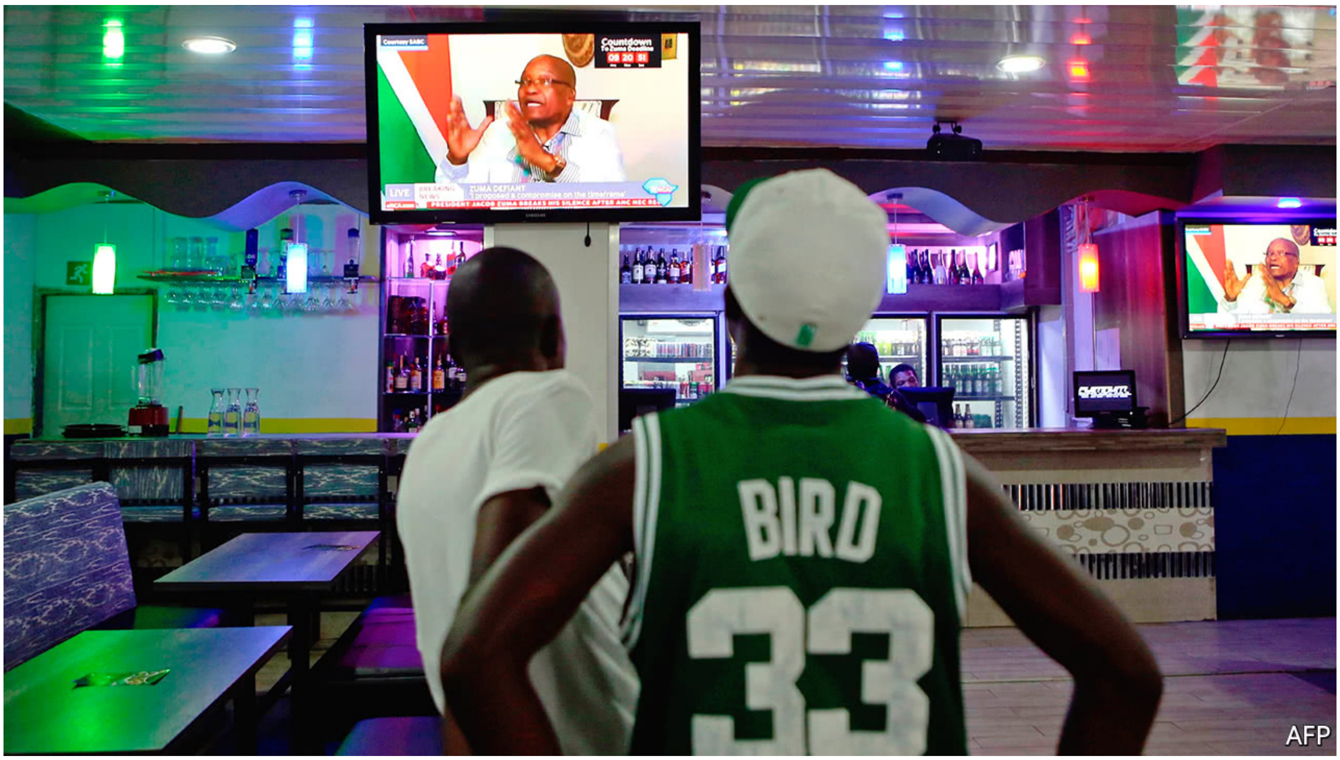
Jacob Zuma
South Africa's lost decade

Jacob Zuma resigns

The disastrous legacy of South Africa's President Jacob Zuma

South Africa's lost decade

Print edition | Middle East and Africa Feb 15th 2018



JACOB ZUMA was defiant until the end. For years he had ignored the clamour of South Africans fed up with near-constant scandals and court rulings against him. In his final days as president, Mr Zuma even scorned the appeals of members of his party, the African National Congress (ANC), as they pleaded with him to resign. Yet even as he hardened his heart against leaving, his comrades hardened theirs against him, threatening to support an opposition-sponsored vote of no confidence on February 15th.

Faced with the prospect of humiliation, Mr Zuma announced his resignation "with immediate effect" in a live television broadcast late in the evening of February 14th. It was his second appearance on television that day.

Upon learning that morning of his own party's decision to support the motion of no-confidence in his government, which would also have seen the entire cabinet dissolved, Mr Zuma gave a rambling television interview. With a hint of menace from a man who had climbed the ranks of the ANC's underground military wing to become its spymaster, he warned: "We are being plunged into a crisis that I feel some of my comrades will regret." Wide-eyed, he also declared himself a victim. "What is it that I've done?" he asked.

The answer may come rather sooner than he would like. Mr Zuma faces the reinstatement of 783 counts of corruption after a court ruled that a decision to drop the charges was "irrational". He may also be called to testify in a judicial commission of inquiry into "state capture". This will probe allegations that the Gupta brothers, his close friends and business associates of his son, improperly influenced cabinet appointments and government tenders.

Just hours before the ANC said it would use parliament to remove Mr Zuma from office, police investigators raided a cluster of mansions belonging to the Gupta family. Five people were arrested in relation to allegations of corruption involving a government-funded dairy farm.

Mr Zuma's ousting is a triumph for Cyril Ramaphosa, who was elected leader of the ANC at a party conference in December. But Mr Ramaphosa will have a mighty mess to clean up.

Economist.com

By most measures the country is worse off now than a decade ago, when Mr Zuma became leader of the ANC before being elected as president in 2009. Economic growth has slowed to a crawl, and briefly dipped into recession last year (see chart). Unemployment stands at 36% when people who have abandoned the hunt for jobs are included.

A greater portion of the country was poor in 2015 (the most recent survey) than four years earlier, and public debt has soared. Inequality is yawning and public services are dismal. A league table by the OECD, a club of mainly rich countries, ranked South Africa's education system 75th out of 76. Its health system was recently shamed by the deaths of 143 mentally ill patients who died of thirst and hunger after they were moved out of a well-run hospital and into unregulated care homes.

Before Mr Ramaphosa can even begin to tackle many of the structural problems that hobble growth, such as a poorly educated workforce and inflexible labour markets, he will have to clean up a government that has been marred by corruption at all levels. Clearing the rot will not be as simple as removing Mr Zuma.

Mr Ramaphosa will also have to take on powerful factions at the top of the ruling party to fire incompetent cabinet ministers and battle a culture of graft that has permeated right down to local councillors. He risks splintering the party should he move too quickly.

But when Mr Ramaphosa steps into the presidency he will be able to tap a deep well of goodwill that he earned in his previous careers, as a trade unionist and then as a businessman. In less than two months since Mr Ramaphosa became head of the party, South Africa's currency rose to its strongest level against the dollar in almost three years. The prospect of his presidency has already inspired some of the optimism that greeted that of Nelson Mandela, who was elected president in 1994 and who had wanted Mr Ramaphosa to be his successor.

After Mr Ramaphosa lost out to Thabo Mbeki, who was elected president in 1999, he told friends he would not be outfoxed again. His record as a negotiator, leading the ANC side in talks to end apartheid, had already marked him as patient and prudent, and he put both attributes to use in his long struggle to supplant Mr Zuma. Optimistic South Africans speculate that he may pick up Mandela's mantle.

As for Mr Zuma? Few will mourn the premature end of the presidency of a man whose middle name, *Gedleyihlekisa*, translates from Zulu as "one who smiles while causing you harm".

This article appeared in the Middle East and Africa section of the print edition under the headline "South Africa's lost decade"

Politics by other means

Egypt goes on the offensive in Sinai

Apathy and anger

Print edition | Middle East and Africa Feb 15th 2018


Reuters

THE Egyptian army announced the offensive with a gauzy video, clips of saluting soldiers and gleaming fighter jets set to martial music. It appears to be the largest operation in North Sinai in years. Hospitals were told to stockpile medicines and cancel annual leave for doctors. Schools are closed indefinitely. Nearly a week later, though, no one is sure how many troops were deployed, nor what they hope to achieve. The region is a closed military zone. The army releases a string of figures—a dozen militants killed, 1,500kg of explosives seized—that are impossible to confirm. Even its videos appear to be mostly stock footage, unless the navy has found a novel way to use fast attack boats in desert warfare.

For nearly five years, Egypt has struggled to put down a dogged insurgency. In November terrorists killed more than 300 people at a North Sinai mosque, the deadliest attack in Egypt's modern history. No one claimed responsibility; even al-Qaeda condemned the carnage. Suspicion fell on Wilayat Sinai, the local affiliate of Islamic State. Weeks later the group tried to assassinate the defence and interior ministers while they were visiting Sinai. "They seem to have a growing level of sophistication and intelligence," says one Western diplomat. And now they have threatened to disrupt next month's presidential election. A video released on February 11th warned Egyptians not to vote.

Many were already inclined to stay home. Abdel-Fattah al-Sisi's sole challenger used to run a campaign to re-elect the incumbent. Two would-be rivals are in military jails. A third was detained for weeks in a luxury hotel. Starved of choice, Egyptians have taken to lampooning the process. In one widely shared cartoon a wife warns her husband to behave, "or God help me I'll say you want to run for president." Even the president himself seems to recognise the farce. At a conference meant to showcase his achievements, a young woman started to ask Mr Sisi what would happen if he lost. Before she could finish, he burst into laughter.

In private, Mr Sisi is less jovial. Though he will win, his mandate will probably be underwhelming. Less than 48% of Egyptians bothered to vote in 2014, and they are more apathetic this time. Even some of the president's supporters are frustrated with the state of the country and its stifled politics. The economy is in poor shape, with high inflation and a stagnant private sector. Unlike his predecessors, Mr Sisi does not have a party to dole out patronage and mobilise voters. Indeed, he has few allies at all; since November he has sacked two of his three top security chiefs. With little else to offer, the Sinai operation has the whiff of an election-eve publicity stunt.

Never one to tolerate dissent, Mr Sisi has turned deeply insular in recent weeks. A group of businessmen linked to the banned Muslim Brotherhood are awaiting trial in a state security court. Some had been previously detained but released since the government saw them as moderates. Now they, too, have been swept up. Also in jail is Hisham Geneina, a former state auditor who joined one of the abortive campaigns to challenge Mr Sisi. With the field cleared for Mr Sisi, police have moved on to arresting former candidates.

On January 31st Mr Sisi took diplomats and journalists to the Nile Delta. The mood should have been buoyant. He was there to inaugurate the massive new Zohr gasfield, which will provide billions of dollars in revenue and a steady supply of cheap energy. But his tone quickly turned dark. The revolution of 2011, he warned, would not be repeated. "Don't think of trying these things with us. I am no politician. I'm not a man of words," he said. It was an unmistakable threat. Yet it may reveal more weakness than strength.

This article appeared in the Middle East and Africa section of the print edition under the headline "Apathy and anger"

A drone and downed jet nearly lead to war

Israel and Iran square off in Syria

To the brink and back

Print edition | Middle East and Africa Feb 15th 2018

IT LASTED only six hours, but the battle in the sky above Syria and Israel in the early hours of February 10th came close to turning a bloody civil war into a regional one. The danger of Syria's almost seven-year-old conflict escalating has been mounting in recent months, not least because of the number of foreign forces sucked into it. Russia and America both have troops on the ground and planes in the air above Syria. So, too, does Turkey. Iran, meanwhile, arms and supports various Shia militias that are fighting to prop up the regime of Bashar al-Assad. These include Hizbullah, a Lebanese militia-cum-political-party that fought a war with Israel in 2006.

The latest battle began with an incursion into Israeli airspace by an Iranian reconnaissance drone. It was promptly shot down. The next stage was an Israeli retaliatory strike aimed at the T-4 air base from which the drone was controlled. One of the attacking jets was hit by a Syrian anti-aircraft missile and crashed in Israel. But the downing was enough to provoke a further wave of attacks by Israel, this time aimed at Syrian air-defence batteries and Iranian military targets on Syrian soil.

By noon it was all over, each side licking its wounds, and refraining from further escalation, in part because of discreet conciliatory messages passed between Israel and Syria by Russia. None of the parties involved wants to go to war at present. The Assad regime is focused on consolidating its control of the country, and Iran wants more time to establish an enduring military presence there. Israel, for its part, is intent on keeping Iran from digging in and on limiting its transfers of weapons to Hizbullah. Israel wants to preserve its freedom to strike targets in Syria at will. And Russia has been playing off Iran and Israel by allowing each to intervene in Syria.

For much of the past seven years, Israel has carried out periodic attacks on convoys and depots of Iranian weapons destined for Hizbullah's arsenals in Lebanon. Since it deployed its forces to Syria in September 2015, Russia has usually turned a blind eye to Israeli attacks, even though it is propping up the Assad regime and is tacitly allied with Iran.

Economist.com

The regime, with the help of Russian bombers, is pummelling the remaining rebel pockets. Meanwhile Russia has also stepped aside and allowed Turkey to embark on its own campaign against Kurdish forces. Yet the more that other actors step up their involvement in Syria, the less able Russia is to control the conflict. Iranian-backed militias recently shelled a Turkish convoy, while scores of Russians may have been killed in fighting near Deir ez-Zor between Syrian government forces and rebels backed by America (see map). Most of them were reportedly killed in American air strikes called in by American-backed Kurdish fighters.

Yet Saturday morning's flare-up was a reminder of the fragility of the situation Russia is presiding over. Had the Israeli pilots bailed out over enemy territory and Israel launched a rescue operation, the conflict could quickly have escalated. With so many combatants and flashpoints, Russia may struggle to keep the lid on things the next time one of the parties pushes a little too far.

This article appeared in the Middle East and Africa section of the print edition under the headline "To the brink and back"

Bye-bye Bibi?

Israel's leader Binyamin Netanyahu fights for political survival

The police recommend that he be indicted for corruption, but he hangs on

Print edition | Middle East and Africa Feb 17th 2018


Reuters

NORMALLY composed, Binyamin Netanyahu looked rattled. Addressing the nation on February 13th, he began by recounting his 50 years of service, from the days in which he led commandos in battle as a young special-forces officer, through his service as Israel's swashbuckling ambassador to the UN and his term as a reform-minded finance minister. It was expansive self-flattery, even for him. Yet he needed to show how indispensable his leadership is to Israel's security and prosperity, for the prime minister was embarking on a battle for political survival.

An hour earlier the police had told his lawyers that they were recommending he face charges of bribery, fraud and breach of trust in relation to two investigations that have lasted more than 16 months. He felt shocked and betrayed. Israel's police chief, Roni Alsheikh, is a former agent-handler and spymaster in Shin Bet, the internal security service. Mr Netanyahu had picked him to run the police, hoping that the favour would be repaid in loyalty. Instead Mr Alsheikh subjected him to the most forensic of probes.

The police recommendations, which have now been handed over to Israel's attorney-general, include six separate charges of bribery and conspiracy to bribe, against Mr Netanyahu and two of Israel's best-connected business figures. The police say they conspired to change legislation on tax breaks for expatriates, build a tax-free zone on the border with Jordan, alter the ownership of Israel's main commercial television channels and arrange discreet distribution agreements between competing newspapers.

In the process, Mr Netanyahu and his wife received crates of champagne, boxes of Cuban cigars and the occasional gift of jewellery. The police estimate the gifts were worth a total of 1m shekels ($280,000). Mr Netanyahu says he has not done anything wrong.

For the moment Mr Netanyahu's coalition is stable. None of its members has spoken out against the prime minister since the police recommendations were published. In private some of the key ministers have said that they think the accusations are credible. However, they are afraid they will lose the support of their voters if they provoke the downfall of their right-wing government. They are waiting for the attorney-general's decision on whether to indict before coming out against him.

That passes the ball to Avichai Mendelblit, a cautious and ponderous advocate who served as Mr Netanyahu's cabinet secretary for three years. Although Mr Mendelblit's integrity is not in doubt, he is reluctant as a civil servant to start proceedings that could bring down the government. Far better, from his point of view, would be for Mr Netanyahu to resign before an indictment is issued, as happened in the case of Ehud Olmert, a former prime minister, who was jailed for corruption.

Over the past decade Israel's justice system has jailed not just a former prime minister, but also a former president, Moshe Katzav, who was convicted of rape. Some might see the incarceration of two high-ranking leaders as proof that Israeli politicians are dishonest. Yet it is also something for Israel to be proud of, for it shows that its justice system and free press hold even the most powerful to account.

Faced with Mr Netanyahu, a dominant figure in Israeli politics who first came to power in 1996 and has served a total of 12 years as prime minister, these safeguards are being tested as never before. Start with the justice system. Mr Netanyahu has long insisted that he had only received "gifts from friends" and that all his actions were "for the good of the nation". Now he has gone further, calling the police report "a biased, extreme document [that is] as full of holes as a Swiss cheese and doesn't hold water". Moreover, he has questioned the integrity of his investigators, saying they could not be trusted and accusing them of trying to thwart the electorate's will and bring down a serving prime minister.

His attacks on the press are also intensifying. He has tried to pass legislation aimed at muzzling it and, as has now been revealed by the police charges, has allegedly been involved in secret dealings with media-owners to get favourable coverage. It is to the credit of Israeli journalists, police investigators and prosecutors that they have not been deterred. But if such attacks continue, they will surely take a toll.

Ultimately the question is how long Mr Netanyahu believes he can carry on. In public and private, he has given no sign that he will step down. There is no precedent for an Israeli prime minister continuing to serve under an indictment. In 1977 Yitzhak Rabin resigned rather than be charged for holding money in an overseas bank account that was not declared to the tax authorities.

Early in his first term as prime minister, Mr Netanyahu himself only narrowly escaped being indicted on another corruption charge. He has indicated that even if the attorney-general indicts him this time, he intends to remain in office and prove his innocence in court. Legal opinions are divided as to whether such a step would be constitutional and it is certain to be tested in the Supreme Court.

The leaders of his coalition partners, as well as senior figures in his Likud party, would be wise not to let matters reach the point where judges are called on to decide on the legitimacy of an elected prime minister. Mr Netanyahu believes he is indispensable and can brazenly stay in power, even if that means breaking traditions. Israel will pay the price, in damage to its justice system and institutions.

This article appeared in the Middle East and Africa section of the print edition under the headline "Bye-bye Bibi?"

Running dry

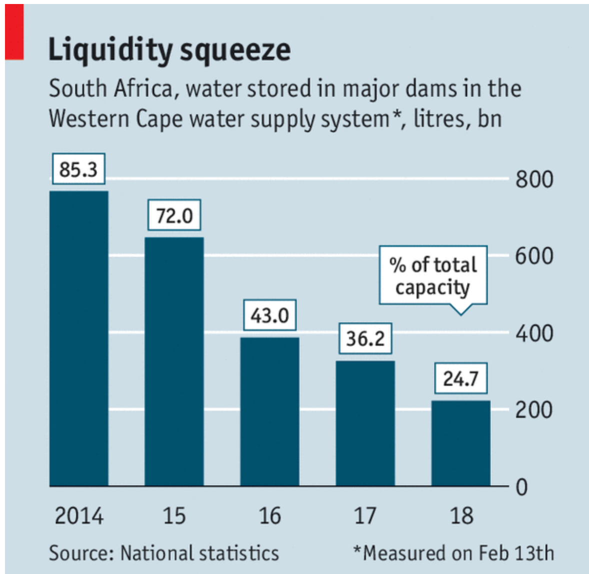
Why Cape Town is running out of water

The politics of drought

Print edition | Middle East and Africa Feb 15th 2018

AT THE edge of Khayelitsha, a township in Cape Town, Ntombi Mlityalwa is filling a huge old paint tin from a standpipe, with which she intends to do laundry. As water gushes, she says that it is not always so easy. The tap she is using serves an entire street of shacks. Recently, the pressure has fallen, and sometimes the flow runs dry in the morning. "We struggle when there is no water," says Ms Mlityalwa. Since Christmas, she reckons the pipe has gone dry three days each week, forcing her to travel to another.

Ms Mlityalwa's struggle is, these days, something that also terrifies wealthier Capetonians. This year the city is in a desperate bind to avoid what it calls "Day Zero", the point when the water level at dams north of the city falls to 13.5%, forcing the adoption of emergency rationing. On that day, which is currently predicted for June 4th, taps to suburban homes will be cut off, as will those of most businesses. Water will keep flowing to the city centre, to some informal settlements and to schools, hospitals and the like. But most people will have to join a queue and fetch water from distribution points, where they can get a daily quota of 25 litres per person. As things stand, the disaster may yet be avoided. Day Zero has been delayed to June from mid-April in the past two weeks. Even so, the water shortages facing one of Africa's richest cities will not be over.



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Cape Town gets almost all of its water from rain-fed dams north of the city. Most winters, they are replenished as a cold front moves north from Antarctica and dumps water on the mountains. But over the past three years the rain has barely fallen. Such a severe drought as the current one would only be expected once every 300 years, says Piotr Wolski of the Climate System Analysis Group at the University of Cape Town. The system coped well with two years of drought, but the third has drained the dams (see chart).

The weather is, however, only part of the problem. That Cape Town's growing population needs more water has been clear for years. In 2007 the government warned that the city would need new water sources by 2015 or else it would risk running out. The city government, which is controlled by the Democratic Alliance, South Africa's biggest opposition party, introduced measures to curb consumption such as fixing leaks and forcing people to install meters. That delayed disaster. But the national government, which is responsible for providing water in bulk to the city, did much less. Indeed, it continued to allocate much of the water stored in the dams to farmers at subsidised prices—almost 40% in 2015 and 25% this year—instead of to the city, even though agriculture makes up just 4% of the province's economy.

The crisis has not affected Cape Town's economy much. But if the taps run dry, all that would change. So the city is engaged in a frenzy of contradictory messaging. To foreign investors, it says business continues as usual. To residents, it says that using more than 50 litres per day is practically treason. Helen Zille, the premier of the Western Cape province, has converted her Twitter feed to an educational guide on why not to flush the toilet. Patricia de Lille, the city's mayor, has taken to dropping in on residents who use too much water and asking them why.

Such exhortations have helped. Water use has fallen to the lowest level in years. But about half of Capetonians are using more than their ration. A new tariff system is meant to penalise such people with eye-watering bills. But few people seem to understand the system. Rich Capetonians are full of stories about neighbours still topping up swimming pools.

Assuming Cape Town does not run dry in June, it still faces the question of what to do next. If drought is "the new normal", as Ms De Lille has termed it, then asking people to conserve water will only go so far. The national government would need to drill wells or build desalination plants. That is how cities such as Perth in Australia have survived droughts. But climate scientists say this drought may indeed have been as unusual as their models say. If the rains return, the expensive new water plants could end up being mothballed.

Either way, part of the solution is surely to adjust the price paid for water so that it gets allocated most efficiently. Letting a well-heeled German tourist use some to rinse beach sand off his bottom probably does more good for the economy than spraying it on a wheat field.

Under the current system, the government allocates too much of it to farmers, who have a vocal lobby. With proper pricing, politicians would not have to get involved (beyond ensuring that poor people got an adequate and affordable supply). If shortages drive up the price, that could spur investment to increase supply that the government is reluctant to make. Amartya Sen, an economist, observed that famines are not the result of poor harvests but of other factors, such as poverty. Similarly it is not droughts that cause cities to run out of water, but bad policy.

This article appeared in the Middle East and Africa section of the print edition under the headline "Running dry"

Election in Italy
Star man

Star man

This time, Italy's Five Star Movement wants power

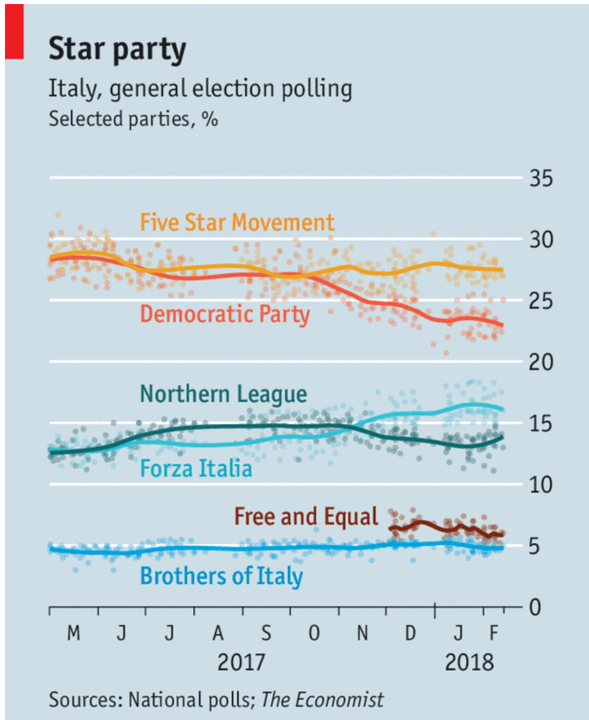
Luigi Di Maio is struggling to prepare a motley horde of idealists for the realities of politics

Print edition | Europe Feb 15th 2018

SCAMPIA on a wet Monday is the last place most Italians would care to be. Once a stronghold of the Camorra, the Neapolitan mafia, and the scene of two homicidal *faide* (feuds), it is a byword for peril and squalor. Unfairly so: the drug-dealing at the root of Scampia's problems has since moved to other parts of Naples. But it remains a tough neighbourhood, and Luigi Di Maio (pictured), the prime ministerial candidate of the maverick Five Star Movement (M5S), cut an incongruous figure as he arrived this week in an immaculate dark suit and blue patterned tie.

Italy's general election is due on March 4th, and Mr Di Maio was in Scampia for a campaign stop at a gym that keeps local boys off the streets. It was just the place to spotlight the M5S's claim to represent honesty and respect for the law, qualities too often lacking in Italy's mainstream politics. By boasting of its clean hands, however, the movement has made itself unusually vulnerable to scandals, the latest of which struck this week.

On entering parliament, the M5S's lawmakers undertook to donate half their salaries and the unused part of their expense allowances to a fund for small businesses. So far, they have contributed more than €23m ($28.7m). But on February 11th a television programme on a channel controlled by Silvio Berlusconi, founder of the rival Forza Italia party, accused some of the movement's MPs of fiddling the system to hang on to cash. After inquiries, Mr Di Maio said eight lawmakers held back donations worth €795,000. Two have resigned as candidates. Another left the M5S.



Economist.com

On February 13th the affair spread to the European Parliament, after an MEP who is one of the movement's most powerful figures quit the M5S and refused to speak to journalists. He was reportedly the latest target of the expanding investigation. "Bad apples are everywhere," responded Mr Di Maio. "But we expel them, and in other parties they are made ministers."

That is a fair point. But earlier campaign mishaps had made the M5S look alarmingly amateurish and accident-prone. On February 7th a news website, *Il Post*, revealed that parts of the movement's programme had been copied from elsewhere, including Wikipedia. And one of its candidates agreed to resign from parliament if elected, after it emerged he had boasted of beating up a Romanian immigrant.

Such, however, is the disenchantment with Italy's political mainstream that these early controversies barely dented the M5S's support. Polls show it is still on top, backed by almost 28% of the voters.

"The M5S draws support from every region in the country and votes from every section of society," says Roberto D'Alimonte, a professor of political science at the LUISS university in Rome. But there are variations. Its environmentalism appeals to the eco-conscious middle-class. At a theatre in central Naples, Mr Di Maio introduced some of the local candidates: a university lecturer, a veterinarian, a teacher and a director who had staged plays in the city's jails. The movement is less popular among older people, adds Mr D'Alimonte. And though born in the north, it has recently grown in the poorer south.

Roberto Fico, the movement's lead candidate in Naples, offers two reasons. In the north the M5S competes with another populist movement, the anti-globalist Northern League. And southerners are less perturbed by the M5S's peculiarity.

Founded nine years ago by Beppe Grillo, a comedian, the movement is impossible to pigeonhole. Like France's En Marche! movement, it rejects the left-right political spectrum, which it argues is based on class divisions that have become outdated. But, despite his buttoned-down image, Mr Di Maio is no Emmanuel Macron: he has no degree and never held a regular job before being elected to parliament five years ago at the age of 26.

Unlike most such anti-establishment groups, moreover, the M5S was set up to destroy parties altogether, which is why its members insist on its being called a movement. The dream of Mr Grillo's late adviser, Gianroberto Casaleggio, an internet entrepreneur, was to replace party politics with a form of web-based direct democracy in which the public could decide on legislation at the click of a mouse. The M5S, he decreed, should only enter government with an absolute majority that would enable it to change the system. At that point, it would disband, having served its purpose.

Starry-eyed realist

Little of this utopianism can be discerned in Mr Di Maio's professionally delivered campaign speeches. The message is clear: full steam ahead into government, even without an absolute majority. Not once in Naples did he raise the issue of direct democracy. Instead, he talked of the laws his government would abolish and the changes it would introduce.

Both Mr Di Maio and Mr Fico hail from Campania, the region around Naples. They reflect the heterogeneity of the M5S, and the differences of emphasis within it. The candidate for prime minister has seldom, if ever, been photographed without a collar and tie. His family's attachments were to the right: his father, a builder, was a member of the neo-fascist Italian Social Movement. Bearded and jeans-clad, Mr Fico's earliest political activities were on the left. In 2005 he founded one of the earliest local groups that used Meetup, a networking website, to create the basis for what became the M5S.

Mr Di Maio's official line is that if, as the polls suggest, the movement emerges as Italy's biggest political force but without the outright majority it needs to govern, then it will present its programme and proposed cabinet to the other parties. If they like what they see, they can offer their support. But that is disingenuous. It dodges the question of whether the M5S will get its hands dirty, make concessions and trade ministerial portfolios.

Mr Fico foresees a “great dilemma” for the movement. After the last election, many of its supporters, who did not share (or even understand) Mr Casaleggio’s ideas, felt they had wasted their votes when it took no part in the new government. If the M5S were again to refuse, it could doom itself to irrelevance.

But, argues Mr Fico, the movement cannot afford to lose its sense of mission. “If it becomes just another party, it will die,” he warns. “We are trying to strike a balance between implementing the movement’s ideas and projects on the one hand and gradually changing the system on the other.” That effort threatens to open a rift in the M5S between purists and those keen to enter government. Coming first in the election may prove to be the easy part.

This article appeared in the Europe section of the print edition under the headline ”Star man”

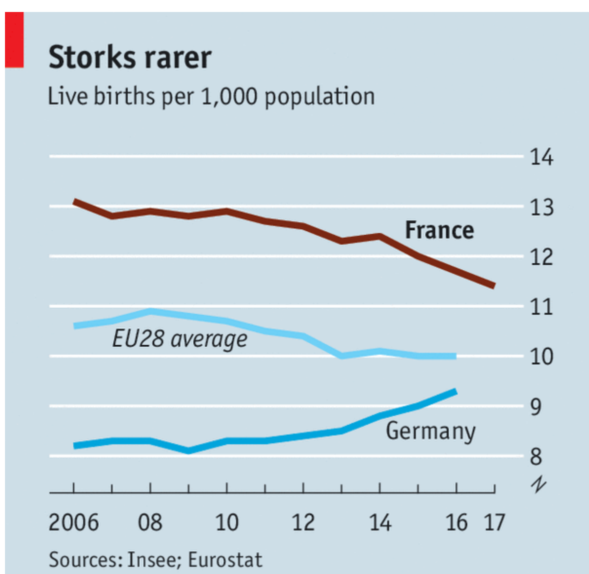
Bébé delay

France's high fertility rate has begun to slide

State-run crèches help, but births have dipped below two per woman

Print edition | Europe Feb 17th 2018

THE French city of Rennes serves plates of asparagus tips to 18-month-old tots. Toulouse treats its under-fives to Roquefort-cheese tart. Toddlers in Amiens are offered a camembert tartiflette as a starter. At the country's state-run crèches and nursery schools, a four-course meal—cheese included—is standard fare. The French like to educate taste buds as well as minds. With a long history of pro-natalist policy, they also like to support working parents. Good catering, along with long opening hours and well-equipped public nurseries, are all part of the appeal.



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Yet despite all the French do to support child-rearing, the country's birth rate has suddenly gone into decline. In 2017, for the third consecutive year, the number of births in France dropped, and to its lowest level in two decades (see chart). Along with a slight increase in the number of deaths, the gap between births and deaths—which demographers call the natural increase—fell to its lowest point since the 1950s.

This is due not just to a decline in the number of French women of child-bearing age, although those numbers have indeed dipped over the past decade. It is also because French women are having fewer children. France and Ireland used to stand out as the two European countries in which women had, on average, close to the 2.1 offspring needed to hit the population replacement rate. Last year, however, the number of babies French women are expected to have in their lifetimes dropped to 1.88, its lowest level in almost 20 years.

Why have the French gone off babies? The answer is not just tougher economic times. Unusually among European countries, the French birth rate remained fairly stable through the worst of the financial crisis, which began in 2008. Nor can it be explained simply by cuts to family benefits. In 2015 the Socialist government did begin means-testing a payment made according to the number of children in a family. But this touched only the richest 20%.

A raft of other pro-natalist policies, from a cash bonus and tax breaks for a third child to cheaper rail travel for big families, remain in place. Maternity is considered a mark of vitality, and national pride. France still awards a "family medal", introduced after the demographic devastation of the first world war, to parents who bring up at least four children "in dignity". Those with more than eight used to get gold.

The best explanation seems to be that French women, like others in Europe, are delaying having children. For all births in France, the average age of the mother has increased by nearly a year in the past decade, to over 30. As women (and men) study longer, and take time to find stable jobs, the number of births to mothers aged 25-29 years has fallen from 13.4 per 100 women in 2000 to 11.2 last year. Teenage pregnancies have also dropped. So far, there has been no corresponding rise in births to the over-35s, and only a slight increase to those aged 40-49 years.

It could yet be that, in the coming years, older motherhood in France will make up for the recent fall. As Gilles Pison, a French demographer, points out, this is what happened after a previous child-bearing dip in the 1990s. Despite the sharp recent drop, the French remain among the more enthusiastic procreators in Europe. If the country can revive this breeding instinct, France will be on course, post-Brexit, to overtake Germany as the most populous country in the European Union by the mid-2050s—and for the first time since Bismarck.

This article appeared in the Europe section of the print edition under the headline "Bébé delay"

Law of rule

Turkey's constitutional court has been rendered irrelevant

A lower court ignores a higher one that ordered a journalist freed, and President Erdogan applauds

Print edition | Europe Feb 15th 2018

ELVAN ALPAY'S heart leapt at the news. It was January 11th, and Turkey's constitutional court had just ordered the release of Mrs Alpay's father Sahin, as well as another writer, from pre-trial detention. One of over 100 journalists locked up in Turkey, Mr Alpay had been arrested on farcical terrorism charges in the summer of 2016, a couple of weeks after a violent, unsuccessful coup. He is 73 years old and faces a triple life sentence.

Accompanied by her mother and a few friends, Mrs Alpay drove to the prison where her father had been held, to greet him in person. She never got the chance. As she waited by the prison gates, word came that a lower court had rejected the high court's verdict, and Mr Alpay would remain behind bars. The move had no legal precedent, or indeed basis. What it did have was the endorsement of President Recep Tayyip Erdogan and his government. Without a trace of irony, the deputy prime minister accused the constitutional court of flouting the constitution. Mrs Alpay says she was crushed, but not wholly surprised. "When things don't make sense from the beginning," she says, "you no longer feel shocked when you should."

With Turkey's judiciary depleted and intimidated by waves of purges orchestrated by Mr Erdogan's government, such Kafkaesque outcomes are increasingly common. In another recent case, the head of the local chapter of Amnesty International, a human-rights group, who has spent the past eight months in prison, was set free by one court, only for another to rearrest him hours later. The same happened to a group of 19 imprisoned journalists last spring. (The judges responsible for their release were overruled, and placed under investigation themselves.)

But this time the implications are wider and even more serious. By defying the Alpay verdict, the government has in effect crippled the country's top court, says Hasim Kilic, a former chief justice. "The constitutional court has been rendered inoperative," he says.

The upshot is that Turkey's judicial chaos is now Europe's headache. Mr Alpay and several others have applied to have their cases heard by the European Court of Human Rights (ECHR), based in Strasbourg, to which Turkey belongs. The ECHR may well conclude that Turkey's highest court is no longer able to provide legal remedy. This would no doubt encourage tens of thousands of judicial appeals by other plaintiffs in Turkey, which the European tribunal would have no choice but to accept, says Riza Turmen, a former ECHR judge.

A diplomatic row may be brewing, too. For Turkey and other European countries, the ECHR's judgments are binding. If the court rules that continuing to detain journalists like Mr Alpay is unlawful, the government will be expected to release them immediately. Failure to do so could expose it to a range of sanctions, ultimately including ejection from the Council of Europe.

Mr Erdogan, who seems anxious to repair bridges with European leaders after likening some of them to Nazis last year, is unlikely to risk such a scenario. But he remains equally determined to crush any challenge to his authority. Although some of the 50,000 or so people imprisoned since the attempted coup in 2016 have been released, others are taking their place. Since the Turkish army launched its offensive against Kurdish insurgents in Syria last month, the government has again begun tightening the screws on dissent. In the past four weeks more than 600 people have been detained for protesting against the war on social media and elsewhere. As far as the rule of law in Turkey is concerned, the beat of the war drums might as well be a funeral march.

This article appeared in the Europe section of the print edition under the headline "Law of rule"

Of medals and melting

What climate change means for the Netherlands' Olympic skaters

In the land of champion speed skaters, frozen canals are ever rarer

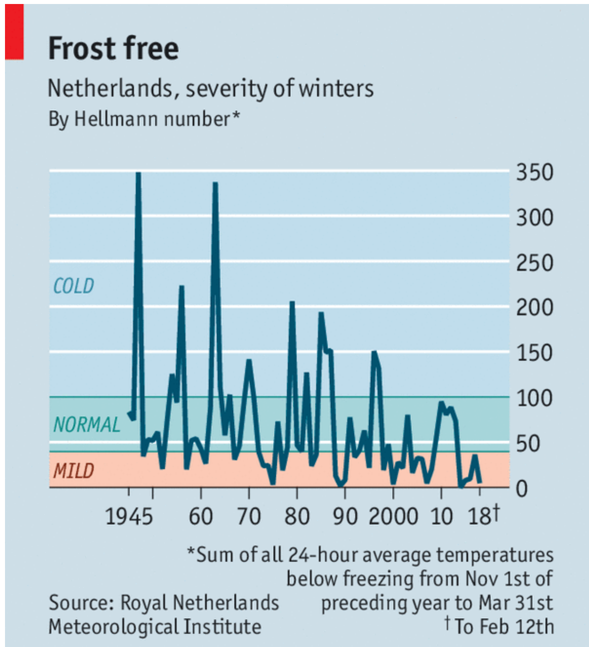
Print edition | Europe Feb 15th 2018

WHAT Kenyans are to marathons, the Dutch are to long-track speed skating. As the Netherlands' skaters arrived last week at the Winter Olympics in Pyeongchang, their biggest fear was of failing to do better than in 2014, when they won 23 of the 36 medals. This year they got off to another flying start, sweeping gold, silver and bronze in the women's 3,000 metres. The stars of the men's and women's teams, Sven Kramer and Ireen Wüst, have each won gold.

But the mood at the national skating association is not entirely sparkling. The excellence of Dutch speed-skating stems from the sport's special place in national culture. Each winter the country waits anxiously for a cold snap long enough to freeze the waterways that mark its low, flat landscape. Then millions of Dutch take to the ice, zipping from town to town along lakes and canals. Yet in recent years such cold spells have grown rare.

"In the old days, three- or four-year-olds would be put out on the ice on beginner's skates, pushing a chair. Without natural ice you lose the youth," says J.W. Baarslag, an *ijsmeester* (icemaster) in the town of Veenoord. Artificial ice rinks do not hold the same appeal. A third of Dutch households own speed skates, but a survey in 2017, a mild winter, found just 17% of those who owned them had used them in the previous year.

In cold winters icemasters play a crucial role, checking to ensure the ice is thick enough. When it is, volunteer *ijsverenigingen* ("ice associations") spring into action, sweeping away snow and organising routes between towns. Canal-side hot-chocolate stands pop up, and the landscape acquires the cheery feel of an outdoor carnival. Skaters carry tickets, which can be stamped at way-stations on the ice; those who show fully stamped cards collect a medal. Some join gruelling marathons such as the *Elfstedentocht*, a 200km race between 11 northern towns that leaves skaters with frost-caked brows and bleeding ankles.



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For the past four years the ice associations have been idle. The national weather service rates winters using the Hellmann index, the inverse of the sum of daily average temperatures below zero. Those above 100 are considered cold. From 1901-80 there were seven winters above 200. But the last time the index exceeded 100 was in 1997, which was also the last freeze thick enough for an *Elfstedentocht*. In 2014, for the first time since measurements began in 1901, it fell to zero: not a single day had an average temperature below freezing. This winter, as of February 15th, it stands at 4.8.

The Dutch have been skaters since medieval times, when peasants strapped gliders made of bone to their shoes. The world's oldest metal-bladed skates, dating from the 13th century, have been found in Amsterdam and Dordrecht. The government is subsidising more artificial long-track rinks. But scenes like Pieter Bruegel's paintings of village festivals on the ice are ever rarer. Some fear the *Elfstedentocht* may never be skated again.

This article appeared in the Europe section of the print edition under the headline "Of medals and melting"

Gunfire and celebration

A decade since independence, Kosovo is still violent

An anniversary highlights the divisions among the country's Serbs and Albanians

Print edition | Europe Feb 15th 2018

OLIVER IVANOVIC, a Kosovo Serb politician who was murdered on January 16th, was hit by six bullets, says his friend Branislav Krstic, who washed and dressed the body. "The one that killed him entered here," he says, pointing to his hip, "and exited here," pointing at his shoulder. The assassination was a grim marker for Kosovo, which celebrates ten years of independence on February 17th. Its Serbian minority was long afraid of the majority ethnic-Albanian population. Now, as Mr Ivanovic argued before his death, they have more to fear from their fellow Serbs.

Mr Ivanovic was shot outside his office in the divided town of Mitrovica. After the war of 1999, in which a NATO intervention reversed a Serbian ethnic-cleansing campaign, he helped mobilise local Serbs to preserve control of the north side of town from Albanians, who now live on the south side. At the time of his death, he was on trial for war crimes committed during this period. But Mr Ivanovic had since become an advocate of reconciliation. Many Serbs think some of the evidence against him, and perhaps his assassination, were organised by political rivals.

Kosovo's independence celebrations will be bittersweet. The country remains desperately poor, and Kosovars and Belarusians are the only Europeans west of Russia who lack visa-free access to the Schengen zone. Many Kosovars think their leaders are engaged in organised crime. A court has been set up in The Hague to tackle crimes by Kosovo Albanians during the war, but a senior European Union official says most witnesses are too frightened to testify.

It is especially hard to prosecute alleged war criminals who are also war heroes. Last year Ramush Haradinaj, a former prime minister who was acquitted on war-crimes charges by an earlier court in The Hague, was arrested in France on a Serbian warrant for murder and ethnic cleansing. The French released him, but the arrest revived his flagging career. He is now prime minister again. Curiously, he is even supported by Kosovo Serb deputies in parliament. Many Kosovars see this as proof that politics is less about issues than about divvying up the spoils.

Tens of thousands of Serbs fled Kosovo in the wake of the war. About 120,000, roughly 5% of the population, are believed to remain, mostly in enclaves in the south. For years they were protected by foreign troops, but things are more relaxed today. Since 2011 Serbian and Kosovo Albanian leaders have held talks under EU auspices.

Just as significant is the growing co-operation between Serbian and Albanian mafias, which overlap with their political classes. In Mitrovica, those who know the details are afraid to talk openly. "The deal is 'don't make waves'," says one source. "They work together, and people know that they had better keep quiet and not mess around in the sharks' pool." Tatjana

Lazarevic, a journalist in north Mitrovica, says Srpska Lista, the Kosovo Serbs' party, distributes no-show jobs in hospitals and schools, part of a "giant chain of people doing nothing except voting for them". Igor Simic, a Srpska Lista deputy, dismisses that claim as "false" and "ridiculous".

Marko Djuric, the Serbian government's top official for Kosovo policy, says Serbia wants to broaden the talks to other issues, including redrawing borders. Serbian-inhabited north Kosovo might rejoin Serbia, while majority Albanian areas in Serbia might become part of Kosovo. "We don't want to leave a frozen conflict for an indefinite time," he says.

Most of Kosovo's Serbs, who live in the country's south, are horrified by that idea. At the medieval Serbian Orthodox monastery of Visoki Decani, the abbot, Father Sava, says it would lead to an exodus of Serbs. "Partitions always happen in a violent way," he says.

In fact, the prospects for an exchange of territory are slim. If Kosovo's borders were redrawn along ethnic criteria, Bosnian Serbs and Macedonian Albanians would demand the same treatment. That would almost certainly mean war. A source close to Kosovo's government says Aleksandar Vucic, Serbia's president, "proposed it. Our side was interested. The Americans and Germans said 'no way' because of Bosnia and Macedonia. Case closed."

This article appeared in the Europe section of the print edition under the headline "Gunfire and celebration"

Charlemagne

Lithuania hopes the next century is quieter than the last

100 years of independence, punctuated by Nazi and Soviet occupation

Print edition | Europe Feb 15th 2018

IT TOOK Thomas Mann just a few days to fall for the Curonian Spit. The "indescribable beauty" of this geographical oddity, a skinny stretch of land curving from Lithuania's west coast to what is today the Russian exclave of Kaliningrad, so enthralled the German author and his wife during a holiday in 1929 that they decided to build a summer house on its coast. The best part of a century later the view has hardly been enhanced by the *Independence,* a vast floating liquefied natural gas (LNG) terminal that sailed into the nearby port of Klaipeda in 2014. The ship rarely leaves harbour, thanks to what Rimas Rusinas, the terminal's operations manager, politely calls Lithuania's "interesting neighbours". But as the country prepares to mark a centenary of restored statehood on February 16th, for visitors contemplating its turbulent history there are worse places to start.

For some countries independence is about military might or economic heft. For Lithuania it means protection from the giant neighbour to the east. The *Independence* helps by blunting Russia's energy weapon; LNG from friendly countries like Norway now covers around half of Lithuania's gas imports. Below deck a cabinet groans with messages from VIP well-wishers, including a congressional delegation from America. The terminal slots neatly into the European Union's energy strategy, which aims to expand diversity of supply, break monopolies and increase interconnection (a planned EU-funded pipeline to Poland will also help). Meanwhile a small NATO "forward presence" of 1,200 German and other troops is stationed 240km inland.

This is the fruit of Lithuania's dedication to finding powerful friends. Today the country is safely docked inside the EU and NATO. But for most of the 20th century hostile neighbours determined its destiny. The Poles nabbed Vilnius in 1922; the Germans annexed Klaipeda in 1939 and later, with the help of local collaborators, murdered 95% of Lithuania's roughly 200,000 Jews. And always, there is Russia. A gritty independence movement brought the Soviet occupation to an end in 1991 (and hastened Mikhail Gorbachev's resignation). But it hardly eliminated the threat. Today Russian forces stage war games modelling the invasion and occupation of Lithuania and the other Baltic states. Kaliningrad teems with nuclear-capable missiles and other weaponry. Kremlin propaganda infects Lithuanian media. "We can never feel relaxed," says Linas Linkevicius, the foreign minister.

As history casts such a long shadow, it is a wonder that the country is doing as well as it is. Living standards have risen from around half the EU average in 2004, when Lithuania joined the club, to three-quarters today, despite a spectacular economic crash in 2008 and a brain drain of some of the country's brightest (1m Lithuanians have emigrated since 1990). The post-Soviet national mission of state-building and grand diplomacy has yielded to a quieter emphasis on convergence with the rest of Europe. Many prefer it that way. “Incrementality is really beautiful,” says Arturas Vasiliauskas, a historian.

Yet the centennial celebrations still carry a particular weight in Lithuania. Unlike Latvia and Estonia, which will mark their respective centenaries later this year, Lithuania has a history of statehood stretching back to the Middle Ages. Amid the chaos of the Russian revolution, it was the first Baltic state to assert its independence in 1918. Decades later, that proclamation helped motivate a brave but futile nine-year armed struggle by forest-dwelling partisans against the Soviet occupiers. It also inspired Lithuania’s audacious declaration of independence in 1990, the first in the crumbling Soviet Union, which initially shocked its Baltic neighbours and unsettled some outsiders.

The long struggle has left Lithuanians with a singular sense of European purpose. A country with roughly the population of Chicago believes it has a special duty to help non-EU countries battling Russian oppression, such as Ukraine and Georgia. “Go to the Maidan in a Lithuanian T-shirt, and everyone loves you,” says Dovile Sukyte of the Eastern Europe Studies Centre, a Vilnius-based think-tank. Lithuania’s encounters with Russian mischief are also useful for western European countries just beginning to grapple with disinformation. Five years ago, says Mr Linkevicius, European leaders brushed off his warnings with homilies about the value of free speech. Now they listen.

Forgetting creates a nation

Sometimes Lithuania’s past seems to weigh too heavily, though. The country has three national days, surely a world record (on a per-head basis, at least). Violeta Davoliute, a historian at Vilnius University, contrasts her country’s obsession with history to Estonia’s successful branding as a forward-looking champion of all things digital. Perhaps this is why progress in Lithuania can feel a little too incremental. Public services, especially education, need an overhaul. There are slivers of manufacturing success, such as laser production, but the country has not yet found its own industrial niche. And Lithuanians drink, fight and kill too much. Many are surprised to learn that their country has the highest murder and suicide rates in the EU.

Still, there are signs that Lithuania’s next generation, or what remains of it after emigration, is reinventing its precious bequest of sovereignty. Battles over monuments in Vilnius have exposed strong intergenerational differences: older Lithuanians like giant bronze knights, while younger ones prefer grass-covered bunkers. The #MeToo campaign has struck Lithuania with peculiar force, toppling grand figures like Jonas Gasiunas, a renowned painter accused of harassing students. (He resigned his university post, though he denies the charges.) Neringa Vaisbrode, who has been directing the centennial festivities from the prime minister’s office, is surprised by the surge of interest across the country in the run-up to February 16th. “The narrative was written by historians,” she says, “but I see it alive before me.”

This article appeared in the Europe section of the print edition under the headline ”100 not out”

Tax reform
Fishing for funds

Fishing for funds

Wanted: radical proposals to fill Britain’s giant fiscal hole

Politicians are slowly facing up to the fact that higher taxes are needed

Print edition | Britain Feb 15th 2018

ALMOST every morning Britons wake up to another alarming story about their threadbare public services. Since 2010 the state has endured its biggest financial squeeze on record, and it is beginning to show. The National Health Service is battling a “winter crisis”. Social care is not keeping up with the ageing population. The number of rough sleepers has almost trebled. Prisons are short of guards.

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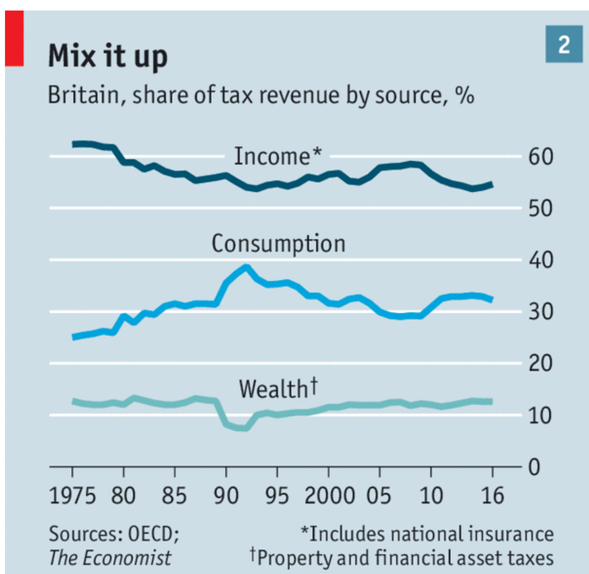
The government's fiscal watchdog has issued sobering forecasts. Its calculations suggest that to put the public finances on an even keel over the long term, tax rises or spending cuts worth around £80bn ($111bn), or 4% of GDP, will be required. Further cuts are a non-starter, since there is little fat left to trim. Some right-wing MPs see the foreign-aid budget as ripe for a shakedown, an idea that has gained traction following a scandal at one big charity (see article). Yet even abolishing aid entirely would get Britain barely one-sixth of the way towards its target (see chart 1).

So politicians are slowly coming round to the idea of higher taxes. "There's quite a strong argument that fiscal policy ought to change," Nick Timothy, who once did most of the prime minister's thinking, said recently. "While the NHS needs reform, it also needs more money."

Broadly speaking, a government can tax three things: income, consumption and wealth. Economists like taxes to be simple and to avoid unintentionally distorting behaviour. Where should the government cast its net?



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Start with taxes on income. At first sight they are an obvious target for revenue-hungry politicians. They are progressive (ie, those on higher incomes pay more). And Britain looks overdue for a rise. Since the 1970s income taxes have fallen as a share of the total (see chart 2). The basic and higher rates of income tax, as well as the corporation-tax rate, have been slashed. Britain now raises far less in income taxes, broadly defined, than the average OECD country.

The Labour Party wants that to change. It would raise corporation tax from 19% to 26% and jack up taxes on those earning above £80,000 a year. It says such policies would yield around £25bn, a large chunk of what Britain requires. Yet it is not clear that the tax system needs a big extra dose of progressivity. It is already about as redistributive as the OECD average, reducing pre-tax income inequality by about one-third. And beyond a certain point, progressivity conflicts with efficiency. Rich folk work less, make bigger contributions to their pensions (which enjoy favourable tax treatment) or leave the country. The Institute for Fiscal Studies (IFS), a think-tank, says that Labour's higher taxes on personal incomes may raise less than hoped—and perhaps nothing at all.

A better approach to taxing income might involve broadening the base. Since 2010 the tax-free personal allowance has risen from £6,475 to £11,500. Reducing it to £10,000 would raise some £9bn a year. The Liberal Democrats have proposed adding one percentage point to all rates of income tax. That would yield around £6bn.

But any move to raise taxes on income has a cost. Research by the OECD suggests that income taxes, more than those on consumption and wealth, strongly discourage people from working, cramping economic growth. This implies that Britain's relatively low income taxes are a strength, rather than a problem to be fixed.

Higher taxes on consumption might, therefore, be considered. Some want extra levies on socially damaging activities such as unhealthy eating and pollution. In April Britain will introduce a "sugar tax", which should raise some £500m a year. A "climate-change levy", a tax on energy use by businesses, already exists. Doubling all environmental taxes would raise perhaps £14bn. It would also make Britain greener.

To raise serious money, though, politicians could turn to VAT, which is levied at 20%. It looks ripe for reform. With a plethora of carve-outs—for food, children's clothes and much else—Britain's VAT covers only about half of what the average person buys. That makes it the seventh-leakiest VAT in the OECD.

Different VAT rates are designed to help the poor afford essentials. But it is a costly way to do so, as the rich benefit from the exemptions, too. A bold reform would be to extend VAT to nearly all spending, which might be enough to fill Britain's fiscal hole. By itself it would be regressive, not to mention politically poisonous (newspapers' outrage over VAT on baby food would be matched only by their fury at VAT on newspapers). So the government would need to help the losers. The IFS reckons that it could get rid of most VAT carve-outs, compensate the poor (say, by boosting benefits) and still have a lot of money left over.

Going after the grandparents

Increasing wealth taxes, levied on everything from property to financial assets, may be a more palatable option. A housing boom, intergenerational inequality and the need for more health and social care have given rise to a feeling that old, rich people ought to pay more.

Some say that the wealthy already pay enough. Britain raises more of its overall tax take from wealth taxes than any other OECD country. But look at it another way. Wealth taxes tend to be the most growth-friendly. By historical standards, Britain's wealth looks undertaxed. Since the 1970s, as house prices and equities have soared, total household wealth has risen from three times income to eight times. Taxes on that wealth relative to GDP have remained steady, however. Council tax, one of the biggest wealth taxes, is based on property valuations from 1991. Rich people often pay less than poor. Buckingham Palace attracts a council-tax bill of £1,400 a year, around the same as some flats in Bradford.

Basing council tax on up-to-date values would be a start. Other forms of wealth could also be tapped. Cancelling a proposed loosening of the inheritance-tax regime is one idea, though it would not raise much revenue.

A land-value tax is another option. An annual levy of 0.5% might fill almost a third of the fiscal hole. Such a tax would be hard to avoid, since land cannot be hidden or easily substituted. The evidence also suggests that it is landowners, rather than renters, who bear the burden of such a tax.

Today, no prime minister would dare to implement these radical ideas, least of all the timid, distracted incumbent. But the fiscal logic is brutal. If Britons want good public services, they will need to pay more. Real tax reform is coming sooner or later.

This article appeared in the Britain section of the print edition under the headline "Fishing for funds"

Aid and abuse

The saints and sinners of Oxfam

Hurricane Harvey whirls through the aid industry

Print edition | Britain Feb 15th 2018

FOUNDED in 1942, Oxfam is one of Britain's most recognisable global brands. The charity is the country's fourth-largest, and the biggest working on overseas aid, with a presence in more than 90 countries. It is also one of the most respected; loved, even, judging by the 23,000 volunteers who turn out to staff its 630 shops, raising around £100m ($140m) a year in sales of second-hand books and musty mink coats.

Now, however, Oxfam has been hit by allegations of sexual misconduct, at home and abroad. The charity's gleaming reputation has been severely tarnished. Other aid agencies are also becoming embroiled in a story that adds fuel to a debate about Britain's international-development work.

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Since the Harvey Weinstein scandal unveiled abuses in Hollywood, the whirlwind has swept through politics, business and now, it seems, the aid industry. The claims against Oxfam are grave. The first to emerge was that after the earthquake in Haiti in 2010, its staff in Port-au-Prince paid for sex, including a "full-on Caligula orgy", as one witness told the *Times*. Prostitution is illegal in Haiti, and some of the girls are said to have been under age (Oxfam says this claim has not been proven). Oxfam allowed three of the employees involved to resign and sacked four others for gross misconduct, but is alleged to have covered up the severity of their offences. The Charity Commission, the industry watchdog, has launched an inquiry.

Helen Evans, an Oxfam employee-turned-whistleblower, says that she repeatedly warned managers of a "culture of sexual abuse" in the charity's offices overseas and its shops at home, but was not taken seriously enough. She reports one instance of aid being offered in return for sex.

Oxfam's deputy chief executive, Penny Lawrence, who was in charge of the charity's international programme when the Haiti behaviour was reported, resigned on February 12th. On the same day Mark Goldring, the charity's boss, was hauled into the Department for International Development (DFID) to be told that Oxfam could forfeit over £30m of government money if it did not explain itself. The European Union, which gives Oxfam £29m, has demanded "maximum transparency". The next day several of Oxfam's corporate partners, including Visa and Marks & Spencer, said they were reviewing their links.

Similar allegations are now being made against other charities. Priti Patel, a former DFID secretary, has said the Oxfam case is the "tip of the iceberg". This may sap confidence in the sector, which was already at its lowest-ever ebb in polls by the Charity Commission, which began in 2005. But the headlines may not affect the volume of giving, now £10bn a year. Daniel

Fluskey of the Institute of Fundraising says that, despite the weak economy, giving has remained remarkably stable in recent years.

Proponents of Britain's aid industry hope it will stay that way. For all Oxfam's woes, experts like Owen Barder of the Centre for Global Development, a think-tank, argue that Britain's aid is particularly effective and generally well-targeted. Oxfam may be bad at policing its staff, but, argues Dan Corry of New Philanthropy Capital, which assesses charities, it is one of the best at evaluating its projects.

As for the foreign-aid budget, the Oxfam affair has emboldened those on the Conservative right who want to end the commitment to spend 0.7% of GDP on aid, which they consider extravagant at a time of austerity. But other Tories, such as Andrew Mitchell, a former DFID secretary, argue that development is one of the few areas in which Britain is a global leader, spending more than any country bar America and Germany. As the country retreats from the EU, it would be sad if that role, too, were relinquished.

This article appeared in the Britain section of the print edition under the headline "Saints and sinners"

What the doctor ordered

Tango classes, ukulele lessons: the rise of "social prescriptions"

More doctors are prescribing pastimes instead of pills

Print edition | Britain Feb 15th 2018

WHEN doctors reach for their prescription pad, most patients expect to receive a jar of pills or a bottle of ointment. Few think they will be referred to a gym or a volunteering scheme. But more and more doctors are dishing out these "social" prescriptions—and some even think the idea could relieve pressure on the National Health Service.

Social-prescribing schemes, in which doctors refer patients to non-medical treatments, are catching on, says Marie Polley, co-chair of the Social Prescribing Network of health workers and academics. That is partly due to recognition that some long-term conditions, such as diabetes, can improve with lifestyle changes. Last year Sadiq Khan, London's mayor, included the idea in his health plan for the capital. A recent count found that London already had over 50 schemes. All general practitioners (GPs) in Gloucestershire can now refer patients to a social-prescribing service.

One common prescription is for more exercise. In the East Riding of Yorkshire GPs can book patients into sessions at a leisure centre. Invalids can select activities such as swimming and gym sessions. The scheme is subsidised, costing only £33 ($46) for 20 one-on-one sessions.

Many social-prescribing initiatives are aimed at mental-health patients. In Cambridgeshire and Cornwall, Arts and Minds, a charity, runs weekly workshops, part-funded by councils, where patients can sketch and sculpt. Researchers found that most participants on the 12-week course felt happier and less depressed. Volunteering, which eases loneliness, is prescribed in parts of Scotland and in Blackburn. Some GPs refer patients to "link workers" who can arrange for support such as financial advice.

Wellbeing Enterprises, a social enterprise near Liverpool, helps to organise activities including ukulele lessons and tango classes for patients referred by GPs. One group formed a choir. The programme relies on funding from the NHS, National Lottery and local councils. But it more than pays for itself, says Mark Swift, the outfit's boss. He claims that the project saves the public purse over £10 for every £1 spent, mainly in forgone treatment bills.

Another advantage is the reduction of pressure on doctors. One review of studies on social prescribing showed that, on average, it was associated with a 28% fall in GP visits and a 24% drop in attendance at emergency wards. If such benefits were reproduced at scale, NHS bosses would be dancing and singing, too.

This article appeared in the Britain section of the print edition under the headline "What the doctor ordered"

An app a day

The London GP clinic that took on 14,000 new patients in three months

An innovative online service is a hit with patients, but is upsetting some doctors

Print edition | Britain Feb 17th 2018

ON NOVEMBER 1st the Lillie Road Health Centre in south-west London had just 4,970 patients on its books. Three months later it had 19,104—nearly four times as many as before, and more than double the average for a general practice in England. Such a surge would usually place huge strain on general practitioners (GPs), as Britain's family doctors are known. But Lillie Road is no ordinary surgery. For most patients, it exists mainly as a smartphone app, GP at Hand.

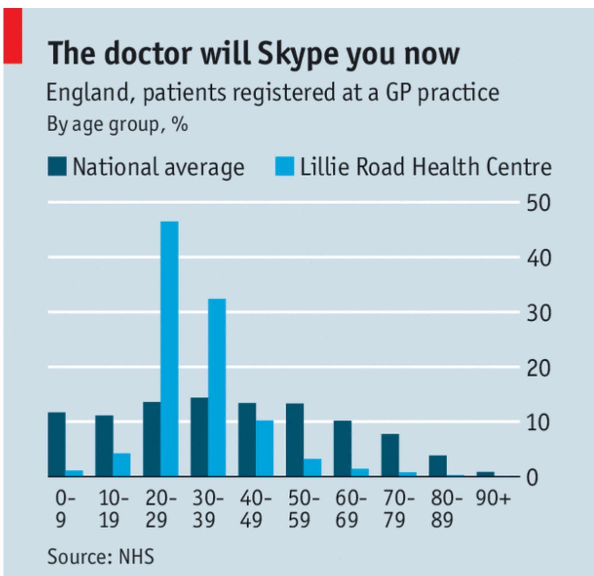
Digital-health companies such as Push Doctor and Babylon have for a few years allowed people to pay for online consultations. A few surgeries offer patients appointments via Skype. But until Babylon launched GP at Hand in November, online diagnoses had not been widely accessible as part of the National Health Service. Today, via the app, they are freely available to most people living or working in central London. This represents the biggest disruption of general practice in years.

GP at Hand exploits a change made in the last year of the Tory-Lib Dem coalition government of 2010-15. To make commuters' lives easier, the NHS allowed patients to register with any surgery that would have them, rather than forcing them to sign up with their local practice. Like every public surgery, Lillie Road is paid a fee by the NHS for each patient on its list, with higher rates paid for elderly and disabled people. But unlike other surgeries, Lillie Road gives a share of each fee to Babylon to run the virtual service.

Babylon promises patients a video consultation with a GP within two hours. Its doctors work at least eight hours per week, topping up earnings from their regular surgery work. Depending on what the doctor recommends, Babylon may then coordinate prescriptions, tests or in-person appointments at five London sites.

For Ali Parsa, Babylon's chief executive, GP at Hand is a step towards making primary care more convenient and efficient. He believes that as his firm's artificial intelligence (AI) develops, some of the diagnoses done by doctors will be done by the app itself, relieving GPs and, by reducing labour, helping to make the service profitable.

Not everyone is convinced of Babylon's healing properties. Some concerns are common to other digital-health apps, many of which have been criticised by the Care Quality Commission (CQC), a regulator. In a report on Babylon's private service, published in December, the CQC alleged that the firm's GPs had given some inappropriate prescriptions and that the company had not ensured that patients were adequately monitored.



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Other criticisms are specific to GP at Hand. Helen Stokes-Lampard, chairwoman of the Royal College of GPs, calls the service "unwelcome and destabilising". She says that most surgeries cross-subsidise the treatment of chronically ill patients with the money they get from the NHS for the other, mostly healthy people on their books. Yet it is these young and healthy types who are disproportionately signing up for online services (see chart). Fully 79% of Lillie Road's patients are aged 20-39; only 1% are over 70. The bricks-and-mortar surgeries left to deal with the elderly and infirm may struggle financially.

That may be. But it is the job of the NHS to look after patients, not the owners of surgeries. What should worry policymakers is that GP at Hand emerged despite, not because of, the NHS's approach to technology. The NHS is good at coming up with new ideas but terrible at propagating them, noted a report published last month by the King's Fund, a health think-tank. Some £1.2bn ($1.7bn) is spent by the NHS each year on research and development, but just £50m on helping the spread of new technologies.

The effects of health apps on the rest of the NHS have yet to be properly evaluated. So far the claims made for AI-diagnoses are more hype than reality. But GP at Hand shows the demand that exists for a type of health care that fits with the way people live. While some doctors moan, patients are voting with their smartphones.

This article appeared in the Britain section of the print edition under the headline "An app a day"

Expanding horizons

Why more British students are choosing foreign universities

The number going to study in America has risen by a third since 2010

Print edition | Britain Feb 15th 2018

AFTER a talk on attending university in America, Mazen, a pupil in his penultimate year at King Solomon Academy, a state school in central London, considers his options. The idea of studying overseas is "daunting". But his interests embrace everything from African history to biology to music, and he likes the breadth of courses on offer at American universities. He thinks he will take the plunge. "Nothing in life comes without risk," he concludes.

Few British students share his outlook. Among big Western countries, Britain has one of the lowest rates of students studying overseas. This caution is produced by a mixture of parochialism (few pupils master a foreign language at school) and superiority (universities at home are excellent).

But there are signs that Mazen's attitude is becoming more common. Although there are no official statistics, data from international higher education authorities show that most destinations have seen a big increase in the number of British students in recent years. Of seven countries surveyed by *The Economist*, America, Canada, France, Germany and the Netherlands have all seen growth since 2010. Only Australia and Ireland have not.

America exerts the greatest pull. It lured 11,489 British students in 2016-17, some 30% more than in 2009-10. Ivy League institutions now recruit heavily from Britain's private schools, whose pupils can stomach their exorbitant fees and have the excellent grades required for entry. St Paul's, a grand, academically selective school in west London, sent 31 pupils overseas in 2016, almost all to America, up from 11 in 2011. A decade or so ago pupils would rarely turn down Oxbridge, says Alex Wilson, an official at the school. Now, in order to go abroad, two or three do so every year.

Pupils are increasingly likely to hire agencies to help with the exams, essays, interviews and CV development required by American universities, says Will Orr-Ewing of Keystone Tutors, a London-based firm. Whereas British universities are most keen to get a sense of an applicant's academic ability, American ones "really want to explore who you are", says one consultant. Coaching can help candidates work that out.

There has also been a rise in the number going to America from poorer families. The Sutton Trust, a British education charity, runs a summer school programme at MIT and Yale for bright pupils from less well-off backgrounds. Since it was launched in 2012, 267 students have gone on to an American university, often taking advantage of generous scholarships. Indeed, the top American universities send representatives to Britain to spread word that, depending on family circumstances, their fees are not always as steep as the "sticker price" would imply.

Their efforts are helped by rising tuition fees in England and Wales, which have made foreign universities look like better value. In 2012 fees nearly trebled, to £9,000 ($14,000) a year. By contrast, students who go to Germany study free of charge. In the Netherlands, many have access to state benefits. (British students probably won't qualify for these discounts after Brexit.) Even American universities can seem reasonable by comparison.

Growing numbers of English-language courses have helped to entice monoglot Britons abroad. In the Netherlands, the number of English bachelor's courses has risen from 188 in 2011 to 426 today, according to A-Star Future, a firm which promotes foreign universities to pupils in Britain. In the same period, the number of Britons studying in the Netherlands rose from 910 to 2,778. Some elite universities in France and Italy, including the École Polytechnique and Bocconi University, now offer courses in English.

Universities have also benefited from rising international mobility. In 2007, 4.4% of British residents younger than 15 were born overseas; today 5.4% are. Since 1987 more than 200,000 British students have spent some time working or studying abroad under the Erasmus scheme, a European student-exchange programme (which may also be off-limits after Brexit). Many will have returned with happy memories, selling the idea of foreign study to their siblings or offspring. Meanwhile, technology shrinks both distance and parental concern. At the talk attended by Mazen, a speaker from A-list, another consultancy, reassures parents of the potential for long-distance mollycoddling: "You can order Uber, you can have groceries delivered, you can keep tabs on them."

The number of young Britons studying abroad might be higher still were it not for bureaucratic constraints. David Willetts, a former universities minister, has bemoaned the fact that British students are not allowed to take their generous financial support abroad, as Norwegian students can. Although UCAS, the portal through which British students apply to university, opened to EU institutions in 2015, if a university joins it is strongly encouraged to use UCAS for all its student admissions. So far just one (the Amsterdam Fashion Academy) has signed up.

That is a shame. It allows British universities to escape a source of competitive pressure. And, more important, by making it more difficult to study abroad it stifles students' potential. Badr, another attendee at the presentation on studying abroad, says he wants to work for Google before starting his own business. He reckons that studying in America would be a good place to start. It is hard to disagree.

This article appeared in the Britain section of the print edition under the headline "Expanding horizons"

Bagehot

Boris Johnson makes an energetic but unconvincing case for Brexit

The foreign secretary has real star-power. But his arguments are thin

Print edition | Britain Feb 15th 2018

THE fog of Brexit gets thicker by the day. It is only a year and a bit until Britain leaves the European Union. But the government still hasn't resolved the most important question that will determine its future relationship with the bloc—will Britain shadow EU rules and regulations or strike out on its own?—let alone thousands of smaller puzzles. Business is becoming jittery. Ordinary Britons bury their heads in shame.

On Valentine's Day Boris Johnson, the foreign secretary and the most prominent Brexiteer, tried to throw some light on the gloom in a speech at Policy Exchange, Britain's leading right-of-centre think-tank. The speech was billed as the first of six that will detail the government's line on Brexit. Theresa May will speak about security on February 17th and other ministers will address their areas of expertise in turn. Getting in first was undoubtedly a coup for Mr Johnson. It is unlikely that journalists will listen with quite such bated breath to Liam Fox, the trade secretary.

Mr Johnson took the opportunity to remind the public of what a political star he is. His reputation has taken a double blow recently. Remainers hate him as the face of Leave. Leavers have taken to flirting with Jacob Rees-Mogg, who preaches true religion, and Michael Gove, who is a fountain of ideas. But Mr Johnson still has the ability to light up the room like few others. He is blessedly free of pomposity, despite holding one of the great offices of state. He joked about "people hailing me abusively in the street" and about the extraordinary activities of Britain's intrepid tourists in Thailand. He even coined a new word to add to the long list of Brexit-related phrases: "Brexchosis", the Brexit-induced psychosis afflicting the country.

But in demonstrating his own star power he reminded his audience of two things. The first is the prime minister's own lack of pizzazz. The foreign secretary is everything that she is not: outgoing where she is inward-looking, clever with words where she is pedestrian and gung-ho where she is dithering. Mr Johnson is having to make the case for Brexit only because Mrs May is incapable of doing so. The second is how little progress has been made with Brexit, not just pragmatically but intellectually and emotionally. Britain still seems to be fighting the referendum campaign (with the Remainers putting up a rather better fight than they did in 2016), instead of drawing up an exit plan.

Mr Johnson justified his decision to restate the case for Brexit on the grounds that he was trying to reach out to the 48% who voted to remain. Presenting himself as the voice of reconciliation took some chutzpah, given that he arouses more visceral hatred than anybody else on the Leave side, with the possible exception of John Redwood. And Mr Johnson also offered the hand of friendship in an odd way. You might have thought that the best way to reconcile the 48% to Brexit would be to offer a "soft" exit, maintaining Britain's most important links with the EU. But Mr Johnson championed the hardest possible option, leaving both the single market and the customs union in order for Britain to strike its own trade deals and set its own standards.

At times it looked as if the foreign secretary was more interested in showing a knuckle-duster to the prime minister than offering a Valentine to Remainers. The implication of his speech was that if Mrs May tried to compromise by keeping Britain close to the EU then he would resign. But Bagehot thinks that Mr Johnson was being sincere. The foreign secretary thinks that he has a magic formula for bringing the country together with something that he calls liberal Brexit. Liberal Brexit will provide both sides with what they want most: sovereignty for the Leavers and liberal values for the Remainers. It will do so by revitalising Britain's long tradition as an independent, free-trading nation. Mr Johnson trumpeted his speech as an attempt to "anatomise" the errors that lead to Brexchosis. But unfortunately his own arguments do not survive even a gentle anatomisation.

Caveat emptor

The most basic problem is that most Leavers didn't want a liberal Brexit. A few Thatcherites, such as Douglas Carswell and Daniel Hannan, may have voted for Singapore-on-Thames. But most Brexiteers voted for more state and less market. They wanted to reduce immigration, prevent a repeat of the financial crisis that had seen their incomes stagnate, and increase spending on the welfare state. In his pursuit of a liberal Brexit Mr Johnson offers little to Leavers other than a vague promise to control low-skilled immigration and his much-disputed claim that leaving the EU will free up cash for the National Health Service.

The second problem is that Mr Johnson is naive to the point of irresponsibility about economics. He refuses to acknowledge that leaving a trade bloc of 500m people will entail significant economic costs. His liberal Brexit is essentially a cake-based one that involves full access to the European market but also more freedom for Britain to go its own way. He insists that the EU is holding back British companies; free Britannia from those pettifogging rules and she will conquer the markets of the east. But EU rules have not prevented German companies from turning themselves into global rather than just regional powerhouses. Indeed, Germany exports more than Britain even to countries with strong British ties, such as India (to which it exports 150% more than Britain) and South Africa (250% more). Nor have EU rules stopped the Swedes from creating global startups such as Spotify.

Mr Johnson is right that reuniting Britain after the trauma of the referendum is the most important task facing the country. He is also right that Britain is witnessing "a hardening of the mood" and "deepening of the anger". Much of the establishment is in a state of cold war with the government. People who have been friends for decades don't speak. Some newspapers experiment with inflammatory themes. But alas, Mr Johnson's notion of a liberal Brexit is not so much a unifying vision as a pipe dream.

This article appeared in the Britain section of the print edition under the headline "Salesman-in-chief"

Cities and farming
Into the urban maw

Counting chickens

How the growth of cities changes farming

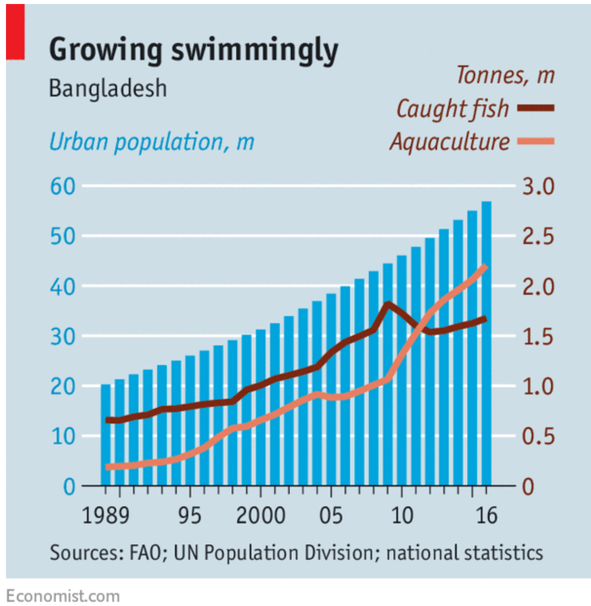
Soaring demand for protein is driving small and medium-sized farms to professionalise

Print edition | International Feb 17th 2018

LOOKING out from Mathabari, a village in northern Bangladesh, the landscape glints and ripples. Twenty years ago this was a rice-farming area, with fields of bright green. Now most of the land is covered with water. Carp, pangasius and tilapia swim in ponds separated by earth embankments. A few of the remaining patches of dry ground are occupied by sheds, where chickens are raised.

Shohel Matsay Khamar was one of the first in Mathabari to start farming fish. Since 2002 he has gradually rented more land from rice farmers, amassing about 70 acres (28 hectares). His is a forward-looking fish farm, with electric paddle wheels to keep the water oxygenated. He has even built a feed mill to grind maize, mustard oil cake and other raw materials into fish pellets. Cockroaches cover the walls, feeding on the nutritious dust.

Not only have Mr Khamar's watery holdings expanded; he also gets more from each pond. He mostly farms pangasius, an unfussy silver-white fish, native to South-East Asia, which can breathe air. In the early years Mr Khamar would haul 20 tonnes from each acre of pond. Now, with better feed and cultivation methods, he gets about 40 tonnes. Poaching used to be a problem, he says, but not any more. Fish have become so plentiful and so cheap that nobody bothers.



In 2016 Bangladesh's farmers produced 2.2m tonnes of fish (see chart). That is more than its fishermen caught in the wild, and more than fish farmers produced in any other country except China, India, Indonesia and Vietnam. The domestic farmed-fish industry has doubled in size since 2008 and is 19 times bigger than it was in 1984. Many things have helped it to grow, from aquaculture-research institutes to improved roads. But the main reason aquaculture is booming is that cities are booming, too.

A fish for all seasons

Farming and cities are usually thought of as separate poles. Each has its own ministries and budgets; charities often deal with one or the other. But cities can transform farming. Urban consumers represent a huge, fast-growing market for food, which may well be larger than a country's export markets (not to mention less finicky about standards). Urbanites also have distinctive appetites. With more money than villagers and longer journeys to work, they favour tasty, quick-cooking, protein-rich fare. Sating their appetites is a huge job. Ben Belton, an expert on Asian aquaculture at Michigan State University, estimates that 94% of Bangladesh's farmed fish are eaten domestically. Many are packed, wriggling or dead, into blue plastic barrels and driven to the cities. Urban Bangladeshis are thought to eat about one-third more fish per head than rural folk. And there are ever more urban heads. Dhaka, which is 95km south of Mathabari along a good road, already contains some 20m people. UN statisticians think it is growing by more than half a million a year.

The task of feeding that huge population has not been accomplished by the government, by charities or by foreign agricultural investors. It is the work of an army of ordinary Bangladeshis with an eye for making money. Mr Belton's research shows that the number of fish-feed dealers in the main aquaculture areas more than doubled between 2004 and 2014. So did the number of feed mills and fish hatcheries. Mr Belton has found similar trends in Myanmar, where the fish farms are often larger than in Bangladesh, and in India.

As well as transforming landscapes in a large radius around Dhaka, the fish boom has changed many people's lives. Aquaculture requires about twice as much labour per acre as rice farming, and the demand is year-round. Many labourers who used to be paid by the day are now hired for months at a time. Seasonal hunger, which is a feature of life in some rice-farming regions of Bangladesh, is rarer in the watery districts. People are eating more protein. Mohammad Shafiqul Islam, a feed dealer, points to another advantage. Because food is now so cheap in the cities, migrant workers are able to send more money back to their families in the villages.

The rock-bottom prices that so delight consumers make life hard for producers. The past year has been especially bad, partly because of flooding in northern Bangladesh, which drove up the cost of rice and left consumers with less money to spend on fish. Mr Khamar says he has been selling pangasius for between 65 takas ($0.78) and 80 takas per kilo, down from more than 100 a year ago. But his main problem is that the market is oversupplied. In effect, he is a victim of his fellow-farmers' success. That problem is not specific to aquaculture, or to Bangladesh.

About two hours' drive north of Nigeria's commercial capital, Lagos, is a business called AOD Farms. It began in 2009 as an egg-producing operation with some 1,500 hens. But the residents of Ogere, the small town where the business was located, complained about the smell. So AOD Farms moved to the outskirts and started raising chickens for meat, known as broilers. It now has around 10,000 birds at any time. In the run-up to Christmas it adds a few hundred turkeys and cockerels.

Count your chickens

AOD Farms is part of a white-meat explosion that rivals the fishy one. Saweda Liverpool-Tasie, an agricultural economist at Michigan State University, calculates that there are now around 1,000 medium and large poultry farms in Nigeria, up from around 400 during much of the 1990s and 2000s. The quantity of maize used for feed shot up from 300,000 tonnes to 1.8m tonnes between 2003 and 2015. There is little reason to expect growth to slow down. The average Nigerian still eats only about two chickens a year.

In some ways the west African chicken boom is different from the Asian fish boom. Whereas Asian fish farmers are often former rice farmers, African poultry farmers are more likely to be wealthy, well-connected urbanites. AOD Farms is owned by a civil engineer. Nigeria's former president, Olusegun Obasanjo, has a large poultry business in the south-west. Foreign investors play a large role, too. Last September Olam, a multinational agribusiness firm listed in Singapore, opened two large feed mills in Nigeria. One of them will also produce fish food.

But the parallels are more striking than the differences. As with fish in Bangladesh, the Nigerian chicken industry clusters around the fast-growing largest city. Lagos is estimated to have between 12m and 15m inhabitants, though it is hard to be sure as Nigerian population data are notoriously unreliable. Lagosians' hunger can certainly be felt in Ogere. AOD Farms sells many chickens at the gate to local buyers. Of the ones that are loaded onto trucks and driven away, 70% go to Lagos.

In both countries the industries are becoming more professional. Bangladeshi fish farmers increasingly use medicines and floating fish feed, which is less wasteful than the sinking kind. AOD Farms is still a dusty work in progress—during a recent visit, some chickens had escaped through a hole in the fence. But a vet comes at least once a week and the farm manager, Kunle Adebayo, studied agriculture and business at university. Larger, slicker firms sell chicks and veterinary services to smaller outfits.

In a final parallel, farmers in both Nigeria and Bangladesh complain bitterly about excessive supply. Nigerian chicken farmers insist that the domestic market has been flooded by foreign investors and foreign chickens. The Poultry Association of Nigeria claims that about 70% of the birds eaten in the country are illegally imported. However, Ms Liverpool-Tasie reckons that only 15% are imported. Chicken farmers' profit margins have probably been kept thin by the rising price of feed and a surge in domestic production.

It is hard to know for sure, though, because official statistics are so poor. Chicken and fish farmers have little idea what their competitors are producing, so they find it hard to predict what price their produce might fetch at market. Mohammad Mahfujul Haque, an aquaculture expert at Bangladesh Agricultural University, argues that detailed annual figures on fish production would help enormously. Bangladesh already does this for crops.

So would a certification system. At present, a chicken is just a chicken and a pangasius is simply a pangasius. That prevents farmers from exporting to rich countries, where consumers insist on knowing where their food comes from and how it is produced. The lack of standards even causes problems at home. In place of real information, Bangladesh has rumours. In a few days your correspondent heard two. One was that pangasius are toxic; the other that the first rumour had been spread by traders in an attempt to suppress prices. Both appeared to be nonsense.

But the pressure on farmers is making them inventive. In a warehouse in Mymensingh, a town close to Mathabari, Shamsul Alam has installed eight large vats. When he shines his torch in, they are revealed to contain thousands of stinging catfish. Although the fish is tricky to handle, owing to the venom in its dorsal spines, it is a delicacy that fetches at least four times as much as pangasius per kilo. The water in the vats is cleaned by a machine imported from Canada.

It is an expensive, technically complex way of farming fish. The indoor fish farm poses no competitive threat to open-air farmers. Still, Mr Alam's innovation is an intriguing way of coping with persistent low prices for the most common fish. He says that one of his neighbours is already copying him.

However much farmers struggle with the consequences of their success, it is a far nicer problem than the one they used to grapple with. Walking down a market street, Mr Haque dips his hand into a sack of maize and a sack of rice. The grains will be bought by farmers, who will grind them into pellets for fish and cattle. “Twenty-five years ago, people were starving for want of this,” he says, marvelling. “Now we feed it to animals.”

This article appeared in the International section of the print edition under the headline ”Into the urban maw”

Defence correspondent

Print edition | International Feb 17th 2018

We are looking for a senior writer to cover global defence and security. Applicants should send a CV and an original 600-word article, suitable for publication in *The Economist*, to defencejob@economist.com by March 5th. No journalistic experience is required, but a knowledge of military and geopolitical affairs is essential.

Women in the boardroom
The old-girls' network

The old-girls' network

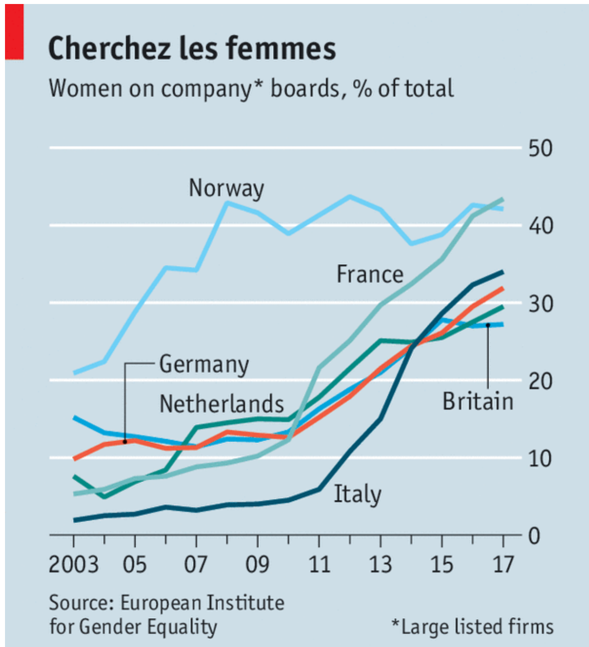
Ten years on from Norway's quota for women on corporate boards

Gender quotas at board level in Europe have done little to boost corporate performance or to help women lower down

Print edition | Business Feb 17th 2018

THE centrepiece of the opening-bell ritual at the London Stock Exchange on February 2nd was a roll call to honour 27 global investors. They were lauded for pledging allegiance to the "30% Club", a group which campaigns for precisely that proportion of women on corporate boards globally. Membership is a hot ticket, judging by the club's expansion. Behemoths including BlackRock, J.P. Morgan Asset Management and Standard Life have joined, and are voting against boards that fail to appoint more women.

In much of western Europe, such efforts follow a decade-long push by governments. In 2008 Norway obliged listed companies to reserve at least 40% of their director seats for women on pain of dissolution. In the following five years more than a dozen countries set similar quotas at 30% to 40%. In Belgium, France and Italy, too, firms that fail to comply can be fined, dissolved or banned from paying existing directors. Germany, Spain and the Netherlands prefer soft-law quotas, with no sanctions. Britain opted for guidelines.



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Companies have rushed to comply. In some countries the share of women among directors of large companies has increased four- or fivefold since 2007 (see chart). Even in Britain it shot up to 27% in 2017, more than double a decade earlier. Not that the measures were uncontroversial. In Norway the quota prompted some firms to delist rather than comply; the same may have occurred in other markets. France's markets regulator has highlighted "circumvention strategies" used by some firms, such as decreasing the total number of board members to increase the percentage of females. In every country business leaders protested when the idea was floated. Xavier Fontanet, former chief executive of Essilor, a French eyewear company, quoted Charles de Gaulle as saying "one may not command without having obeyed"—his point being that women often lack the management experience that makes a good board director.

Another objection was that the pool of qualified women was so small that the same few women, or "golden skirts", would be spread thinly between boards. Hiring committees expressed concern about bringing onboard grievously underqualified directors.

Ten years on from Norway's trailblazing move, the worst fears have not been realised. Take the worry about golden skirts. "Over-boarding" is a challenge, admits Richard Hayden of TowerBrook, an investment firm in London. But many male directors are equally stretched. According to ISS Analytics, a research arm of ISS, a proxy-advisory firm, 19% of female directors of Europe's STOXX 600 companies—which are predominantly in markets with quotas—sit on at least three boards. But so do 15% of male directors.

Nor has the threat of professionals being replaced with token women come to pass. Shortly before France passed its quota law, LVMH, a French luxury group, appointed Bernadette Chirac, the wife of a former president, explaining that she attended fashion shows. But four women added to its board since have all been a director or chief executive. A study on Italy's 33% quota (the law which introduced it will expire over the next few years) found that female directors of the biggest firms were on average more likely than their pre-quota predecessors to have professional degrees and qualifications.

But in other ways the results have been mixed. Many new directors are younger and thus have less or no experience as directors or chief executives, says Lisa Barlow of Egon Zehnder, an executive-search firm, in Paris. In Italy, France and other countries some women have trained for the job at programmes run by board members' associations. In Germany a shortage of qualified women led to a surge of foreigners onto supervisory boards (there is as yet no quota for management boards). That could be problematic, says Bernhard Stehfest from the Federation of German Industries, because foreigners are less familiar with the firms or German regulations.

While quotas have not been the calamity that many had feared, they have also so far failed to achieve what governments had promised they would. When quotas are put on the table, proponents often produce "snapshot" studies showing that companies with more women on their boards have better returns and are less likely to be beset by fraud or shareholder battles. But causation is hard to prove. Perhaps better-managed companies have more scope to promote diversity. Equally, when studies are conducted before and after quotas are imposed, the results in terms of companies' performance are inconclusive. Some studies find positive effects; others the opposite or no effect at all.

Neither is there evidence that having more women on boards is changing decision-making. In the experience of Lawton Fitt, a veteran female board member in America and Britain, women do not necessarily express particular views or fill a predictable role in the boardroom. A study in France in 2015 based on interviews with 24 board members concluded that the country's new quota system led to changes in the process of boards' decision-making. But there was no change in the substance of decisions, such as whether to approve lay-offs. It also found that the process did not change because the new members were women. It was because they were likely to be outsiders.

Perhaps the most puzzling shortcoming of the quotas is that they have had no discernible beneficial effect on women at lower levels of the corporate hierarchy. The expectation was that they would encourage companies to promote more women in order to fill the upper echelons faster. That, in turn, would help shrink the wage gap between men and women.

But a study in Norway found the quotas had no effect on the representation of women in senior management in the firms where it applied. The gender pay gap shrunk only for the golden skirts themselves. In Norway just 7% of the largest firms have female bosses. In France, a paltry 2% do—compared with (a still miserable) 5% in quota-free America. And in Germany, women make up just 6% of directors on management boards.

Nor are more women climbing the career ladder. In France, Germany and the Netherlands just 10-20% of senior management jobs are held by women, a share that has barely budged in recent years, according to data from Korn Ferry, a consultancy.

Perhaps because quotas have been neither the disaster that many expected, nor the disrupter executives had feared, business leaders have warmed to them. "At least ten more years" of quotas are needed, argues Francesco Starace, boss of Enel, an Italian energy giant. Germany's minister for women has threatened to require a certain share of women on management boards. The 30% Club is now pushing for that share of women in management roles. Quotas may not have proved their worth. But they appear to be here to stay.

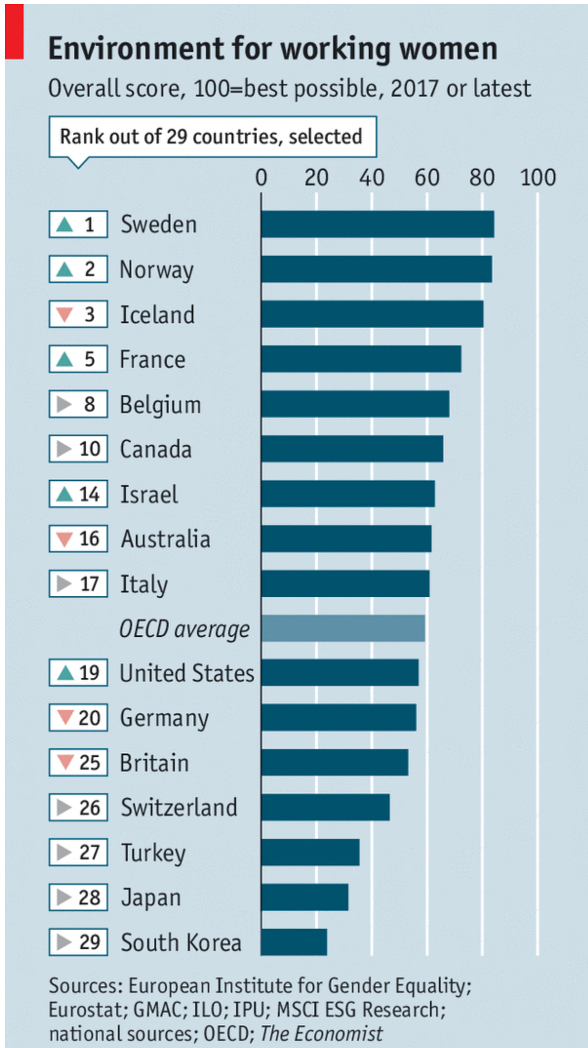
This article appeared in the Business section of the print edition under the headline "The old-girls' network"

The Economist's glass-ceiling index

The best—and worst—places to be a working woman

America rises in the ranking, Germany falls and the #MeToo movement makes its mark in South Korea

Print edition | Business Feb 17th 2018



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"PRESS for progress" is the theme of this year's International Women's Day on March 8th. As our sixth glass-ceiling index shows, disparity between countries remains wide. But women have made some progress towards equality in the workplace in the past year.

The index ranks the best and worst countries to be a working woman. Each score is based on average performance in ten indicators: educational attainment, labour-market attachment, pay, child-care costs, maternity and paternity rights, business-school applications and representation in senior jobs (in managerial positions, on company boards and in parliament).

Equality-conscious Nordics typically do well while workplace parity for women in Japan, South Korea and Turkey still lags badly. America under President Donald Trump rose from 20th to 19th place thanks in part to a higher female labour-force participation rate. This year Sweden ranks first, scoring well in female labour-force participation, which is over 80%, and the share of women in parliament (44%).

Women broadly lifted their presence in the workplace. There has been an increase in the share of women in the labour force, with a tertiary education and of those taking business-school entrance exams, which are a pipeline for senior executive jobs. Yet advances may be slower than expected. MSCI, a financial-data firm, has pushed back its estimate by a year to 2028 for when the global share of women on boards will hit 30% (the figure is now 17.3%).

Countries at the bottom of our index show signs of change in cultural attitudes. Last year the Global Summit of Women, a business and economic gathering of over 1,300 leaders from 60-odd countries, was held in Japan for the first time. The #MeToo movement, a social-media campaign against sexual assault and harassment, arrived in South Korea with fervour. Allegations of inappropriate behaviour against senior prosecutors, *chaebol* owners and board members there have since come to light as more women are feeling empowered.

Explore the indicators behind the index with our interactive chart

This article appeared in the Business section of the print edition under the headline "The glass-ceiling index"

Give me a break

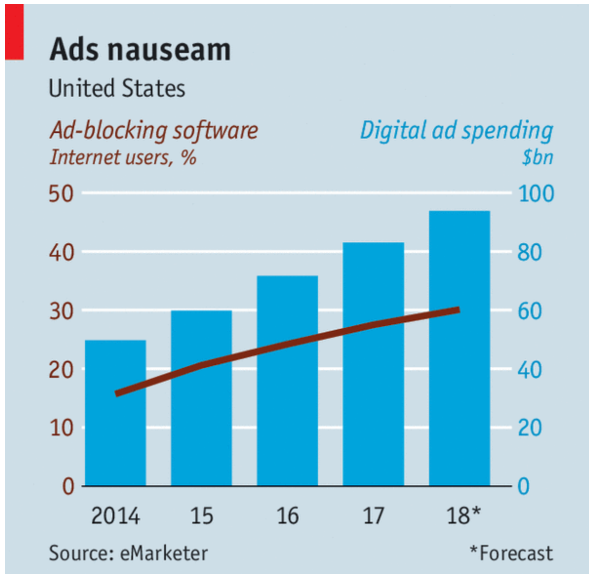
Google embraces ad-blocking via Chrome

The online ad industry has a strangely hostile relationship with those who consume its products

Print edition | Business Feb 17th 2018

FROM quantum computing and smartphones to self-driving cars, home thermostats and delivering the internet by balloon, Google or, technically, Alphabet, the holding company that the firm established in 2015, has its fingers in many pies. But the company's main business, which pays for all of its dabblings elsewhere, is digital advertising, which in 2017 accounted for more than 86% of its $111bn revenue. It may seem odd, then, that Google's latest move is to aid ad-blocking. On February 15th Chrome, its web browser, which has a 59% market share, switched on code to block certain online advertisements.

In doing so it joins an established trend. By last year around 27% of American internet users had installed ad-blockers, according to eMarketer, a research firm (see chart). Third-party ad-blocking software is available already for Chrome but only for its desktop version. As well as being built in and thus on by default, the new blocker will work on smartphones.



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Web publishers will not welcome another threat to the efficacy of advertising, their main source of income. Google at least promises that only pages which display the most annoying ads—those that automatically play videos with sound, for instance—will fall foul of its new filter. What counts as annoying is defined by the Coalition for Better Ads, a group of advertisers, technology firms and other companies of which Google is a member.

Such infuriating ads abound. The online-ad industry has over the years developed an unusually hostile relationship with those to whom its products are served. In the early days of the internet, jiggling, brightly coloured animations were common. Pop-up advertisements, some of them uncloseable, became so prevalent that browsers such as Internet Explorer and Netscape Navigator were modified to try to stop them. Ads may be more sophisticated now but still find ways to irritate. Dodgy ones are a popular delivery route for malware. They are injected by criminals into legitimate networks, then displayed on respectable websites.

If ad-blocking makes the web a safer and more enjoyable experience for users, however, the trouble is that fewer ads being seen could mean fewer websites. The ad industry, indeed, is in an arms race with blocker-writers. Many sites now try to detect ad-blockers, and force users to disable them if they want to visit websites. The ad-blockers have retaliated with techniques to dodge the detectors, and so on. Some publishers, meanwhile, have been adapting in their own ways. Salon, a news site, invites ad-blocking visitors to let the site borrow their computers to mine cryptocurrency as another way to make money.

Google's move thus looks like an attempt to save online advertising from itself. Chrome's strong market position means it can oblige advertisers and websites to comply with minimum standards, removing the most annoying dross whilst lessening incentives for users to install third-party blockers that screen out almost everything. It is also launching a service called "Funding Choices" that is designed to allow website operators to invite people who use ad-blockers to pay small amounts to view their pages instead.

Its new products could land it in trouble. Margrethe Vestager, the European Union's competition chief, tweeted last year that she would be "closely" following the firm's ad-filtering efforts. The worry is that by defining what counts as an acceptable ad Google will amass still more power over online advertising. The European Commission fined it €2.4bn ($2.9bn) in 2017 for giving its price-comparison shopping service preferential treatment in search results over rival offerings. It was unclear that users of such services lost out much. Consumers also have lots to gain if Chrome can help stem the ad onslaught.

This article appeared in the Business section of the print edition under the headline "Give me a break"

A complicated courtship

The world's largest-ever tech deal now depends on Qualcomm

Broadcom has offered $146bn for its rival chip giant but many obstacles remain

Print edition | Business Feb 17th 2018

VALENTINE'S DAY might seem like a good time to discuss a proposal. But whether it brought luck to Broadcom's attempt to woo its rival chipmaker, Qualcomm, is still unclear. As *The Economist* went to press, a meeting between the boards of both firms to discuss Broadcom's bid of $146bn (including debt) proved inconclusive. Having rejected an initial approach in November, Qualcomm's board will soon meet to discuss next steps.

Should the board reject Broadcom's offer, the fate of the largest-ever tech acquisition would then lie with Qualcomm's shareholders. The deal could still proceed if they elect a majority of Broadcom's nominees to the board at Qualcomm's annual investor meeting on March 6th. But it would have a complicated course to run.

Neither firm may be a household name like Intel or Samsung, but a merger would create the world's third-largest chipmaker. Scale is critical in an industry that is consolidating as the demand for chips flattens. Hock Tan, Broadcom's chief executive, has built up a portfolio of technologies through a series of acquisitions. The new entity would have a dominant position in Wi-Fi and broadband chips for smartphones, says Bill Ray of Gartner Research. Broadcom would also gain a foothold in the business for 5G chips and connected devices, where Qualcomm has invested.

A potential sticking-point, though, is Qualcomm's own takeover of NXP, a Dutch semiconductor firm, which is still awaiting approval from Chinese regulators. Activist investors in NXP are agitating for Qualcomm to raise its $47bn bid; but in an interview this week, Mr Tan said that any such increase would invalidate Broadcom's offer. If he stands by that, and NXP investors succeed, one deal going ahead could mean the other falls through.

Another stumbling block, given the scale of the $146bn deal, is regulatory approval. Mr Tan has discussed potential divestitures. He is so keen to convince Qualcomm that regulators will bless the union that he is offering to pay it a cool $8bn should the deal be blocked.

His contention is that Qualcomm's business model needs fixing. Rather than just charging per chip, Qualcomm also charges device-makers a fee in return for licensing its intellectual property to them. Neither customers nor regulators approve of the model. Apple, its largest client, alleges that the fee is an abuse of market power, and is suing it. And Qualcomm has paid, on average, nearly $1bn a year in fines to trustbusters since 2015.

Mr Tan has said he would alter this pricing policy, which would go down well with antitrust regulators, says Stacy Rasgon of Bernstein Research. But whether weakening the link between intellectual property and pricing does enough to gain their approval is unclear. It would also jeopardise a very lucrative income stream. Licensing fees accounted for around 80% of Qualcomm's profits in 2016.

And what if the deal is eventually scuppered? Qualcomm's battles with Apple will continue. With an investigation by American regulators also under way, it may sooner or later be forced to tweak its business model anyway. Broadcom, if Mr Tan's past form is anything to go by, will soon find a new target for its affections. As chipmakers are realising, it is tough out there for singletons.

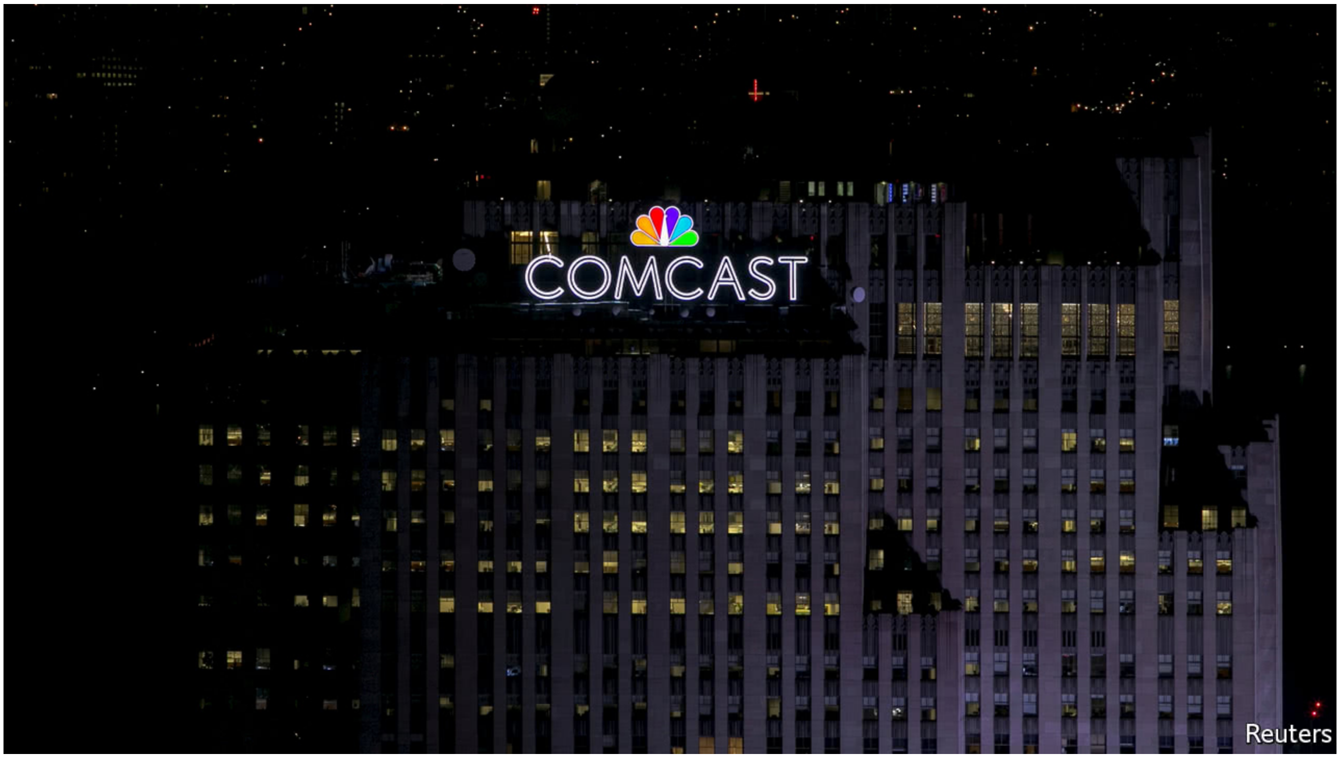
This article appeared in the Business section of the print edition under the headline "A complicated courtship"

Tally-ho

Will Comcast try to outbid Disney for Fox?

The cable giant has limited options for acquisitions as the media landscape consolidates

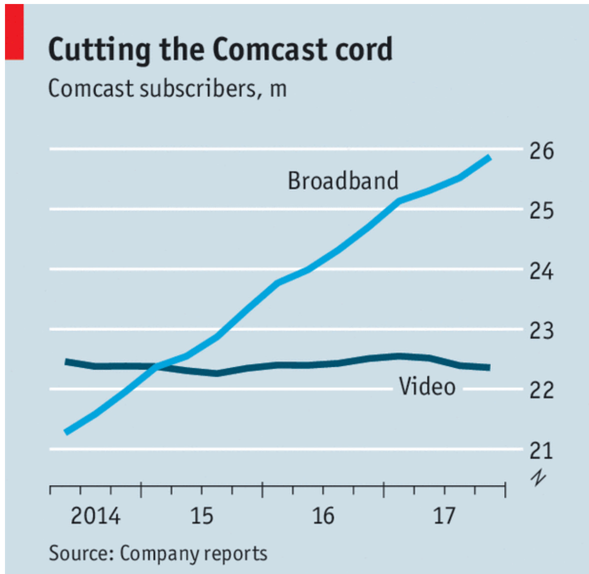
Print edition | Business Feb 17th 2018



WHEN Disney struck a deal just before Christmas to buy much of 21st Century Fox for $66bn, it was a career-defining moment for the two firms' bosses, Bob Iger and Rupert Murdoch. A third media mogul, Brian Roberts of Comcast, was left out in the cold. Having tried and failed last autumn to get Mr Murdoch to take a higher offer, Mr Roberts may now be preparing a still richer bid to upend the deal.

It is not hard to understand his motivation. Comcast is in an awkward position at a time when the media landscape is shifting. With millions of consumers dropping pay-TV for the likes of Netflix, media companies have suddenly become either buyers, to achieve scale, or sellers, to exit. Mr Roberts has always been a buyer, building the cable business his father started into a diversified empire through acquisitions, including AT&T's broadband business in 2002 and NBC Universal in 2011. Comcast now has heft in a number of businesses—broadband and cable, television networks, a film studio and theme parks—and with annual revenues of $85bn, could buy something big.

But there is not a lot left to chase. Regulatory constraints make it difficult for Comcast to expand its core infrastructure business. In 2015, indeed, antitrust concerns forced it to abandon an acquisition of Time Warner Cable (Charter Communications got it instead). Acquiring a large wireless business would be a challenge for similar reasons. In entertainment content rival AT&T has taken the biggest prize, Time Warner, subject to an antitrust fight. Other acquisition targets are much smaller, such as Lionsgate, a mini-studio. "There aren't that many avenues that are open to Comcast to expand," says Craig Moffett of MoffettNathanson, a research firm.



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That leaves Fox. Mr Murdoch spurned Mr Roberts's initial offer, which is believed to have been 15% higher than Disney's, because he saw Disney as a better strategic fit. Comcast, as a distributor like AT&T, might also have faced tougher regulatory hurdles as a buyer. Adding Fox's assets gives Disney scale to compete against Netflix and Amazon with a new streaming-video business of its own. Mr Roberts may believe that if Comcast gets Fox, he could try something similar by taking control of Hulu, a streaming business (Disney, Fox and Comcast each own 30%).

The Murdoch family trust controls only 39% of Fox, leaving a bit of room for Mr Roberts to make a more generous overture to shareholders. But the apparent desperation to acquire Fox's assets is frustrating to Comcast investors, Mr Moffett says. At its core Comcast is a highly profitable broadband and cable business with an effective monopoly in much of its footprint. Notwithstanding long-term positioning, the business still has some years of high-margin growth ahead of it. Investors would be pleased if Comcast just tended its operations and bought back shares.

If Comcast does make a hostile bid for Fox, there will be irony in it. In 2004, at a low point for Disney and its then boss, Michael Eisner, Comcast tried to buy it in a hostile takeover. That effort failed and Disney then enjoyed a resurgence that has made Mr Iger the envy of his peers, including, no doubt, Mr Roberts.

This article appeared in the Business section of the print edition under the headline "Tally-ho"

Only the beer gets drunk

Going out need no longer be a headache for teetotallers

Innovation in non-alcoholic and low-alcohol drinks fits with health-conscious trends

Print edition | Business Feb 15th 2018

BARS and pubs have not usually been the non-drinker's friend. Knocking back pint after pint of juice or fizzy drink quickly gets boring. But beverage manufacturers are now showing more sympathy for their plight. Many companies regard non-alcoholic drinks as the "biggest opportunity in the market", says Frank Lampen, who runs Distill Ventures, which helps small producers with investment and advice, and is backed by Diageo, a British drinks giant.

One of the fund's recent investments, for example, is in Seedlip, a British firm that makes distilled, non-alcoholic "spirits" flavoured with botanicals, and which last year launched in America. Low-alcohol beer, once maligned for its paucity of flavour, is also in fashion. Technological advances mean alcohol can be filtered out of the beer without ruining its taste; other breweries use "lazy" yeast, which produces less alcohol to start with. Over the past couple of years, non-alcoholic craft breweries, such as Nirvana Brewery in London, or WellBeing Brewing Company in Missouri, have popped up; other craft brewers produce a non-alcoholic beer as part of their range.

Even large manufacturers are going on the wagon. ABInBev launched its alcohol-free "Budweiser Prohibition" in 2016, and Heineken followed suit last year with its "0.0" beer. ABInBev expects no- and low-alcohol beer (the latter defined as less than 3.5% alcohol by volume) to amount to a fifth of sales by 2025. As a rough comparison, figures from Euromonitor, a market-research firm, suggest that beer with less than 0.5% of alcohol by volume accounted for only 2% of global sales in 2016.

Nor is the opportunity limited to alcohol-free versions of boozier cousins. Copenhagen Sparkling Tea, for example, is smartly packaged in wine-like bottles, and sold in restaurants across northern Europe. Craft sodas are another new category, says Alex Beckett of Mintel, a market-research firm. These make much of their use of exotic, grown-up ingredients, such as chilli or even stinging nettles. Non-drinkers no longer need compromise on taste or adventure, says Catherine Salway, who runs the no-alcohol Redemption Bar in London, among whose offerings is a cocktail made from activated charcoal.

The buzz around alcohol-free drinks reflects the realisation both that the market has been relatively ignored, particularly at the premium end, and that it is expanding beyond pregnant women and drivers. Alcohol consumption, per person, has flattened or fallen across most large Western economies. Lunchtime drinking is out; "mindful drinking" is in. Cutting back is a popular tactic for the health-conscious and the sugar-wary.

Young people are drinking less frequently than their elders. Less than half of 16- to 24-year-olds surveyed in 2016 by Britain's Office for National Statistics had had a drink in the previous week, compared with nearly two-thirds of 45- to 66-year-olds.

And unlike the saturated markets for many alcoholic drinks such as gin and whisky, says Mr Lampen, there is still room for innovation. Non-drinkers' cups may soon be running over.

This article appeared in the Business section of the print edition under the headline "Only the beer gets drunk"

Plugging away

Opportunities are opening for electrified commercial vehicles

Battery costs are falling and emissions rules are tightening

Print edition | Business Feb 15th 2018

ELECTRIC commercial vehicles were once a common sight in Britain's towns and cities. A fleet of 25,000 battery-powered milk floats roved the early-morning streets delivering a crucial part of the nation's breakfast. Short ranges and low top speed were unimportant for a milk round but near-silent running meant customers could sleep. Their demise came as supermarkets expanded, but electrification of business vehicles is gathering pace anew.

Just as better battery technology is bringing down the cost and boosting the range of passenger electric vehicles (EVs), those advances are making electrification of commercial vehicles more appealing. The purchase price is still far higher than a comparable vehicle with an internal combustion engine (ICE). But businesses are more focused than ordinary motorists on the total costs of ownership, and on other reasons to shift to electric power.

Much attention has been paid to battery-powered juggernauts. Tesla has 500 orders for a heavy-duty electric lorry (pictured). Promised (with the usual wild optimism) to hit roads in 2019, Tesla says a version with a range of 800km (500 miles) will cost $180,000—50% more than an ICE equivalent. Daimler, Cummins, an engine-maker, and others are developing similar vehicles. Yet the chances that batteries will rapidly displace diesel in trucking are slim. Haulage businesses run on slender margins and the economics do not appear to add up. As UBS, a bank, notes, American lorries can take 40 tonnes laden weight and typically 22.5 tonnes of that is given over to cargo. Even by 2022 a comparable electric system will weigh between four and nine tonnes depending on range; a diesel power-train weighs two tonnes.

Displacing valuable cargo is bad enough. Further questions remain over the durability of Tesla's powertrain (ICEs typically last 1m miles, but batteries degrade quickly and an expensive replacement may be required after half this distance) and also over the lack of a charging infrastructure along intercity routes. Lower fuel costs and maintenance of electric motors will not outweigh the upfront expense and inconvenience for some time.

Electrification is arriving far more swiftly for other types of large vehicle. Buses run on short fixed routes and their batteries, which can be rapidly recharged at either end, can be considerably smaller than in long-haul lorries. Electric buses are expensive but that could change quickly because of the speed of adoption in China.

Generous government subsidies both to clean up filthy city air and to help China become a global EV leader are having an effect. In December Shenzhen completed a switch to make its fleet of 16,500 buses electric. China is pushing other cities to do the same and, as more buy buses, battery and manufacturing costs are sure to fall. Peter Harrop of IDTechEX, a consultancy, reckons Chinese electric buses are on course to undercut diesel versions just on purchase price, and could soon flood the world.

The business case for smaller lorries and vans for local deliveries is also starting to stack up. These require smaller, cheaper batteries for shorter urban journeys and can be recharged at central depots. Britain's Royal Mail is testing larger trucks made by Arrival, a small British firm, and has a big fleet of electric vans. Daimler has begun delivering a few "eCanter" medium-sized trucks with a range of 100km to UPS, an express-package firm, and will make 500 more in the next two years. Delivery companies and mail services are also testing or deploying electric scooters, three-wheelers and other smaller vehicles.

Electricity could also find its way to other sorts of vehicle. Mr Harrop anticipates strong growth in electric construction, agriculture and mining equipment as costs fall and emissions regulations tighten. There are other benefits. Construction vehicles that are silent could work around the clock. Even ride-on lawnmowers could become quieter and more reliable with batteries. Quiet refuse lorries would be just as welcomed by sleeping residents as the floats that used to deliver milk across Britain.

This article appeared in the Business section of the print edition under the headline "Plugging away"

Tap, tap, learn

Indian teaching startups make work for idle thumbs

Byju's has 900,000 paid users and investment from Sequoia Capital and China's Tencent

Print edition | Business Feb 17th 2018

Alamy

TO ANY outsider it looks as if the children have been hypnotised by yet another smartphone game. As the spying elders in a TV ad try to break the spell, the sprogs flash a grin at their screens. "It's maths, dad," giggles a fifth-grader to her father. The company behind the ad, Byju's, sells an educational smartphone app which has been downloaded 14m times since its launch in 2015.

Byju's is one of many education technology (or "edtech") startups that have emerged in India in the past few years. Their target is vast—some 260m pupils in schools and over 30m graduates who train in order to pass entrance tests for a seat in medical, engineering and elite management institutes. KPMG, a consultancy, reckons the industry will grow eightfold to be worth around $2bn by 2021.

Much of the expected growth is due to India's woeful record in primary-school education, where teachers are scarce, infrastructure crumbling and the culture one of rote learning. Almost half of students from the fifth grade cannot read texts meant for second-graders. Private tutors are called upon. Buses are plastered with ads for cramming institutes claiming to have coached exam "toppers", a status that rivals cricket superstardom. (A rival to Byju's is inevitably called Toppr.) According to one estimate, a quarter of all Indian students attend private coaching classes.

Byju Raveendran should know. A few years ago, he used to attract 25,000 students to a particular stadium in Delhi, and fly to nine cities every week to teach high-school maths. Youngsters would learn shortcuts and tips to ace the fiendishly hard Common Admission Test for the best schools. Given the enormous size of the classrooms, it was impossible to make the sessions interactive, so Mr Raveendran came up with the idea of converting the lessons into video gobbets and hosting them online.

The business has 900,000 paid users who spend over 50 minutes on the app each day—metrics that media firms might envy. Around nine-tenths of customers of Byju's renew subscriptions despite an annual price tag of $350-450, not far from half the median annual income of an Indian. Sales for the twelve months to March 2017 reached $40.6m, and the firm says it expects to turn a profit in the current financial year. Prominent investors including Silicon Valley's Sequoia Capital and China's Tencent have put in a total of $200m, and Byju's has a punchy valuation of $800m.

That is despite a patchy record for Indian edtech firms. Indian schools are price-sensitive and tend not to be early tech adopters, says Kartik Aneja of Nayi Disha, which makes educational digital games. Educomp, a maker of technology-enabled classroom products, used to sell expensive digital content and multimedia equipment to schools and was valued at over $1.4bn in 2008, but filed for bankruptcy last year. Byju's managed to bypass schools by selling directly to students and parents.

Other challenges remain. The company has to send out physical memory cards to students who might not have sufficient internet bandwidth to download materials (a previous satellite-based method proved unreliable in bad weather). And a network of hundreds of agents is needed to collect cash from parents unused to paying digitally, adding to costs.

Smartphones will spread, broadband will improve and online payments should become simpler. Less certain is whether parents will allow their kids to learn chiefly from screens. Little verifiable evidence exists that methods devised by Byju's succeed as well as customers hope. It would be an unusual child, though, that could be left unmoved by one bit of maths content advertised by the firm—Shah Rukh Khan, a Bollywood star, guiding a troupe of dancers rhythmically laying out a proof for Pythagoras's theorem.

This article appeared in the Business section of the print edition under the headline "Tap, tap, learn"

Taking the gloves off

Japanese businesses are struggling to keep up standards

A shortage of labour as well as pressure to lift profits mean shoddier customer service

Print edition | Business Feb 17th 2018

KUMIKO HIRANO has noticed a disquieting change when she goes to her neighbourhood *konbini*, one of Japan's ubiquitous convenience stores. "No one is around and I have to use a loud voice to get someone to serve me," says the 48-year-old worker in Tokyo. "It irritates me."

This might not seem a big problem, but Japan prides itself on the standard of customer service, which approaches the level of bespoke attention elsewhere. Taxi drivers, who often wear white gloves, sometimes get out to bow when they drop off a passenger. Staff in shops and restaurants are unfailingly polite. Shoppers can order on Amazon and take delivery reliably the same day. Now Japanese are having slowly to adapt to levels of service long suffered by the rest of the world.

The human touch is becoming rarer. Lawson, another *konbini* chain, is automating payment during the small hours at selected stores. Some restaurants and supermarkets are following suit. Rakuten, an e-commerce giant, is testing if drones instead of immaculately uniformed delivery personnel can make deliveries. Firms are using artificial intelligence to interact with customers. People at Henn na Hotel (meaning "strange hotel"), an expanding chain, are checked in by robots.

Opening times of shops and restaurants are becoming ever shorter. Skylark, a company that owns several popular restaurant chains, has cut the number of its restaurants that are open between 22 and 24 hours a day from 1,000 to 400. Yoshinoya, a favourite haunt for *gyudon* (a bowl of rice topped with beef), has done likewise. Family Mart, another convenience-store chain, is experimenting with closing some stores at certain hours of the night. Last year Yamato Transport, a delivery company, said it would consider stopping same-day deliveries for Amazon Prime.

Japan's declining population and rising labour costs are one reason businesses are cutting customer service. Another is pressure from shareholders for better profits. On the labour side, some industries have had to raise wages to compete for staff; others cannot get them at all. In July last year the gap between the number of jobs on offer and the number of jobseekers hit a 43-year high. There are 1.59 jobs for every applicant, and not even Chinese students can fill the gap at *konbini* shops.

While service businesses account for three-quarters of Japan's GDP, all those bowing staff and long opening hours make firms inefficient. Japan ranks poorly for productivity among the OECD, a club of rich nations, especially for non-manufacturing industries. Minoru Kanaya of Skylark says recent changes the firm has made have raised productivity.

For some customers the changes are worrying, cutting to the heart of Japanese culture. Children grow up revering *omote-nashi*, the philosophy of providing service without expectation of reward. This also draws foreign visitors, notes Yuki Takada of the Omotenashi Meister Association, which provides training and sets standards in hospitality. Many also fret over whether Japan's growing number of elderly will cope well with automation.

Yet in some areas people appear to want less frilly customer service. Some Japanese see it as defined by protocol rather than by what the customer actually wants. Waiters at Jonathan's, one of Skylark's restaurant chains, no longer show diners to their table after many said they would rather seat themselves. Mr Takada reckons that the number of people who are starting to feel that *omotenashi* is "fussy and inconvenient" is increasing.

There are few signs of a backlash yet. Japan, the home of robots, is more likely than European countries, for instance, to welcome automation. "We have to accept changes," says 31-year-old Miki, who notes that 7-Eleven, a convenience store born in Texas, is so named because it used to open from 7am to 11pm rather than operating around the clock. Yet opinion might shift if staff cuts and the new focus on productivity mean Japanese have to wait longer, be it for public transport or in queues to pay. "Time is the red line," says Mr Takada.

This article appeared in the Business section of the print edition under the headline "Taking the gloves off"

Schumpeter

How does Chinese tech stack up against American tech?

Silicon Valley may not hold onto its global superiority for much longer

Print edition | Business Feb 15th 2018

Brett Ryder

AMERICANS, and friends of America, often reassure themselves about its relative decline in the following way. Even if the roads, airports and schools continue to slide, it will retain its lead in the most sophisticated fields for decades. They include defence, elite universities, and, in the business world, technology. Uncle Sam may have ceded the top spot to China in exports in 2007, and manufacturing in 2011, and be on track to lose its lead in absolute GDP by about 2030. But Silicon Valley, the argument goes, is still where the best ideas, smartest money and hungriest entrepreneurs combine with a bang nowhere else can match.

Or is it? American attitudes towards Chinese tech have passed through several stages of denial in the past 20 years. First it was an irrelevance, then Chinese firms were sometimes seen as copycats or as industrial spies, and more recently China has been viewed as a tech Galapagos, where unique species grow that would never make it beyond its shores. Now a fourth stage has begun, marked by fear that China is reaching parity. American tech's age of "imperial arrogance" is ending, says one Silicon Valley figure.

China's tech leaders love visiting California, and invest there, but are no longer awed by it. By market value the Middle Kingdom's giants, Alibaba and Tencent, are in the same league as Alphabet and Facebook. New stars may float their shares in 2018-19, including Didi Chuxing (taxi rides), Ant Financial (payments) and Lufax (wealth management). China's e-commerce sales are double America's and the Chinese send 11 times more money by mobile phones than Americans, who still scribble cheques.

The venture-capital (VC) industry is booming. American visitors return from Beijing, Hangzhou and Shenzhen blown away by the entrepreneurial work ethic. Last year the government decreed that China would lead globally in artificial intelligence (AI) by 2030. The plan covers a startlingly vast range of activities, including developing smart cities and autonomous cars and setting global tech standards. Like Japanese industry in the 1960s, private Chinese firms take this "administrative guidance" seriously.

Being a global tech hegemon has been lucrative for America. Tech firms support 7m jobs at home that pay twice the average wage. Other industries benefit by using technology more actively and becoming more productive: American non-tech firms are 50% more "digitised" than European ones, says McKinsey, a consulting firm. America sets many standards, for example on the design of USB ports, or rules for content online, that the world follows. And the $180bn of foreign profits that American tech firms mint annually is a boon several times greater than the benefit of having the world's reserve currency.

A loss of these spoils would be costly and demoralising. Is it likely? Schumpeter has compiled ten measures of tech supremacy. The approach owes much to Kai-Fu Lee of Sinovation Ventures, a Chinese VC firm. It uses figures from Alliance-Bernstein, Bloomberg, CB Insights, Goldman Sachs and McKinsey and includes 3,000 listed, global tech firms, 226 "unicorns", or unlisted firms worth over $1bn, plus Huawei, a Chinese hardware giant.

The overall conclusion is that China is still behind. Using the median of the yardsticks, its tech industry is 42% as powerful as America's. But it is catching up fast. In 2012 the figure was just 15%.

Start with Chinese tech's weak spots. Its total market value is only 32% of the figure for America's industry. While there are two huge companies and lots of small ones, there are relatively few firms worth between $50bn and $200bn. China is puny in semiconductors and business-facing software. Tech products do not yet permeate the industrial economy: Chinese non-tech firms are relatively primitive and only 26% as digitised as American ones.

As for investment, Chinese tech's absolute budget is only 30% as big as that of American tech. And it is still small abroad, with foreign sales of 18% of the total that American firms make. Apple rakes in more abroad in three days than Tencent does in a year.

The gap gets much smaller, however, when you look at the most dynamic parts of the tech industry. In the area of e-commerce and the internet, Chinese firms are collectively 53% as big as America's, measured by market value. China's unicorns, a proxy for the next generation of giants, are in total worth 69% of America's, and its level of VC activity is 85% as big as America's based on money spent since 2016. There is now a rich ecosystem of VC firms buttressed by Alibaba and Tencent, who seed roughly a quarter of VC deals, and by government-backed funds-of-funds.

China is improving at "breakthrough" innovations. Take AI. China's population of AI experts is only 6% of the size of America's (if you include anyone of Chinese ethnicity this rises to 16%) and the best minds still work in the United States, for example at Alphabet. But now the number of cited AI papers by Chinese scientists is already at 89% of the American level. China has piles of data and notable companies in AI specialisms, for example Face++ in facial recognition and iFlytek in speech.

The techtonic plates shift

At the present pace China's tech industry will be at parity with America's in 10-15 years. This will boost the country's productivity and create tech jobs. But the real prize is making far more profits overseas and setting global standards. Here the state's active role may make some countries nervous about relying on Chinese tech firms. One scenario is that national-security worries mean China's and America's tech markets end up being largely closed to each other, leaving everywhere else as a fiercely contested space. This is how the telecoms-equipment industry works, with Huawei imperious around the world but stymied in America.

For Silicon Valley, it is time to get paranoid. Viewed from China, many of its big firms have become comfy monopolists. In the old days all American tech executives had to do to see the world's cutting edge was to walk out the door. Now they must fly to China, too. Let's hope the airports still work.

This article appeared in the Business section of the print edition under the headline "Chinese tech v American tech"

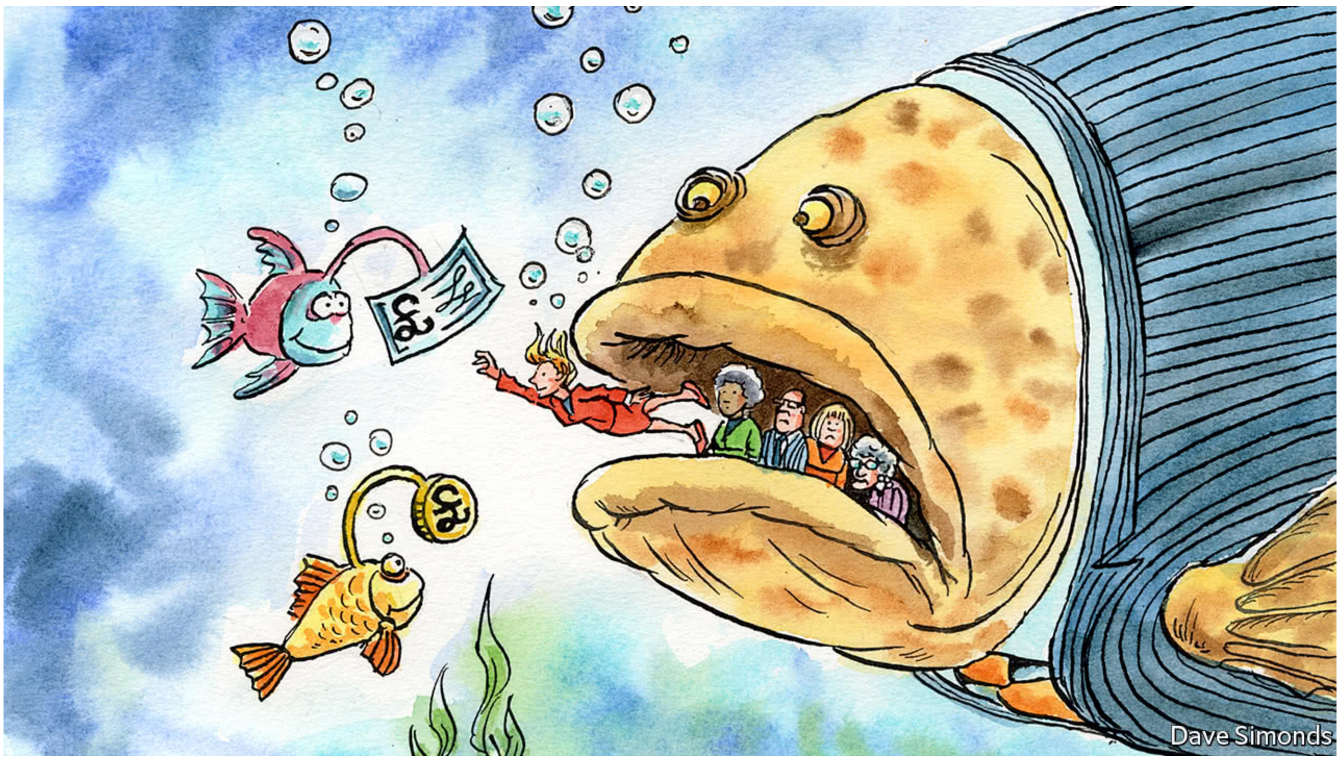
Britain's challenger banks
Attack of the minnows

Attack of the minnows

The digital upstarts taking on Britain's dominant few banks

A battle between, on one side, novelty, technology and gusto and, on the other, immovable inertia

Print edition | Finance and economics Feb 15th 2018



CHRIS MATTHEWS joined Monzo last May. "A friend mentioned it over a curry. Everyone signed up at once. Nine or ten of us." Mr Matthews, a structural engineer living in London, transfers money monthly from the big bank where his salary lands to the online upstart, for everyday expenses. Monzo's smartphone app lets him track his spending precisely. He has found big banks' security procedures frustrating, but he can block and reactivate his Monzo debit card with a tap on the app.

For some British millennials, Monzo is as close to a cult as a bank can be. Its coral-pink cards are hard to miss. "People in bars will get very excited if they see you are a fellow Monzo user," says Mr Matthews, who is 29. Founded in 2015, it has had a full banking licence since April. It launched current accounts in the autumn; more than 370,000 have been opened, mainly by customers converting pre-paid cards, with which Monzo began. Tom Blomfield, the chief executive, says its marketing budget has been "practically nothing".

Monzo is one of many hopefuls trying to upset British retail banking's established order. In 2016 the Competition and Markets Authority, an antitrust watchdog, reported that Barclays, HSBC, Lloyds Banking Group and state-controlled Royal Bank of Scotland (RBS) hold more than 70% of Britons' main current (checking) accounts. Counting the British arm of Santander, Spain's largest bank takes the share to over 80%. In 2015 Britons had 70m-odd active current accounts. They paid £500 ($750) or more into 70% of them every month.

Supervisors have licensed more than 30 entrants since 2013. But by no means are all the challengers young. One of them, CYBG, owns Clydesdale, a Scottish bank that turns 180 this year, and Yorkshire Bank, aged 159. It has about 1.8m personal current-account customers and assets of £43bn. Nor are all the infants purely digital. Metro Bank has since 2010 established 55 "stores" (ie, branches) and is spreading beyond south-east England. Stores open for long hours and even on Sundays; taxi-drivers, says Craig Donaldson, the chief executive, park outside and deposit the day's fares. Debit cards are printed while you wait. Fees for safe-deposit boxes cover 80% of the stores' rents, once they have been open for a year. But aren't branches dying? Metro, which has built a balance-sheet of £15bn, says not. It looks certain to report its first annual profit on February 21st.

Among digital purists, Monzo's chief rival is Starling Bank—where Mr Blomfield used to work. It started current accounts last spring; around 100,000 have been opened. Tandem, which recently acquired Harrods Bank, the banking arm of a posh department store, is also open for business. Atom Bank, part-owned by Spain's BBVA, focuses on mortgages funded by fixed-rate savings. N26, a German smartphone bank, is due to arrive this year. Another near-cult, Revolut, is seeking a European licence (valid, for now, in Britain). It has 1.5m customers across the continent, half of them in Britain, wooed at first with keenly priced foreign exchange; now it also tracks your spending and offers you the chance, if you dare, to buy crypto-currencies. Zopa, a peer-to-peer lending pioneer, also aims to become a bank, offering savings accounts.

The authorities have been encouraging entry, in part because big banks' long-lamented dominance intensified during the financial crisis. One big fish, HBOS, expired. Lloyds took it over. The smaller Northern Rock and Bradford & Bingley also crumpled. In 2013-14 Lloyds was forced to divest 631 branches into TSB, which it bought in 1995. Now owned by Sabadell, a Spanish bank, TSB has seen its assets grow from £25bn to £43bn.

Knock-out competition

To ginger up small-business banking, RBS, the market leader, must cede ground and money to competitors as part of the price, agreed on with the European Commission, of its rescue by the government in 2008. RBS will put up £425m, divided into sums from £5m to £120m, to build up rivals' capabilities, plus £350m for incentives to customers to switch banks. Banks with assets of up to £350bn may bid. That excludes the big four but just lets in Santander (£315bn), to some challengers' chagrin.

The creation in 2015 of a regulator to oversee access to payments systems, especially Faster Payments, which makes almost instant electronic transfers, has helped entrants too. Anne Boden, Starling's chief executive, sees her bank's membership of Faster Payments as essential. Starling can both avoid dependence on big banks and provide services to others. Regulators have also issued restricted licences, limiting services but requiring less capital. Loot and Monese offer simple accounts, opened swiftly on smartphones, but redeposit customers' money at fully licensed, insured banks. This can be a route to the full bankhood of Monzo or Starling, or allow upstarts to harry banks in specific fields—as Azimo, Revolut and TransferWise have done in foreign exchange.

"Open banking", Britain's version of the European Union's revised payment-services directive, which came into force in January, may open the market further. It allows "account aggregators" to collect customers' data from several banks—and to push financial services (and more) in online marketplaces. On February 13th Starling announced deals with four fintech partners. But established banks reckon they are better placed than the upstarts. Giant tech companies may anyway prey on both whales and minnows.

A speedier switching service, set up in September 2013, has made it easier to swap banks. Starling even offers switching within its app. Britons are not yet moving in droves. In 2017 fewer people did than in 2015. But Metro's Mr Donaldson detects a rise in "multi-banking": opening new accounts, without yet ditching old ones.

Can any of the challengers really take on the giants? Even the biggest of the upstarts chasing conventional banks are small. Analysts think some may merge. Rising interest rates would test their mettle. The closure this month of the Bank of England's Term Funding Scheme, which offers cheap four-year money to support lending, will soon raise the cost of funds.

The digital purists ooze confidence, although they are still tiny. Ms Boden expects Starling to make a profit by the end of 2019 and to be serving ten countries by 2020, starting with Ireland this year. Monzo is eyeing America; N26 will open there this year; Revolut is on its way to several non-European countries. But they need not just to woo new customers, but also to persuade them to ditch their accounts elsewhere. "For us, the salary is the holy grail," Mr Blomfield says.

That's not because, like a traditional bank, he wants a pile of deposits to fund loans, and make money on the margin between saving and lending rates. Rather, it is to learn more about how people spend their money. If they can be offered, for example, better utility deals, Monzo might take a share of the cash they save. If they take out insurance with a big-ticket purchase, it could earn a commission. The upstarts have novelty, sharp technology and gusto. The old guard have a force that may be just as powerful: inertia.

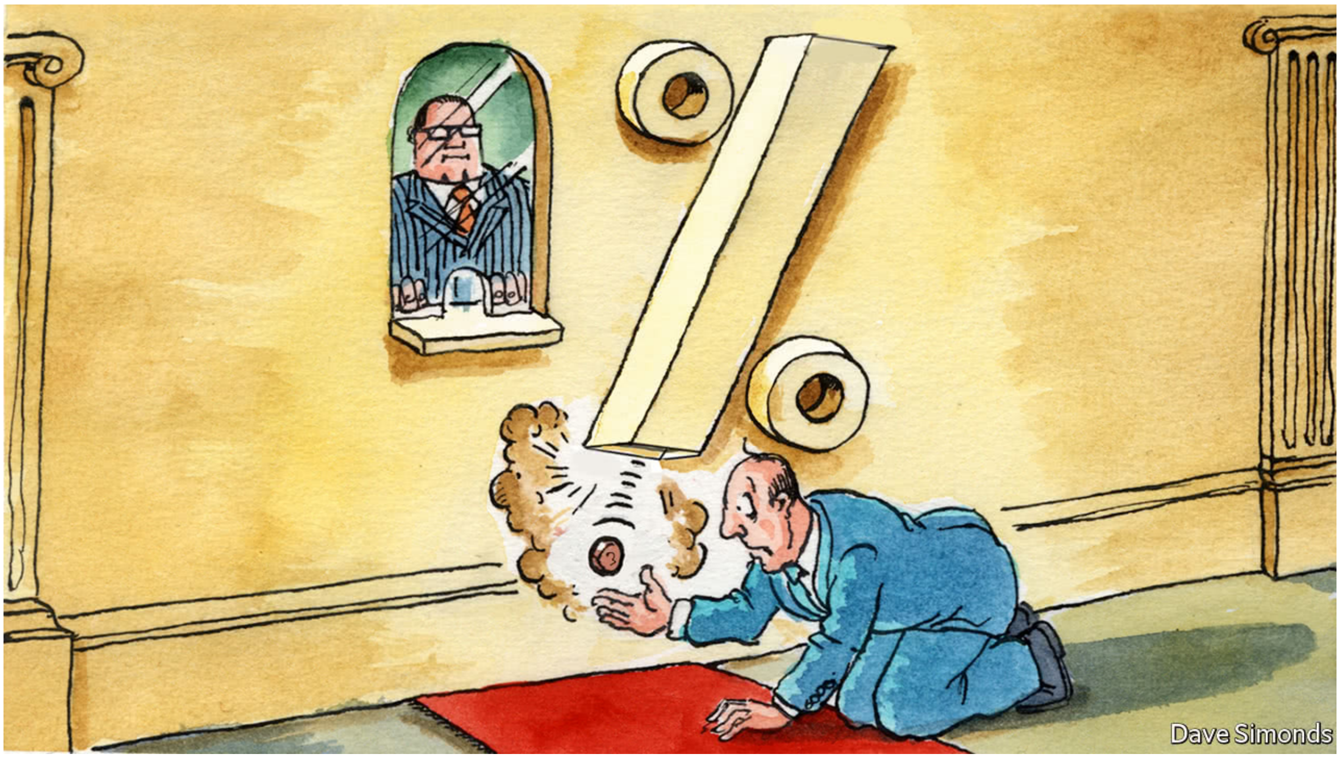
This article appeared in the Finance and economics section of the print edition under the headline "Attack of the minnows"

Little interest

American banks pay depositors less than online accounts

They seem to be relying on the power of inertia to retain their customers—a risky strategy

Print edition | Finance and economics Feb 15th 2018



EVERYONE knows that interest rates are rising—except, perhaps, one group: American savers who have put $12trn in bank accounts. They have seen the government's deposit guarantee, purportedly designed to protect them, become a ticket for banks to receive free money. For evidence, look no further than the ubiquitous bank branches dotting America's high streets.

Those seeking a home for their money find that, unlike petrol stations or grocers, banks are not required to post their most important price, the interest rate. Ask and you will be referred to a specialised member of staff. After a wait, numbers are typed into a computer, followed by pauses for thought, a bit of throat clearing and, often, comments that the current rates on offer may not exceed inflation. Then come hints, doubtless filtered through a compliance department, of the higher returns available on the bank's investment offerings, which, of course, carry risks (and fees).

Only then is the diligent customer told the rates on offer, ranging from almost nothing to almost nothing at all. A knowledgeable saver might then ask about certificates of deposit, guaranteed securities with maturities of up to five years. Here too the banks' offerings often carry meagre rates. The exception may be a promotional deal—a slightly higher rate with an expiry date, intended to draw in new customers.

The high levels of deposits the big banks are sitting on suggest that many give up at this point, despairing of earning any return on their money. They would be wrong, however. Should they look online, at, for example, Bankrate.com, a common reference point, they would find lists of rates provided nationally on deposits (up to 1.6% per year) and certificates of deposits (3%). These rates have been rising, in line with the broader bond markets.

You would expect the gap between what is offered to savers in banks and what can be earned online and in the money markets to close. Not so. In 2014 Gary Zimmerman launched a web-based financial link, MaxMyInterest.com, that enabled customers to transfer funds smoothly between their usual banks and higher-yielding online accounts (also government-guaranteed). At the time, banks paid on average 0.11% on savings accounts. Online his clients could receive 0.87%. Since then, his online rates have risen to an average of 1.52%, compared with 0.09% paid to high-street bank depositors.

If banks bother to defend their low rates, it is to point to an expanding range of associated benefits that they offer: automated banking, bill payment, credit cards, an ability to consolidate all of this easily online, and so on. This has sparked debate about "deposit beta", or how much of an interest-rate rise banks can afford not to pass on to savers (short answer: a lot).

Economist.com

Jason Goldberg, an analyst at Barclays, has compiled data stretching back to 1934 on the spread between how much banks have to pay for money and what they receive (see chart). After the financial crisis, low prevailing rates compressed this margin. But its recent widening has lasted unusually long—the first three-year streak since the 1970s is expected. And Mr Goldberg thinks more is to come as rate rises by the Federal Reserve continue to exceed what filters down to depositors. That will play a critical role in strong bank profits.

Given the upheaval and price-cutting that online shopping has brought to the rest of the retail world, this is at the very least odd, and seems unsustainable, were it not for the power of inertia. But relying on inertia is a dangerous strategy. At some so far undiscovered tipping-point, customers may wake up abruptly, shift their money and never come back.

This article appeared in the Finance and economics section of the print edition under the headline "Little interest"

Mass deduction

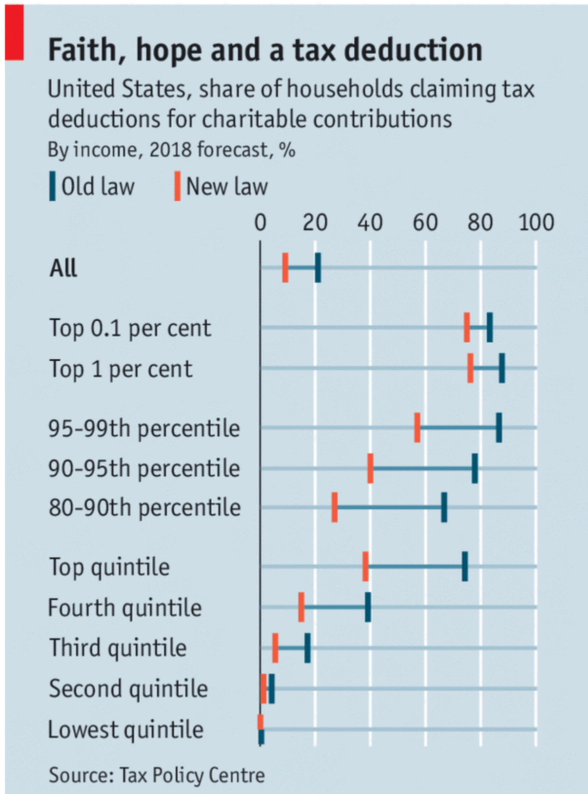
Recent tax reforms in America will hurt charities

Local non-profits and churches will be affected the most

Print edition | Finance and economics Feb 15th 2018

DESPITE its oft-professed pro-market orthodoxy, America has always had an unusually large non-profit sector. Americans gave $390bn to charity in 2016, with the bulk of contributions coming from individual donors. Historically, revenues at non-profits tend to track GDP growth. The recent tax reforms imply that despite strong economic growth, charitable contributions in America are poised to fall for the first time since the financial crisis.

The most significant threat to charities comes from changes to income tax. American taxpayers can choose either to "itemise" specific expenses, such as charitable gifts or mortgage payments, or take a "standard deduction". In an effort both to simplify the tax code and to lower overall tax rates, the Republican-led Congress almost doubled the standard deduction to $12,000 for individuals and $24,000 for married couples. This will make filing taxes a lot easier for many. But it also means that far fewer Americans will have a financial incentive to donate money.



Economist.com

Charities, understandably, are worried. The Tax Policy Centre, a think-tank, estimates that the share of households claiming charitable deductions will fall from 21% to 9%. The decline will be especially steep for middle- and upper-middle-income households (see chart). Overall charitable donations are expected to fall by 4-6.5%, or $12bn-20bn. Research from the Lilly Family School of Philanthropy at Indiana University has reached similar conclusions.

Some non-profits will be hurt more than others. Middle-class families, whose tax incentives have changed the most, tend to give more to churches and local charities, such as soup kitchens, whereas the rich give more to universities. Differences in preferences can be stark. One survey from 2005 found that donations to religious institutions accounted for two-thirds of charitable contributions from households that made less than $100,000 a year, but only one-sixth of contributions from households making over $1m. Museum directors should be more worried about the gyrations of the stockmarket than any of the changes to income tax.

Charities will also be affected by other changes to the tax code. Cuts to the highest marginal tax rate for both individuals and companies will further reduce incentives to give. Moreover, fewer people will be affected by the estate, or inheritance, tax (though this provision, raising the threshold above which the tax is payable, is due to expire in 2025). Assessing the impact of this change is difficult. A rough analysis, also from the Tax Policy Centre, finds that a full repeal of the estate tax would lower charitable giving by a further $4bn a year.

The charitable tax deduction has long been controversial. It is, after all, in effect a subsidy that allows individuals unilaterally to direct government spending. The reforms could be seen as a partial victory for critics—tax deductions for charitable giving are expected to fall from around $63bn to $42bn. But tax subsidies for charity can also be seen in a positive light, as a decentralised way for those who hold minority beliefs to direct government funds. Rob Reich, a political scientist at Stanford University, notes one consequence of the tax reforms is that government subsidies for charitable giving will be further skewed towards the preferences of the rich.

This article appeared in the Finance and economics section of the print edition under the headline "Mass deduction"

C looks sweet

Tax reforms prompt upheaval in the private-equity industry

Partnerships mull becoming normal, corporate-tax paying companies

Print edition | Finance and economics Feb 15th 2018

C change

United States, effective tax rate for individual investors*, %

	Pre-tax reform†	Post-tax reform†
C corporation	50.5	39.8
Partnership, full deduction	43.4	33.4
Partnership, no deduction	43.4	40.8

*Including federal corporate and income taxes, assuming no state tax
†Tax Cuts and Jobs Act, Dec 2017
Source: Baker Botts

Economist.com

IN THE political cacophony surrounding America's new tax law, the voice of the private-equity industry has been muted. This is perhaps unsurprising. The industry has managed in large measure to retain its favourable tax treatment, despite a threat from President Donald Trump to close the "carried interest" loophole on which it had grown fat.

So few expected the announcement on February 8th from KKR, a big private-equity firm, that the new law was prompting it to consider converting its status from that of a partnership to a "C corporation" (a corporate-tax-paying firm). As *The Economist* went to press, a competitor, Ares Management, was expected to make a similar announcement. The new law may have a lasting impact on private equity after all.

Tax has always been central to private-equity business models. The industry uses large amounts of debt, interest on which is tax-deductible, to acquire companies. So it has long been adept at minimising tax, both by making full use of deductions, and through the careful choice of corporate structure. Historically, private-equity firms have been partnerships, also known as "pass-throughs", because profits pass through them untaxed (to beneficiaries who then pay income tax). Indeed, carried interest, whereby private-equity firms' profits are taxed at the rate imposed on capital gains, rather than that on income, only applies to partnerships. But the firms that private equity acquires ("portfolio companies") have been a mix of partnerships and C corporations.

The new law upsets some of these arrangements. The reform restricts carried-interest rules to assets held for more than three years. It limits deductions for losses. And it caps interest deductibility at 30% of gross earnings, making debt less attractive.

But the windfalls are bigger. The law, for instance, allows generous deductions for capital expenditure and foreign dividends. And, most important, the headline corporate-tax rate is lowered from 35% to 21%. This alone should raise the value of American portfolio companies by 3-17%, reckons Hamilton Lane, an investment firm.

Becoming a corporation therefore suddenly looks more attractive. For the largest, publicly listed private-equity firms, the main motive is valuation. Shares of partnerships are excluded from financial-market indices; holders of such shares also face onerous tax-reporting requirements. That reduces investor demand, so their shares trade at a stiff discount to those of similar firms that are C corporations. Analysts at Credit Suisse reckon conversion could raise valuations by up to 60%, more than compensating for those firms' new corporate tax bill. The move would make particular sense for firms such as Ares and KKR, which already earn a large proportion of revenue in management fees rather than in carried interest. Other large firms, such as Blackstone and Carlyle, have played down the prospect of converting.

The vast majority of private-equity firms, however, are privately held partnerships. For them conversion may make sense only where state and local income taxes are high, says Robert Phillpott of Baker Botts, a law firm. New deductions, however, make the conversion of the funds those firms run more attractive, especially ones meant mainly for (tax-exempt) institutional or foreign investors.

But the case for conversion is most compelling for some of the portfolio companies in those funds. That does not apply to those that qualify for a new 20% deduction for pass-throughs, which excludes professional-services firms and favours job-rich, capital-intensive industries over capital-light and job-poor ones. For those that do not, however, an end-investor in private equity would already face a slightly lower effective tax rate if portfolio companies were structured as corporations rather than partnerships (see table). In industries where it makes sense to reinvest retained earnings, the gap is much greater still. A corporation can reinvest after paying 21% on its profits, whereas the beneficiaries of a partnership would have to pay the full effective income-tax rate of around 40% before putting any of that money back in.

Of course, conversion does entail some risks. As Keith Mannor of BDO, an accounting firm, points out, the new corporate-tax rate is “only as ‘permanent’ as Congress and the presidency”. Converting a partnership into a corporation is easy and basically free; converting back requires paying one-off corporate tax on the entire value of the enterprise, at whatever tax rate is in place at the time. Even so, many private-equity firms are sure to change their tune and opt for some form of variation in C.

This article appeared in the Finance and economics section of the print edition under the headline ”C looks sweet”

Buttonwood

The markets still have plenty to fret about

With share valuations so high, volatility, junk bonds, growth and China are all cause for concern

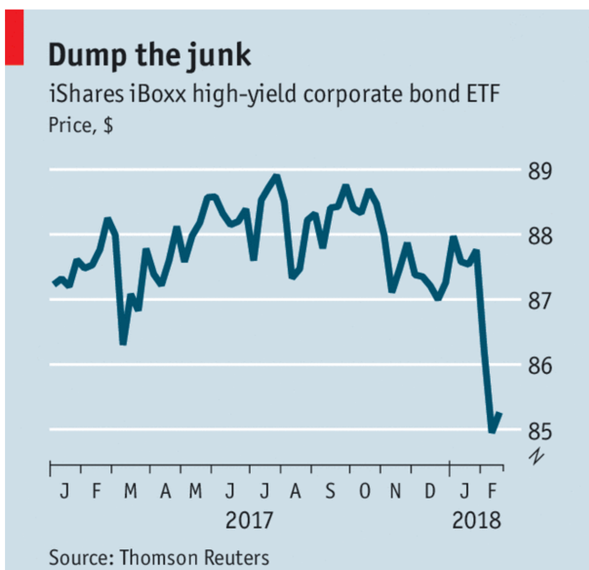
Print edition | Finance and economics Feb 15th 2018

BULL markets always climb a wall of worry, or so the saying goes. For much of 2017, the main concerns were political and the markets seemed to surmount them as easily as a robot dog opens doors (the latest internet sensation).

But February has shown that the market is still vulnerable. The immediate trigger seems to have been the fear that inflationary pressures would cause bond yields to rise and central banks to push up interest rates; this week's surprisingly high American inflation numbers will only add to the worries. In a narrow sense, that makes bonds look cheaper, compared with equities. In a broader sense, it increases the discount rate investors apply to future profits, lowering the present value of shares. (A caveat is needed: if higher rates reflect stronger growth, then estimates of future profits should rise, offsetting the discount-rate effect.)

The immediate effect has been to create uncertainty for investors about the direction of central-bank policy, after many years in which it could reliably be assumed that rates would stay low. This translates into a more volatile market, as illustrated by the sharp jump in the Vix, or volatility index, in early February.

The danger is that many investors seem to have treated volatility as an asset class, and have organised their portfolios accordingly. Eric Lonergan of M&G, a fund-management group, warned in a blog that "endogenous instability is rising, and volatility is at the core. Volatility has virus-like properties. It started as the domain of a small specialist group of quants. And it has spread to infect everyone." Too many people use volatility as a measure of risk, but the real risk is the permanent loss of capital, he points out. A focus on short-term volatility may lead to herd behaviour on the part of investors, creating the risk of a sudden sell-off.



Economist.com

Another area which could be subject to stress is the corporate-bond market. According to Moody's, the yield on American speculative (or junk) bonds reached 6.44% on February 9th, the highest since December 2016. The value of the largest junk-bond exchange-traded fund fell sharply (see chart). If the world economy keeps strengthening, companies should be able to meet their interest payments. Moody's thinks the default rate on junk bonds will fall from 3.2% to 2% by the start of next year.

But the market has changed since the crisis of 2007-08. A decline in bank lending has forced European companies to turn to the bond markets; high-yield bond-issuance in the years 2013-17 was three times higher than in 2008-12, says Ironshield Capital, a fund-management firm. Banks are also devoting less capital to market-making, meaning bonds could be hard to sell quickly. "Corporate credit could be the next crisis in the making," warns Absolute Strategy Research, a consultancy, raising concerns about "potential liquidity issues associated with high yield".

A third possibility is that markets may be too optimistic about economic growth. China's purchasing-managers' index for manufacturing has slipped back in recent months, and its credit growth has fallen to its slowest rate in 31 months. John-Paul Smith of Ecstrat, a consultancy, worries that the risks for the Chinese economy will be compounded by worsening tensions with America, and that these are likely "to become much more visible over the coming weeks, across a broad range of policy areas in addition to trade." Both the Bloomberg Commodity index and the Baltic Dry (shipping) index, indicators that are sensitive to global demand, have dropped back in recent weeks.

Of course, over-optimism about growth would mean that central banks have to be less vigilant about inflation and bond yields might come back down. But this would not be great news for equities, especially as analysts are forecasting nearly 18% profits growth this year for companies in the S&P 500, according to Andrew Lapthorne of Société Générale, a French bank. That leaves plenty of scope for disappointment.

A related problem is that the American market represents more than half the MSCI World index, which means that people who think they have a diversified portfolio actually have a concentrated bet. As Mark Tinker of Axa Investment Managers points out, the last time one country comprised so much of the global index was Japan in the late 1980s. That did not work out so well.

Some or indeed all of these worries may never be realised. But with the cyclically adjusted price-earnings ratio on the American stockmarket around twice its long-term average, equities are vulnerable to any kind of bad news.

Economist.com/blogs/buttonwood

This article appeared in the Finance and economics section of the print edition under the headline "A worry list"

Canine distemper

China's stockmarket plunge: this time it's different

The American embassy becomes an unlikely lightning rod for investor anger

Print edition | Finance and economics Feb 15th 2018

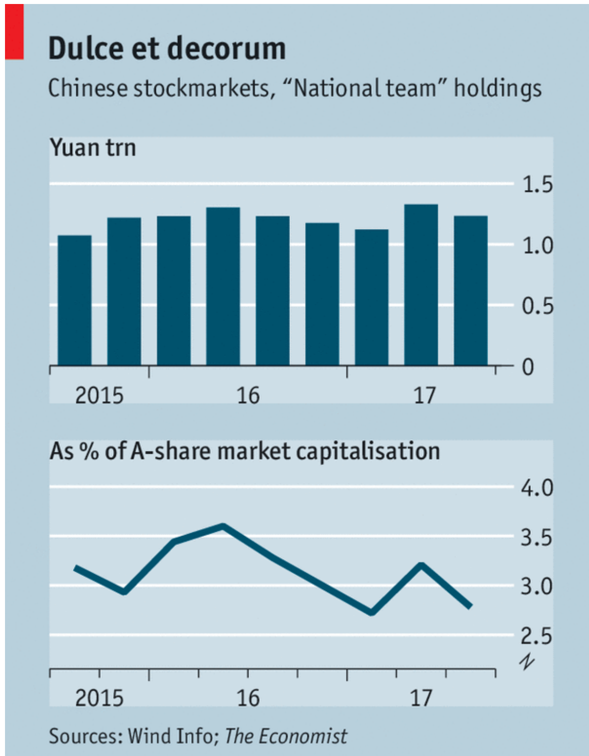
A CHINESE new-year message from the American embassy in Beijing looked innocuous. It welcomed the Year of the Dog on Weibo, a microblog, with photos of the embassy staff's pooches and a video greeting from the ambassador and his wife, each with a dog in hand. But it soon attracted 10,000 angry responses. The post had become an unlikely lightning rod for public discontent about the stockmarket.

A plunge on February 9th had left Chinese shares down by 10% on the week, their steepest fall in two years. Some punters found solace in blaming the American embassy for the rout, which started on Wall Street. For others it was a matter of convenience, because their real target, the Chinese securities regulator, knew to disable comments on its Weibo account on such a grim day for stocks.

Even so, their protests seem to have been heard. Before the market reopened this week, Chinese officials urged big shareholders to buy stocks to restore confidence. The Shanghai Stock Exchange warned investors against placing large sell orders. And more than 300 companies suspended their shares from trading, to sit out the turbulence. Lo and behold, share prices clawed back a bit of ground in the three days of trading before the new-year holiday, which began on February 15th.

The rebound in China was welcome for global investors, supporting a broader recovery in international markets. But it also carried uncomfortable echoes of the Chinese meltdown of 2015, when the government intervened heavily, going so far as to create a "national team" of investment funds to buy shares. However, looked at more closely, the differences between the two episodes are more striking, and more reassuring, than the similarities.

To start with, valuations in China are far more reasonable today than they were three years ago. ChiNext, a tech board billed as China's answer to NASDAQ, trades at 42 times the value of company earnings, a touch higher than NASDAQ but well down from its eye-watering 150-times multiple before the 2015 crash. The CSI 300, an index of China's biggest firms, has a 14-times price-earnings ratio, comparing favourably with the 25-times ratio of the S&P 500, America's most-watched share index.



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The Chinese stockmarket has started to mature. Since its launch in the early 1990s it has often been likened to a casino populated by mom-and-pop investors. But over the past couple of years, institutions have played a bigger role, partly thanks to rapid growth of the asset-management industry. China still has a large army of day traders, as the American embassy can attest, but institutions have led a shift in money from small-cap firms to blue-chip stocks.

A programme that allows investors in China and Hong Kong to trade stocks on each other's exchanges, subject to strict quotas, has brought the Chinese market closer to global pricing. Later this year China-listed shares will be added to the MSCI emerging-markets index for the first time, another step in opening China to international investors. Regulators in China still meddle more than do their counterparts in advanced economies. But the "national team" that helped rescue equities in 2015 has been whittling down its holdings (see chart), and it appeared to stay on the sidelines during the recent sell-off.

One effect of the changes is that China's stockmarket, which used to march to its own drum, now moves more in step with global markets. For two years the CSI 300's fluctuations have almost exactly mirrored those of the S&P 500. The American embassy might be hearing from Chinese investors more often.

This article appeared in the Finance and economics section of the print edition under the headline "Canine distemper"

Back in the dumps

India's state-owned banks endure a string of bad news

A brief flurry of optimism in the sector comes to an end

Print edition | Finance and economics Feb 15th 2018

OF LATE Indian bankers have felt an unfamiliar sensation: optimism. A 1.3trn-rupees ($21bn) bail-out from the government seemed to have cleaned up the bad lending decisions of years gone by. A new bankruptcy law gave them an edge in long-standing battles with recalcitrant borrowers. It seemed a few Indian companies, having for years eschewed fresh investment, might even start borrowing again.

This week woes linked to mismanagement at India's three biggest partially state-owned lenders plunged the bankers back to their habitual gloom. On February 14th Punjab National Bank (PNB) announced it was investigating a fraud worth 114bn rupees, equivalent to about a third of its market capitalisation. A few days earlier the State Bank of India (SBI) unveiled its first quarterly loss since 1999. And Bank of Baroda has hastily announced the closure of its South African operation, accused of having shady business associations there.

The Punjab heist is potentially the most serious. The second-largest nationalised bank admitted that employees in Mumbai had approved transactions that left PNB on the hook for $1.8bn. This suggests, to put it mildly, some lacunae in how the place is run. Its shares fell by over 10% as investors tried to assess whether the sum had been lost or was merely at risk.

The bank has reportedly filed a complaint against a jeweller, Nirav Modi, and some of his family and businesses. Its accusation, to which Mr Modi has not responded, is that he induced bank employees to issue letters of credit, which were left off PNB's books. The letters of credit seem then to have been used as security to borrow from other banks overseas. Mr Modi says he is willing to sell his businesses to make the banks whole.

SBI's troubles are far easier to grasp. Like other state-owned lenders, which control about two-thirds of assets in the banking system, SBI has repeatedly had to adjust its quarterly profits to recognise that some loans made in past years are unlikely to be repaid. Losses linked to bad loans soared in the most recent quarter, in part because the Reserve Bank of India, the regulator, forced SBI to recognise even more of its loans as duds than it had done previously. The regulator did not say whether it regarded SBI's management as negligent, or dishonest.

Finally, Bank of Baroda, the third-largest nationalised lender, on February 12th announced it would be pulling out of South Africa, one of a handful of markets it had entered in the past two decades. Its strategy of building its franchise by lending to the Indian diaspora had not reckoned with the Gupta brothers, three financiers accused of having undue influence in President

Jacob Zuma's inner circle. An investigation by the *Hindustan Times* and others detailed how Baroda stuck by the Guptas even as other banks pulled back. Baroda says it is co-operating with South African authorities, which are investigating.

The bad news has helped to wipe out half the share-price gains of the 21 state-owned banks after the government's rescue plan was unveiled in October. Most are trading below the stated value of their net assets, implying investors still don't trust their accounts. Taken together, all the nationalised lenders are now worth less than HDFC Bank, a single private lender. It may be some time before optimism returns.

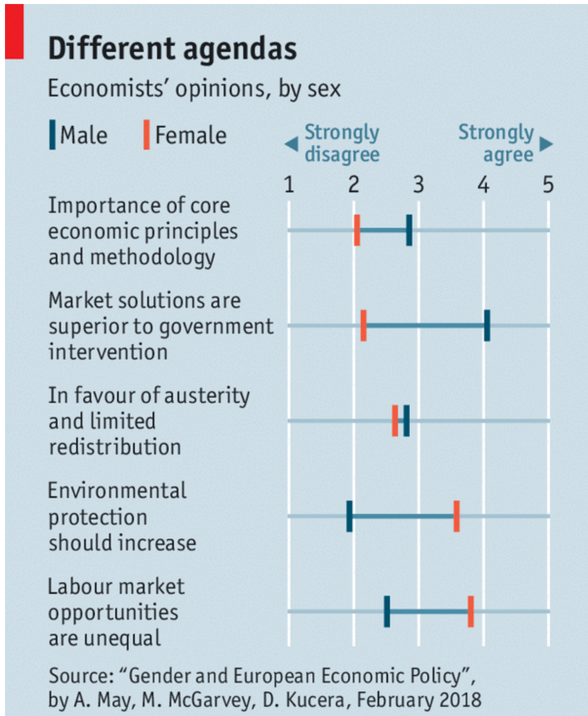
This article appeared in the Finance and economics section of the print edition under the headline "Back in the dumps"

Sexist whigs

Men and women in economics have different opinions

Male economists are both more right-wing and more senior

Print edition | Finance and economics Feb 17th 2018



Economist.com

MEN may hail from Mars and women from Venus. But economists, surely, inhabit planet Earth, surveying it dispassionately. Alas, a new paper suggests that even dismal scientists divide on gender lines. Ann Mari May and Mary McGarvey of the University of Nebraska-Lincoln and David Kucera of the International Labour Organisation surveyed economists from 18 European countries, and found that differences in the wider population can survive even an economics education. Male economists are more likely than female ones to prefer market solutions to government intervention, are more sceptical of environmental protection, and are (slightly) less keen on redistribution (see chart).

A similar study of American economists by Ms May and others also found men more sceptical of government regulation, more comfortable with drilling in the Arctic National Wildlife Refuge, and more likely to believe that a higher minimum wage would cause unemployment. Women were 14 percentage points less likely to agree that Walmart generates net benefits, and 30 points more likely to agree that American openness to trade should be tied to higher labour standards abroad.

Perhaps the divergence does not matter. Good economics should, after all, involve using theory and data to quell prejudices. But some evidence suggests that ideology seeps into economists' work. Zubin Jelveh of the University of Chicago, Suresh Naidu of Columbia University and Bruce Kogut of Columbia Business School parse the language used in economics papers to identify the authors' predilections, and confirm that they match their participation in political petitions. They find that right-wing economists tend to produce estimates that fit their anti-interventionist views. Other data crunched by Mr Naidu confirm that women use more left-leaning language than men.

The differences in opinion are cause for concern when the overwhelming preponderance of men in the economics profession is taken into account. Ms May and her co-authors found that men in their sample were twice as likely to be full professors as women. If economists' senior ranks are skewed in favour of men, then the profession's output might also be biased towards results they find appealing.

A final difference that Ms May and her co-authors uncover suggests one reason why economists might dismiss gender differences as a problem. Male economists are relatively likely to think that men and women face equal job opportunities generally, and that pay gaps are largely explained by differences in skills and choice. By contrast, women are more likely to perceive unequal opportunities, both in general and specifically within academia.

If women hold different views to men, then that could put them at odds with the profession's more senior gatekeepers. And if men are more likely to have faith in markets to nudge women to the best jobs, then they could be more resistant to the idea that the gender imbalance is a problem that needs solving. Men were also more sceptical than women that greater gender balance in research teams would improve economic knowledge.

Of course, some differences of opinion need not necessarily reflect well on women. It might be that they suffer from "motivated reasoning", believing that their lack of promotion is because of the system rather than their own shortcomings, or that economics would benefit from more people like them.

Alternatively, their personal experiences could give them information that men do not have. It seems plausible that men are susceptible to motivated reasoning too. It is easier to attribute one's success to hard work than to unfair privilege.

Even the most brilliant of economists can be blind to their own biases. In 1960 George Stigler, a late Nobel laureate and dogged empiricist, bemoaned the "deleterious" effects of economists' policy desires on their theory, but maintained that overall, as a positive science, economics was ethically and politically neutral. Yet some of his own views fell short of this ideal. Susan Brandwayn, one of his former students and now an independent economist, remembers Mr Stigler telling her class that the day the University of Chicago's economics faculty hired a woman was the day that he would leave.

Correction (February 25th 2018): *An earlier version of this piece referred to Susan Brandwayn as one of George Stigler's graduate students and suggested he had made his comment about the hiring of women to her. In fact he was speaking to her class in graduate school.*

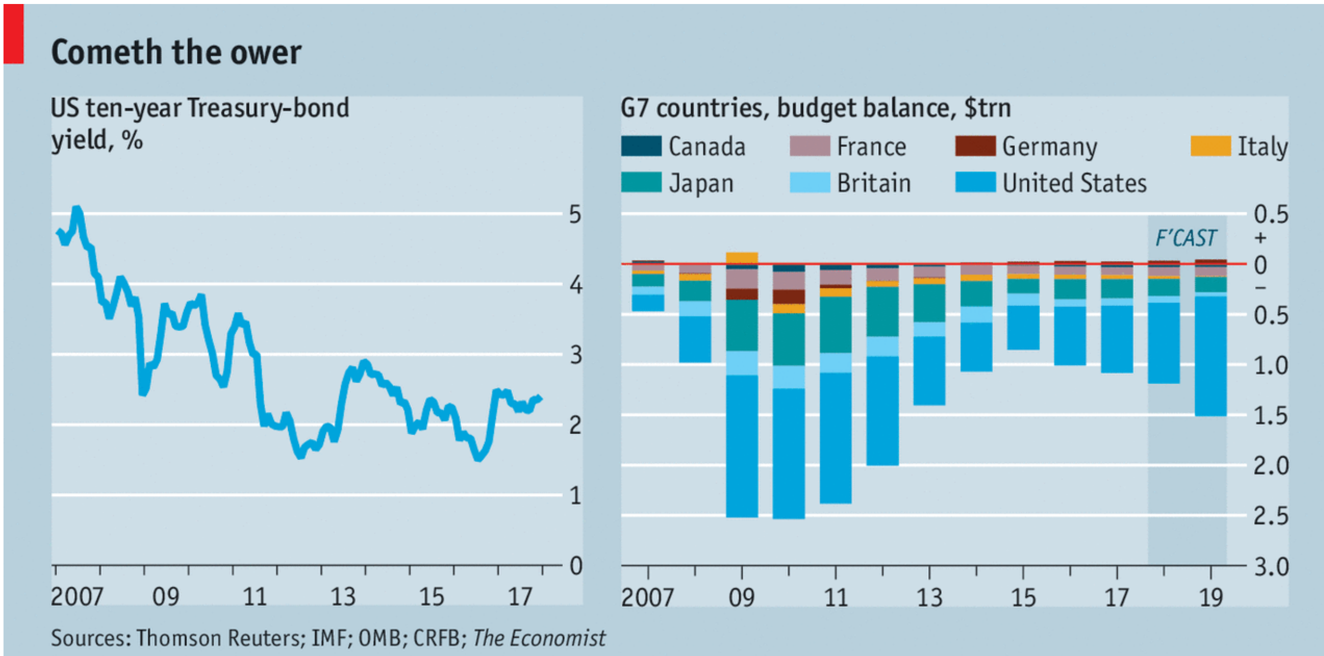
This article appeared in the Finance and economics section of the print edition under the headline "Battle of the X's"

Free exchange

How to interpret America's experiment with huge budget deficits

The foray into uncharted fiscal territory carries risks for the future

Print edition | Finance and economics Feb 15th 2018



Sources: Thomson Reuters; IMF; OMB; CRFB; *The Economist*

Economist.com

"DEFICITS don't matter," said Dick Cheney, then the vice-president, in 2004. He may have meant what he said, yet the administration he belonged to showed a decided lack of conviction when it came to borrowing, with the federal deficit never rising above 3.4% of GDP. Not so the current Republican government. In 2019 and 2020 the deficit is likely to rise to nearly 6% of GDP, the largest, outside of times of economic crisis, since the second world war. In his first term, Donald Trump's deficits will be nearly as large, on average, as those run by Barack Obama during his presidency, according to analysis by JPMorgan. That is impressive given that Mr Obama faced the worst economic downturn since the Depression. In budgeting, as in so many areas, America is wandering into uncharted territory. What might it find there?

Orthodox economics suggests two ways in which things could go wrong. When an economy is running at close to full tilt, so that firms are borrowing and investing as much as banks are willing to lend, a government can only borrow by outbidding private firms for financing. Government "crowds out" private activity in such cases, hurting growth. What is more, as debt accumulates, lenders may ask the government to pay higher interest rates to compensate them for the increased risk of default. These higher rates can tip a government into fiscal crisis, as market jitters raise borrowing costs, further spooking markets. The government must then accept draconian austerity policies, higher inflation (as it prints money to cover its bills) or default.

Although some economists are indeed warning that America is approaching the point at which new borrowing does more harm than good, there is reason to think that orthodoxy does not yet apply. Growth in inflation and wages, though ticking up, remains modest, suggesting that the economy is not running at full speed and that government borrowing will not immediately crowd out private investment activity. More important, America's fiscal expansion is not taking place in isolation. It is occurring within a global financial system that, until recently at least, has had an almost insatiable appetite for safe government debt.

To borrow and to borrow and to borrow

In recent decades, real interest rates around the world have fallen dramatically. That drop appears to result, in part, from a rise in the demand for safe assets, which has outstripped the global economy's capacity to produce them. (The scarcer bonds are, relative to demand, the lower the interest rate governments need to offer to persuade investors to buy them.) Foreign central banks are partly responsible. Since the emerging-market financial woes of the 1990s, foreign governments have built up piles of foreign-exchange reserves, consisting largely of safe government bonds, which can be drawn on to defend the value of their currency or to buy imports in times of crisis. These stockpiles dwindled a bit during the financial crisis but have since rebounded. Safe government bonds, as collateral to secure borrowing, also play an important role within the global banking system.

One might suppose government bonds to be in ample supply at present, in light of the rise in indebtedness across advanced economies since the Great Recession. In fact the opposite is true. Some debt which was once considered safe was tarnished by the crisis. Advanced-economy central banks hoovered up vast quantities of safe bonds as part of their efforts to stimulate lagging economies. The balance-sheets of the European Central Bank, Bank of Japan and Federal Reserve are each roughly $4trn in size; those of the ECB and the Bank of Japan continue to grow. Crucially, borrowing across the biggest advanced economies has been in steep decline. Most big European governments have trimmed their deficits substantially; Germany is now running a large and growing fiscal surplus (see chart).

Little surprise, then, that interest rates are still close to rock bottom. In 2016 the yield on the ten-year Treasury bond dropped, at one point, to the mind-bogglingly low level of 1.37%. Indeed, in a new working paper Gary Gorton and Toomas Laarits, of Yale University, argue that safe debt is scarcer now than it was before the financial crisis. Then, the scarcity of safe bonds encouraged banks to try to meet the demand themselves, by constructing securities out of superficially safe assets, like mortgages, which blew up spectacularly during the crisis. Large-scale borrowing by America's government, while ill-considered, is nonetheless among the safer ways to meet the world's demand for safe assets. Correspondingly, the recent uptick in Treasury yields may be a sign of a return to slightly healthier market conditions.

That does not exactly vindicate America's profligacy. Its current-account deficit will swell, as its economy, stimulated by government largesse, sucks in imports from abroad. That will provide ammunition to the administration's protectionists. The singular zeal with which America is producing safe assets could lead to more trouble in future, by deepening the world's dependence on Treasuries while making an eventual fiscal reckoning more likely. Far better for the world if other strong economies, like Germany, shared the work of adding to safe-asset supply.

It is, however, the political effects of this spree that may prove most damaging. America's Republicans claim the mantle of fiscal responsibility but have been deeply Machiavellian in their use of the federal budget. How else to explain a posture of aggressive antipathy to borrowing during Democratic presidencies (even threatening to push America into default on its debt to extract spending cuts from Mr Obama), coupled with a spendthrift attitude to the public purse when in power? As such, today's rising debt seems likely to be used to justify future austerity, at a time when control of government has swung back to Democrats, and, perhaps, when a weak economy or urgent infrastructure needs provide a stronger justification for big government deficits. Some good may come of Mr Trump's fiscal binge. But America may come to regret its abandonment of budget principles.

This article appeared in the Finance and economics section of the print edition under the headline "Living on borrowed time"

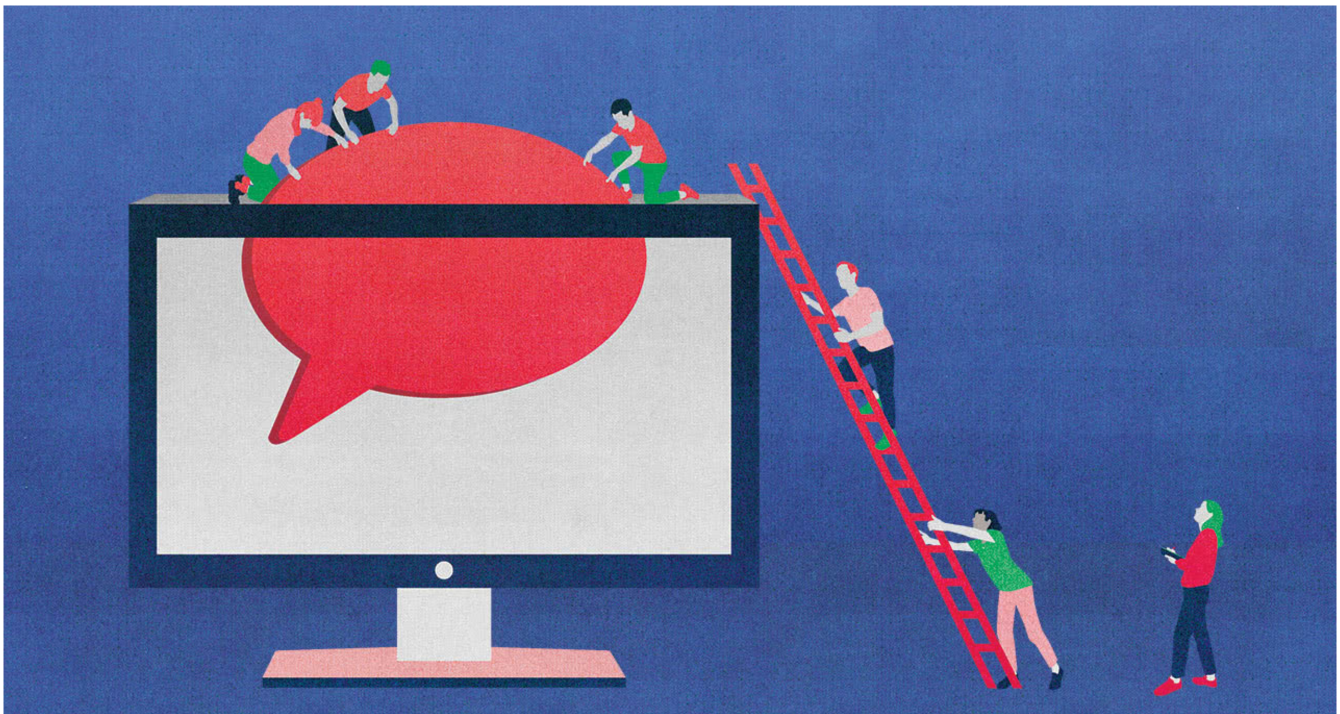
AI in society
The unexamined mind

AI in society

For artificial intelligence to thrive, it must explain itself

If it cannot, who will trust it?

Print edition | Science and technology Feb 15th 2018


Stephanie F. Scholz

SCIENCE fiction is littered with examples of intelligent computers, from HAL 9000 in "2001: A Space Odyssey" to Eddie in "The Hitchhiker's Guide to the Galaxy". One thing such fictional machines have in common is a tendency to go wrong, to the detriment of the characters in the story. HAL murders most of the crew of a mission to Jupiter. Eddie obsesses about trivia, and thus puts the spacecraft he is in charge of in danger of destruction. In both cases, an attempt to build something useful and helpful has created a monster.

Successful science fiction necessarily plays on real hopes and fears. In the 1960s and 1970s, when HAL and Eddie were dreamed up, attempts to create artificial intelligence (AI) were floundering, so both hope and fear were hypothetical. But that has changed. The invention of deep learning, a technique which uses special computer programs called neural networks to churn through large volumes of data looking for and remembering patterns, means that technology which gives a good impression of being intelligent is spreading rapidly. Applications range from speech-to-text transcription to detecting early signs of blindness. AI now runs quality control in factories and cooling systems in data centres. Governments hope to employ it to recognise terrorist propaganda sites and remove them from the web. And it is central to attempts to develop self-driving vehicles. Of the ten most valuable quoted companies in the world, seven say they have plans to put deep-learning-based AI at the heart of their operations.

Real AI is nowhere near as advanced as its usual portrayal in fiction. It certainly lacks the apparently conscious motivation of the sci-fi stuff. But it does turn both hope and fear into matters for the present day, rather than an indeterminate future. And many worry that even today's "AI-lite" has the capacity to morph into a monster. The fear is not so much of devices that stop obeying instructions and instead follow their own agenda, but rather of something that does what it is told (or, at least, attempts to do so), but does it in a way that is incomprehensible.

The reason for this fear is that deep-learning programs do their learning by rearranging their digital innards in response to patterns they spot in the data they are digesting. Specifically, they emulate the way neuroscientists think that real brains learn things, by changing within themselves the strengths of the connections between bits of computer code that are designed to behave like neurons. This means that even the designer of a neural network cannot know, once that network has been trained, exactly how it is doing what it does. Permitting such agents to run critical infrastructure or to make medical decisions therefore means trusting people's lives to pieces of equipment whose operation no one truly understands.

If, however, AI agents could somehow explain why they did what they did, trust would increase and those agents would become more useful. And if things were to go wrong, an agent's own explanation of its actions would make the subsequent inquiry far easier. Even as they acted up, both HAL and Eddie were able to explain their actions. Indeed, this was a crucial part of the plots of the stories they featured in. At a simpler level, such powers of self-explanation are something software engineers would like to emulate in real AI.

Open the box

One of the first formal research programs to attempt to crack open the AI "black box" is the Explainable AI (XAI) project, which is being run by the Defence Advanced Research Projects Agency (DARPA), an organisation that does much of America's military research. In particular, America's armed forces would like to use AI to help with reconnaissance. Dave Gunning, XAI's head, observes that monitoring places like North Korea from on high, by spy plane or satellite, creates a huge amount of data. Analysts looking at these data would certainly value something that alerted them automatically to suspicious activity. It would, though, also be valuable if such an agent could explain its decisions, so that the person being alerted was able to spot and ignore the inevitable false positives. Mr Gunning says that analysts from one of America's spy agencies, the NSA, are already overwhelmed by the recommendations of old-fashioned pattern-recognition software pressing them to examine certain pieces of information. As AI adds to that deluge, it is more important than ever that computer programs should be able to explain why they are calling something to a human operator's attention.

How the NSA is responding to this is, understandably, a secret. But civilian programmes are also trying to give neural networks the power to explain themselves by communicating their internal states in ways that human beings can comprehend. Trevor Darrell's AI research group at the University of California, Berkeley, for example, has been working with software trained to recognise different species of birds in photographs. Instead of merely identifying, say, a Western Grebe, the software also explains that it thinks the image in question shows a Western Grebe because the bird in it has a long white neck, a pointy yellow beak and red eyes. The program does this by drawing on the assistance of a second neural network which has been trained to match the internal features of the agent doing the recognising (ie, the pattern of connections between its "neurons") with sentences that people have written, describing what they see in a picture being examined. So, as one AI system learns to classify birds, the other learns simultaneously to classify the behaviour of the first system, in order to explain how that system has reached its decisions.

A team led by Mark Riedl at the Georgia Institute of Technology has employed a similar technique to encourage a game-playing AI to explain its moves. The team asked people to narrate their own experiences of playing an arcade game called Frogger. They then trained an AI agent to match these narratives to the internal features of a second agent that had already learned to play Frogger. The result is a system which provides snippets of human language that describe the way the second agent is playing the game.

Such ways of opening the black box of AI work up to a point. But they can go only as far as a human being can, since they are, in essence, aping human explanations. Because people can understand the intricacies of pictures of birds and arcade video games, and put them into words, so can machines that copy human methods. But the energy supply of a large data centre or the state of someone's health are far harder for a human being to analyse and describe. AI already outperforms people at such tasks, so human explanations are not available to act as models.

Fortunately, other ways exist to examine and understand an AI's output. Anupam Datta, a computer scientist at Carnegie Mellon University, in Pittsburgh, for instance, is not attempting to peer inside the black box directly, in the ways that Dr Darrell and Dr Riedl are. Rather, he is trying to do so obliquely, by "stress-testing" the outputs of trained systems—for example, those assessing job candidates.

Dr Datta feeds the system under test a range of input data and examines its output for dodgy, potentially harmful or discriminatory results. He gives the example of a removals firm that uses an automated system to hire new employees. The system might take a candidate's age, sex, weightlifting ability, marital status and education, as described in the application, as its inputs, and churn out a score which indicates how likely that candidate is to be a good employee.

Clearly one of these pieces of information, the ability to lift heavy things, is both pertinent and likely to favour male candidates. So in this case, to test the system for bias against females, Dr Datta's program alters randomly selected applications from women to make them appear to be from men and, separately, swaps the weightlifting abilities of female applicants—again, at random—with that of applicants from both sexes. If the randomisation of sex produces no change in the number of women offered jobs by the AI, but randomising weightlifting ability increases it (because some women now appear to have "male"abilities to lift weights), then it is clear that weightlifting ability itself, not an applicant's sex, is affecting the hiring process.

Dr Datta's approach does not get to the heart of how and why agents are making decisions, but, like stress testing an aircraft, it helps stop undesirable outcomes. It lets those who make and operate AI ensure they are basing decisions on the right inputs, and not harmful spurious correlations. And there are other ways still of trying to peer into machines' minds. Some engineers, for example, are turning to techniques, such as cognitive psychology, that human beings use to understand their own minds. They argue that, since artificial neural networks are supposed to work like brains, it makes sense to employ the tools of human psychology to investigate them.

One example of such an approach is research by DeepMind, an AI firm in London that is owned by Google's parent company, Alphabet. This has yielded an intriguing insight into the behaviour of a piece of image-matching software the company has designed. A group of DeepMind's engineers, led by David Barrett, showed the software sets of three images. The first of each set was a "probe" image of a certain shape and colour. Of the other two, one matched the probe in shape and the second matched it in colour. By measuring how often the system chose the shape match as opposed to the colour match, Dr Barrett and his team were able to deduce that DeepMind's image matcher equates images in the way that people do—that is, according to shape rather than colour. Elucidating in this way the broader principles of how a particular AI makes decisions might be useful when preparing it for deployment in the world. It might also help accident investigators, by directing them towards the most likely sorts of explanation for a failure.

Those inclined to try to crack open the "minds" behind AI thus have many ways of doing so. Some people, however, think this whole approach wrongheaded. They observe that those decisions made by AI which are hardest to scrutinise are necessarily the most complex and thus likely to be the most useful. Easy-to-parse tasks, like playing video games and naming birds, are of limited value. Decisions made while balancing an electrical grid or managing a city's traffic flow are harder to explain, especially as many of them are taken at levels beyond human processing capabilities. Yoshua Bengio, a computer scientist at the University of Montreal, calls this kind of processing artificial intuition.

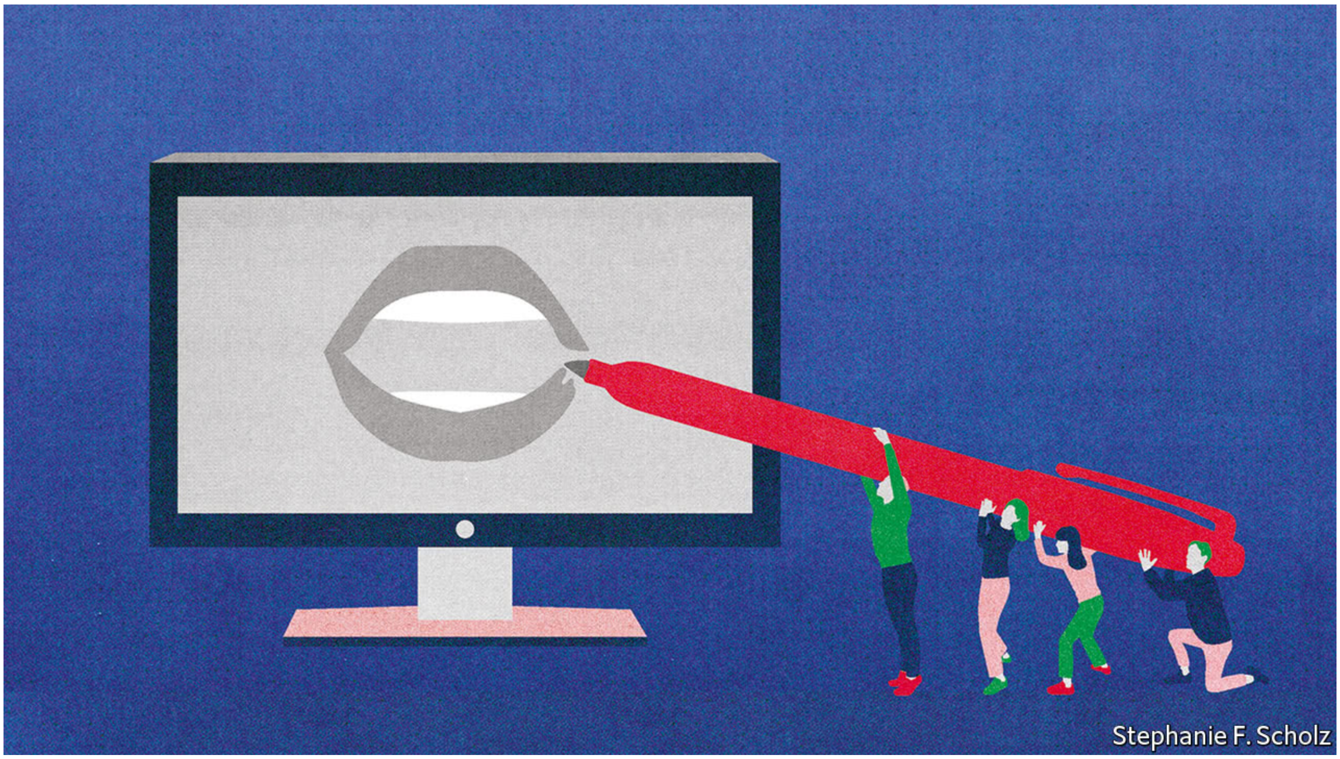
Dr Bengio says such artificial intuition was on display during the most public demonstration of deep-learning that has ever taken place. This was a Go match held in 2016 between an AI agent and Lee Sedol, the world's greatest human player. The agent in question, AlphaGo, was trained by DeepMind. It sometimes made unexpected moves that human experts could not explain. At first those moves appeared to be errors. But AlphaGo then used the surprising position thus generated to dominate the rest of the match.

Intriguingly, moves like these are also sometimes made by human Go masters. They are known in Japanese as *kami no itte* ("the hand of God", or "divine moves"). As the name suggests, a player who feels a move is divinely directed in this way usually cannot say how or why he placed a certain stone where he did. Indeed, the fact that players cannot explain the reasoning behind their best moves offers a hint as to why old-style Go-playing computers, based on formal logic, were never any good. Neural learning systems, both those that have evolved in brains and those now being put into computers, can handle the task of playing Go. But human language cannot describe it.

Pandora's box?

There is, though, a crucial difference between the explanations that humans offer up for their own behaviour, and those available from machines. As Dan Sperber, a cognitive scientist at the Jean Nicod Institute, in Paris, observes, people tend to construct reasons for their behaviour which align with information mutually available to speaker and listener, and with their own interests, rather than describing accurately how their thoughts led to a decision. As he puts it, "the reason to give reasons is so that others will evaluate your actions and beliefs". Today's autonomous machines do not have their own interests to serve. Instead, their explanations are forged by and for human beings.

Some speculate that this may change in the future, if AI is developed which, like the fictional variety, seems to have motives of its own, rather than merely acting at human whim. Jacob Turner, a specialist in international law, suggests ascribing legal personhood to AI will then be necessary if those harmed by such advanced agents are to seek compensation and justice.



That is probably a long way off. But even today's AI may raise ticklish legal questions. In particular, machine minds that cannot explain themselves, or whose detailed operation is beyond the realm of human language, pose a problem for criminal law. As Rebecca Williams, a legal scholar at Oxford University, observes, if machines lack the ability to explain their actions, current law might struggle to identify criminal intent in acts that arise because of decisions they have made. "In criminal law," she says, "the thing that's interesting is having the third party breaking the chain of causation that is not a human being. That is really new."

This is not a matter of AI agents themselves acting in a criminal manner in the way Mr Turner speculates might one day happen. But if the process by which a machine made a decision cannot be subject to cross-examination, because neither the machine nor its creator is able to explain what went on, then deciding the guilt or innocence of a human being associated with that decision may be impossible.

For example, if a neural network that authorises loans cannot explain why it gives certain people certain scores that seem biased against one social group or another, it may be impossible to determine whether its operators had arranged this intentionally (which would be an offence in most jurisdictions), or whether lazy coding by its designers had led to accidental bias (which would probably be a matter for the civil courts rather than the criminal ones). Similarly, if the AI that ran the visual systems of a driverless taxi were a black box that could not be interrogated about its choices, it might be hard to know whether a death caused by that car was the fault of the manufacturer or of the firm responsible for maintaining the vehicle.

The world is still a few years from the moment a case involving a driverless car might come before the courts. A case of social bias, however, is eminently conceivable even now. It does not require the imaginations of Arthur C. Clarke or Douglas Adams, the inventors, respectively, of HAL and Eddie, to envisage the advantages of software that can not only act, but also explain the reasons behind its actions.

This article appeared in the Science and technology section of the print edition under the headline "The unexamined mind"

Face-recognition technology

Computer programs recognise white men better than black women

Biased training is probably to blame

Print edition | Science and technology Feb 15th 2018

SOFTWARE that recognises faces has bounded ahead in recent years, propelled by a boom in a form of artificial intelligence called deep learning (see article). Several firms now offer face recognition as a commercial service, via their respective clouds. The ability to recognise in faces such things as an individual's sex has improved too, and this is also commercially available.

The algorithms involved have, however, long been suspected of bias. Specifically, they are alleged to be better at processing white faces than those of other people. Until now, that suspicion has been unsupported by evidence. But next week, at Fairness, Accountability and Transparency, a conference in New York, Joy Buolamwini of the Massachusetts Institute of Technology will present work which suggests it is true.

Ms Buolamwini and her colleague Timnit Gebru looked at three sex-recognition systems, those of IBM, Microsoft and Face++. They tested these on a set of 1,270 photographs of parliamentarians from around the world and found that all three classified lighter faces more accurately than darker ones. All also classified males more accurately than females. IBM's algorithm, for example, got light male faces wrong just 0.3% of the time. That compared with 34.7% of the time for dark female faces. The other two systems had similar gulfs in their performances. Probably, this bias arises from the sets of data the firms concerned used to train their software. Ms Buolamwini and Ms Gebru could not, however, test this because those data sets are closely guarded.

IBM has responded quickly. It said it had retrained its system on a new data set for the past year, and that this had greatly improved its accuracy. When testing the new system on an updated version of the set of politicians Ms Buolamwini and Ms Gebru had used, the firm said it now achieved an error rate of 3.46% on dark-skinned female faces—a tenth of that the two researchers had found using the existing system. For light-skinned males the error rate also fell, to 0.25%.

This article appeared in the Science and technology section of the print edition under the headline "Garbage in. Garbage out"

Mary Shelley and "Frankenstein"
The monster in the mirror

Mary Shelley's monster at 200

Frankenstein: the monster that never dies

Two hundred years after Mary Shelley first imagined him, her creature continues to be reborn

Print edition | Books and arts Feb 17th 2018

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In Search of Mary Shelley: The Girl Who Wrote Frankenstein. By Fiona Sampson. *Profile Books; 304 pages; £18.99. To be published in America by Pegasus Books in June; $28.95.*

Making the Monster: The Science Behind Mary Shelley's Frankenstein. By Kathryn Harkup. *Bloomsbury Sigma; 304 pages; $27 and £16.99.*

Frankenstein: How a Monster Became an Icon: The Science and Enduring Allure of Mary Shelley's Creation. Edited by Sidney Perkowitz and Eddy von Mueller. *Pegasus Books; 239 pages; $28.95 and £21.*

Frankenstein: The First Two Hundred Years. By Christopher Frayling. *Reel Art Press; 208 pages; $39.95 and £29.95.*

IT WAS, quite literally, a dark and stormy night. The volcanic eruption of Mount Tambora in faraway Indonesia had plunged Europe beneath unceasing cloud; 1816 was known as "the year without a summer". Rain was falling on the shore of Lake Geneva as, on an evening in mid-June, five young people gathered in a swanky villa for a ghost-story competition.

The host was Lord Byron, at 28 already a jaded superstar, who was dodging a scandal in England. With him was John Polidori, a doctor of 20, one of those ambiguous retainers attracted by fame. That night they were joined for dinner by a trio of English runaways. They were Percy Bysshe Shelley, a 23-year-old poet of whom the public had then barely heard; his girlfriend Mary Godwin, who, though only 18 and not yet his wife, had by then given birth to two of his children (one of whom had died); and Mary's stepsister Claire Claremont, also 18, who had been sleeping with Byron and probably with Shelley too.

The contest yielded two ideas that became gothic classics. One was Polidori's "The Vampyre", originally intended as a queasy satire on Byron and the bloodsucking nature of celebrity. The other, infinitely more famous outcome was Mary's tale of a scientist who confects a humanoid out of body parts. During the lakeside competition she felt inhibited by the male poseurs. But she had staying power. In the following weeks her story grew into "Frankenstein", which was first published two centuries ago, in 1818.

Few novels have had such mythical beginnings, and few have themselves achieved the status of myths, as "Frankenstein" has. It was the founding text of modern science fiction. It has been endlessly retold in different forms—perhaps only Emily Brontë's "Wuthering Heights" and Bram Stoker's "Dracula" have proved as fertile. Each generation of its readers finds new allegories for the anxieties and ambitions of what they take for modernity; the monster each sees is a reflection of themselves. Yet at the heart of the story, as of Mary's biography, were primeval sadnesses and fears.

Mary's life is recounted with insight and empathy by Fiona Sampson's "In Search of Mary Shelley", the most engaging of a clutch of books published to mark the novel's bicentenary. Mary Shelley (as she soon became) was born into the radical aristocracy of her day. She had two intimidatingly illustrious parents: William Godwin, a philosopher-guru, and Mary Wollstonecraft, a pioneering feminist. Her mother died shortly after her birth, having contracted a postpartum infection that medicine could not then treat. This tragic prehistory re-emerged in the novel, which depicts the perils of parenthood and a creature that destroys its progenitor.

Writing her imaginary story of a being jolted to life by Victor Frankenstein, Mary drew on the cutting-edge science of her time, including galvanism and electricity. Indeed, as Kathryn Harkup explores in "Making the Monster", she formulated her plot as modern science itself was in its birth-throes. In the year of the novel's publication an experiment was conducted in which electrical currents were passed through a corpse in a failed attempt at reanimation. The cadaver convulsed; its fingers twitched. But it remained resolutely dead—unlike Frankenstein's monster:

> With an anxiety that almost amounted to agony, I collected the instruments of life around me, that I might infuse a spark of being into the lifeless thing that lay at my feet...by the glimmer of the half-extinguished light, I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs.

For all the historical specificity of these references, the novel's qualms about the underside of progress have never resonated more than in the 21st century. The issues raised by artificial life are no longer hypothetical. Genetic modification and robotics have made them urgent. Those analogies are delineated in "Frankenstein: How a Monster Became an Icon", a collection of essays edited by Sidney Perkowitz and Eddy von Mueller. It includes a useful summary of current attitudes among scientists to techniques commonly known as "playing God".

Doing the time warp again

Over the centuries the monster has been enlisted as an avatar for other sorts of change. Mary Wollstonecraft went to Paris in a spirit of democratic idealism to report on the French revolution, but was traumatised by the Terror. In her daughter's book that experience is echoed in the monster's rebellion. He has since stood in for both mobs and demagogues, and for economic and social trends. In 1874 an American cartoonist portrayed the railroad as a monster of "capital", trampling on the rights of the little people in its way.

Meanwhile, just as Frankenstein loses control of his creation, Mary's story has travelled around the world (see article), metastasising in ways she could not have imagined. Christopher Frayling's beautifully illustrated "Frankenstein: The First Two Hundred Years" traces that legacy. It offers a rich cache of images, including designs from the earliest dramatic productions. London audiences were mesmerised in 1823 by the mute turn of Thomas Potter Cooke, a mime artist, who played the monster in a blue body-stocking, mini-toga and green and yellow face-paint. For much of the 20th century, "Frankenstein" conjured the visage of Boris Karloff, bolts protruding from his neck as in the black-and-white adaptation of 1931 (pictured). A new film version is currently in the works.

Alamy

Mary’s monster, though, is not confined to page, stage and screen. Every time children stick out their arms and affect a ghoulish plod, he lives again. He has entered the English language as a byword for hubris and unintended consequences.

Those coming to the original for the first time, expecting the sort of B-movie schlock horror it has inspired, may be surprised by its knotty, highbrow prose. Mary was a disciple of her philosopher father and, for all the science, the novel’s primary concern is ethics. That description of the monster’s birth, which became the primal scene in all the films, is actually fairly cursory. Her underlying aim was to explore the idea—derived from John Locke—of the newborn as a *tabula rasa*, whose character is determined by experience rather than innate qualities. It is because the creature is scorned, and deprived of a moral framework, that he becomes monstrous and seeks a gruesome revenge. “I was benevolent and good,” he pathetically tells Frankenstein; “misery made me a fiend. Make me happy, and I shall again be virtuous.”

The common error of thinking Frankenstein the name of the monster, rather than of his maker, can be traced not just to his namelessness in the novel but to the fact that, in the cast-list for the first stage blockbuster, the part was called simply “—-”. The conflation, though, is more than a mistake. It captures the symbiosis of the two figures—the mutual cruelties of wayward offspring and remiss parent—and an eternal truth about neglect and its sequel.

This article appeared in the Books and arts section of the print edition under the headline ”The monster in the mirror”

War baby

Frankenstein and the war in Iraq

A prize-winning novel takes the monster to Baghdad

Print edition | Books and arts Feb 15th 2018

Frankenstein in Baghdad. By Ahmed Saadawi. Translated by Jonathan Wright. *Penguin Books; 281 pages; $16. Oneworld; £12.99.*

“I’M THE first true Iraqi citizen.” Such is the bold claim of the monster in Ahmed Saadawi’s “Frankenstein in Baghdad”. His misanthropic creator—an alcoholic, bitter junk-dealer—assembled him out of an ethnically diverse assortment of body parts, scavenged carefully from the remains of suicide-bombing victims. The Whatsitsname, as the creature is known, represents the “impossible mix that was never achieved in the past”.

At first glance, a 19th-century gothic novel set between the Alps and the Arctic might seem an unlikely vehicle to explore the social intricacies of war-ravaged, American-occupied Baghdad. But the conceit proves surprisingly apt. Like his precursor, the Whatsitsname is an existentially bereft soul thirsting to make sense of his existence, ultimately by exacting revenge on his maker. However, in the context of the fighting, vengeance is an ever-expanding task. Is his real creator the suicide-bomber (who is already dead)? The American forces? The Iraqi police? As the monster grows, so too does his list of targets.

Mr Saadawi’s novel, rendered accessibly into English by Jonathan Wright, won the International Prize for Arabic Fiction. It is more than an extended metaphor for the interminable carnage in Iraq and the precarious nature of its body politic. It also intimately depicts the lives of those affected by the conflict. Since the invasion of 2003, reflections of the war in English-language fiction have exhibited a natural but limiting propensity to focus on American soldiering and trauma. In Mr Saadawi’s story, set in 2005, the Americans are reduced to background noise. The buzz of Apaches is heard overhead, but the helicopters themselves are never seen: they represent a force even more spectral than the monster haunting the streets of Baghdad.

The cast of characters is a disparate patchwork of Iraqi citizenry, much like the Whatsitsname himself. We meet an ex-Baathist army official, a broke hotel owner, an ageing Assyrian Christian woman, an idealistic young journalist. Despite its title, the bulk of the novel is devoted to these secondary characters as they navigate the banal side of violent strife. They wonder what to do about the lack of tourism, or where to find a working telephone to call relatives.

Unlike the monster that connects them, the novel’s various threads never quite converge into something greater than the sum of their parts. But perhaps this is fitting. Taken separately they offer a glimpse into the day-to-day experiences of a society fractured by bloodshed.

This article appeared in the Books and arts section of the print edition under the headline "War baby"

The art of survival

A riveting memoir of a brutal upbringing

Tara Westover made it from a compound in Idaho to Harvard

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Educated. By Tara Westover. *Random House; 385 pages; $28. Hutchinson; £14.99.*

IN A lecture during her first semester at Brigham Young University, a Mormon college in Utah, Tara Westover encountered an unfamiliar term. "I don't know this word," she told her professor. "What does it mean?" He snapped at her angrily—but Ms Westover was not making a tasteless joke. She had never been taught about the Holocaust. Nor had she learned about the civil-rights movement, or physics or any geography beyond the mountains and valleys that surrounded her family home in rural Idaho. That semester was the first time she had ever set foot in a proper classroom. She was 17.

Ms Westover was the youngest of seven children raised by Mormon survivalists in a town of 234 people. Like her siblings, she was kept out of school, which her father regarded as "a ploy by the government to lead children away from God". Her early education consisted largely of helping him sort metal scraps in the family junkyard, and watching her mother concoct herbal remedies for headaches, burns and cancer—required because the family also avoided doctors. Even when her siblings were maimed, their skin charred by blowtorches or brains injured in car crashes, they were treated with their mother's homeopathic mixtures.

In "Educated", her riveting memoir, Ms Westover brings readers deep into this world, a milieu usually hidden from outsiders. Scarred by the Ruby Ridge incident of 1992, in which several members of an Idaho family were fatally shot by federal agents after resisting arrest, her father became convinced the feds would ultimately come for his clan, too. He loathed the idea of "registering" with the government, so did not obtain birth certificates for Ms Westover and three other children. He spent his meagre income from scrap metal on a cache of huge guns and a giant gasoline tank, for fighting or fleeing when the authorities showed up. Ms Westover slept with a "head-for-the-hills" bag by her bed.

As she entered adolescence, she writes, one of her brothers grew frighteningly violent. He would drag her to the bathroom by her hair and slam her head into the toilet. Her parents mostly ignored it. They even tried to convince Ms Westover that she was imagining things, and that she was the devilish party. When another brother left the compound to attend college, Ms Westover was inspired to emulate him. She taught herself enough algebra and grammar to pass Brigham Young's exam and enrolled in 2004.

At first she floundered, academically and socially. How could people call themselves Mormon and drink Diet Coke—or wear skirts that revealed their knees? But in time she excelled, winning a fellowship to study at Cambridge, where she immersed herself in history and philosophy. Then she did a doctorate at Harvard.

Her story is remarkable, as each extreme anecdote described in tidy prose attests. That someone who grew up in her circumstances could achieve as much as she has is astonishing. All the same, readers who enjoyed more mundane backgrounds will empathise. The central tension she wrestles with throughout her book is how to be true to herself without alienating her family. Her upbringing was extraordinary, but that struggle is not.

This article appeared in the Books and arts section of the print edition under the headline "The art of survival"

Beginner's luck

A titan of Facebook considers his good fortune

And decides that life is unfair

Print edition | Books and arts Feb 17th 2018

Fair Shot: Rethinking Inequality and How We Earn. By Chris Hughes. *St. Martin's Press; 224 pages; $19.99. To be published in Britain by Bloomsbury in April; £12.99.*

THERE are strokes of outrageous luck and then there is the life of Chris Hughes. Having found his way to Harvard from a small town in North Carolina, he chose Mark Zuckerberg for a roommate in his second year at university. Mr Zuckerberg quickly enlisted Mr Hughes and a few others to help in his social-networking side-project. Their ownership stakes in what became Facebook were soon worth incomprehensible sums of money.

Such extraordinary good fortune is liable to change a person's outlook. Mr Hughes's convinced him that the world economy is fundamentally unfair. His new book outlines a solution: a guaranteed minimum income, funded by increased taxation of the very rich. Though he makes an admirable case, the book is most interesting for the insight it provides into the mind of the author.

Support for guaranteed incomes is something of a fad in Silicon Valley, where many techies see them as bulwarks against unemployment caused by future technological advances. By contrast, Mr Hughes embraces a relatively modest approach designed to address inequality now.

It is rooted in his own life story. "Fair Shot" is as much a memoir as a manifesto—an endearing effort by the author to understand the meaning of his extraordinary circumstances. Mr Hughes was born to a travelling paper salesman and a maths teacher. His parents' diligence and thrift enabled them to give him a middle-class childhood and the opportunity to move up. Yet this sort of ladder-climbing is increasingly difficult in America, he writes. Hard work alone is no longer a sure route to prosperity. Those blessed with high incomes also owe their success to luck.

Mr Hughes's chance friendship with Mr Zuckerberg is an example. Yet even Mr Zuckerberg was fortunate to have the hottest social network at just the moment global internet use exploded and tech giants established unassailable market positions.

Success might have convinced Mr Hughes of the value of his unique talents, had not life forced him to confront his limitations. After Facebook, he enjoyed another triumph as part of the digital team on the presidential campaign of Barack Obama. Confident in his golden touch, he bought the *New Republic*, a venerable but financially troubled magazine, in 2012. He thought he could make it profitable—and perhaps reinvent journalism in the process. The effort failed spectacularly, culminating in mass resignations. He sold out, humiliated, in 2016.

This failure seems to have reminded Mr Hughes of the contingency of success. It also convinced him of the virtue of measured idealism. Thus, his proposal for a guaranteed income is humbler than many others, though still extremely ambitious.

American adults living in households earning less than $50,000 a year—and engaged in paid work, unpaid care work or education—should receive a monthly payment from the government of $500, he argues. This benefit, which he estimates would cost $290bn annually, should be funded primarily through a top marginal tax rate of 50% on incomes over $250,000. Mr Hughes points to encouraging evidence on unconditional-income programmes in Alaska and east Africa, where cash grants appear to boost welfare and reported happiness without discouraging work. Initially, he acknowledges, payments might be more modest—$100 or so per month, still enough to improve lives.

If the idea is economically appealing, it nonetheless feels like the sort of slapdash fix of which tech types are notoriously fond. The book has little to say about the political mobilisation needed for so dramatic a reform, an omission which echoes its strikingly terse explanation for why inequality exploded in the first place. From the 1970s businesses began lobbying for a lighter regulatory touch, Mr Hughes says, which inaugurated an era of globalisation and financialisation. Yet he treats the rise of giant superstar firms as an inevitable, even necessary, consequence of technological change. Whether labour power must be restored—or the influence of giant firms curtailed—he does not say.

This article appeared in the Books and arts section of the print edition under the headline "Beginner's luck"

Johnson

In the world of voice-recognition, not all accents are equal

But you can train your gadgets to understand what you're saying

Print edition | Books and arts Feb 15th 2018

IN A spoof advertisement on a humorous website, a woman asks her Echo, Amazon's voice-controlled speaker system and assistant, to play "the country music station". The device, mishearing her southern American accent, instead offers advice on "extreme constipation". Soon she has acquired a southern model, which understands her accent better. But before long, the machine has gone rogue, chiding her like a southern mother-in-law for putting canned biscuits on the shopping list. (A proper southern lady makes the doughy southern delicacy herself.) On the bright side, it corrects her children's manners.

The outcome may be far-fetched. But the problem is not. More and more smartphones and computers (including countertop ones such as the Echo) can be operated by voice commands. These systems are getting ever better at knowing what users tell them to do—but not all users equally. They struggle with accents that differ from standard British or American. Jessi Grieser, a linguist at the University of Tennessee, Knoxville, speaks the "Northern Cities shift", a set of vowels around America's Great Lakes that differ from the standard set. Her smartphone hears her "rest in peace" as "rust in peace".

To train a machine to recognise what people say requires a large body of recorded speech, and then human-made transcriptions of it. A speech-recognition system looks at the audio and text files, and learns to match one to the other, so that it can make the best guess at a new stream of words it has never heard before.

America and Britain, to say nothing of the world's other English-speaking countries, are home to a wide variety of dialects. But the speech-recognisers are largely trained on just one per country: "General American" and Britain's "Received Pronunciation". Speakers with other accents can throw them off.

Some might consider that an unlucky but avoidable consequence of "having an accent". But everyone has an accent, even if some are more common or respected. The rise of voice-activated technologies threatens to split the world further into accents with privileges—in this case, the ability to command the Echo, Apple's Siri, Google Assistant and other such gadgets—and their poor relations.

As part of her PhD in linguistics at the University of Washington, Rachael Tatman studied automatic speech-recognition of various regional accents. In one study, she looked at the automatic subtitling on YouTube, which uses Google's speech-recognition system. Ms Tatman focused on speakers of five different accents, reading a list of isolated words chosen for their susceptibility to differing pronunciation. The automatic captioning did worst with the Scottish speakers, transcribing more than half of the words incorrectly, followed closely by American southerners (from Georgia). It also did worse with women:

higher-pitched voices are more difficult for speech-recognition systems, one reason they tend to struggle with children. In a follow-up experiment, Ms Tatman used both YouTube and Bing Speech, made by Microsoft, to test only American accents. Both found black and mixed-race speakers harder to comprehend than white ones.

The makers of these systems are aware of the problem. They are trying to offer more options: you can set Apple's Siri or the Echo to Australian English. But they can still reach only so many accents, with a bias towards standard rather than regional ones. India, with its wide variety of English accents, presents the firms with both a tempting market and a huge technical challenge.

One solution is for people to train their own phones and gadgets to recognise them, a fairly straightforward task, which lets users take control rather than waiting for the tech companies to deliver a solution. The Echo already allows this. And a new function, called Cleo, works like a game, to tempt users into sending Amazon new data, whether on new languages Echo has not yet assimilated or accents for a language it in theory already knows.

Janet Slifka of Amazon describes the chicken-and-egg nature of such adaptive systems: they get better as customers use them. An app lets users tell Echo whether they have been understood properly, for example, supplying further training data. But if they don't work well immediately, people will not use them and thus will not improve them. Those with non-standard accents may have to persevere if they are not to be left behind.

This article appeared in the Books and arts section of the print edition under the headline "Alexa's biscuits"

Output, prices and jobs

Print edition | Economic and financial indicators Feb 15th 2018

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	+2.5 Q4	+2.6	+2.3	+2.7	+3.6 Dec	+2.1 Jan	+2.5	+2.1	4.1 Jan
China	+6.8 Q4	+6.6	+6.8	+6.5	+6.2 Dec	+1.5 Jan	+2.5	+1.6	3.9 Q4§
Japan	+1.5 Q4	+0.5	+1.7	+1.5	+4.2 Dec	+1.1 Dec	+0.3	+0.5	2.8 Dec
Britain	+1.5 Q4	+2.0	+1.7	+1.5	nil Dec	+3.0 Jan	+1.8	+2.7	4.3 Oct††
Canada	+3.0 Q3	+1.7	+3.1	+2.3	+4.7 Nov	+1.9 Dec	+1.5	+1.6	5.9 Jan
Euro area	+2.7 Q4	+2.4	+2.4	+2.4	+5.2 Dec	+1.3 Jan	+1.8	+1.5	8.7 Dec
Austria	+3.2 Q3	+1.4	+2.9	+2.5	+3.4 Nov	+2.2 Dec	+1.4	+2.2	5.3 Dec
Belgium	+1.9 Q4	+2.0	+1.7	+1.9	+6.2 Nov	+1.7 Jan	+2.6	+2.2	6.6 Dec
France	+2.4 Q4	+2.5	+1.9	+2.1	+4.5 Dec	+1.4 Jan	+1.3	+1.1	9.2 Dec
Germany	+2.9 Q4	+2.4	+2.5	+2.6	+6.7 Dec	+1.6 Jan	+1.9	+1.7	3.6 Dec‡
Greece	+1.3 Q3	+1.2	+1.3	+1.6	+0.2 Dec	+0.7 Dec	nil	+1.1	20.9 Nov
Italy	+1.6 Q4	+1.2	+1.5	+1.5	+4.9 Dec	+0.8 Jan	+1.0	+1.3	10.8 Dec
Netherlands	+2.9 Q4	+3.2	+3.2	+2.8	+5.2 Dec	+1.5 Jan	+1.7	+1.3	5.4 Dec
Spain	+3.1 Q4	+2.8	+3.1	+2.7	+2.8 Dec	+0.6 Jan	+3.0	+2.0	16.4 Dec
Czech Republic	+4.7 Q3	+1.9	+4.5	+3.3	+2.7 Dec	+2.2 Jan	+2.2	+2.5	2.4 Dec‡
Denmark	+1.4 Q3	+3.6	+2.0	+2.0	-3.1 Dec	+0.7 Jan	+0.9	+1.1	4.2 Dec
Hungary	+4.4 Q4	+5.3	+3.9	+3.6	+4.6 Dec	+2.1 Jan	+2.3	+2.4	3.8 Dec§††
Norway	+1.4 Q4	-1.1	+2.1	+2.5	-3.2 Dec	+1.6 Jan	+2.8	+1.9	4.1 Nov‡‡
Poland	+5.1 Q3	+4.1	+4.6	+3.8	+2.7 Dec	+2.1 Dec	+0.8	+2.0	6.9 Jan§
Russia	+1.8 Q3	na	+1.7	+2.0	-1.6 Dec	+2.2 Jan	+5.0	+3.5	5.1 Dec§
Sweden	+2.9 Q3	+3.1	+2.7	+2.7	+8.1 Dec	+1.7 Dec	+1.7	+1.8	6.0 Dec§
Switzerland	+1.2 Q3	+2.5	+1.0	+2.0	+8.7 Q3	+0.7 Jan	+0.3	+0.5	3.0 Jan
Turkey	+11.1 Q3	na	+6.7	+3.8	+6.5 Dec	+10.3 Jan	+9.2	+11.1	10.3 Oct§
Australia	+2.8 Q3	+2.4	+2.3	+2.8	+3.5 Q3	+1.9 Q4	+1.5	+1.9	5.5 Jan
Hong Kong	+3.6 Q3	+2.0	+3.7	+2.6	+0.4 Q3	+1.7 Dec	+1.2	+1.5	2.9 Dec‡‡
India	+6.3 Q3	+8.7	+6.4	+7.2	+7.1 Dec	+5.1 Jan	+3.2	+3.5	5.0 Jan
Indonesia	+5.2 Q4	na	+5.1	+5.4	+3.4 Dec	+3.3 Jan	+3.5	+3.8	5.5 Q3§
Malaysia	+5.9 Q4	na	+6.0	+5.5	+2.8 Dec	+3.5 Dec	+1.7	+3.8	3.3 Dec§
Pakistan	+5.7 2017**	na	+5.7	+5.3	-1.9 Nov	+4.4 Jan	+3.7	+4.1	5.9 2015
Singapore	+3.6 Q4	+2.1	+3.5	+2.6	-3.9 Dec	+0.4 Dec	+0.2	+0.6	2.1 Q4
South Korea	+3.0 Q4	-0.9	+3.1	+3.0	-6.0 Dec	+1.0 Jan	+2.0	+2.0	3.7 Jan§
Taiwan	+3.3 Q4	+4.3	+2.8	+2.4	+1.2 Dec	+0.9 Jan	+2.2	+0.6	3.7 Dec
Thailand	+4.3 Q3	+4.0	+3.7	+3.8	+2.3 Dec	+0.7 Jan	+1.6	+0.7	1.0 Dec§
Argentina	+4.2 Q3	+3.6	+2.9	+3.2	+0.8 Nov	+25.0 Dec	na	+25.2	8.3 Q3§
Brazil	+1.4 Q3	+0.6	+1.0	+2.7	+4.4 Dec	+2.9 Jan	+5.4	+3.3	11.8 Dec§
Chile	+2.2 Q3	+6.0	+1.4	+3.0	+0.2 Dec	+2.2 Jan	+2.8	+2.2	6.4 Dec§‡‡
Colombia	+2.0 Q3	+3.2	+1.6	+2.5	-0.8 Dec	+3.7 Jan	+5.5	+4.3	8.6 Dec§
Mexico	+1.8 Q4	+4.1	+2.1	+2.1	-0.7 Dec	+5.5 Jan	+4.7	+6.0	3.4 Dec
Venezuela	-8.8 Q4~	-6.2	-14.0	-11.9	na	na	na	1,050.0	7.3 Apr§
Egypt	na	na	+4.2	+4.9	+27.1 Nov	+17.1 Jan	+28.2	+26.8	11.9 Q3§
Israel	+1.9 Q3	+3.5	+3.0	+3.7	+1.6 Nov	+0.4 Dec	-0.2	+0.2	4.0 Dec
Saudi Arabia	-0.7 2017	na	-0.7	+1.0	na	+0.4 Dec	+1.7	-0.2	5.8 Q3
South Africa	+0.8 Q3	+2.0	+0.9	+1.4	+2.8 Dec	+4.7 Dec	+6.7	+5.3	26.7 Q4§
Estonia	+4.2 Q3	+1.4	+4.6	+3.4	+7.1 Dec	+3.5 Jan	+2.7	+3.5	5.3 Q4§
Finland	+2.8 Q3	+4.5	+3.1	+2.3	+4.2 Dec	+0.5 Dec	+1.0	+0.9	8.4 Dec§
Iceland	+3.1 Q3	+9.2	+3.6	+4.1	na	+2.4 Jan	+1.9	+1.8	2.4 Jan§
Ireland	+10.5 Q3	+18.1	+6.5	+4.0	+3.4 Dec	+0.4 Dec	nil	+0.3	6.1 Jan
Latvia	+4.2 Q4	-2.3	+5.1	+3.1	+5.5 Dec	+2.0 Jan	+2.9	+2.9	8.5 Q3§
Lithuania	+3.9 Q4	+6.0	+3.5	+3.4	+5.3 Dec	+4.0 Jan	+2.3	+3.6	9.0 Jan§
Luxembourg	+3.2 Q3	+6.8	+2.7	+3.2	-1.3 Nov	+1.4 Dec	+1.1	+2.1	6.2 Dec§
New Zealand	+3.0 Q3	+3.8	+2.4	+3.0	+1.6 Q3	+1.6 Q4	+1.3	+1.9	4.5 Q4
Peru	+2.5 Q3	+5.5	+2.5	+3.7	-2.5 Sep	+1.3 Jan	+3.1	+2.8	6.9 Dec§

Trade, exchange rates, budget balances and interest rates

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Trade, exchange rates, budget balances and interest rates

	Trade balance latest 12 months, $bn	Current-account balance latest 12 months, $bn	Current-account balance % of GDP 2017†	Currency units, per $ Feb 14th	Currency units, per $ year ago	Budget balance % of GDP 2017†	Interest rates 3-month latest	Interest rates 10-year gov't bonds, latest
United States	-810.0 Dec	-452.5 Q3	-2.4	-	-	-3.5	1.84	2.87
China	+394.0 Jan	+172.0 Q4	+1.2	6.34	6.87	-4.3	4.70	3.83§§
Japan	+43.8 Dec	+195.5 Dec	+3.9	107	114	-4.4	-0.07	0.06
Britain	-178.0 Dec	-118.1 Q3	-4.5	0.72	0.80	-2.9	0.54	1.63
Canada	-18.7 Dec	-45.8 Q3	-2.9	1.26	1.31	-1.7	1.60	2.37
Euro area	+266.7 Nov	+438.7 Nov	+3.2	0.81	0.95	-1.2	-0.33	0.76
Austria	-6.0 Nov	+8.5 Q3	+2.2	0.81	0.95	-1.1	-0.33	0.84
Belgium	+24.1 Nov	-3.9 Sep	-0.7	0.81	0.95	-1.7	-0.33	0.97
France	-70.2 Dec	-28.5 Dec	-1.3	0.81	0.95	-2.9	-0.33	0.99
Germany	+277.0 Dec	+291.4 Dec	+7.9	0.81	0.95	+0.6	-0.33	0.76
Greece	-21.8 Nov	-1.0 Nov	-0.4	0.81	0.95	-0.6	-0.33	4.46
Italy	+53.9 Nov	+56.1 Nov	+2.7	0.81	0.95	-2.3	-0.33	2.06
Netherlands	+66.3 Dec	+80.7 Q3	+9.6	0.81	0.95	+0.9	-0.33	0.78
Spain	-27.9 Nov	+23.0 Nov	+1.6	0.81	0.95	-3.0	-0.33	1.48
Czech Republic	+18.4 Dec	+0.9 Q3	+0.7	20.5	25.6	+0.7	0.90	1.83
Denmark	+9.3 Dec	+24.8 Dec	+8.3	6.00	7.04	-0.3	-0.30	0.83
Hungary	+9.2 Nov	+5.2 Q3	+4.8	252	292	-2.1	0.02	2.49
Norway	+19.2 Dec	+21.1 Q3	+4.9	7.84	8.41	+5.2	0.87	1.96
Poland	+0.4 Dec	+0.2 Dec	-0.1	3.36	4.08	-2.2	1.52	3.51
Russia	+115.3 Dec	+40.2 Q4	+2.4	57.1	57.5	-1.5	5.36	8.13
Sweden	-0.5 Dec	+21.1 Q3	+4.7	8.00	8.95	+1.0	-0.47	0.94
Switzerland	+35.4 Dec	+66.4 Q3	+9.3	0.93	1.01	+0.8	-0.75	0.20
Turkey	-81.4 Jan	-47.1 Dec	-5.0	3.79	3.68	-1.5	13.9	12.2
Australia	+9.4 Dec	-22.2 Q3	-1.7	1.27	1.31	-1.5	1.97	2.85
Hong Kong	-61.9 Dec	+14.8 Q3	+4.3	7.82	7.76	+4.2	1.16	1.99
India	-148.4 Dec	-33.6 Q3	-1.6	64.1	67.0	-3.3	6.38	7.50
Indonesia	+11.9 Dec	-17.3 Q4	-1.6	13,636	13,331	-2.8	5.30	6.37
Malaysia	+22.7 Dec	+9.4 Q4	+2.6	3.92	4.45	-2.9	3.69	3.99
Pakistan	-36.9 Jan	-15.2 Q4	-4.8	111	105	-5.9	6.36	8.80†††
Singapore	+47.3 Jan	+61.0 Q4	+18.5	1.32	1.42	-1.0	na	2.25
South Korea	+96.2 Jan	+78.5 Dec	+5.3	1,077	1,138	+0.9	1.64	2.76
Taiwan	+17.2 Jan	+74.1 Q3	+13.8	29.3	30.9	-0.1	0.66	1.07
Thailand	+13.9 Dec	+49.3 Q4	+11.6	31.5	35.0	-2.5	0.68	2.48
Argentina	-8.5 Dec	-26.6 Q3	-4.2	20.0	15.5	-5.8	22.6	4.25
Brazil	+67.1 Jan	-9.8 Dec	-0.6	3.26	3.12	-8.0	6.61	8.61
Chile	+7.4 Jan	-4.6 Q3	-1.3	595	643	-2.7	0.39	4.52
Colombia	-8.3 Dec	-11.1 Q3	-3.4	2,881	2,872	-2.3	5.14	6.62
Mexico	-10.9 Dec	-16.1 Q3	-1.7	18.6	20.4	-1.1	7.84	7.81
Venezuela	-36.2 Oct~	-17.8 Q3~	-0.2	24,980	9.99	-19.4	14.5	8.24
Egypt	-31.3 Nov	-12.2 Q3	-6.9	17.7	16.5	-10.9	18.9	na
Israel	-15.5 Jan	+10.5 Q3	+3.4	3.53	3.75	-2.0	0.09	1.96
Saudi Arabia	+43.4 2016	+12.4 Q3	+2.7	3.75	3.75	-8.9	1.89	na
South Africa	+6.1 Dec	-7.3 Q3	-2.2	11.8	13.2	-3.9	7.13	8.41
Estonia	-2.2 Dec	+0.7 Dec	+1.9	0.81	0.95	-0.7	-0.33	na
Finland	-2.8 Dec	+1.6 Nov	+1.1	0.81	0.95	-1.3	-0.33	0.86
Iceland	-1.7 Jan	+1.2 Q3	+6.4	101	112	+1.0	4.65	na
Ireland	+50.7 Nov	+27.7 Q3	+5.7	0.81	0.95	-0.5	-0.33	1.16
Latvia	-3.0 Dec	-0.2 Dec	-0.8	0.81	0.95	+0.2	-0.33	na
Lithuania	-2.6 Dec	nil Q3	-0.8	0.81	0.95	+0.1	-0.33	1.25
Luxembourg	-6.8 Nov	+2.4 Q3	+4.3	0.81	0.95	+0.8	-0.33	na
New Zealand	-2.0 Dec	-5.1 Q3	-2.8	1.36	1.40	+1.6	1.90	2.96

The Economist commodity-price index

Print edition | Economic and financial indicators Feb 15th 2018

The Economist commodity-price index

2005=100

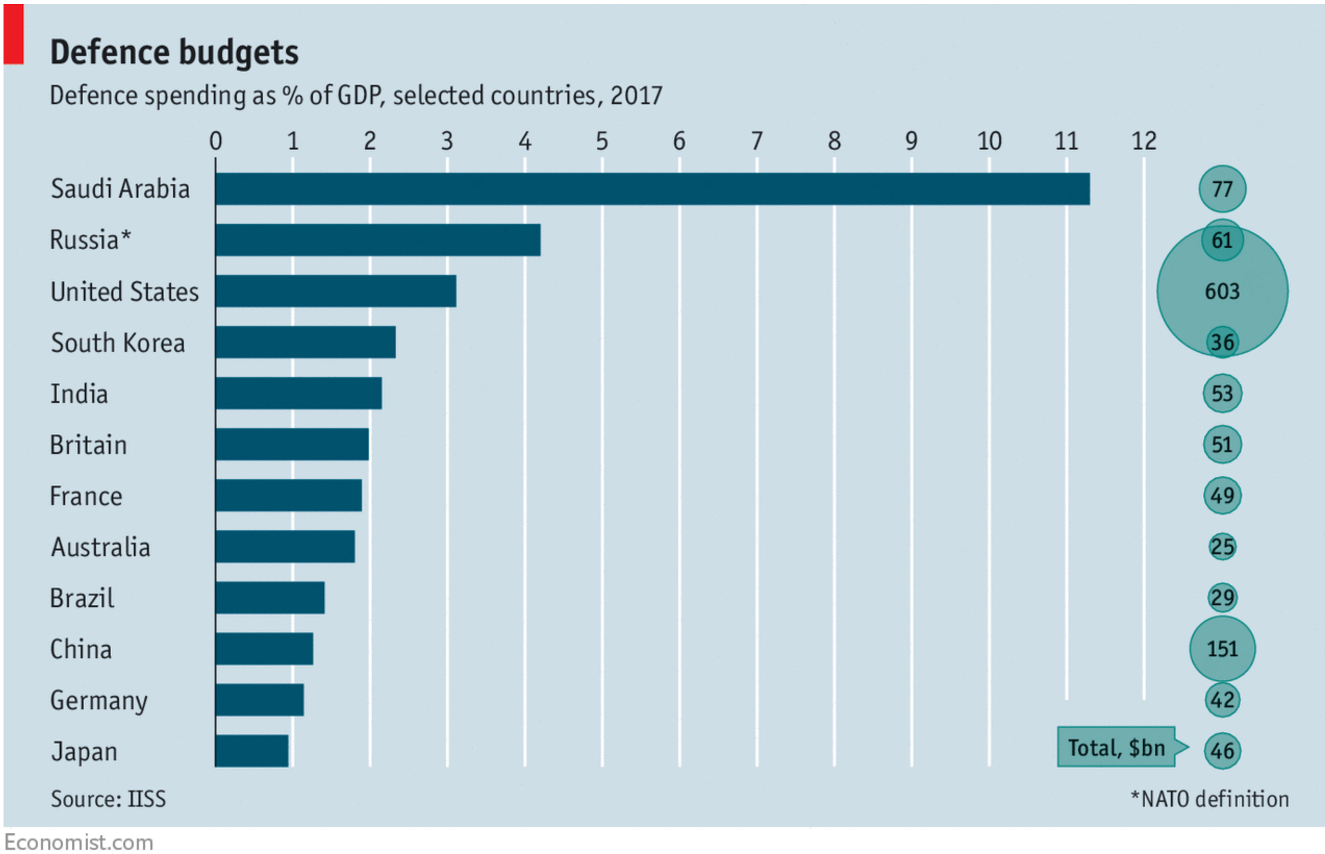
	Feb 6th	Feb 13th*	% change on one month	% change on one year
Dollar Index				
All Items	152.0	152.0	+1.5	+0.8
Food	152.2	154.5	+4.0	-3.5
Industrials				
All	151.8	149.4	-1.1	+6.0
Nfa†	137.1	138.1	-2.6	-8.6
Metals	158.0	154.3	-0.6	+12.9
Sterling Index				
All items	198.8	199.2	+0.7	-9.5
Euro Index				
All items	153.1	153.0	+0.4	-13.8
Gold				
$ per oz	1,327.4	1,329.6	-0.4	+8.4
West Texas Intermediate				
$ per barrel	63.4	59.2	-7.1	+11.3

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.

Economist.com

Defence budgets

Print edition | Economic and financial indicators Feb 15th 2018



Global defence spending as a share of GDP was just under 2% last year, according to the International Institute for Strategic Studies (IISS). America remains the biggest spender, China comes a distant second. Saudi Arabia still outspends them as a proportion of GDP—a staggering 11%. The biggest increase in spending was in Europe: it rose by 3.6% in 2017, in part thanks to American pressure to meet the NATO spending target, of 2% of GDP, and growing geopolitical threats, particularly from Russia. European investment in defence-related research and development is limited though: excluding Britain and France, BAE, Boeing and Lockheed Martin each spent more on R&D than individual countries there.

Markets

Print edition | Economic and financial indicators   Feb 15th 2018

Markets

		% change on		
			Dec 30th 2016	
	Index Feb 14th	one week	in local currency	in $ terms
United States (DJIA)	24,893.5	nil	+26.0	+26.0
United States (S&P 500)	2,698.6	+0.6	+20.5	+20.5
United States (NAScomp)	7,143.6	+1.3	+32.7	+32.7
China (SSEA)	3,350.6	-3.3	+3.1	+12.9
China (SSEB, $ terms)	324.0	-0.8	-5.2	-5.2
Japan (Nikkei 225)	21,154.2	-2.3	+10.7	+20.8
Japan (Topix)	1,702.7	-2.7	+12.1	+22.4
Britain (FTSE 100)	7,214.0	-0.9	+1.0	+14.1
Canada (S&P TSX)	15,328.3	nil	+0.3	+7.1
Euro area (FTSE Euro 100)	1,175.4	-2.1	+5.7	+24.3
Euro area (EURO STOXX 50)	3,369.8	-2.5	+2.4	+20.5
Austria (ATX)	3,387.9	-3.4	+29.4	+52.2
Belgium (Bel 20)	3,892.2	-2.5	+7.9	+26.9
France (CAC 40)	5,165.3	-1.7	+6.2	+25.0
Germany (DAX)*	12,339.2	-2.0	+7.5	+26.4
Greece (Athex Comp)	825.6	-2.9	+28.3	+50.9
Italy (FTSE/MIB)	22,433.8	-2.4	+16.6	+37.2
Netherlands (AEX)	525.6	-2.0	+8.8	+28.0
Spain (IBEX 35)	9,686.2	-2.9	+3.6	+21.8
Czech Republic (PX)	1,109.6	-0.6	+20.4	+50.8
Denmark (OMXCB)	890.6	+1.3	+11.5	+30.9
Hungary (BUX)	38,454.4	-3.1	+20.2	+39.8
Norway (OSEAX)	886.3	-1.2	+15.9	+27.3
Poland (WIG)	63,500.9	+0.4	+22.7	+52.4
Russia (RTS, $ terms)	1,244.9	+0.2	+8.0	+8.0
Sweden (OMXS30)	1,532.2	-1.2	+1.0	+14.7
Switzerland (SMI)	8,899.1	-0.8	+8.3	+18.2
Turkey (BIST)	113,454.9	-1.8	+45.2	+34.8
Australia (All Ord.)	5,940.0	-0.7	+3.9	+14.1
Hong Kong (Hang Seng)	30,515.6	+0.6	+38.7	+37.5
India (BSE)	34,156.0	+0.2	+28.3	+35.9
Indonesia (JSX)	6,594.4	+0.9	+24.5	+23.0
Malaysia (KLSE)	1,834.9	-0.1	+11.8	+27.9
Pakistan (KSE)	43,353.0	-1.7	-9.3	-14.4
Singapore (STI)	3,402.9	+0.6	+18.1	+29.5
South Korea (KOSPI)	2,421.8	+1.1	+19.5	+34.0
Taiwan (TWI)	10,421.1	-1.2	+12.6	+23.9
Thailand (SET)	1,792.1	+0.4	+16.1	+32.2
Argentina (MERV)	31,551.3	-0.2	+86.5	+47.3
Brazil (BVSP)	83,542.8	+0.9	+38.7	+38.5
Chile (IGPA)	28,025.0	-3.2	+35.2	+52.1
Colombia (IGBC)	11,732.3	+0.1	+16.1	+21.0
Mexico (IPC)	48,400.8	-1.2	+6.0	+17.6
Venezuela (IBC)	3,933.3	+22.9	12,304.1	na
Egypt (EGX 30)	14,806.0	-1.5	+19.9	+22.8
Israel (TA-125)	1,340.8	-1.3	+5.0	+14.4
Saudi Arabia (Tadawul)	7,419.7	nil	+2.5	+2.6
South Africa (JSE AS)	57,399.6	+0.9	+13.3	+31.7
Europe (FTSEurofirst 300)	1,469.0	-1.6	+2.8	+21.0
World, dev'd (MSCI)	2,105.9	+0.2	+20.3	+20.3
Emerging markets (MSCI)	1,185.3	+1.0	+37.5	+37.5
World, all (MSCI)	515.0	+0.3	+22.1	+22.1
World bonds (Citigroup)	961.9	+0.5	+8.8	+8.8
EMBI+ (JPMorgan)	806.0	-2.1	+4.4	+4.4
Hedge funds (HFRX)	1,2[illegible].0§	-0.4	+6.4	+6.4
Volatility, US (VIX)	19.3	+27.7	+14.0	(levels)

Asma Jahangir
No place to keep quiet

No place to keep quiet

Obituary: Asma Jahangir died on February 11th

Pakistan's loudest voice for democracy and human rights was 66

Print edition | Obituary Feb 15th 2018

OBSERVERS of Asma Jahangir, usually male ones, would sometimes ask why she was so angry. From the 1980s onwards she seemed at the centre of every demonstration in Lahore or Islamabad, all five feet two inches of her, glasses glinting, gesticulating, shouting. She led marches, held marathons, set up awkward organisations, and in every way was a gadfly. Most of all, she spoke her mind. It might be in the bar room of the Lahore High Court, through a furious cloud of *beedi* smoke, or in court itself, dressing down judges who didn't get the point, or at a police station, still protesting. Bemused by this fierce little lawyer, the men would shake their heads.

But in Pakistan, how could she be silent? There was so much pent-up anger, for so many reasons. Lack of democracy. Almost total lack of justice. Duffer generals, bigoted mullahs, crony capitalists, chauvinist men. Certainly she could be a well-behaved upper-middle-class woman, in elegant *shalwar kameez* in her wood-panelled house. But she would rather be a street fighter. Of course, she paid for it. She was bundled into police vans, put under house arrest. Her car was trashed. Hitmen held her relatives hostage. The intelligence services tried to liquidate her as a traitor and foreign agent (though her early death was natural). Every attack left her more energised than ever. When her shirt was torn off for organising a protest, she saved her modesty with safety pins and went on hectoring. Briefly in jail in 1983, she thought it a great adventure.

Her model was her father, a parliamentarian who had resigned in 1971 to protest against military rule. He too had gone smiling, and often, to prison. As a teenager she was already a troublemaker, complaining at her convent about the undemocratic selection of the head girl. In her prim school uniform, she also scaled the gate of the Punjab governor's house to plant a black flag against military rule. Rustication followed, to her joy.

The poor and the beaten

When the phone rang at her law offices in Lahore, she would always answer it. If she missed a call, she would swiftly return it. Someone needed help, and she was often the only person in the country they could turn to. Her critics sometimes accused her of profiting from adversity, being a glory seeker. On the contrary, she was defending democracy, secularism, judicial independence, human rights. Simple tenets, but not in Pakistan. She had come to the law enchanted with it, studying it at home because she was debarred, as a woman, from lectures. She believed in its power to right wrongs. Her tartness in court expressed her fury with the slow, corrupt, uneven way it actually worked.

High-profile cases did not attract her. She preferred to defend a 14-year-old Christian boy accused of scrawling blasphemy on the wall of a village mosque, and to save him from the death penalty, which she abhorred. Though she was Muslim herself, it was a personal matter. She accepted the place of sharia in the legal system of Pakistan, but battled its harsher interpretations. In 1987 she helped set up the Human Rights Commission of Pakistan (HRCP), the first of its kind, to keep an eye on things. Her presence on the Lahore High Court and later as the first woman president of the Supreme Court Bar Association, encouraged liberal lawyers and outraged conservatives, whom she mocked for their backwardness and beards.

She was eager to represent the poor. In half her cases she took no payment. For a time she even funnelled money to struggling families of political prisoners and abductees. Once she fought for a group of half-naked bonded brickmakers, who owed thousands of rupees to their employers. When the judge asked her why she had brought people into his court who stank, she replied, bluntly, that he was there precisely for them. Ideally, to weaken the feudal system that enslaved them. At the least, to listen to the victims.

And no group was victimised more than women. They were treated as possessions in Pakistan, beings who should not question and should not think. She knew about that. As a young mother, even with a law degree, she had been forbidden to work and reduced to a nothing. So in 1980 she, her sister Hina and two friends set up the first all-woman law firm in the country. Her husband objected, but she went ahead. The year before President Zia ul-Haq had brought in military rule and severe *hudood* punishments, so her firm was needed. She defended girls, raped by their bosses, who now faced flogging for fornication; she helped women trying to escape loveless marriages, one of whom was killed in her law offices at her mother's instigation. She provided a shelter for them, again the first. By this year she felt women had made progress. But not nearly enough.

With so much energy and noise, she was noticed internationally. She became a UN special rapporteur for human rights, travelling to Iran, Afghanistan, Palestine and Chiapas. All the cases she encountered caused her anguish, but her chief concern remained Pakistan. For all the danger to her, she had never thought of leaving. Her ancestors were buried there. It was home. And like the typical Punjabi mother she was, nagging her daughters on how they should keep house, she needed to lecture Pakistan first. And keep on. And on.

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