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The world this week

Politics



After hard, soft and then red, white and blue, Theresa May announced a "clean" Brexit. In her most important speech yet on the issue, **Britain's** prime minister set out a position for quitting the EU that includes leaving the single market and customs union. Mrs May said she would seek the best possible trade terms with Europe and be a "good neighbour", but that no deal would be better than a bad deal for Britain. Donald Trump held out the promise of a trade agreement with America after praising Britain's Brexit choice.

Germany's chancellor, Angela Merkel, responded to Mrs May's Brexit speech with vows to hold the EU together and block any British "cherrypicking" in the negotiations. Jean-Claude Juncker, the president of the European Commission, promised to work for a fair deal for both sides, saying: "We are not in a hostile mood."

Northern Ireland's Assembly collapsed amid a scandal involving the first minister's handling of a renewableheating programme that could cost taxpayers £490m (\$600m). Elections for a new Assembly on March 2nd might come to be used as a proxy poll on Brexit: the province voted to remain in the EU.

The European Parliament elected a new president. Antonio Tajani, an Italian conservative from the European People's Party, will replace Germany's Martin Schulz. Under his leadership, the parliament will have the final say on approving Brexit. An avalanche hit a hotel in the Abruzzo region of central Italy. Around 30 people were inside. The avalanche was apparently triggered by one of three earthquakes that struck the region this week. Earthquakes in the same area last year killed more than 300 people.

Germany's federal court rejected an attempt to ban the neo-Nazi National Democratic Party. German states submitted a petition to ban it in 2013, citing its racist, anti-Semitic platform. The court found that although the party "pursues aims contrary to the constitution", it does not pose a threat to democracy.

Davos man



In a speech at the World Economic Forum in Davos, China's leader, Xi Jinping, defended globalisation and said trade wars produced no winners. His remarks appeared to be aimed at Donald Trump, who has threatened to impose huge tariffs on Chinese products. Mr Xi was the first Chinese president to attend the event.

Australia, China and Malaysia abandoned the search for мн370, a Malaysian airliner that disappeared in the southern Indian Ocean in 2014 with 239 people on board. Debris from the plane has washed up in Africa, but the crash site has never been located.

Hun Sen, the prime minister of Cambodia, launched a lawsuit against Sam Rainsy, an exiled opposition leader, for defamation, Mr Sam Rainsv claims that Mr Hun Sen is trying to destroy his party to prevent it winning elections scheduled for next year.

Rodrigo Duterte, the president of the **Philippines**, mulled imposing martial law if necessary to advance his homicidal campaign against drugs.

No preferential treatment

Barack Obama ended the 22-year-old "wet foot, dry foot" policy, under which Cubans who landed on American soil were permitted to stay. Cubans who try to get into the United States will now be treated like other migrants. Mr Obama's decision is in keeping with his policy of normalising relations with the communist government of Cuba.

The wave of violence in Brazil's prisons continued with the deaths of at least 30 people at a jail. Some of the inmates were decapitated in a fight between gangs. About 140 people have died in prison violence so far this year.

Colombia will begin peace negotiations in February with the ELN, the country's secondlargest guerrilla group. It made peace with the largest, the FARC, last year.

An Italian court sentenced in absentia eight former officials of South American military regimes to life in prison for their role in the disappearance of 23 Italians during the 1970s and 1980s. The officials participated in Operation Condor, a campaign of persecution and murder by half a dozen governments against their leftist opponents.

Crisis action

Having lost an election, Yahva Jammeh missed a deadline to step down as president of the Gambia to make way for his successor, Adama Barrow. Neighbouring west African countries have called on Mr Jammeh to go. Senegal moved troops towards its border in preparation for a possible intervention.

In Nigeria an air-force jet operating against Boko Haram, a jihadist group, mistakenly bombed a refugee camp killing at least 76 people. Aid workers were among the dead.

Two people were killed in Israel in clashes between police and residents of a Bedouin village that the authorities are trying to demolish.



A high court in Egypt upheld a ruling that prevented the government from handing sovereignty of two islands in the Red Sea to Saudi Arabia. The government's proposal to hand the uninhabited islands to the Saudis, who had asked Egypt to protect them in the 1950s, sparked street protests last year.

Clemency for Chelsea

In one of his final actions as president, Barack Obama commuted the sentence handed down to Chelsea Manning, a former intelligence analyst, for passing secret documents to WikiLeaks. In 2013 Ms Manning (Bradley Manning as she was known then) was sentenced to 35 years. As a convict she began her transition from a male to a female. Supporters praise her as a whistle-blower, but her critics insist she put American and allied lives at risk.

Last year was the hottest since data started to be collected in 1880 and the third consecutive year of record global warming, according to America's National Oceanic and Atmospheric Administration. The average temperature over land and sea was 58.69°F (14.8°C), 0.07°F (0.04°C) above 2015's average.

Donald Trump prepared for his inauguration on January 20th as America's 45th president. Mr Trump told a newspaper that because of the celebrations he would take the weekend off and Day One of his administration would start on Monday January 23rd.

Business

Having sweetened its offer, **British American Tobacco** secured a deal to gain full control of Reynolds for \$49bn, creating the world's biggest listed cigarette company, Revnolds is based in the American market, which is again looking alluring after years of costly litigation and falling demand. The volume of cigarettes sold in America has fallen sharply in the past decade, but overall retail sales in the industry have risen thanks to population growth and new products, such as e-cigarettes.

That vision thing

Luxottica, an Italian maker of fashionable eyeware, agreed to merge with Essilor, a French company that produces lenses. The €46bn (\$49bn) transaction is one of the biggest crossborder deals in the EU to date. The merger had long been resisted by Luxottica's founder, Leonardo Del Vecchio, who built his firm up into a global behemoth that owns the Oakley and Ray-Ban brands and supplies designer frames for Chanel, Prada and others.

In a vindication of the strategy pursued by Britain's Serious Fraud Office, **Rolls-Royce** settled claims dating from 1989 to 2013 that it had bribed officials in various countries in order to win contracts. The engineering company will pay penalties totalling £671m (\$809m) to regulators in America, Brazil and Britain. Most of that goes to the SFO, which pushed for a deferred prosecution agreement, still a novel concept under British law.

Fiat Chrysler Automobiles' share price was left bruised b

share price was left bruised by an allegation from America's Environmental Protection Agency that it had used software in 104,000 diesel cars to let them exceed legal limits on nitrogen-oxide emissions. The EPA did not go as far as to say that FCA had cheated in emissions tests; that transgression has cost Volkswagen billions in fines. FCA strongly denied the claim; its boss, Sergio Mar-

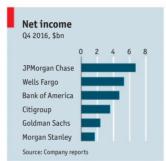
chionne, said "We don't belong to a class of criminals."

Consumer prices in Britain rose by 1.6% in December, a big bounce from 1.2% in November and the highest figure for two years. Costlier transport contributed to the spike. Rising inflation is an unwelcome conundrum for the Bank of England. Its governor, Mark Carney, noted that higher prices could dampen consumer spending and slow economic growth, meaning future interest-rate decisions might move "in either direction".

In South Korea a court rejected prosecutors' request to arrest Lee Jae-yong, the vice-chairman of **Samsung Electronics**, on allegations of bribery related to an influence-peddling scandal that has rocked the country. Prosecutors allege that money paid by Mr Lee to a friend of South Korea's president was intended as a bribe to help win a merger of two Samsung affiliates. Mr Lee denies that. The prosecutors are still pressing their case.

America's Federal Trade Commission lodged an antitrust lawsuit against **Qualcomm**, accusing it of abusing its commanding position in the semiconductor market to impose stringent licensing terms on patents for chips in mobile phones.

Another profit warning from **Pearson** caused its share price to plunge by 30%. The academic publisher is facing a decline in demand for its textbooks in America, partly because of the rise of services that let students rent the books.



A surge in trading after the election of Donald Trump helped America's big banks reap big profits in the fourth quarter. Many investors adjusted their portfolios when Mr Trump's victory heightened expectations of interest-rate rise and of cuts in regulations and taxes.

SpaceX sent its first rocket into orbit since an explosion on a launch pad last September grounded its fleet. The government has accepted the com-

pany's report on the accident, allowing it to start clearing its backlog of satellite launches for fee-paying customers and cargo missions to the International Space Station.

Reversal of fortunes

ExxonMobil agreed to pay \$6.6bn for several oil firms owned by the Bass family in Fort Worth, the latest in a flurry of deals to snap up energy assets in Texas as oil prices rebound, Meanwhile, Saudi Arabia said it would soon start accepting tenders for an expansion of solar and wind **power** in the country that will cost up to \$50bn. The collapse of the oil price two years ago tore a hole in the kingdom's finances. It now hopes to get 30% of its power from renewables by 2030.

China's footballing authorities capped the number of foreign players that clubs can field in a match to three per team, down from five, as part of a series of measures to foster the development of local Chinese talent. The news came as Xi Jinping, China's president, extolled the virtues of globalisation at the annual gabfest at Dayos.

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



The 45th president

What is Donald Trump likely to achieve in power?



UCH of the time, argues David Runciman, a British academic, politics matters little to most people. Then, suddenly, it matters all too much. Donald Trump's term as America's 45th president, which is due to begin with the inauguration on Janu-

ary 20th, stands to be one of those moments.

It is extraordinary how little American voters and the world at large feel they know about what Mr Trump intends. Those who back him are awaiting the biggest shake-up in Washington, DC, in half a century—though their optimism is an act of faith. Those who oppose him are convinced there will be chaos and ruin on an epoch-changing scale—though their despair is guesswork. All that just about everyone can agree on is that Mr Trump promises to be an entirely new sort of American president. The question is, what sort?

Inside the West Wig

You may be tempted to conclude that it is simply too soon to tell. But there is enough information—from the campaign, the months since his victory and his life as a property developer and entertainer-to take a view of what kind of person Mr Trump is and how he means to fill the office first occupied by George Washington. There is also evidence from the team he has picked, which includes a mix of wealthy businessmen, generals and Republican activists (see pages 14-18).

For sure, Mr Trump is changeable. He will tell the New York Times that climate change is man-made in one breath and promise coal country that he will reopen its mines in the next. But that does not mean, as some suggest, that you must always shut out what the president says and wait to see what he does.

When a president speaks, no easy distinction is to be made between word and deed. When Mr Trump says that NATO is obsolete, as he did to two European journalists last week, he makes its obsolescence more likely, even if he takes no action. Moreover, Mr Trump has long held certain beliefs and attitudes that sketch out the lines of a possible presidency. They suggest that the almost boundless Trumpian optimism on display among American businesspeople deserves to be tempered by fears about trade protection and geopolitics, as well as questions about how Mr Trump will run his administration.

Start with the optimism. Since November's election the s&p500 index is up by 6%, to reach record highs. Surveys show that business confidence has soared. Both reflect hopes that Mr Trump will cut corporate taxes, leading companies to bring foreign profits back home. A boom in domestic spending should follow which, combined with investment in infrastructure and a programme of deregulation, will lift the economy and boost wages.

Done well, tax reform would confer lasting benefits (see Free exchange), as would a thoughtful and carefully designed programme of infrastructure investment and deregulation. But if such programmes are poorly executed, there is the risk of a sugar-rush as capital chases opportunities that do little to enhance the productive potential of the economy.

That is not the only danger. If prices start to rise faster, pressure will mount on the Federal Reserve to increase interest rates. The dollar will soar and countries that have amassed large dollar debts, many of them emerging markets, may well buckle. One way or another, any resulting instability will blow back into America. If the Trump administration reacts to widening trade deficits with extra tariffs and non-tariff barriers, then the instability will only be exacerbated. Should Mr Trump right from the start set out to engage foreign exporters from countries such as China, Germany and Mexico in a conflict over trade, he would do grave harm to the global regime that America itself created after the second world war.

Just as Mr Trump underestimates the fragility of the global economic system, so too does he misread geopolitics. Even before taking office, Mr Trump has hacked away at the decadesold, largely bipartisan cloth of American foreign policy. He has casually disparaged the value of the European Union, which his predecessors always nurtured as a source of stability. He has compared Angela Merkel, Germany's chancellor and the closest of allies, unfavourably to Vladimir Putin, Russia's president and an old foe. He has savaged Mexico, whose prosperity and goodwill matter greatly to America's southern states. And, most recklessly, he has begun to pull apart America's carefully stitched dealings with the rising superpower, China-imperilling the most important bilateral relationship of all.

The idea running through Mr Trump's diplomacy is that relations between states follow the art of the deal. Mr Trump acts as if he can get what he wants from sovereign states by picking fights that he is then willing to settle—at a price, naturally. His mistake is to think that countries are like businesses. In fact, America cannot walk away from China in search of another superpower to deal with over the South China Sea. Doubts that have been sown cannot be uprooted, as if the game had all along been a harmless exercise in price discovery. Alliances that take decades to build can be weakened in months.

Dealings between sovereign states tend towards anarchybecause, ultimately, there is no global government to impose order and no means of coercion but war. For as long as Mr Trump is unravelling the order that America created, and from which it gains so much, he is getting his country a terrible deal.

Hair Force One

So troubling is this prospect that it raises one further question. How will Mr Trump's White House work? On the one hand you have party stalwarts, including the vice-president, Mike Pence; the chief of staff, Reince Priebus; and congressional Republicans, led by Paul Ryan and Mitch McConnell. On the other are the agitators-particularly Steve Bannon, Peter Navarro and Michael Flynn. The titanic struggle between normal politics and insurgency, mediated by Mr Trump's daughter, Ivanka, and son-in-law, Jared Kushner, will determine just how revolutionary this presidency is.

As Mr Trump assumes power, the world is on edge. From the Oval Office, presidents can do a modest amount of good. Sadly, they can also do immense harm.

African politics

A dismal dynast

Africa's top bureaucrat, Nkosazana Dlamini-Zuma, wants to be South Africa's next president. Bad idea



IN MANY ways the African Union (AU) is outdoing its European counterpart. It has never presided over a continental currency crisis. No member state is threatening to quit. And you could walk from Cairo to Cape Town without meeting anyone

who complains about the overweening bossiness of the African superstate. But this is largely because the AU, unlike the EU, is irrelevant to most people's lives. That is a pity.

Before 2002, when it was called the Organisation of African Unity, it was dismissed as a talking-shop for dictators. For the next decade, it was led by diplomats from small countries, picked by member states precisely because they had so little clout. But then, in 2012, a heavyweight stepped in to run the AU commission. Nkosazana Dlamini-Zuma, a veteran of the antiapartheid struggle and a woman who had held three important cabinet posts in South Africa, was expected to inject more vigour and ambition into the AU. As she prepares to hand over to an as-yet unnamed successor this month, it is worth assessing her record (see page 37).

This matters for two reasons. First, because Africa's forum for tackling regional problems needs to work better. Second, because Ms Dlamini-Zuma apparently wants to be the next president of South Africa. Her experience at the AU, supporters claim, makes her the best-qualified successor to President Jacob Zuma, who happens to be her ex-husband.

Running the ill-funded AU is hard, but even so, nothing she has achieved there suggests that she deserves to run her country. Her flagship policy, Agenda 2063, is like a balloon ride over the Serengeti, offering pleasant views of a distant horizon and

powered by hot air. By 2063, when none of its boosters will still be in power, it hopes that Africa will be rich, peaceful, corruption-free and enjoying the benefits of "transformative leadership in all fields". In the shorter term, Ms Dlamini-Zuma has called for a shared currency, a central bank and a "continental government" to tie together states that barely trade with one another. None of this is happening. She also wants to introduce a single African passport letting citizens move freely across the continent by 2018. A splendid idea, but for now the AU issues them only to heads of state and senior AU officials.

Ms Dlamini-Zuma has also failed to grapple with Africa's conflicts. AU troops have done a creditable job in Somalia, but promises from AU members to send troops to quell fighting or repression in Burundi and South Sudan remain unkept. Under Ms Dlamini-Zuma, the AU has condemned blatant coups, but its monitors have approved elections that were far from free and fair. Knowing that African leaders find the International Criminal Court too muscular, she backs an African alternative that explicitly grants immunity to incumbent rulers.

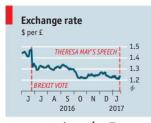
From the Union to the Union Buildings

This is the opposite of what South Africa needs. Under Mr Zuma, corruption has metastasised. Ruling-party bigwigs dole out contracts to each other and demand slices of businesses built by others. Investors are scared, growth is slow and public services, especially schools, are woeful. South Africa needs a graft-busting president: someone to break the networks of patronage that stretch to the top. Instead, Mr Zuma, who is accused of 783 counts of corruption, is paving the way for his exwife, whom he expects to protect him. Her family ties and time at the AU suggest that Ms Dlamini-Zuma is the last person to help Africa's most advanced economy fulfil its potential. ■

Britain and the European Union

A hard road

The government promises a "truly global Britain" after Brexit. Is that plausible?



HALF a year after choosing Brexit, Britons have learned what they voted for. The singleword result of June's referendum—"Leave"—followed a campaign boasting copious (incompatible) benefits: taking back control of immigration, ending

payments into the European Union budget, rolling back foreign courts' jurisdiction and trading with the continent as freely as ever. On January 17th Theresa May at last acknowledged that leaving the EU would involve trade-offs, and indicated some of the choices she would make. She will pursue a "hard Brexit" (rebranded "clean" by its advocates), taking Britain out of the EU's single market in order to reclaim control of immigration and shake off the authority of the EU's judges.

Mrs May declared that this course represents no retreat, but rather that it will be the making of a "truly global Britain". Escaping the shackles of the EU will leave the country "more outward-looking than ever before". Her rhetoric was rousing. But as the negotiations drag on, it will become clear that her vision is riven with tensions and unresolved choices.

Definitely maybe

Mrs May's speech was substantial and direct—welcome after months in which her statements on Brexit had been Delphic to the point of evasion. Although she plans to leave the single market, Mrs May wants "the freest possible" trade deal with the EU, including privileged access for industries such as cars and finance (see page 46). In order to be able to strike its own >>>

▶ trade deals outside Europe, Britain will also leave the EU's customs union (freeing itself from the common external tariff), but will aim to keep its benefits in some areas. The government will consider making some payments into the EU budget, but the "vast" contributions of the past will end. Mrs May would like a trade agreement with the EU to be wrapped up within two years, meaning that there is no need for a formal transition arrangement; she suggests a phasing-in period, whose length could vary by sector. Parliament will get a vote on the final deal, though by then it will be too late for it to change much.

The pound rose on the discovery that Mrs Maybe had a plan after all. Sympathetic newspapers compared her steel to that of Margaret Thatcher (perhaps forgetting that the single market was one of the Iron Lady's proudest achievements). Yet, for her plan to succeed, Mrs May must overcome several obstacles—not least her own contradictory impulses.

The essential task will be to get the EU to agree to the sort of deal she set out this week. When it comes to the single market and customs union, European leaders have made clear their opposition to "cherry-picking". A tailored transition plan may get the same bleak response. And the EU has never concluded a trade agreement in two years, let alone a deep one.

Mrs May would retort that Britain will get a good deal because its negotiating position is strong. In her speech, after distancing herself from Donald Trump's Eurobashing, she warned that the EU would be committing "an act of calamitous self-harm" if it tried to punish Britain with a bad deal. Europeans would miss London's financial markets; they might also lose access to British intelligence, which has "already saved countless lives" across the continent.

Her undiplomatic threats ring hollow. Everyone will lose if there is no agreement, but nobody will lose as much as Britain. The country is in no position to bully its way to a cushy deal and EU leaders in no mood to offer one.

Mrs May's way for Britain to come out on top, even if it loses access to markets in Europe, is for the country to open itself up to the world. In rediscovering its past as a trading nation, Britain can become a sort of Singapore-on-Thames, free of the dead hand of an over-regulated EU. Long touted by some liberal Brexiteers, the idea has a certain devil-may-care appeal.

Yet if Mrs May is to turn Britain into a freewheeling, laissez-faire economy, she will have to sacrifice some of her own convictions. She has interpreted the Brexit vote as a roar by those left behind by globalisation. On their behalf, she has railed against employers who break the "social contract" by hiring foreigners rather than training locals. Under Mrs May, Britain, a beacon for investment, risks becoming less attractive to foreigners, not more. The minimum wage is rising. She wants to vet foreign takeovers of British firms. Above all, the promise to "control" immigration looks like a euphemism for reducing it (see Bagehot). Forced to choose on a visit to India, Mrs May put continued restrictions on student visas before a trade deal.

The Economist opposed Brexit. If Britain has to leave the single market and the customs union, we would urge the globalising side of Mrs May to prevail over the side that would put up barriers. But for this, Mrs May will have to abandon views to which, as home secretary, she has long held firm. Britain is heading out of the EU, and it will survive. But the chances are that it will be a poorer, more inward-looking place—its drawbridge up, its influence diminished.

Regulating car emissions

Road outrage

To stop carmakers bending the rules, Europe must get much tougher



AMERICA'S system of corporate justice has many flaws. The size of the fines it slaps on firms is arbitrary. Its habitual use of deferred-prosecution agreements (a practice that is spreading to Britain; this week Rolls-Royce, an engineering

firm, was fined for bribery—see page 54) means that too many cases are settled rather than thrashed out in court. But even crude justice can be better than none. To see why, look at Europe's flaccid approach to the emissions scandal that engulfed Volkswagen (vw) in 2015 and now threatens others.

Diesel-engined vehicles belch out poisonous nitrogen-oxide (NOx) gases. Limits have been imposed around the world on these toxic fumes. But the extra cost of making engines compliant, and the adverse impact that this has on performance and fuel efficiency, tempt carmakers to flout the rules. That is easier to get away with in Europe than in America, where the regulations are tighter and enforcement is more rigorous.

American agencies were the ones to uncover vw's use of a "defeat device", a bit of software that reduced NOx emissions when its cars were being officially tested, and turned itself off on the roads. The German carmaker faces a bill of over \$20bn

in penalties and costs; six of its executives were indicted by the Department of Justice this month. Fiat Chrysler Automobiles (FCA) is the latest carmaker to fall foul of American enforcers. On January 12th the Environmental Protection Agency (EPA) accused the firm, whose chairman is a director of *The Economist*'s parent company, of using software to manipulate measured NOx emissions on 104,000 vehicles. The agency stopped short of calling the software a "defeat device", but FCA, which denies any wrongdoing, must convince the EPA that it is acting within the rules (see page 52).

A gargantuan grey area

Life is much easier in Europe, where the regulations are pliable to the point of meaninglessness. The gentle motoring required in official emissions tests is far removed from the revving and braking of real driving. Tests are also conducted at high temperatures, at which cars perform better. On the road, emission controls in some cars turn off at temperatures of 17°C and below, ostensibly to protect the engine from the chill. (In America there is also a recognition that there should be a cold-start exemption, but it kicks in below 3°C.) Some cars spew up to 15 times more noxious gases on the road than under test conditions. Damningly, vw felt able to conclude that, under the European emissions regime, it had done nothing wrong.

Even if the rules were tighter, enforcement would be a problem. Diesel-engined vehicles, which make up around half the traffic on the continent's roads, are central to the financial health of many European carmakers. That gives the national agencies which conduct tests a reason to look the other way. Another incentive lies in the battle against climate change, because complying with NOx emissions regulation adds to costs. In the hugely competitive market for small cars, a higher price can steer consumers towards petrol cars, which are less efficient than diesel engines and hence produce more carbon dioxide, the main greenhouse gas.

Neither is a good reason to avoid getting much tougher. It is true that Europe's carmakers have more at stake than America's. But so do Europe's citizens. NOx emissions cause the premature deaths of an estimated 72,000 Europeans a year. And

one way or another, Europe's love affair with diesel is souring. This week the city of Oslo used new powers to ban diesel cars temporarily in order to improve air quality. Paris, Madrid and Athens are set to ban diesels altogether by 2025. The falling cost of battery-powered cars may offer a greener alternative.

Europe is getting stricter. A new test that better mirrors driving conditions on real roads will start to be rolled out later this year. To reduce the risk of manipulated results, regulators will examine vehicles on the road as well as under test conditions. But EU member states have already won an exemption, meaning that NOx emissions will be allowed to exceed the official test limit for years. And the tests will still be conducted by national agencies. The exemption should go. To beef up enforcement, Europe should hand more oversight to the EU. For the sake of Europeans' lungs, it is past time to get tough.

The legacy of gendercide

Too many single men

The war on baby girls is winding down, but its effects will be felt for decades



FEW years ago it looked like Athe curse that would never lift. In China, north India and other parts of Asia, ever more girls were being destroyed by their parents. Many were detected in utero by ultrasound scans and aborted: others died

young as a result of neglect; some were murdered. In 2010 this newspaper put a pair of empty pink shoes on the cover and called it gendercide. In retrospect, we were too pessimistic. Today more girls are quietly being allowed to survive.

Gendercide happens where families are small and the desire for sons is overwhelming. In places where women are expected to move out of their parents' homes upon marriage and into their husbands' households, raising a girl can seem like an act of pure charity. So many parents have avoided it that, by one careful estimate, at least 130m girls and women are missing worldwide. It is as if the entire female population of Britain, France, Germany and Spain had been wiped out.

Fortunately, pro-girl evangelising and economic growth have at last begun to reverse this terrible trend (see page 49). Now that women are more likely than before to earn good money, parents see girls as more valuable. And the craving for boys has diminished as parents realise that they will be hard to marry off (since there are too few brides to go around). So the imbalance between girls and boys at birth is diminishing in several countries, including China and India. In South Korea, where a highly unnatural 115 boys were being born for every 100 girls two decades ago, there is no longer any evidence of sex selection—and some that parents prefer girls.

This is wonderful news, and it will be still more wonderful if the progress continues. Ending the war on baby girls would not only cut abortions, which are controversial in themselves and can entail medical complications, especially in poor countries. It would also show that girls and women are valued. Yet gendercide will leave an awful legacy. Today's problem is a shortage of girls; tomorrow's will be an excess of young men.

As cohort after cohort of young Asians reach marriageable

age, all of them containing too few women, a huge number of men will struggle to find partners. Some will import foreign brides, thereby unbalancing the sex ratio in other, poorer countries. A great many will remain single. Some women will benefit from being more in demand. But the consequences are bad for societies as a whole, because young, single, sex-starved men are dangerous. Stable relationships calm them down. Some studies (though not all) suggest that more unattached men means more crime, more rape and more chance of political violence. The worst-affected districts will be poor, rural ones, because eligible women will leave them to find husbands in the cities. Parts of Asia could come to resemble America's Wild West. (Many polygamous societies already do: think of Sudan or northern Nigeria, where rich men marry several women and leave poor men with none.)

There are no easy answers. Historians note that rulers used to deal with surpluses of young men by sending them off to war, but such a cure would obviously be worse than the disease. Some say governments should tolerate a larger sex industry. Prostitution is often lawless and exploitative, but it would be less so if governments legalised and regulated it. One Chinese academic has suggested allowing polyandry (ie, letting women take more than one husband). In the most unbalanced areas something like this may happen, regardless of the law.

Don't just do something

Above all, governments should be cautious and humble. When trying to strong-arm demography, they have an awful record. China's one-child policy, though recently relaxed, has aggravated the national sex imbalance—and been coercive, brutal and less effective than its admirers claim. Without it, the birth rate in China would have fallen too-perhaps just as fast. Bad policies often outlast the ills they are supposed to remedy.

It will be for Asian societies to deal with the excess male lump they have created. It would help if they did not look down on bachelors: some make it hard for unmarried people to get hold of contraceptives. But whatever policymakers do now, the sex imbalance will cause trouble for decades. The old preference for boys will hurt men and women alike.

Conservative thought

Your leader on a "dithering" Theresa May recognised that comparisons of the current British prime minister with Margaret Thatcher are difficult because Thatcher only came into her own in her second term ("Theresa Maybe", January 7th). If so much of our political horizon looks unfamiliar it is because we are reluctant to recognise all those second-term Thatcherite chickens that have come home to roost. The shift from manufacturing to services; the indifference of central government towards the regions; the transfer of wealth from poor to rich; the creation of an unemployable underclass that generates demand for a resented migrant workforce to fill the skills gap: the failure of education to consider how knowledge advances in the wider world; the neglect of obvious housing needs; the unaddressed problem of low productivity and the accompanying tendency of Britain to become an ancien régime rentier economy.

Thoughtful Conservatives know that the seeds of these malaises were sown by their party 30 years ago. They know that not one of these issues has a root cause in Britain's membership of the EU. Perhaps "Theresa Maybe" is a thoughtful Conservative. Maybe that is why she is dithering. PETER HAYDON London

The best comparison of Mrs May would be to Harold Wilson, a consummate politician who was brilliant at manipulating his rivals and manoeuvring them into impotence, usually by appointing them to jobs beyond their abilities. The unfortunate consequence of this was that many of the most important jobs in the land were put into the hands of total incompetents. Wilson was so occupied with clever party politics that he had little time to govern the country. Mrs May appears to be purposefully striding down the same blind alley. CHRIS WRIGHT Dieburg, Germany

Defending the split infinitive

"Researchers demonstrated how wirelessly to hack a car" is absurdly unnatural syntax ("Breaching-point", December 24th). It encourages a misreading where "wirelessly" goes with "how" (as in "how frequently"). "Demonstrated how to wirelessly hack a car" expresses what was meant. The Economist has advocated evidence-based inquiry and intellectual freedom since 1843. Why submit to an adverbpositioning policy founded on dogmatism? The need for clarity should overrule superstitious dread of the split infinitive. **GEOFFREY PULLUM**

Professor of general linguistics University of Edinburgh

The Magic Kingdom

Walt Disney World makes the inauthentic believable ("Yesterdayland", December 24th). In just one day you can stroll through an idyllic time that really never was (Main Street, USA), casually explore Mars (Mission Space) and go on safari for white rhinos (Kilimanjaro Safaris). The experience is so accomplished that the visitor has no time for reflection, or to consider the remarkable infrastructure underground where employees change into their costumes. The seamless gradient change in music and aesthetics make the transition from Tomorrowland to Mickey's Toontown Fair not just easy, but almost natural. Perhaps there is hope, as the quote from Jean-Jacques Rousseau displayed inside the Land Pavilion at EPCOT suggests: "Nature never deceives us; it is always we who deceive ourselves."

BRENT WARSHAW Fairfield, Connecticut

North Korea's reach

America's defence budget represents 72% of total NATO spending, but this is misleading, you say, because the figure "reflects America's global reach" as well as protecting the North Atlantic ("Allies and interests", December 17th). Fair

enough. But as the missile flies, Pyongyang is closer to Berlin than San Francisco. ANDY LADICK Washouaal, Washinaton

Dumping grounds

"Men of steel, house of cards" (January 7th) wondered whether cheap Chinese steel imports into America are "really so terrible" if they benefit American firms that consume steel. The problem is this: it is market forces that generate the new technologies, products and improvements in efficiency that bring benefits to consumers; but when governments decide production and capacity levels, profits suffer and innovation is stymied.

In recent years China, faced with chronic overcapacity in steel because of stagnating demand at home, pushed steel exports to around 120m tonnes. These exports were sold at a significant loss, of \$25bn on an annualised basis, according to data from the China Iron and Steel Association. This prompted the collapse in the price of steel, causing American steelmakers to curb their capacity to produce it. In this context the industry rightly sought trade actions to protect itself from unfair trade practices.

So, yes to global trade and the benefits it brings. But exporting unsustainable domestic losses to harm the sustainability of the same industry in another country is not free or fair trade. For example, were China to start dumping millions of smartphones into the American market at a price below cost I would be surprised if Apple satidly by. NICOLA DAVIDSON Vice-president ArcelorMittal London

A rake and a scoundrel

I liked your piece about how Harry Flashman, a fictional globetrotter, would have made a great journalist ("The cad as correspondent", December 24th). When I stayed at the Gandamack Lodge in Kabul, Flashman was a looming

presence among the old British muskets, swords and maps. On the wall outside was a plaque with a quote from Flash: "Kabul might not be Hyde Park but at least it was safe for the present." Well, not anymore. The Afghan government closed this haunt for journalists. diplomats, fixers and shady characters a few years ago after an increase in attacks on foreigners. I'm sure Flash found another appropriate watering

TOM BOWMAN National Public Radio's Pentaqon correspondent Alexandria, Virginia

William Boot, the brilliant creation of Evelyn Waugh in "Scoop", his satire on newspapers and British imperial politics during the grubby 1930s, was an amiable eccentric who succeeded in spite of himself. Flashman may have been closer to the reality of the empire than Boot, but Boot is more endearing, and successfully ran a counter-revolution. ANDERS OUROM Vancouver



As the late, great, Christopher Hitchens once said on discovering a friend of his had also fallen for that arch-cad Harry Flashman, one can recognise a confirmed addict and fellowsufferer. As someone who also likes to re-read Flashmans in the places they are set, it is my belief that your correspondent is a terminal case. Huzzah! RTCHARD CARTER London |

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

Executive Focus

EXCITING OPPORTUNITY TO MANAGE AN INNOVATIVE IMPACT-LEVEL FORECASTING AND MONITORING MODEL



TradeMark East Africa (TMEA) is funded by a range of development agencies with the aim of growing prosperity in East Africa through trade. We believe that enhanced trade contributes to economic growth, a reduction in poverty and subsequently increased prosperity. The first phase of TMEA runs to mid-2017 and we expect this to be followed by a second phase from 2017 to 2024.

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The Director, IMPACT and Research will manage our innovative impact-level forecasting and monitoring economic model, and design and oversee our activities to generate, analyse and manage knowledge, in order to better articulate the benefits of the overall TMEA programme. She will be responsible for delivering the research component of TMEA's knowledge vision, and ecyloping a knowledge culture within TMEA with the aim of: enhancing its effectiveness; strengthening organisational learning: intensifying innovation; and increasing TMEA's external visibility through increased knowledge generation and sharing. The post requires experience with both microeconomic and macroeconomic analysis and best practices, ideally evidenced by a record of published research.

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The detailed job profile for this post can be accessed on our website www.trademarkea.com

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INTERNATIONAL GRAINS COUNCIL

EXECUTIVE DIRECTOR (United Nations Under Secretary-General level)

Applications are invited for the post of Executive Director of the International Grains Council (IGC), which will fall vacant on 1 February 2018.

The Executive Director is the chief administrative officer and head of the Secretariat of the International Grains Council. The IGC is an intergovernmental commodity body based in London. Its multinational Secretariat administers the Grains Trade Convention, 1995 and the Food Assistance Convention

The IGC's activities are primarily focused on providing, for the benefit of member governments and subscribers, an independent source of information and analysis of world market developments in grains, rice and oilseeds. The Council also monitors changes in national grain policies, conducts surveys of the international grains industry and fosters co-operation between governments and the industry. (For more information about the IGC see www.ioc.int).

Candidates should have a solid knowledge of the world grain economy as well as international agricultural and food policy issues; sound capabilities in the area of market and economic analysis; extensive administrative and managerial experience at an appropriately senior level; experience in working with government representatives and relevant international organisations; excellent communication skills in English, the working language of the Council and, at least one of the other three official languages of the Council (French, Russian or Spanish) would be desirable.

Applicants must be citizens of a country which is a member* of the International Grains Council. Interested individuals should apply directly to the email address below. Applicants should indicate whether the application is being sponsored by their government.

Remuneration will be in line with the United Nations Under Secretary-General level applicable in London, where the position is based.

Letters of application and a curriculum vitae in English should be sent by email to:

Mr. Aly Toure, IGC Chairman

Email: Chairman2017@igc.int

The closing date for applications is 10 March 2017.

* Members of IGC are: Algeria, Argentina, Australia, Canada, Côte d'Ivoire, Cuba, Egypt, European Union, India, Iran, Iraq, Japan, Kazakhstan, Kenya, Korea (Rep), Morocco, Norway, Pakistan, Russian Federation, Saudi Arabia, South Africa, Switzerland, Tunisia, Turkey, Ukraine, United States, Vatican City.



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 of efficiency, organization and time management.

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A helluva handover

WASHINGTON, DC

The drama of the transition is over, and the new president's team is largely in place. Now for the drama of government

OLED up in Trump Tower, the New TYork citadel he seems reluctant to leave, Donald Trump detected a tsunami of excitement in the national capital before his inauguration on January 20th. "People are pouring into Washington in record numbers," he tweeted. In fact the mood in Washington, DC, where Mr Trump won 4% of the vote on November 8th, was more obviously one of apathy and disdain for his upcoming jamboree. Even the scalpers were unhappy, having reportedly overestimated people's willingness to shell out to see Mr Trump sworn in as the 45th president. Some 200,000 protesters are expected to attend an anti-Trump march the day after the inauguration (see page 22).

Mr Trump's post-election behaviour has been every bit as belligerent as it was during the campaign. In his victory speech he said it was time to "bind the wounds of division"; he has ever since been insulting and threatening people on Twitter, at a rate of roughly one attack every two days. His targets have included Meryl Streep, Boeing, a union boss in Indiana, "so-called A-list celebrities" who refused to perform at his inauguration, Toyota and the "distorted and inaccurate" media, whose job it will be to hold his administration to account.

He enters the White House as by far the most unpopular new president of recent times. It does not help that America's intelligence agencies believe Russian hackers

Also in this section

18 Peter Navarro's economics

sought to bring about his victory over Hillary Clinton (though she won the popular vote by almost 3m ballots).

Yet amid the protests, the launch of a Senate investigation into Russia's hacking and nerves jangling in the United States and elsewhere at the prospect of President Trump, the transition has been chugging along fairly smoothly. The markets have responded with a "Trump bump", exploring record highs in expectation of tax cuts and deregulation.

Mr Trump has named most of his senior team, including cabinet secretaries and top White House aides, and their Senate confirmation hearings are well under way. These are even more of a formality than usual, thanks to a recent change to the Senate's rules, instigated by a former Democratic senator, Harry Reid, which allows cabinet appointments to be approved by a simple majority. As the Republicans control both congressional houses, even Mr Trump's most divisive nominees-such as Senator Jeff Sessions from Alabama, his choice for attorney-general, an immigration hawk dogged by historical allegations of racism-appear to be breezing through.

Tom Price, a doctor and congressman from Georgia who is Mr Trump's pick for health secretary, is touted by Democrats as the likeliest faller; he is in trouble over legislation he proposed that would have benefited a medical-kit firm in which he owned shares. But as the Democrats mainly dislike Dr Price because he is the putative assassin of Barack Obama's health-care reform, and Republicans like him for the same reason, he will probably get a pass. "There are two people responsible for the direction we are heading in," says Senator John Barrasso, a Republican from Wyoming, approvingly. "Donald Trump, who won the election, and Harry Reid, for changing the Senate rule. This has allowed the president-elect to nominate patriots, not parrots."

Indeed, Mr Trump's cabinet picks have been solidly conservative, with a strong strain of small-governmentism. At least three of his nominees appear to have mixed feelings about whether their future departments should even exist.

Rick Perry, Mr Trump's choice to lead the Department of Energy, pledged to abolish that agency when campaigning for the presidency in 2011. Ben Carson, a rightwinger with little management experience, whom Mr Trump has chosen to head his Department of Housing and Urban Development, once wrote that "entrusting the government" to look after housing

▶ policy was "downright dangerous". As attorney-general of Oklahoma Scott Pruitt, picked to lead the Environmental Protection Agency, has sued the EPA 14 times, partly in an attempt to foil the Clean Power Plan, Mr Obama's main effort to cut America's greenhouse-gas emissions.

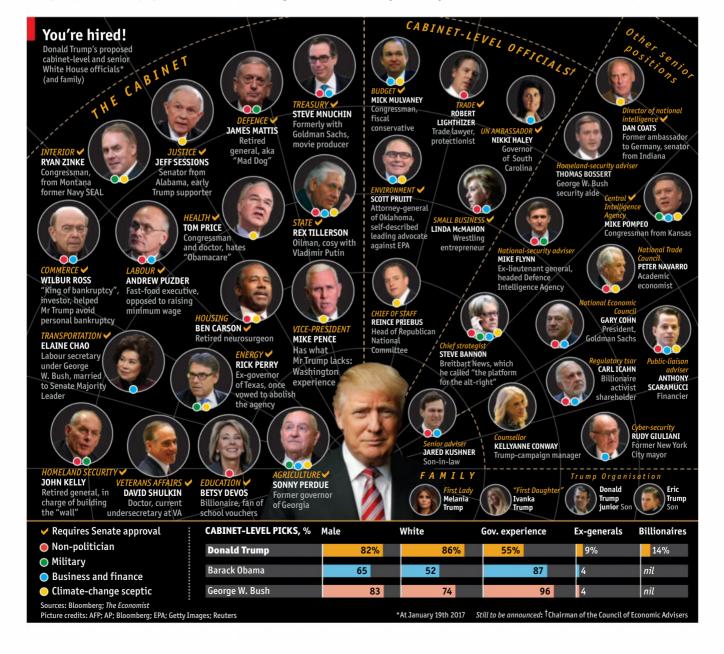
Climate of opinion

That all three are climate-change sceptics is no coincidence. So, to varying degrees, are almost all the politicians in Mr Trump's administration (see graphic). Reince Priebus, his chief of staff, recently summarised his boss's view of climate science as mostly "a bunch of bunk". Mr Trump's dishevelled chief strategist, Steve Bannon, a self-described nationalist populist, has similar views, with a twist. Mr Trump has described climate change as a hoax perpetrated by the Chinese; Mr Bannon blames a conspiracy of shadowy "globalists" for the UN's Paris Agreement on climate, which Mr Trump has vowed to "cancel". Plainly, Mr Pruitt's brief will be to carry on doing what he was doing—with the power of the federal government behind him.

The disavowal of climate science reflects a wider disdain for expert opinion. A small illustration of this, with potentially large consequences for American children, is that Mr Trump has discussed appointing Robert F. Kennedy junior, a lawyer and proponent of a bogus theory linking vaccines and autism, to chair a vaccine-safety commission. A bigger illustration is that the one academic economist on Mr Trump's senior economic team, Peter Navarro, is a protectionist with a maverick aversion to trade deficits (see next article).

The team is dominated by bankers and businessmen, including two Goldman Sachs alumni, Steven Mnuchin, Mr Trump's choice for treasury secretary, and Gary Cohn, the head of his National Economic Council. For his commerce secretary, Mr Trump has picked Wilbur Ross, a billionaire businessman who is also a protectionist, having made a fortune by buying and turning around stricken American steel and textiles mills, which he argues require stiffer protective tariffs.

Reflecting Mr Trump's outsider status, around half his appointees are non-politicians, including perhaps the most important, Mr Bannon and Mr Trump's other main adviser, Jared Kushner, his 36-yearold son-in-law. A scion of a billionaire New York property developer, and a reformed metropolitan liberal, Mr Kushner is in some ways similar to Mr Trump. He is married to Mr Trump's daughter, Ivanka, who is expected to take on many of the usual duties of a White House consort, and is as ruthless as he is influential. Governor Chris Christie of New Jersey, whom Mr >>



Kushner axed as head of the transition, can attest to that.

The fact that many of Mr Trump's picks are plutocrats reflects his preference for pragmatists over pointy-heads, as well as his belief that moneymaking is a transferable skill. That was the underlying logic of his own candidacy. He also likes tough guys, ideally in uniform, hence his selection of three former generals: James Mattis and John Kelly, both former marines, at, respectively, the Pentagon and the Department of Homeland Security, and Michael Flynn, his national-security adviser. Mr Trump assured a crowd in Ohio that his cabinet would include the "greatest killers you've ever seen".

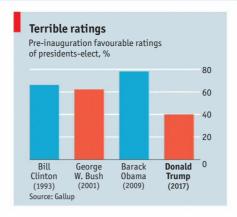
His nominees' ability to look the part, Hollywood-style, is indeed said to be an important consideration for Mr Trump. "He's very aesthetic," one of his advisers told the Washington Post. "You can come with somebody who is very qualified for the job, but if they don't look the part, they're not going anywhere." In the case of the stern Mr Kelly and craggy-faced Mr Mattis—whose nickname, "Mad Dog", Mr Trump enunciates with relish—this appears to have worked out well.

Divided and ruling

Mr Mattis owes his moniker to his combat record and fondness for scandalising civilians; it's "fun to shoot some people", he told a crowd in San Diego. Yet he owes his reputation as a commander to his thoughtfulness, interest in history and concern for his soldiers. "He's perfect for Trump," says Michael O'Hanlon of the Brookings Institution, who has worked closely with the general. "His toughness gets him through the door. But he's actually an intellectual in Genghis Khan clothing." Mr Kelly is also respected, including for the understanding of America's southern neighbours he developed while heading the Us Southern Command. That was apparent in his Senate hearing, in which he said the border wall that is Mr Trump's signature promise would not alone be sufficient to block illegal immigration: a "physical barrier, in and of itself, will not do the job."

In another transition, such an array of military men would have sparked concerns for the civil-military balance; Mr Mattis had to obtain a waiver of a rule restricting former soldiers from becoming defence secretary. That Messrs Mattis and Kelly have nonetheless been welcomed on Capitol Hill reflects a fear, among Republicans and Democrats, that it will take a tough guy to stand up to Mr Trump. "I firmly believe that those in power deserve full candour," said Mr Kelly when asked for his assurance on this. The highest-ranking officer to have lost a child fighting in Iraq or Afghanistan, he is unlikely to be bullied.

This also seems to be true of Mr Trump's most intriguing cabinet appoint-



ment: Rex Tillerson, the former boss of Exxon Mobil, whom he has tapped to be secretary of state. This was at first denounced as further evidence of Mr Trump's strange crush on Vladimir Putin's regime, with which Mr Tillerson has done a lot of business, as well as his climate-change scepticism. That may be right on both counts. In his confirmation hearing, Mr Tillerson called for better relations with Russia and was, at best, vague about what steps he would take to counter global warming. Yet he appeared more measured in his view of the world than some of Mr Trump's other advisers, including Mr Bannon and Mr Flynn, who want to forge an alliance with Russia to fight Islamist militancy.

Mr Tillerson denounced Russia's invasion of Ukraine as an "illegal action", spoke up for NATO and said he looked forward to working with the Senate "particularly on the construct of new sanctions" against Russian aggression. He even offered a dash of Wilsonian warmth: "We are the only global superpower with the means and moral compass capable of shaping the world for good." Mr Tillerson appears to have the authority and judgment necessary to steer Mr Trump's belligerent instincts into the realm of realism.

In short, this looks like a curate's egg of an administration. In Messrs Cohn, Kelly, Mattis, Mnuchin, Perry and Tillerson, Mr Trump has assembled a group of successful people who appear to have at least some of the requisite qualities to run the government. That could also turn out to be true of Mr Trump's choice for education secretary, Betsy DeVos, a billionaire Republican benefactor and advocate for school choice—though the results of her experiments in her native Michigan are not all that impressive. Mr Carson, Mr Pruitt and Mr Sessions look like awful appointments.

Mr Flynn may be worse. A gifted intelligence officer, with a flair for institutional reform, he was sacked as head of the Defence Intelligence Agency in 2014, allegedly for poor management skills. Already critical of the president's approach to fighting Islamist militancy, Mr Flynn proceeded to get mad. He horrified former comrades last year by launching several eye-pop-

pingly partisan and Islamophobic—or as Colin Powell put it, "right-wing nutty"—attacks on Mr Obama, Mrs Clinton and Muslims. Even if paired with a more emotionally stable commander-in-chief, Mr Flynn would be a concern.

Yet the biggest uncertainty surrounding Mr Trump's cabinet concerns less the calibre of its members than the agenda they will pursue. It is hard to exaggerate how divided his team is on the big policy questions. Some members of the economic team, including Mr Mnuchin, who will be primarily busy with Mr Trump's promised tax cuts, and Mr Cohn, who will play a coordinating and shaping role, are broadly in favour of free trade. Yet the likeliest architects of Mr Trump's trade policy, Mr Ross, Mr Bannon and Mr Navarro, are economic nationalists.

Similarly, Mr Mattis and Mr Tillerson appear to hold mainstream conservative views; both say it behoves the United States to uphold international rules, ideally by working through traditional alliances such as NATO. Mr Trump, however, has suggested that NATO could be "obsolete". Mr Tillerson also said that America should not quit the UN's Paris accord on climate change; Mr Trump has both vowed to "cancel" the agreement and said that he was "open-minded" about whether to honour it or not.

Mr Trump acknowledged the conflict in a tweet: "All my cabinet nominee[s] are looking good...I want them to be themselves and express their own thoughts, not mine!" Was he suggesting his nominees' views matter more than his own? Does he envisage them capably governing while he, Mr Kushner and Mr Bannon set about making the great changes Mr Trump has promised? Or will this be a squabbling talking-shop of a government, over which Mr Trump will preside watchfully, before swooping down on one side of an argument or another? That is how he has managed his business; it is also the role he played in "The Apprentice".

Even those familiar with Mr Trump's thinking cannot say how he means to govern. "Trump is a wildcard, a political black swan, we don't know how pragmatic he'll be or how dogmatic," says Stephen Moore, who helped write his economic policy. Yet some of his team's current preoccupations offer early clues.

Deciphering Donald

One is a House Republican tax proposal that could indicate how protectionist Mr Trump is. Known as "border adjustability", it is central to an ambitious House Republican tax plan and is intended to boost exports by scrapping tax on foreign sales, even as firms would lose the right to deduct the cost of imports from their profits. An additional advantage, some of its proponents suggest, is that border adjustabil-



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ity could look sufficiently like an import tariff for Mr Trump to claim that he had executed his threat to slap a tariff on American outsourcers, without causing anything like the same economic damage. Yet it seems Mr Trump's protectionist rhetoric is in earnest. "Anytime I hear border adjustment, I don't love it," Mr Trump told the Wall Street Journal on January 13th.

After tax cuts and new trade terms, Mr Trump's biggest economic promise is deregulation. He should find quick wins in finance and energy. But his pledge to scrap and replace Obamacare, with the many rules attached to it, will be a more daunting test of his political skills. Because Democratic senators could filibuster away any bill to repeal the health-care programme, the Republicans plan to starve it of money until the insurance markets that underpin it collapse. Many think that, presented with a fait accompli, the Democrats would grudgingly support whatever alternative scheme they are offered. But Mr Trump appears unconvinced by this, and he is probably right to be.

Slow starvation of Obamacare would ensure many hard-luck stories, for which the Republicans would be blamed. An alternative ploy would be to make relatively footling changes to Obamacare and declare victory. It would be hard to persuade the Republicans in Congress to swallow that. But as Mr Trump claimed on January 14th to be putting the final touches to a plan that would involve "insurance for everybody", somewhat like Obamacare, and unlike any Republican proposal, perhaps this is what he has in mind.

Deal or no deal?

Besides the small matter of whether Mr Trump means to launch a trade war, a pressing foreign-policy question concerns Russia. Mr Trump, Mr Bannon and Mr Flynn want a better relationship with Mr Putin. "But what will they give up for it?" asks Nicholas Burns, a former American ambassador to NATO. Mr Trump has signalled that he might drop some of the sanctions Mr Obama placed on Russia after its intervention in Ukraine. Perhaps he would also consider scrapping American troop deployments to Poland and the Baltic states. Either step would be viewed by NATO'S European members as evidence that Mr Trump's apparent disdain for the alliance is for real.

This need not go badly. Mr Trump could back-pedal on protectionism, ignore or somehow improve Obamacare and maintain America's watchfully adversarial footing with Russia. His administration could turn out as well as the markets seem to expect. But that would be largely down to Mr Trump himself; it will not be, as some have fancifully hoped, because his administration has been saved by the better angels in his cabinet.

Peter Navarro

Free-trader turned game-changer

WASHINGTON, DC

The head of Donald Trump's new National Trade Council is about to become one of the world's most powerful economists. That's worrying

THE day after Ronald Reagan won his second term as president in 1984, a doctoral student at Harvard University published his second book. "The Policy Game: How Special Interests and Ideologues are Stealing America" complained that greedy interest groups and misguided ideologues had led America to "a point in its history where it cannot grow and prosper". The solution: increase political participation and swap ideology for pragmatism.

On January 20th that student, now a professor, will enter the White House as part of a populist insurgency. Peter Navarro, a China-bashing eccentric who will lead the new National Trade Council, has emerged as the brains behind Donald Trump's brawn on trade. Lauded as a "visionary" by Mr Trump, Mr Navarro may soon be the world's most powerful economist working outside a central bank.

He once supported free trade. An entire chapter of "The Policy Game" extols its virtues, labelling the protectionism of Reagan, who coerced the Japanese into reducing their car exports in 1981, as "dangerous and virulent". There was a hint of his later scepticism: he called for more compensation for workers who lose their jobs to foreign competition, and stricter trade rules at the supranational level. But one benefit of such rules, he wrote, would be to provide presidents with an "escape from domestic protectionist pressures...the issue would be out of their hands."

It seems that Mr Navarro's change of

heart came decades later, after he took an interest in China. (Like other members of the incoming administration, he has been unavailable for interview in advance of the inauguration.) His road to China was a long and winding one: his research interests are broader than the average economist's. His doctoral thesis studied the reasons firms give to charity; his paper on this remains his most cited work. He has worked extensively on energy policy. In 2000 or so he began studying online education, and was an early adopter of technological aids in his own teaching, says Frank Harris, one of his former students.

Two themes emerge from Mr Navarro's zigzagging research, which, since 1989, he has pursued at the University of California, Irvine. The first is a preference for realworld issues over abstraction. In 2000 he wrote two papers with Mr Harris on the best way to develop wind energy. Just months after the attacks of September 11th 2001 he tried to calculate their economic costs. He has written a popular book about investing, "If It's Raining in Brazil, Buy Starbucks". He is a prolific writer, but has no publications in top-tier academic journals.

The second theme is his interest in the distribution of income. But whereas the fortunes of rich and poor have gripped other economists, Mr Navarro has "always been focused on a broad swathe of the middle", says Richard Carson, a co-author. (Mr Carson worked with Mr Navarro on a paper arguing that the growth of cities >>>



Ready to rock

▶ should be tied to quality-of-life measures, such as traffic levels and school overcrowding.) Such concerns helped to draw Mr Navarro into politics. In the 1990s he ran for office several times as a Democrat, losing every race. He seems to be enjoying his political comeback: his television appearances can deteriorate into rumbustious shouting matches. He is fond of hyperbole. When he sends e-mails, his screen name appears as "ComingChinaWars".

It is his recent work on China that led to his unlikely hiring by Mr Trump. In the past decade or so Mr Navarro has penned three books warning darkly of the dangers posed by China's economic and military rise. The second, "Death by China", became a documentary in 2012. Narrated by Martin Sheen, an actor and left-wing icon, the film tours communities that have suffered from competition with Chinese imports, juxtaposing shuttered American factories with shots of Chinese sweatshops.

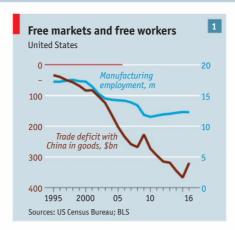
The core allegations Mr Navarro makes against China are not all that controversial. He accuses China of keeping its currency cheap, a common charge until 2015, when China began intervening in currency markets in the opposite direction. He deplores China's practice of forcing American firms to hand over intellectual property as a condition of access to its market. He notes, correctly, that Chinese firms pollute the environment more freely and employ workers in far worse conditions than American rules allow, and produce exports which often benefit from government subsidies.

Trading positions

A charitable interpretation of his views is therefore that he is not a protectionist at all. Rather, he simply objects to mercantilism on the part of the Chinese. In 2006 he estimated that 41% of China's competitive advantage over America in manufacturing stemmed from unfair trade practices. In interviews he has noted the similarity between this figure and the 45% tariff Mr Trump threatens to levy on Chinese goods.

But this interpretation does not explain Mr Navarro's oddest views, like his opinion of the trade deficit. After China joined the World Trade Organisation in 2001, the trade deficit exploded at the same time as millions of manufacturing jobs vanished (see chart 1). Mr Navarro claims that, as a matter of arithmetic, unbalanced trade is responsible for a slowdown in growth since 2000. Mr Trump spouts similar lines, talking about the trade deficit as if it were simply lost American wealth.

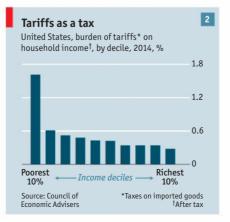
This is dodgy economics. A deconstruction of spending in the economy shows exports as a positive and imports as a negative. But the same accounting exercise also shows government spending as a component of GDP. Few economists-and certainly few Republicans-would say that the bigger the government, the richer the econ-



omy in the long-term. The equation shows how resources are used, not produced.

Were Americans unable to buy cheap imports, they would be poorer, with less to spend on other things. They would also be less specialised, and hence less productive, at work. Lawrence Edwards and Robert Lawrence, two economists, estimate that, under certain assumptions, by 2008 trade in manufactured goods put \$1,000 in the pockets of every American. China accounted for about a quarter of that amount. Recent work by the Council of Economic Advisers has shown that trade barriers, by raising the price of goods, tend to hurt the poorest most (see chart 2). If China exploits its workers and pollutes its rivers so that poor Americans can enjoy cheaper goods, it is not obvious that America is getting a raw deal.

Trade balances result primarily from saving-and-investment patterns. When capital flows in one direction, goods and services flow in the other. China's trade surplus with America during the 2000s was a consequence mainly of the Chinese buying Treasury bills, says Gordon Hanson, a trade specialist at the University of California, San Diego. This was not necessarily benign. Ben Bernanke, a former chairman of the Federal Reserve, suggested in 2005 that it contributed to a "global saving glut". Mr Navarro sometimes hints at this more nuanced view. A book he wrote in 2010 with Glenn Hubbard, a more



mainstream Republican economist, argued that "Asia saves too much and the United States consumes too much." Yet Mr Trump's plan for tax cuts and infrastructure spending, by pushing up government deficits, would make this problem worse.

What might Mr Navarro recommend in office? He and Mr Hubbard say that China should be subject to "appropriate defensive measures". That probably means more than the retaliatory duties already imposed on some Chinese goods. Mr Navarro says that Mr Trump is merely threatening an across-the-board tariff, in order to exact concessions from the Chinese. He seems to think that once they comply with global trade rules, the trade deficit will close and manufacturing jobs will return to America's shores: "The best jobs programme...is trade reform with China."

This is a fantasy. When manufacturing production moves overseas and then returns, productivity has usually risen in the interim; so far fewer jobs come back than left. Messrs Edwards and Lawrence find that even though the trade deficit in manufactured goods in 2010 was about two-anda-half times what it was in 1998, the number of lost manufacturing jobs the deficit represented rose only very slightly, from 2.5m to 2.7m. In any case, if China lost lowskilled jobs, manufacturers would relocate to other low-cost emerging economies, not America, says Eswar Prasad of the Brookings Institution, a think-tank.

That means neither fairer play by China nor tariffs could help many American workers. More productive strategies are available. David Dollar, also of Brookings, has set out how a country could play "responsible hardball" with China. He recommends restricting the acquisition of American firms by China's state-owned enterprises, something the Obama administration cautiously started doing. Such investment flows represent artificially high Chinese savings rather than the invisible hand of the market. Until now China has invested mainly in Treasury bonds. But it is increasingly interested in buying American technology firms. With restrictions imposed, America could demand that China open up more of its services market.

What about environmental and labour standards? The best way to improve those, argues Mr Prasad, would be to write trade deals including rules which China will eventually have to follow. This was one aim of the doomed Trans-Pacific Partnership. It is a more realistic goal than returning low-skilled work to America en masse.

It is possible that, in office, Mr Navarro will lean towards these kinds of ideas. But there is no sign of it yet: he recently promised "a seismic and transformative shift in trade policy". Another change of opinion on trade might be too much to hope for. A man who has waited 32 years for a revolution has probably made up his mind.





THE ACCENIDA

The people have spoken. Who's listening?



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Emboldened states

California steaming

America's most progressive state is set to lead the new fight against federal power

N NOVEMBER 9th, as it started to sink in that Donald Trump would be their president too, Californians expressed their anger and disappointment in different and creative ways. Some took to the streets and burnt papier-mâché effigies of Mr Trump's bronzed face. Others chanted "not my president" and waved signs that read "Immigrants Make America Great" and "Deport Trump". Kevin de León and Anthony Rendon, the leaders of the California Senate and Assembly, respectively, released a statement.

"Today, we woke up feeling like strangers in a foreign land, because yesterday Americans expressed their views on a pluralistic and democratic society that are clearly inconsistent with the values of the people of California," it read. "We will lead the resistance to any effort that would shred our social fabric or our constitution." As Mr Trump takes residence in the White House, California's lawmakers are putting their words into action.

They will have plenty of examples to follow. During the Obama administration, Texas and Oklahoma were strident advocates for state sovereignty. Several other states also challenged the federal government in court and by making their own laws. Indeed calls for states' rights and limited federal power have been a defining feature of American conservatism since the New Deal, says Ilva Somin, a federalism expert at George Mason University. But with the election of Mr Trump, whose party controls both houses of Congress and who plans to appoint conservatives to the Supreme Court, it is Democrats who find themselves turning to the states as bulwarks of resistance. California, America's most populous and progressive state, will lead the blue-state opposition.

California has plumped for Democrats since the early 1990s-Hillary Clinton won by a margin of 30 percentage points. It is one of six states where Democrats hold the governor's mansion and both houses of the state legislature. But Californians' opposition to Mr Trump goes beyond partisanship. If America's new president honours his promises to deport illegal immigrants, repeal the Affordable Care Act (better known as Obamacare) and relax environmental protections, California-America's largest economy-stands to lose more than any other state.

More than 3m undocumented immigrants call the Golden State home, reckons the Migration Policy Institute, a think-tank. (Texas, the second most popular state for undocumented foreigners, has less than half as many.) These workers make up nearly 10% of the workforce and contribute \$130bn-or about 5%-of the state's annual output, according to a 2014 study. Health Access California, a consumer advocacy group, estimates that the state government could lose \$22bn in federal funding annually if Obamacare is gutted; some 5m Cali-

fornians could find themselves without health coverage. And even though Mr Trump has vowed to axe Barack Obama's Clean Power Plan, which would have regulated carbon emissions from power plants, California is likely to continue complying with-or even exceed-the requirements laid out in the framework. But its companies might find themselves at a competitive disadvantage if other states do not.

Politicians from California and other blue states plan to resist Mr Trump using three main tools: legislation, litigation and circumvention.

Start with legislation. On December 5th California's lawmakers introduced a package of laws to impede mass deportation. One bill would create a programme to fund legal representation for immigrants in deportation hearings. Andrew Cuomo, the governor of New York, announced earlier this month that he would launch a similar fund. A recent national study found that immigrants with legal counsel were fiveand-a-half times more likely to avoid deportation than if they represented themselves. Yet only 14% of detained immigrants in deportation proceedings had lawyers. Gun control, health care and environmental policy are other areas where Democrat-dominated states might focus in the coming years, says John Hudak, a fellow at the Brookings Institution.

The leaves are brown

Several states are also getting ready to challenge the Trump administration in court. Maura Healey, the attorney-general of Massachusetts, which has a Republican governor, and Eric Schneiderman, the attorney-general of New York, have both expressed their willingness to square off against the federal government. Earlier this month the California State Legislature announced that it had retained Eric Holder, >> who served as Mr Obama's attorney-general, as outside counsel. He will work with the state's next attorney-general to bring suits against the federal government. California's decision to hire outside counsel is distinctive, but litigation as a means of stalling the federal government is hardly new. In 2010 a group of mostly Republican attorneys-general filed a lawsuit to block Obamacare. According to analysis by the Texas Tribune, the Lone Star State sued the Obama administration at least 48 times during Mr Obama's term. Hiring Mr Holder "sends a message to the administration about the state's resolve to defend our people, our diversity, and economic output,"

savs Mr de León.

Some potential suits are starting to take shape. Gavin Newsom, California's lieutenant-governor who will run for governor in 2018, has said that the state could sue under the California Environmental Quality Act or its federal equivalent to quash Mr Trump's plans for a wall along the border with Mexico. The argument would rest on the claim that construction of the wall could upset water flows and quality as well as wildlife. Richard Revesz, an environmental-policy expert at New York University's School of Law, says Democratic states could also sue to slow the repeal of the Clean Power Plan.

Women's rights

March nemesis

Donald Trump may unwittingly be a revitalising force for American feminism

F ALL the things uttered by Donald Trump during the election campaign, none seemed to threaten his chances of victory more than his admission, on tape, that he had grabbed women "by the pussy" without their consent. Yet Republicans-and voters-eventually looked past his attitude towards women. Many Americans, however, remain worried that a Trump presidency heralds a new age of sexism and misogyny. In the days after the election, donations to women's non-profit groups surged. So did demand for contraception, as women worried that access to birth-control would be curtailed. On January 21st, the day after the inauguration, some 200,000 American men and women are expected to turn up at a march in Washington to protest against regressive policies and demand equal treatment for



Still suffering

women-and a lot more besides.

The march grew from two unrelated Facebook posts into the "Women's March on Washington", which promises to be the biggest single anti-Trump demonstration vet. It has also spawned sister marches in New York, San Francisco, London and dozens of other cities. But arranging it has proved thorny. It was originally called the "Million Women March", until organisers were admonished for appropriating the name of the 1997 "Million Woman March", which focused on African-American women. Others claimed that it too closely resembled the 1963 "March on Washington" led by Martin Luther King Jr. The event's Facebook page is rife with comments advising white women to "check their privilege". Some women, put off by all the bickering, decided not to attend.

It is the kind of semantic nitpicking that has made progressive movements unappealing to many Americans. Yet it may have done some good: the march has brought together a broad coalition. Nearly 450 organisations, from the Council on American Islamic Relations to Greenpeace and the Coalition Against Gun Violence, have signed on as official partners. In addition to well-trodden feminist concerns like the wage gap and paid parental leave, the protest platform embraces other causes-immigrant rights, ending police brutality, climate protection—as integral to women's progress. The organisers argue that matters of social justice and women's rights go hand in hand. In the comfortable Obama years, many liberal Americans believed feminism's work was mostly finished. Mr Trump's ascent banished such complacency. He may be the unifying enemy they need.

The final way in which blue states can resist Mr Trump's policy agenda is by trying to get around federal policy. California already has cap-and-trade agreements with foreign jurisdictions such as Québec. Mr de León says that, under the Trump administration the state will work to expand such programmes. Since 2009 nine states in the north-east have participated in the Regional Greenhouse Gas Initiative, a capand-trade programme. Even if climate protections are relaxed under Mr Trump, such an alliance could continue.

On immigration, California has legislation preventing local jails from holding people for extra time just so that federal immigration enforcement officers can deport them. So-called "sanctuary cities" in other states, including Chicago, New York, Seattle and others, have pledged to protect their undocumented residents in similar ways. Such policies are likely to be effective at obstructing a massive dragnet; there are 5,800 federal deportation agents compared with more than 750,000 state and local police officers. Deporting undocumented immigrants without co-operation is much more difficult.

Mr Trump has threatened to cut federal funding for jurisdictions that insist on adhering to "sanctuary" policies, but Mr Somin suggests that courts may not look kindly on such an action. In 2012 the Supreme Court ruled that the federal government cannot force states to bend to its wishes with a financial "gun to the head". Although much about the next four years is unpredictable, one thing seems clear: the courts will be busy. ■

Asian-American voters

Bull in a China shop

DIAMOND BAR, CALIFORNIA

A long-slumbering voter block awakes

THE 2016 election marked a coming-out **L** party for conservative Chinese-Americans, who offered Donald Trump some of his most passionate support among nonwhites. Now some are feeling the first twinges of a hangover, as their hero threatens a trade war with China and hints that he might upgrade ties with Taiwan, the island that Chinese leaders call no more than a breakaway province.

"My members worshipped Trump religiously for a whole year," says David Tian Wang, a 33-year-old businessman originally from Beijing, who founded "Chinese Americans for Trump", a group which paid for Trump billboards in more than a dozen states and flew aerial banners over 32 cities. Perhaps most importantly, Mr Wang's >> members rallied supporters on Chineselanguage internet forums and messaging apps including WeChat, attracting outsized attention from media outlets and elected officials in places where Asian voters can swing elections, such as southern California. Interviewed in Diamond Bar, an affluent, majority-Asian city east of Los Angeles, Mr Wang remains a true believer. But perhaps half of his members are anxiously "waiting for Trump's next move".

There are about 4m Chinese-Americans. Typically, most combined a mild preference for Democrats with a general wariness of party politics. Early immigrants from southern China, Hong Kong and Taiwan lacked education, clustered in inner cities and "worked in bad jobs", making them prey for Democratic politicians offering welfare, sniffs Mr Wang. Recent immigrants from mainland China often attended good universities, work in the professions and "want to mingle with white people", he says. A big political moment came in 2014, when Chinese-Americans mobilised against SCA5, a proposed amendment to California's constitution that would have opened the door to racebased affirmative action. Many Chinese-Americans charge that race-conscious school admissions hurt high-achieving Asian youngsters and favour black and Hispanic candidates.

Asian votes helped Phillip Chen, a young Republican of Taiwanese descent, win a seat in the California state Assembly in November, representing Diamond Bar and a swathe of nearby suburbs. For years Asian-Americans, who make up about a third of his district's registered voters, shunned politics, though they longed to assimilate and fit in in other ways. At the recent election his own mother's friends wondered aloud why her son, "a nice young man" with a graduate degree, was running for office. His Chinese-American constituents admire Mr Trump's business acumen and worry about taxes, regulation and law and order, including a clampdown on illegal immigration. But they also want peace between Taiwan and China, Mr Chen says, and so will be watching the new president with a wary eye.

At an Asian shopping centre in Rowland Heights the most worried are those, such as Mike Lee, a sales director from Taiwan, who backed Hillary Clinton. He fears that Mr Trump will use the island as a "bargaining chip" with China. In contrast John Lin, a businessman from southern China, does not regret his Trump vote, cast because he thinks that "generally speaking a man has more control than a woman". He scoffs at talk of a trade war: "Walmart can't survive without Chinese products." As for rows over Taiwan, Mr Trump just needs time to become "more familiar with the world". Mr Lin has strong nerves, a helpful asset for Trump fans everywhere.



Chelsea Manning

The long commute

Barack Obama cuts short the whistle-blower's sentence

CLOPPY security at an American military base in Iraq in 2009 allowed a lowly soldier to set off a diplomatic thunderstorm. Bradley Manning, a junior intelligence analyst, downloaded a database of American government files onto a CD (labelled "Lady Gaga" to avoid suspicion) and uploaded them to WikiLeaks, a website devoted to exposing official wrongdoing.

The results were explosive and the price was heavy. The hundreds of thousands of leaked documents included a video of a shocking American airstrike on innocent Iraqis, carelessly mistaken for terrorists. A caustic ambassadorial cable describing the sybaritic lifestyle of the Tunisian presidential family may have sparked the Arab Spring.

In truth, though, the leaked cables mostly exposed nothing more than mild hypocrisy and buried literary talents. But they also endangered diplomats' sources. In some countries-China and Zimbabwe, for example-candid discussions with American officials are regarded as tantamount to treason; there and elsewhere retribution duly followed. So too did costly and secret State Department efforts to protect, where possible, people who had mistakenly trusted America's ability to keep a conversation private.

Speedily arrested after leaving clues in an online conversation, the soldier was jailed for 35 years on 22 charges, including espionage. Fans decried persecution of a brave whistle-blower, and what seemed vindictively harsh treatment, including nearly a year of solitary confinement.

The cause gained added weight when, the day after being sentenced, the convict switched name and sex: something that would have led to an immediate discharge from the army in any other circumstances. The authorities allowed her to take hormone-replacement therapy, but not to grow her hair.

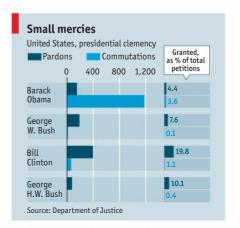
Chelsea Manning, now aged 29, was the most prominent name on a list of presidential pardons and commutations, most of which involved those serving long terms for drug offences, issued by Barack Obama in the final hours of his presidency. Her sentence will now end in May, after almost seven years behind bars.

Others are furious. Senator Tom Cotton, a former army officer, said "We ought not treat a traitor like a martyr." His colleague Lindsey Graham, an air-force veteran, tweeted that Ms Manning had "stabbed fellow service members in the back". John McCain said the decision "devalues the courage of real whistle-blowers". Such critics argue that Ms Manning ignored whistle-blowing criteria, such as trying internal channels first, and matching leaks with the purported wrongdoing.

The move also casts a spotlight on two other cases. One is WikiLeaks' founder, Julian Assange, holed up since 2012 in the Ecuadorean embassy in London to avoid questioning in a Swedish sexual-assault case. WikiLeaks had said he would be willing to face trial in America for leaking secrets if Ms Manning was pardoned. Mr Assange says he will stand by that position.

The other is Edward Snowden, an intelligence contractor who fled to Russia in 2013. Officials dismissed any talk of forgiveness for him, saying that the damage he had done was far graver, and that Ms Manning had already served a sufficient sentence. Mr Obama said that "justice had been served".

Despite his clemency splurge, Mr Obama has been mostly regarded as rather harsh on whistle-blowers. Few expect Mr Trump to be lenient either.



Lexington | History lessons

In inauguration week, remembering an accomplished but fatally flawed president



CAN a bad man be a good president? The potential urgency of this question took Lexington on a cross-country pilgrimage to the Richard Nixon Presidential Library and Museum in Yorba Linda, California. The museum, which reopened in October after an expensive overhaul, attempts to weigh the flaws of the 37th president against his undoubted merits, starting with his intelligence, daunting capacity for work and a poker-player's willingness to take calculated risks in geopolitics.

Much thought has gone into burnishing the reputation of the only president to resign the office. A new display for the selfie generation allows visitors to photograph themselves on the Great Wall of China next to a life-size Nixon cut-out, recalling his history-making visit in 1972. Little-known moments of physical courage are remembered. Carefully preserved bullets and glass fragments testify to a nearly fatal mob attack on his car while visiting Venezuela in 1958 as Dwight Eisenhower's vice-president—the display explains how Nixon prevented a bloodbath by ordering his Secret Service agent to hold fire.

The museum hails Nixon for rallying a "silent majority" of Americans who felt ignored and disdained by bossy, self-dealing elites. Captions suggest that Nixon balanced a conservative's wariness of big government with a pragmatist's willingness to wield federal authority to heal chronic ills, whether that involved desegregating schools in the South to an extent that had eluded his Democratic predecessors or creating the Environmental Protection Agency to clean up rivers so polluted that they caught fire. This empathy for America's forgotten, damaged places was all the more remarkable because—as the museum admits via filmed interviews with aides and family members—Nixon was a brooding introvert, "suspicious" to the point of paranoia.

The Watergate scandal that felled Nixon is presented in a sidegallery filled with sombre black, red and grey panels bearing labels like "Dirty Tricks and Political Espionage" and "Obstruction of Justice". In the brightly lit main halls an elegant display explains how Nixon recorded White House conversations with hidden microphones, to preserve his presidency for posterity. An old-fashioned telephone plays such recordings as "Daddy, Do You Want to Go Out to Dinner?" a 1973 call from Nixon's daughter, Julie. Walk a few yards into the Watergate gallery and the taped recordings are of the president growling about Jews in his government, snarling, "Generally speaking, you can't trust the bastards." Blazered volunteers earnestly describe Nixon's strong and weak points. They work hard, with one guide spending long minutes explaining Maoist China to two youngsters perched on the canary-yellow sofas in a replica of his Oval Office from around 1969.

Alas for keepers of the Nixon flame, the museum—whose historical displays have become more candid over the years, notably when the complex became part of the official presidential library system in 2007—is too honest for its own good. The museum would like visitors to judge Nixon the man, which is why it includes a sculpture of a favourite dog curled up in an armchair and tours of the modest cottage where he was born, back when Yorba Linda was a rural backwater. But it ends up telling a story larger than any one individual. It reveals how close America's ship of state came to being wrecked by a particularly lethal sort of bad leader: one guided by a broken moral compass.

The museum quotes one eyewitness to Watergate saying of Nixon's resignation: "The system worked." It nearly didn't, though. A pilgrimage to Yorba Linda offers several troubling lessons. First, Nixon employed in his cabinet and White House many clever men with brilliant cvs. They did little to rein in the thugs and glinty-eyed loyalists infesting his inner circle, though some grandees did resign out of principle-notably the attorneygeneral and deputy attorney-general, who both quit rather than obey Nixon's orders to fire a special prosecutor closing in on him (in the end the solicitor-general did the deed). Second, and perhaps unintentionally, the museum suggests that if the Supreme Court had not forced Nixon to release White House tapes of his ordering illegal acts, many partisans might have continued to look the other way. A striking interview, filmed in 2008, shows Bob Dole, a young senator back in 1973 who later became a party leader and presidential candidate, conceding that he tried to convince himself that sinister aides were behind every misdeed. "I didn't want to make myself believe Nixon did this, that he actually participated," he explains in a telling tangle of words.

A piece of cake, until you get to the top

Next, the museum records Nixon fulminating against perceived tormentors in the press. But photographs also show him acknowledging its reach by speaking in a newly opened West Wing briefing room—a facility whose future is currently in doubt. Today, amid confected rows about "fake news", reporters who unearthed a new Watergate would start with roughly half the country ready to disbelieve them. Finally, the Nixon museum shows how the symbolic power of the presidency can cow dissent, even in this sceptical age. Tours end with a peek into a lovingly restored Sea King helicopter used by four presidents. A reverential guide points out a chic white racing stripe along the dark green fuselage, painted at Jacqueline Kennedy's suggestion. He adds, lightly, that the aircraft is the one that carried Nixon into enforced retirement, and museum-goers look no less impressed.

Indoors, a diorama recreates that departure from the South Lawn of the White House, portraying the former presidential couple in their helicopter seats and quoting Pat Nixon's lament to her husband: "It's so sad, it's so sad." The staging lends the scene dignity and pathos. But the moment was not sad, it was a merited disgrace. No political leader is an angel. Good men have been bad presidents (cf, Jimmy Carter). But the presidency is the wrong job for an amoral man.

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Bello is away

El Salvador

Unhappy anniversary

SAN SALVADOR

The country needs a new peace accord

EL SALVADOR was reborn 25 years ago. On January 16th 1992 the government signed a peace accord with left-wing guerrillas at Chapultepec castle in Mexico City, ending a 12-year civil war in which 75,000 people died. The agreement, followed by a truth commission that laid bare the war's atrocities and by an amnesty, was a model for reconciliation in other countries. It underpins El Salvador's political order today.

Stirring as that achievement was, the festivities held to commemorate it this week fell flat. The convention centre in San Salvador's Zona Rosa, not far from where guerrillas invaded the capital in 1989, prompting the first peace talks, was emptier than normal for big events. A small exhibition, displaying military uniforms, guerrillas' weapons and quotes about peace from the likes of Confucius and John Lennon, lined the walkway to the stage. The crowd, clad in white, seemed more interested in free pupusas (bean-and-cheese filled tortillas) than in the speeches. The event ended with a confetti drop, listless applause and a return to the food queues.

The mood was downbeat because El Salvador's 6m people have little to celebrate. The dominant feeling these days is "fear, not peace", says Alejandro Marroquín, a member of a breakdancing group that was invited to the commemoration. Having fled gang violence in greater San Salvador four years ago, he thinks that "the

war has continued. The only difference is that now it's between the gangs and the government." El Salvador is the most violent country in the Americas, with a murder rate of 80 per 100,000 people—more than 15 times that of the United States.

That is not the only disappointment. After an initial spurt, economic growth has dropped to a torpid 2% or so, less than half the Central American average (see chart on next page). Corruption is rife. Two post-war presidents face charges; another one died last January before he could be tried. Many Salvadoreans have given up on their country. More than 40% want to leave within the next year, says a new poll by the Central American University. That is the highest level since the university started asking the question a decade ago.

A big factor behind these let-downs is the flaws of the main political parties, heirs to the combatants of the civil war. Since the peace accord, the right-wing Nationalist Republican Alliance (Arena) and the leftist Farabundo Martí National Liberation Front (FMLN) have had turns in power. (The current president, Salvador Sánchez Cerén, a former guerrilla commander, belongs to the FMLN.) They renounced war, but failed to learn statesmanship.

The antagonism between them is abnormal for rivals in a democratic system. The fmln still yearns for socialism, though it has reconciled itself to the market econ-

omy for now. Arena's party song proposes a different goal. "El Salvador will be the tomb where the reds end up," it prophesies. The clash "doesn't allow for a vision of the country", says Luis Mario Rodríguez of Fusades, a pro-business think-tank. About the only thing the parties agree on is that the real point of wielding power is to enjoy the spoils. The result is what Salvadoreans call a "patrimonial state", which justifies itself through patronage and stifles any institution that stands up to it.

El Salvador's leaders now finally realise that a new peace agreement of sorts is needed. Mr Sánchez Cerén used the commemoration ceremony to present a special envoy from the UN, Benito Andión, to "facilitate dialogue". Just how Mr Andión, a Mexican diplomat, will interpret that is unclear. Some suggest that his job will be to help broker a peace between the government and the two main gangs, Barrio 18 and Mara Salvatrucha. But the UN statement on Mr Andión's appointment says his job is to "address the key challenges" affecting El Salvador, which sounds like a broader brief. Just as in 1992, "we need dialogue that matches today's historical moment," declared Mr Sánchez Cerén.

Budget brinkmanship

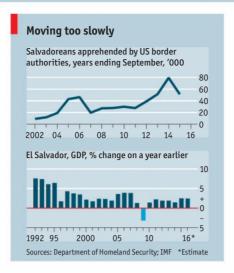
Gridlock has brought El Salvador to the brink of economic catastrophe. After years of slow growth and overspending, in part to prop up a state pension scheme, the central government nearly ran out of cash late last year. Blocked from long-term borrowing by the opposition, which has more seats in congress, it stopped making monthly payments to municipalities. Health workers went on strike after the government reneged on wage agreements. It came close to a default on its debt.

A deal in November between the gov-

• ernment and Arena averted disaster by allowing the government to issue \$550m of new debt in exchange for agreeing to a "fiscal-responsibility law", which would cap borrowing and spending. But that is just a stopgap. The opposition, doubting that the government will keep its fiscal promises, has refused to approve the budget for 2017. Another crisis looms. "We are playing with fire," says Alex Segovia, an economist.

The quarrel is partly about how to reduce the budget deficit, which was an estimated 4% of GDP last year. The FMLN wants to lift the government's low revenue by raising income tax and levying one on property. Arena pushes mainly for spending cuts. The parties have yet to agree on a needed reform of pensions. A "negotiating table" set up last April has so far failed to come up with a solution. The government has called in the IMF, which may now broker a resolution to the crisis.

A budget deal, if it happens, would unlock just one of the many manacles on the economy. El Salvador's use of the strong dollar as its currency keeps prices stable but holds back exports. A lethargic bureaucracy is another obstacle: shipping goods from El Salvador to the United States is no faster than from Vietnam, says an ob-



server in San Salvador. With a trade deficit of nearly 20% of GDP, El Salvador depends on remittances from 2m Salvadoreans living in the United States. Its biggest firms are consumer-oriented conglomerates that mainly live off the American bounty.

Nothing constrains the economy more than crime, which deters investment and drives young workers out of the country. The cost of violence and insecurity is 16%

of GDP, by one estimate. Gangs extort vast sums from businesses, equivalent to 3% of GDP. Recently, the threat of gang violence has emptied entire villages. In September one local government in western El Salvador set up a camp on a basketball court for dozens of families that had been ordered to leave by gangs, the first settlement for internally displaced people since the civil war.

The FMLN government, which tries to seem as tough on criminals as is the opposition, claims that its recent crackdown is working. Security forces have killed 900 gang members over the past two years. The government has largely cut off mobilephone contact between imprisoned gangsters and their confederates on the outside, who operate the extortion business and carry out murders. The number of murders dropped by 20% last year to 5,278.

Mara Salvatrucha and a faction of Barrio 18, perhaps weakened by the government's offensive, have recently proposed a dialogue with the government and offered to lay down their arms. Barrio 18 even offered to give up extortion. The FMLN has so far rejected negotiation.

Critics contend that the government's mano dura (iron-fist) policies have worsened conditions in prisons, which were already appalling. They say that the killing of gangsters by police amounts to state-sponsored murder. Such brutality will provoke more violence, believes José Luis Sanz, director of El Faro, a digital newspaper.

The accidental attorney-general

When the state does something right, it is usually in spite of the main parties rather than because of them. The process of appointing people to such sensitive jobs as prosecutor and high-court judge is designed to ensure that only creatures of the political parties get them. On occasion, though, less pliant candidates slip through. Such is the case with Douglas Meléndez, attorney-general since 2016, who startled Salvadoreans by pursuing corruption cases against figures of both parties. One FMLN ex-president, Mauricio Funes, has taken refuge in Nicaragua. Antonio Saca, who governed until 2009 as a member of Arena, is in jail awaiting trial on charges that he helped embezzle \$246m of public money, roughly 1% of GDP. "To see a president in handcuffs was like something out of a film," says Roberto Burgos of DTJ, an NGO that promotes good government. The constitutional court has also shown an independent streak by challenging political parties' abuses. Such checks on power are El Salvador's best hope for cleaning up government and modernising politics.

But the ruling party has responded to defiance with threats and abuse. Demonstrators encouraged by the FMLN have been issuing death threats against constitutional judges, says Sidney Blanco, who sits on the court.

Argentina

Tango in trouble

The flat-footed economy is pulling dancers off the floor

HEN couples tango outdoors in **V** Buenos Aires, it is usually to cadge coins from tourists. A recent display, outside the city hall, had a new purpose: to draw attention to the plight of the city's milongas, tango events where the dancers' only audience is other dancers.

Perhaps 150 milongas take place weekly in dance halls and community centres across the capital, either in the afternoons or after midnight. "They are the heart of the tango," says Julio Bassan, president of the Association of Milonga Organisers (AOM). And they are in trouble.

With a weak economy and high inflation cutting into incomes, attendance fell by as much as half last year, Mr Bassan reckons; 17 milongas closed. "When there's so much uncertainty, the first thing that people cut back on is recreation," says Jimena Salzman, who runs the Milonga de las Morochas ("Milonga of the Dark-Haired Women"). She charges an entrance fee of 100 pesos (\$6.25), the cost of a cinema ticket. That puts some people off. "I love to dance, but I need to eat," says Augustín Rodrigo, a teacher, who has reduced his daily tangoing to twice a week.

A milonga is a dance as well as an

event, a forerunner to the tango that mixes Cuban, African and European influences. In tango's heyday, some 70 years ago, milongas attracted thousands of dancers. Club Huracán in the city's south had seven dance floors. Some cling to tradition. A man must invite a woman to dance with a caheceo (nod). If she accepts, the pair will dance anti-clockwise to a tanda, or set of three or four songs. A cortina, a few seconds of music, signals the end of a set, during which the man escorts his partner back to her seat.

Few milongas are so conservative now. Young milongueros prefer modern tango, which mixes the music of classical composers like Carlos Gardel, who died in 1935, with electronic beats. But the young come less often. In an age of dating apps, fewer find mates in milongas.

Tango itself is in no danger. Glitzy shows are a daily event in Buenos Aires. But campaigners say neighbourhood milongas are tango's spiritual home. On December 7th the city council passed a "milonga promotion law". It sets up a registry and offers tax exemptions and 9m pesos a year of financial aid from the budget. Like it or not, taxpayers will help keep milongas alive.



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Independent-minded officials survive in office thanks largely to backing from outside powers such as the United States. Photos of Mr Meléndez in the company of foreign ambassadors send the message that he is not alone, notes Mr Burgos. American support for the attorney-general is part of a broader programme to improve governance, investment conditions and law enforcement in El Salvador, to weaken the lure of emigration to the United States. El Salvador is a beneficiary of the Alliance for Prosperity, which provides it and the two

other countries in Central America's "northern triangle", Guatemala and Honduras, with nearly \$750m a year. Authorisation to spend that money in El Salvador probably would have been withheld had the government shut Mr Meléndez down.

Salvadoreans expect that assistance to continue under the Trump presidency. Its aim, after all, is to slow down immigration. That is encouraging. But something is wrong when outsiders show more of the political will needed to reform El Salvador than do the country's own politicians.

Cuban migrants

Special no more

HAVANA AND MEXICO CITY

The end of wet foot, dry foot

AMONG a group of young men gathered in a tin-roofed telephone-repair shop in Havana, the topic of conversation is how to leave Cuba. The easiest way, they now reckon, is to marry a European. That is because on January 12th, in one of his final acts as president, Barack Obama ended the 22-year-old "wet foot, dry foot" policy, which allowed Cubans who land on American soil to stay in the country; those caught at sea were sent home. That shuts off the main escape route for Cubans in search of a better life.

Mr Obama's decision looks like an attempt to protect one of his few foreignpolicy successes: his agreement with Cuba's president, Raúl Castro, in December 2014 to restore diplomatic relations and loosen an economic embargo imposed on the island by the United States in 1960. Donald Trump, who will become the American president on January 20th, has said contradictory things about the rapprochement with Cuba, but his more recent comments have been negative. Some members of his transition team are fierce opponents of the normalisation policy.

Mr Trump's administration may thus try to undo the rapprochement with Cuba, which includes freer travel and better telecoms links with the island. The wet foot, dry foot decision makes that harder. Mr Trump does not like immigration; he will find it awkward to reverse a decision that makes it more difficult. It will also be tricky to justify reopening automatic asylum for Cubans but not for citizens of countries that are even more repressive.

Fearing that the United States would shut its Cubans-only entrance, many Cubans rushed to its borders. In fiscal year 2016, which ended in September, 56,000 arrived, more than double the number of two years before. Many paid thousands of dollars for tickets and in bribes and fees to people-smugglers to reach the United States' southern border. One popular route started with a flight to Ecuador, followed by a perilous land journey through Central America. Some Cubans still venture into leaky boats to cross the Florida Strait.

Mr Obama's abrupt decision to end the wet foot, dry foot policy leaves some-no one is sure how many-stranded en route to the United States. More than 500 are in southern Mexico, waiting for documentation from the Mexican government that would allow them to journey to the American border. They will now be treated just like others clamouring for admission, though the United States says it will try to give them humanitarian assistance.

Nearly half a million people were caught trying to enter the United States illegally in fiscal 2015 (down from 1.8m in 2000). They face detention until they are sent back. About a third were from Central America's "northern triangle", where governments are less repressive than in Cuba but violence is far worse. Cubans who face

political persecution will still have a right to asylum. Others can apply for the 20,000 migrant visas available to the country's citizens each year.

American conservatives have slammed Mr Obama's wet foot, dry foot reversal, and his simultaneous decision to stop giving Cuban doctors who defect from a third country fast-track entry to the United States, as his final betraval of the Cuban people. The regime has become more repressive since he unfroze relations, they maintain. Arrests of dissidents, for example, have increased.

Defenders of Mr Obama's thaw point out that the government now uses shortterm detention rather than long jail sentences to discourage its opponents. The number of political prisoners has fallen sharply. Although Mr Trump has complained that the United States gets "nothing" from its new relationship with Cuba, it has led to co-operation in such areas as drug-trafficking and cyber-crime.

In Havana, the reaction to Mr Obama's gambit is mixed. Cuba's government, which saw the wet foot, dry foot policy as an insult and a cause of a damaging brain drain, is pleased. Some ordinary folk think the change is justified. Wet foot, dry foot was just "another way to implement the blockade", said a well-dressed woman who would not give her name. Barbara Izquierdo, a housewife whose brother went to the United States 15 years ago, admits that most Cubans leave for financial reasons, not political ones.

But many Cubans, living on monthly incomes of \$50-200, are crestfallen. "We don't live, we survive," says a young man who works in property. He had hoped to leave and then to return to "build something for myself". He must now wait for the government to allow greater economic and political freedom. The death last November of Fidel Castro, the leader of the Cuban revolution, and Raúl Castro's plan to step down as president next year, may help bring change. Ambitious Cubans, denied the prospect of escaping to the United States, may now push harder for that.



Floating to Florida is now futile



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Chinese influence in South-East Asia

The giant's client

PHNOM PENH

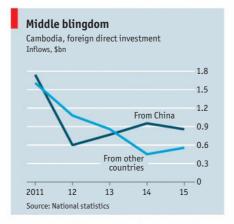
Why Cambodia has embraced China, and what that means for the region

AMBODIA is a thin piece of ham be-✓ tween two fat pieces of bread," says a former Cambodian minister, as he stirs a glass of iced coffee. To Cambodia's west is Thailand, which has more than four times as many people; the two countries have a dormant but unsettled border dispute. To the east is Vietnam, nearly six times as populous, which invaded Cambodia in 1979 and occupied it for ten years. So Cambodia has done what small countries always do: it has found a protector.

As long ago as 2006 Hun Sen, Cambodia's prime minister, declared China his country's "most trustworthy friend". China's past three presidents have all visited Cambodia, offering lavish aid and investment. The current one, Xi Jinping, declared Mr Hun Sen "an ironclad friend". China is Cambodia's biggest source of foreign direct investment by far: in 2015 it contributed a greater share to the total than all other countries combined (see chart). Cambodia has continued to accept Chinese largesse with glee, even as most of the rest of South-East Asia grows ever warier of its giant neighbour to the north (Laos, an even thinner slice of ham just north of Cambodia, is an exception). The ramifications of the strengthening relationship extend well bevond Cambodia's borders.

China has long taken an interest in Cambodia. When America backed Lon Nol, a strongman who seized power in 1970. China supported his opponents: Norodom Sihanouk, the deposed king; and the Khmers Rouges, who displaced Lon Nol in 1975 and then murdered around 2m of their countrymen. China continued to support the Khmers Rouges even after the Vietnamese invasion pushed them out. But once Mr Hun Sen, a defector from the Khmers Rouges sheltered by Vietnam, fully consolidated power in the 1990s, China began assiduously courting him.

China provides military aid: uniforms, vehicles, loans to buy helicopters and a training facility in southern Cambodia. Between 2011 and 2015 Chinese firms funnelled nearly \$5bn in loans and investment to Cambodia, accounting for around 70% of the total industrial investment in the country. Chinese firms run garment and food-processing factories and are also heavily involved in construction, mining,



infrastructure and hydropower. Others hold at least 369,000 hectares of land concessions on which they grow sugar, rubber, paper and other crops.

The government is often willing to bend the rules for Chinese firms. One is developing a luxury resort inside a national park on the edges of Sihanoukville, the country's main port. Another has won development rights over some 20% of Cambodia's coastline. Human-rights groups allege that fishermen who had lived in the area for generations were summarily evicted, taken inland and told that they were now farmers.

Each side gets something out of the relationship. For Cambodia, the most obvious benefit is economic: it is poor and aiddependent; Chinese money lets it buy and build things it could not otherwise afford. Phay Siphan, a government spokesman, said last year: "Without Chinese aid, we go nowhere."

But there are also two strategic benefits. First, Cambodia uses China as a counterweight to Vietnam. Among ordinary Cambodians, anti-Vietnamese sentiment runs deep. Many bitterly recall the Vietnamese occupation and some demand the return of "Kampuchea Krom"-the delta of the Mekong river, which today is part of Vietnam, but is home to many ethnic Cambodians and was for centuries part of the Khmer Empire. Since Vietnam harboured Mr Hun Sen, the opposition depicts him as a Vietnamese puppet. Closeness to China helps to defuse such claims.

Cambodia also uses China as a hedge against the West. Chinese money comes with no strings attached, unlike most Western donations, which are often linked to the government's conduct. When Mr Hun Sen mounted a putsch against his coalition partners in the 1990s, Western donors suspended aid. China boosted it. Westerners may threaten to cut funding again if, as is >> likely, the government rigs elections next year (this week Mr Hun Sen again sued Sam Rainsy, the exiled leader of the main opposition party, for defamation, one of many steps seemingly intended to neuter his opponents). Chinese money will make it much easier for Mr Hun Sen to shrug off Western protests.

As for China, it gets a proxy within the ten-country Association of South-East Asian Nations (ASEAN). Cambodia has repeatedly blocked ASEAN from making statements that criticise China's expansive territorial claims in the South China Sea, even though they conflict with those of several other ASEAN members. Last year, less than a week after Cambodia endorsed China's stance that competing maritime claims should be solved bilaterally, China gave Cambodia an aid package worth around \$600m. (Mr Hun Sen insists the two were not related.)

China also seems to be eroding America's clout in the region. For the past eight years Cambodia has held joint military exercises with America, but this week it announced that it would not do so this year or next. Cambodia and China, meanwhile, staged an eight-day joint exercise in November. The two countries also held their first joint naval exercises last year.

ASEAN's long-standing complaint, that Chinese influence on Cambodia hinders regional unity, is growing moot: over the South China Sea, at least, that unity appears to have disintegrated anyway. The Philippines, which took China to an international tribunal over its maritime claims, has reversed course. Its new president, Rodrigo Duterte, expresses contempt for America and affection for China. Vietnam, China's other main adversary in the sea, recently pledged to resolve its maritime dispute bilaterally. Nobody yet knows what America's policy on the South China Sea will be under Donald Trump, but increasingly it looks as if Cambodia has picked the winning side.

pat of the World Bank, is that Thailand spends too much money propping up small schools, where teaching is poorest. Almost half of Thai schools have fewer than 120 students, and most of those have less than one teacher per class. Opening lots of village schools once helped Thailand achieve impressive attendance rates, but road-building and other improvements in infrastructure mean most schools are now within 20 minutes of another. Over the next ten years falling birth rates will reduce school rolls by more than 1m, making it ever more difficult for tiny institutions to provide adequate instruction at a reasonable cost.

Prayuth Chan-ocha, Thailand's prime minister and the leader of its junta, says school reform is urgently needed. But some of his goals are aimed more at boosting his and the monarchy's prestige than making children smarter. Soon after taking power in a coup in 2014 Mr Prayuth grumbled that few Thai children could cite the achievements of long-dead kings. He ordered schools to display a list he drew up of 12 "Thai" values, including obedience to elders, "correctly" understanding democracy and loyalty to the monarch.

Insiders say that some officials are working on better approaches. In June the government restarted a long-stalled plan to merge small schools; authorities say they hope to subsume more than 10,000 schools over four years. Analysts worry that the junta's effort to re-centralise government will deprive good schools of independence. But they also hope it will eventually allow reformers to force an ossified education system to adopt the best of international practice. There is talk of education reform in a vague 20-year plan which the junta has promised to bequeath to the nation, and which future elected governments will be constitutionally bound to follow. Better hope that the army sets only its sanest policies in stone.

Education in Thailand

Not rocket science

To soothe Thailand's bitter politics, first fix its rotten schools

VERYONE knows that nurturing brain $oldsymbol{\mathsf{L}}$ boxes is good for an economy. In Thailand, school reformers have an extra incentive: to narrow differences between rich people in cities and their poorer rural cousins, which have led to a decade of political tension and occasional eruptions of violence. For years shoddy teaching has favoured urban children whose parents can afford to send them to cramming schools or to study abroad. Dismal instruction in the countryside has made it easier for city slickers from posh colleges to paint their political opponents as pliable bumpkins.

The dangerous social divide is all the more reason to worry about Thailand's poor rating in an educational league table published in December. Thailand limped into the bottom quarter of 70 countries whose pupils participated in the maths, reading and science tests organised under the Programme for International Student Assessment (PISA). Its scores have deteriorated since a previous assessment in 2012, when researchers found that almost onethird of the country's 15-year-olds were "functionally illiterate", including almost half of those studying in rural schools.

Thailand's dismal performance is not dramatically out of step with countries of similar incomes. But it is strange given its unusually generous spending on education, which in some years has hoovered up more than a quarter of the budget. Rote learning is common. There is a shortage of maths and science teachers, but a surfeit of physical-education instructors. Many head teachers lack the authority to hire or fire their own staff. Classrooms are stern and bullying teachers numerous: in one incident that caused uproar in the media last year, a PE instructor was alleged to have struck a schoolgirl in the face with a mug.

A big problem, argues Dilaka Lathapi-



I must not oppose military coups

Street vendors in Mumbai

Stabbed in the snack

MIIMBAT

State legislators decide that not all hawkers are created equal

GOOD street-food stall is the one place Ain Mumbai where the posh and the poor might rub shoulders, if only for the few seconds it takes to gobble down a savoury snack. You can be sure the vendor himself will have come from the latter category: hawking, as it is known, rivals taxidriving as a time-tested route from rural poverty to something a little less wretched. But nativist politicians may change that: in the name of helping hawkers, they are trying to impose new rules that would bar most of them from the trade.

Life was supposed to be getting easier



Can I see your licence?

for Mumbai's 150,000-odd hawkers. In 2014 the national parliament passed a law that required states to formalise the practice, for instance by issuing licences and designating areas where it was expressly

permitted. States have been slow to comply. The government of Maharashtra, of which Mumbai is the capital, had been sitting on its hands for three years. It only decided to act in the run-up to municipal elections in February.

The draft rules, however, include a requirement that would-be hawkers be domiciled in Maharashtra, Under local law, domicile comes only after 15 years of residence. Few hawkers are likely to be eligible: most are immigrants from poorer northern states. Even those who have been living in the city for decades would have trouble proving their status, since they tend to live in informal dwellings and so cannot prove an address.

The proposed rule is the work of the Shiv Sena, a party that blends Maharashtrian chauvinism with Hindu nationalism. (Its previous triumphs include renaming Bombay as Mumbai in 1995, in a bid to cleanse the city of any vestige of colonialism.) Elections to the city council are pitting it against the Bharatiya Janata Party of India's prime minister, Narendra Modi, with which it rules both the city and the state in uneasy coalitions.

The proposal may not be legal. Although India is a federal country, states do not have the right to bar other Indians from settling or working. The national government is trying to pull down internal economic barriers: it has fought hard to replace local levies with a pan-Indian goods and services tax.

Many of Mumbai's hawkers may not bother with the new system. Only 14,000 of them make use of the existing one, although at least ten times that number operate, according to unions that represent them. Those who obtain a licence, however, ought to find it easier to stand up to bribe-demanding cops and bureaucrats. A politician for the opposition Congress party claims the current system allows officials to squeeze some 3bn rupees (\$44m) a month from hawkers. If such bounty is indeed to be had, expect the new rules to keep hawkers on the fringes of legality.

Politics in Australia

Going for gold

A series of scandals prompts tougher rules on politicians' expenses

AVING scraped back to power with a one-seat majority last year, Malcolm Turnbull always expected "plenty of surprises and challenges in 2017". He did not expect them to start so soon. On January 13th the prime minister accepted the resignation of Sussan Ley, his health minister, after claims that she had misused taxpayers' money. As the scandal erupted, the government was pursuing spending cuts and clamping down on some welfare recipients in a bid to balance the budget. That made it all the more embarrassing that Ms Ley had bought an investment property worth almost A\$800,000 (\$600,000) in 2015, while on a government-paid visit to the Gold Coast in Queensland.

Ms Ley tried to explain the apparent blurring of public and private business by suggesting, to widespread derision, that she had bought the flat on impulse. A string of revelations followed: she had charged taxpayers for several other Gold Coast trips; two were to New Year's Eve parties hosted by a businesswoman who had donated money to the ruling Liberal Party; she had chartered planes to fly to official engagements instead of taking commercial flights at a fraction of the cost (she is a pilot) and so on. Ms Ley called the furore a "distraction" but has agreed to repay some of the money she claimed.

Ms Ley has been one of the more talented and colourful members of Mr Turnbull's cabinet. Born in Nigeria, she has been a cattle farmer, a cook for sheep shearers and an official in the Australian Taxation Office. Yet she failed to heed the lessons of "Choppergate", an expenses scandal that rocked the government 17 months ago. Bronwyn Bishop, then speaker of the lower house, quit after the disclosure that she had spent more than \$5,000 chartering a helicopter to attend a Liberal fundraising event. Politicians from both sides have charged taxpayers thousands to fly their families with them to events in the farthest corners of the country. Australians have paid for Julie Bishop, the foreign minister, to attend a polo match. Steve Ciobo, the trade minister, says taxpayers "expect" to pay for politicians to go to sporting events.

Perhaps. But opaque rules have given politicians leeway in judging how much they can get away with. An inquiry after Choppergate called the laws on parliamentary expenses a "complex patchwork" that was "close to impossible" to understand and administer. In the wake of the latest scandal, Mr Turnbull has promised to shift responsibility for overseeing MPS' claims to a new independent agency run by auditing experts, a former judge and a former MP. Politicians will also have to disclose expenses monthly instead of twice a year. Mr Turnbull reckons the new system's independence and openness will "make a very big change". This year will be all the trickier for him if it does not.

Pakistan's economy

Roads to nowhere

TSIAMARAD

An obsession with showy infrastructure distracts from deeper problems

NEARLY 20 years after it opened, Pakistan's first material stan's first motorway still has a desolate feel. There is scant traffic along the 375km link between Islamabad and Lahore (pictured). Motorists can drive for miles without seeing another vehicle, save perhaps for traffic cops manning speed traps. As the two cities are already connected by the Grand Trunk Road, which is 90km shorter and toll-free, there is simply not much demand for a motorway.

Yet this \$1.2bn white elephant is one of the proudest achievements of Nawaz Sharif, who was prime minister when it opened in 1997 and is once again running Pakistan. Mr Sharif, who enjoys comparisons to Sher Shah Suri, a 16th-century ruler who renovated the Grand Trunk Road, never tires of talking about it. He regained power in 2013 with a campaign which both harked back to his famous road and promised more infrastructure to come. He even pledged bullet trains that would enable pious passengers to leave Karachi after dawn prayers and arrive in Peshawar, more than 1,000km to the north, in time for evening worship.

It is an article of faith for Mr Sharif and his party, the Pakistan Muslim League Nawaz (PML-N), that investment in infrastructure is a foolproof way of boosting the economy. His government is racing to finish umpteen projects before the next election, due by mid-2018, including a metro line in Lahore and a new airport for Islamabad. The likelihood is that the new airport (which has been plagued with problems, including runways that have been built too close together) will be as underused as most of the country's other airports, many of which are modern and spacious.

Pakistan's infrastructure is underused because the economic boom it was meant to trigger has never arrived. Over the past three years the government has successfully staved off a balance-of-payments crisis, achieving some measure of macroeconomic stability. It has trimmed the budget deficit, partly by broadening the tax take and partly by cutting energy subsidies. That, along with lower oil prices, has narrowed Pakistan's trade deficit and allowed it to begin rebuilding its foreign-exchange reserves. The stockmarket has risen by 50% since the end of 2015.

But terrorism and insurgency have put off investors, both foreign and domestic. The country is also held back by inefficient and often cartelised industries, which have fallen behind rivals in India and Bangladesh. Exports, 60% of which are textiles, have been shrinking for years. Much more needs to be done to create an educated workforce. Almost half of all those aged five to 16 are out of school-25m children. Health, like education, is woefully underfunded, in part because successive governments shy away from taxing the wealthy. Only 0.6% of the population pays income tax. As the World Bank puts it, Pakistan's long-term development depends on "better nutrition, health and education".

Cement to be

But Mr Sharif's government is pinning its hopes on yet more infrastructure to fix the country's economic problems, in the form of a \$46bn investment scheme known as the China-Pakistan Economic Corridor (CPEC). Much of it is being financed on commercial terms, including several power plants. Pakistan undoubtedly needs to relieve a chronic shortage of electricity. But critics fear the country will struggle to pay back the debt, especially if foreign-exchange earnings from exports continue to dwindle. At the very least, the government will need to continue chasing deadbeat customers to pay their bills and cutting expensive subsidies-steps that are deeply unpopular.

In addition to boosting Pakistan's power supply, CPEC is supposed to link China

by land to Gwadar, a deep-water port on the Arabian Sea, in the hope of creating a lucrative new trade route. New or upgraded roads will stretch the length of the country. The Karakoram Highway between the two countries, which was built in the 1960s at vast expense over a high and crumbly mountain range, is being upgraded as part of the trade corridor. But it forever needs patching up and is little used. Sceptics say Xinjiang, China's westernmost region, is still too poor for better transport links to make much difference to Pakistan's economy. Securing isolated stretches of road from separatist rebels in Balochistan is also gobbling up large amounts of cash.

Lijian Zhao, a Chinese diplomat, says China is all too aware that Pakistan needs more than just big-ticket infrastructure if it is to flourish. Disarmingly, he praises the efforts of Britain and other countries to improve Pakistan's "software", such as education and the rule of law. "But China's expertise is hardware," says Mr Zhao.

It may not concern Mr Sharif unduly if the next generation of roads is as deserted as the last. Civilian governments have often struggled to get much done in between military coups, but voters are impressed by gleaming new projects, even if they never use them. It's an approach that has worked for Mr Sharif's brother, Shehbaz, the popular chief minister of Punjab province. He has lavished resources on endless sequences of over- and underpasses to create "signal-free" traffic corridors in Lahore, the provincial capital, that are of most benefit to the rich minority who can afford cars.

There are limits, however. Khawaja Saad Rafique, the railways minister, recently admitted to parliament that the country would not be getting a bullet train after all. "When we asked the Chinese about it, they laughed at us," he said. ■



Jam tomorrow?

Also in this section 34 China's new aircraft-carrier 36 Banyan: The factious politics of

Chinese museums



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China and the world

The new Dayos man

BEIJING AND DAVOS

Xi Jinping tries to portray his country as a rock of stability in a troubled world. His timing, at least, is faultless

ELEGATES at the World Economic Forum in the Swiss resort of Davos often treat politicians as rock stars. But the fawning reception given to China's leader, Xi Jinping, on January 17th was extraordinary. He was the first Chinese president to attend the annual gathering of the world's business and political elite. Even an overflow room was packed when he delivered, in his usual dour manner, a speech laced with literary references-rendered through bulky headsets into equally monotone translations. Mr Xi said little that was new, but the audience lapped it up anyway. Here, at a time of global uncertainty and anxiety for capitalists, was the world's most powerful communist presenting himself as a champion of globalisation and open markets.

Mr Xi (pictured, next to a panda icesculpture) did not mention Donald Trump by name, nor even America, but his message was clear. "No one will emerge as a winner in a trade war," he said, in a swipe at Mr Trump who has threatened, among other mercantilist acts, to slap heavy tariffs on Chinese goods. Mr Xi likened protectionism to "locking oneself in a dark room", a phrase that delegates repeated with delight. His words seemed comforting to many of them after a year of political surprises, not least in America and Britain. Mr Xi quoted from Dickens to describe a "world of contradictions", as he put it. "It was the best of times, it was the worst of times," he said. Many foreign businesses complain about what they regard as a rise of protectionism in China, too-but no one could accuse Mr Xi of being out of tune with the Davos mood. China, Mr Xi assured delegates, "will keep its door wide open and not close it".

The Chinese president also portrayed his country as a staunch defender of the environment. He said that sticking to the Paris agreement on climate change, which came into effect last year, was "a responsibility we must assume for future generations". These, too, were welcome words to many listening: Mr Trump's threat to reject the pact will make China's commitment to it all the more crucial.

The week of whose inauguration?

The timing of Mr Xi's trip was fortuitous according to the Financial Times his aides were working on it before Britain voted to leave the European Union and well before Mr Trump's election victory. But he must have relished the points that those events enabled him to score at Davos. Mr Xi faces political battles of his own as he prepares for a five-yearly Communist Party congress in the autumn and a reshuffle right after it. He wants to install more of his allies in key positions. Standing tall on the world stage could help (and attending Dayos will have reinforced the point to his colleagues that

he is in charge of China's economy, as he clearly is of every other main portfolio).

Mr Xi would have relished the occasion even had the predictions of many in the global elite a year ago proved accuratethat Britain would vote to stay in the EU and that Mr Trump would not win. The forum is one where embarrassing questions about China's politics are seldom raised openly. Mr Xi could talk airily of China's openness, with little fear of being asked why he is clamping down on dissent and tightening controls on the internet (last year this newspaper's website joined the many foreign ones that are blocked). On January 14th China's most senior judge condemned judicial independence as a "false Western ideal".

Previously, the highest-ranking Chinese attendees had been prime ministers. In 2016 the vice-president, Li Yuanchao, who ranks lower than the prime minister in the party hierarchy, led the team. So why has Mr Xi waited until his fifth year as president to turn up? He may well have winced at the thought of doing so last year, when discussions were dominated by questions about China's management of its slowing economy in the wake of a stockmarket crash and a sudden devaluation of the yuan. Many analysts still worry about China's economy (not least its growing debt), but the West's problems have loomed larger over the Swiss Alps this week.

And for all his uplifting talk, Mr Xi shows no signs of wanting to take over as the world's chief troubleshooter, even if Mr Trump shuns that role. Mr Xi is preoccupied with managing affairs at home and asserting control in seas nearby (see next story). "Nothing is perfect in the world," the new Davos man sagely informed the delegates. But he is unlikely to take the lead in making the world a better place.

The navy

Deep blue ambition

China's aircraft-carrier programme says a lot about its ambitions

FOR Admiral Wu Shengli, the commander of China's navy since 2006, it must have been a sweet swansong to mark his imminent retirement. In November China announced that its first and only aircraft-carrier, the Liaoning, was combat ready. On December 24th its navy duly dispatched an impressive-looking carrier battle-group with three escorting destroyers, a couple of frigates, a corvette and a refuelling ship. It sailed from the northern port of Qingdao down through the Miyako Strait, past Taiwan and into the South China Sea.

Three weeks later the Liaoning (pictured) was back in port having sailed home via the Taiwan Strait, thus completing a loop around the island. The point was not lost on the Taiwanese, who scrambled fighter jets and sent naval ships to monitor the group's progress. The Chinese ships showed off their firepower, with Shenyang J-15 fighters staging a series of take-off and landing drills. That everything went smoothly was evidence of the navy's transformation under Admiral Wu (his career perhaps destined by his forename, which means victory). He had meticulously prepared for this moment, which came just four years after the carrier, acquired as a partially built hulk from Ukraine in 1998, formally entered naval service.

China's deployment of an aircraft-carrier is not a military game-changer. But it is a conspicuous symbol of the country's ambitions as a maritime and global power. The Liaoning has been a crucial building block for the navy in its evolution from a coastal defence force into what is now a modern navy that China uses to assert its (contested) maritime claims in the East and South China Seas. Within the next 25 years China expects its navy to become a powerful blue-water fleet that can guard China's sea lanes of communication against any aggressor, push the Us Navy beyond the "second island chain" far out into the Pacific (see map) and protect the country's farflung commercial interests.

To that end, probably around 2004, China made up its mind that it must have aircraft-carriers. A second, indigenously designed one, based on the Liaoning but with the latest radar and space for more aircraft, is nearing completion at the northern port of Dalian. Many analysts believe that a third such vessel, larger and more complex, is under construction in Shanghai. Andrew Erickson of the Us Naval War College says Admiral Wu adopted a "crawl,



walk, run" approach to developing a carrier capability, recognising the difficulties involved. Carrier operations are inherently dangerous—America lost 8,500 aircrew in the 40 years to 1988 on its way to reaching what Mr Erickson calls its current "gold standard" of carrier expertise.

Commissioning the Liaoning was a good way to start. Much modified and fettled by the Chinese, the ship is based on the Soviet Kuznetsov-class design. It is big, with a displacement of about 60,000 tons, but nowhere near the size of America's super-carriers such as the USS Ronald Reagan, which is based in Japan. That Nimitz-class ship displaces around 100,000 tons.

In other ways, too, the Liaoning pales in comparison with America's 10 Nimitzclass carriers. They can carry more than 55 fixed-wing aircraft. The Liaoning can only handle 24 J-15s (based on the Russian Sukhoi su-33) and a handful of helicopters. Unlike the American carriers, it lacks a catapult to propel aircraft from its deck. Instead it relies on a "ski-jump" prow to provide extra lift. As a result, the J-15s have to carry a lighter load of weapons and fuel. Heavier, slower airborne early-warning and anti-submarine aircraft cannot take off from the Liaoning at all. That limits the type of missions the ship can perform and makes the vessel vulnerable when operating beyond the range of shore-based aircraft. The Liaoning also depends on a notoriously unreliable Soviet-era design for its steam turbines, which cuts its range and speed compared with the nuclear-powered Nimitz-class carriers.

The US Office of Naval Intelligence has dismissed the *Liaoning*'s ability to project naval power over a long distance. But the ship does have military value. It can provide air-protection for China's fleet, and would be a major asset in disaster-relief or evacuation missions. Peter Singer of the New America Foundation, a think-tank, says that a *Liaoning*-led battle group would also seem pretty formidable to neighbours, such as Vietnam or the Philippines, should China feel like bullying them.

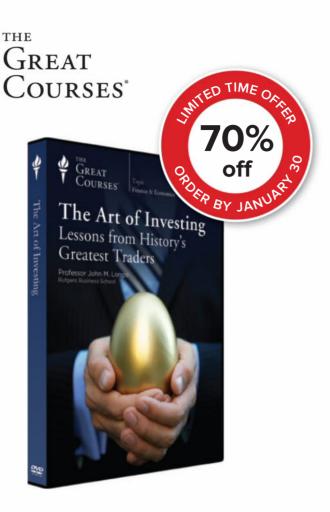
But the main value of the Liaoning is the experience that it is giving the navy in the complex choreography of carrier operations. Those skills will help in the eventual deployment of indigenously designed carriers. The Chinese have been training with catapult-launch systems on land. This has fuelled speculation that the carrier thought to be under construction in Shanghai will be a genuine flat-top. It is possible that the ship will also be nuclear-powered, which could give it the range and speed of American carriers.

It is not clear how many carriers China plans to build. As a rule of thumb, you need three to be certain of having one at sea all the time. Mr Erickson says that some analysts in China have been suggesting a fleet as large as six. Mr Singer thinks it is possible that China's carriers will one day match the capability of American ones. Mr Erickson says that while China can copy a lot, without combat experience and "tribal knowledge" passed from one crew to another, it will find it hard to attain that level.

China, ironically, has done more than any other country to sow doubts about whether carriers are worth all the effort and expense, by developing shore-based anti-ship ballistic missiles, such as the DF-21D and DF-26, known as "carrier killers". Submarines are less vulnerable, but highly visible ships bristling with weaponry are still badges of pride for aspiring great powers like China. As in America, the view in China that carriers and status go together will be hard to change. ■



Scary, perhaps, but also easy to sink



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Banyan | Dangling forbidden pleasures

Why all the fuss about Hong Kong getting a world-class museum?



FTHE world's most popular museum, drawing over 15m visitors La year, suddenly offered a distant city a priceless haul of artefacts—on permanent loan and absolutely free—you would expect that city's residents to jump for joy. Not so, when the city is Hong Kong, and when the Palace Museum, which occupies most of Beijing's vast Forbidden City, is doing the offering. In December Hong Kong's chief secretary, Carrie Lam, announced surprise plans to build a branch of the Palace Museum in a showcase cultural district going up on reclaimed land in Hong Kong's harbour. Many of the territory's residents erupted in anger.

The cultural and commercial benefits for Hong Kong are unarguable, says Mark O'Neill, who has written a book on the Forbidden City's treasures. The complex was the seat of China's emperors from the 15th century until Pu Yi, the last emperor, resigned in 1912. It houses such an array of imperial Chinese pieces that the Palace Museum is able to display less than 1% of the collection at any time. A trove on show in Hong Kong would draw in millions of visitors a year. As well as ticket sales, think of all the merchandising possibilities, from catalogues to replicas of jewellery and furniture. Not just the museum but the whole city would profit from increased visitors. And then there is the intangible aspect: a boost for a young city with a relatively sparse cultural hinterland.

One country, two Hong Kongs

So great is the furore, however, that it may even scupper the plans. The problem is that Hong Kong these days is a divided place. On one side are those who favour smooth relations with mainland China and who would do the bidding of China's Communist masters in Beijing. On the other are Hong Kongers who resent the central government's growing influence and heavy hand, and who aim zealously to guard Hong Kong's freedoms. With an eye for the telegenic gesture, pro-democracy politicians staged a protest in the subway system in front of a huge display promoting the museum project. Their leaders said they were not opposed to the idea of a museum, but to the murky way in which the decision in favour of it was reached. They also made clear that they associated the Forbidden City mostly with the bloody crackdown on students who in 1989 protested in Tiananmen Square just in front of it. Under pressure, Ms Lam has agreed to a period of consultation.

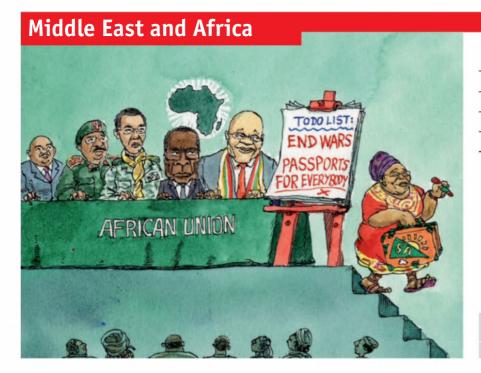
Yet at the same time the Hong Kong administration has called for politics not to be dragged into the debate. The call is absurd. For a start, Ms Lam wants to be Hong Kong's next chief executive, who will be chosen in March; her museum enthusiasm will surely help to reinforce the Communist Party's faith in her. Moreover, China's rulers want a museum in Hong Kong precisely to make a political point. As local obstreperousness has grown in recent years, they have lamented that brattish Hong Kongers lack patriotism and appreciation for China's greatness. The museum is intended to teach them a lesson.

Moreover, the Forbidden City has always been about politics and power. The Yongle emperor, or rather thousands of forced labourers, built it as an expression of Ming-dynasty might. From it radiated the emperors' cosmic as well as terrestrial power. That is why, at the height of the Cultural Revolution, Mao Zedong stood before the Forbidden City to call for the destruction of all traits carried over from old, imperial China-though not the palace itself. Zhou Enlai is said to have closed it to save it from rampaging mobs of Red Guards. It was reopened in 1971 when Henry Kissinger, Richard Nixon's national-security adviser, visited Beijing as part of America's effort to forge ties with the Communist regime. At a time when Beijing itself was looking miserable and drab, Mr O'Neill points out, there was no better way to impress on Mr Kissinger a sense of China's power and sophistication. (He has been in awe of China ever since.) The palace still serves this purpose. Thousands of tourists gather every morning to watch paramilitary troops march out of the Forbidden City, goose-step across the road and raise the national flag on Tiananmen Square.

Lastly, remember the rivalry with Taiwan. It, too, has a Palace Museum—with a far finer display than the one in Beijing and the word "National" at the beginning of its name. It is filled with hundreds of thousands of artefacts, mostly from the Forbidden City, that were carried to the island by Chiang Kai-shek and his Kuomintang (кмт) forces when they retreated to Taiwan in 1949. They took the best ones, though beauty is sometimes in the eye of the beholder: the "Meat-shaped Stone"-a hideous carving in the shape of a piece of braised pork—is, perversely, the biggest draw today. For Chiang, the treasures boosted the KMT's claim to be the sole and rightful ruler of China.

When ties across the Taiwan Strait improved under the then кмт president, Ma Ying-jeou, who stepped down last year, Beijing's Palace Museum lent pieces to its Taiwanese counterpart as a mark of goodwill. Since President Tsai Ing-wen took over, China has been far frostier. Her Democratic Progressive Party inclines towards independence and downplays historical links with China. Yet even the KMT used Taiwan's Palace Museum to make a point about the island's distinct identity. A branch of the collection opened two years ago near Chiayi, a city in southern Taiwan. It emphasises a history of Taiwan not as an adjunct to China but as an island nation steeped in Asian influences. And even as China has sought to enforce Taiwan's diplomatic isolation, the treasures remain a source of soft power, with Taiwan lending them to the world's top museums-but not to Beijing's Palace Museum, for fear (implausibly) that China might not return the pieces.

As for Hong Kong, China's leaders will be peeved at the ingratitude of many residents over the museum offer. But Hong Kongers' refusal to be awed by a supposedly glorious past is hardly surprising. Their problem is an inglorious present, with China denying them full democracy. And China's problem is that it is still scrabbling for a source of soft power with which to appeal.



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The African Union

Ex factor

TOHANNESBURG

Nkosazana Dlamini-Zuma heads home to South Africa after a disappointing spell running the African Union

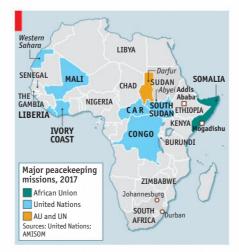
LTHOUGH a jolly spot for surf and sun, ADurban is hardly a centre of African diplomacy. So it was a surprise when Nkosazana Dlamini-Zuma, the outgoing head of the African Union (AU), chose to deliver the first-ever "State of the Continent" speech there last month instead of at the AU's grand headquarters in Addis Ababa.

Ms Dlamini-Zuma's speech focused on high-minded plans for education and agriculture. She acknowledged "pockets of problems" in war-ravaged Burundi, Libva. Somalia and South Sudan, but only in passing. Journalists fought to stay awake. The thin crowd had to be cajoled into applause. South African cabinet ministers due to attend sent lackeys instead. Back in Addis, the event fed the widely held view that Ms Dlamini-Zuma spent her term at the AU with one foot in South Africa, where she is jockeying to succeed her exhusband, Jacob Zuma, as president in 2019.

Ms Dlamini-Zuma's four-year term as head of the AU's executive arm should have ended six months ago but was extended when its members could not agree on a successor. They will gather again from January 22nd and vote for her replacement. Among the contenders are a veteran diplomat from Senegal and the foreign ministers of Kenya and Chad. The selection process is less about the candidate's talents than about governments and regional blocs vying for influence. For the second consecutive summit, representatives of civil society will be barred; some AU leaders apparently don't like scrutiny.

As the first woman to head the Au's executive arm, Ms Dlamini-Zuma came into the role in 2012 buoyed by high hopes and promises to reform a moribund institution. A medical doctor and veteran of the anti-apartheid struggle, she had served as a cabinet minister under four South African presidents, including Nelson Mandela.

Her record in government was controversial: as health minister she promoted the use of a toxic industrial solvent as a miracle cure for AIDS, and then purged reg-



ulators when they told her that human trials would be unethical. However, as home-affairs minister, she was credited with making her ministry less corrupt and inept. So many thought she would get things done at the AU. For the most part, they were disappointed. "Her heart isn't in it," says one observer. "Someone who was more invested might have done more."

Her flagship policy, known as Agenda 2063, is a mishmash of proposals. Some are unambitious; others, implausible. Within 50 years, the document declares, Africans will grow more, earn more and eat more. (This is a safe bet, but in the unlikely event that it does not come to pass, Ms Dlamini-Zuma will not be around to take the blame.) A few paragraphs later it promises African passports and visa-free travel for all Africans by 2018. Governments will have to hurry to meet this goal. So far, only presidents and officials can get pan-African passports. They are so rare that even Ms Dlamini-Zuma struggles to convince border guards that hers is real. The document also aims to end all wars in Africa by 2020. How, it does not say.

It is by no means all Ms Dlamini-Zuma's fault that the AU is so ineffective. It is a club that welcomes autocrats and democrats alike. The only leaders it ostracises are those who seize power in a coup or who ignore the results of an election too blatantly, as recently happened in Gambia. Those who merely rig the polls are welcomed. The Au's current chairman, a ceremonial but symbolically important figure chosen by the body's assembly, is Idriss Déby, the oil-fuelled strongman of Chad. The previous one was Robert Mugabe, who has misruled Zimbabwe since 1980.

Yet even given these constraints, Ms Dlamini-Zuma has been a let-down. She has campaigned against sex discrimina->> 8 Middle East and Africa

The Economist January 21st 2017

tion, violence against women and for an end to child marriages. Yet for all her rhetoric, the AU has failed to grapple seriously with the crisis in South Sudan, where women and girls are gang-raped by soldiers. She seldom visits countries riven by conflict; for instance, she has yet to visit Somalia. When put to the test the AU has repeatedly failed to deploy peacekeepers to crisis zones. The notable exceptions are Darfur, where it was the first outfit to send peacekeepers, and Somalia, where an AU force has helped to push jihadists from the capital. A crisis in Burundi offered a chance for the AU to show its mettle. President Pierre Nkurunziza's decision to seek an illicit third term ignited mass protests followed by a brutal, ethnically charged crackdown. The AU said it would send peacekeepers to protect civilians. But when Mr Nkurunziza objected, it decided not to. A modest plan to send 100 observers is still on the starting blocks. The AU also promised, in July 2016, to send a force

The AU struggles to persuade member states to bankroll it. Some 70% of its budget comes from non-African donors such as the European Union. Ms Dlamini-Zuma tried to reduce the AU's reliance on the West, appointing Donald Kaberuka, a former head of the African Development Bank, to find new sources of cash. His plan, to finance the organisation through a 0.2% levy on imports into African countries, is meant to start this month.

to South Sudan. It is nowhere to be seen.

Ms Dlamini-Zuma is wary of foreigners who scold Africans about human rights. During her tenure the AU has considered a mass pullout from the International Criminal Court, which some members deem prejudiced because most of its targets have been African. Her alternative is the African Court of Justice and Human Rights, which the AU has barred from hearing cases against incumbent government heads and their senior officials.

Such deference to high office would doubtless please her ex-husband, who has been charged with 783 counts of corruption and fraud by South African prosecutors. (He denies wrongdoing.) Mr Zuma is expected to stand down as head of South Africa's ruling party, the African National Congress, in December. Whoever succeeds him as party chief is likely to win the presidency at the next general election. Mr Zuma has used all his presidential powers to avoid standing trial and is no doubt keen to anoint a sympathetic successor.

On an unrelated subject he argues that it is time for the ANC to have a female president and that his ex-wife is the most qualified candidate. Ms Dlamini-Zuma has said little about her plans beyond blandly indicating that she would never refuse a request from the ANC to serve the party. Judging by her Durban speech, she would welcome such an opportunity.

Farming in Ethiopia and Kenya

Qatnip

CHIIKO AND MAIIA

A booming green business that may turn to bust

THIS is qat," explains Teklu Kaimo, gesturing to the wooded field behind him. He started growing it in 1976, and over the years its soft, green leaves have brought him a measure of prosperity. He has a modest plot of land, 11 children and money to pay their way through school.

A short walk down the hill, the central marketplace of this part of southern Ethiopia comes alive with farmers, merchants and salesmen as the sun sets. Young men sprint down streets with bundles of fresh qat leaves on their shoulders, as traders call out prices and haul the bags aboard lorries. They are bound for Addis Ababa, the capital, where the following morning they will be sold to qat-chewers in the city, or packed onto planes bound for neighbouring Djibouti and Somaliland.

Ethiopia's trade in gat, a mild stimulant native to this part of Africa, is booming. Where once cultivation and consumption were restricted to the Muslim lowlands towards the country's east, today it is grown and masticated throughout the country. Nearly half a million hectares of land are thought to be devoted to it, some two-andhalf times more than was grown 15 years ago. Many of those cultivating it have switched from coffee, Ethiopia's biggest export, to one that offers juicier and more stable returns. Qat is now the country's second-largest source of foreign currency, and, with prices rising, a handy source of government revenue.

The industry's growth is partly due to increased consumption. Qat kiosks are dotted around all main towns; young men

chewing on street corners or in university libraries have become a ubiquitous feature of Ethiopian life. For many, its spread is a symbol of national decline. "It is getting worse by the day," says Fitsum Zeab, a businessmen in Addis Ababa.

Much the same is true in neighbouring Kenya, the region's second-largest qat producer. Here, too, demand is growing, thanks to a large diaspora of Somalis (the plant's long-standing international missionaries) and better roads that allow farmers to get perishable qat to market while it is still fresh. And economic importance is translating into political heft: last year Kenya declared it an officially sanctioned cash crop.

But the plight of Maua, a small town considered the Kenyan trade's epicentre, gives pause for thought. Britain's decision in 2014 to ban the substance (against the advice of its drugs advisory council, which thought it harmless) slammed the qat economy. In 2013, before the prohibition, Britain imported some £15m-worth (\$25m) worth of the stuff. Prices have since fallen by half and unemployment has risen sharply. "Everyone is feeling the pinch now," says Lenana Mbiti, a former trader.

That gives pause to Ethiopian farmers too. Although they have been less affected by bans in Europe because they sell most of their crop close to home, they fret that their market will shrink.

Experts doubt that qat will ever become a mass-marketed global commodity like coffee, tea or sugar. Instead, small towns in places such as Wondo-Genet are becoming dependent upon the production and trade of a substance that will probably be outlawed in yet more countries.

Even so, qat's popularity among farmers persists because it is perhaps the only crop that can provide sufficient income from a small plot of land to support a family. "There is simply nothing else," says Birhanu Kiamo, Mr Kaimo's brother, neighbour and fellow qat farmer.



Qat, a tonic?

Default in paradise

Boats and a scandal

ΚΔΜΡΔΙΔ

Mozambique fails to pay its debts

N 2014 Mozambique seemed a good I place to host the IMF's "Africa Rising" conference. The economy was buoyant, having grown by about 7% a year for a decade. Offshore gas promised riches. Investors were optimistic, so much so that, in 2013, they snapped up \$850m of bonds issued by a state-owned tuna-fishing company, with temptingly high yields.

But Mozambique's rise has halted. Those "tuna bonds" were the first mis-step in a widening scandal that led the government to say on January 16th that it would default on its debt.

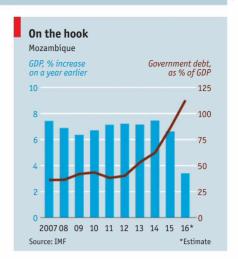
The government's financial difficulties arise partly from a downturn in commodity prices that caused economic growth to slump to 3.4% in 2016 (though it should improve this year). Yet the main reason the government is in a pickle is its own fecklessness. The state-owned tuna company that issued the bonds never caught many fish. That is scarcely surprising since much of the money it raised went toward buying gunboats instead of the fishing sort. When it became clear that the company could not honour its debts, bondholders agreed to swap the bonds it had issued for government ones. Yet before the ink was dry on that debt-swap the government admitted it had also guaranteed \$1.4bn in secret loans, worth 11% of GDP. The revelation shocked the IMF and donors into freezing support to a country that still relies on international aid to balance its books.

The government, now weighed down by debt equalling some 112% of GDP, may be trying to use the default as a tactic to force bondholders into "restructuring" the debt, which is a polite way of saying that it wants them to give it a handout.

This week's missed payment will irk bondholders but may not be enough to force them to the table, says Stuart Culverhouse of Exotix, a brokerage. Having been hooked once, few trust the government. They have refused to negotiate until it signs up to an IMF programme and allows a full (and independent) audit of its indebtedness. The IMF, for its part, also wants an investigation into where the money went and who authorised the borrowing before it will lend more. Kroll, a firm of investigators hired by the government, is expected to release a report next month.

Instead of squeezing bondholders the government may do better by trying to restructure, or even repudiate, its secret loans (one of which is already in arrears and all of which may be unconstitutional since they were not approved by parliament).

Few members of the ruling party, Frelimo, want to shine too much light on those loans since bigwigs may be implicated. Yet imposing IMF-mandated spending cuts also carries risks. With less bounty to spread around Frelimo may struggle to buy support in local elections next year and in a presidential contest in 2019, says Alex Vines of Chatham House, a think-tank. Its best hope may be to hold out for the bountiful gas revenues expected in the middle of the next decade. Regulators, meanwhile, are probing the banks that arranged both the bonds and the secret loans, Credit Suisse and VTB. More may yet be revealed about Mozambique's fishy finances.



Bahrain

An unhappy isle

The royals have won. Yet they are still hounding the Shias

SAGGING rope, haphazard barri-Acades—and fear. That is all it has taken to keep Diraz, Bahrain's largest Shia village, under siege for the past seven months. Two checkpoints bar access to all but residents. Friends and family members are kept out. Grocers offload their wares at the perimeter wall. And the protesters who once thronged to hear the island's leading Shia cleric, Isa Qassim, deliver his Friday sermon now stay at home. "Forget the thousands who used to join rallies," says a cleric in a neighbouring village, recalling the protests which erupted after tanks crushed the mass demonstrations for democracy in 2011. "Today we can't even find ten. Who wants to risk five years of prison and torture for ten minutes of glory?"

Though small, running out of oil and dependent on larger Gulf neighbours, Bah-

rain typifies how Arab autocrats have crushed the Arab Awakening's demands for greater representation. After six years of suppression, the Shia opposition is disheartened. Maligned as the cat's paw of Iran and a threat to Sunni rule in Bahrain, their movement is battered and broken. More than 2,600 political prisoners are in jail, a large number in a kingdom of just 650,000 people. Many of the detainees are children, says a former member of parliament from Wefaq, the Shia party the government banned last year. Hundreds have been exiled, scores barred from travel, and over 300 stripped of their nationality, including Sheikh Oassim. Even the execution on January 15th of three Bahrainis—the first for two decades—roused only sporadic unrest by the island's opposition.

The "national dialogue" that was es-



Protesters may topple bins but they can't bin Hamad

Middle East and Africa

poused during more turbulent times by the king's son and crown prince, Salman bin Hamad, is on hold. Many of his erstwhile interlocutors are in jail on implausible terrorist charges. The online edition of the last independent daily newspaper was banned on January 16th. Although the graffiti on village walls declare "Death to [Kingl Hamad", few youngsters risk more than a token rally before police start firing birdshot. "We had a revolution and we lost," says a female protest leader now in exile.

Shia and Sunni subjects should share many grievances. Both resent a ruling family that hoards ministerial posts. The king's uncle, Khalifa bin Salman, is the world's longest serving prime minister, having been in place for 46 years. The king himself has ruled since the death of his father in 1999. Although the Al Khalifas monopolise power, they spread the pain of austerity. In line with Vision 2030, an economic programme devised for Bahrain by McKinsey, a consultancy, they have cut subsidies on such basics as meat. Even this is not enough. The oil price would have to double to balance the budget. Last year Standard and Poor's, a ratings agency, judged the country's debt to be junk.

The government's fiscal measures have fallen most harshly on Shias. Fellow Gulf states have given billions in aid to prop up the kingdom, but much has been channelled into building housing for Sunnis and foreigners. New mansions, compounds and high-rise blocks screen rundown Shia villages. Undulating parks along the corniche beautify Sunni parts. The authorities have also chipped away at the demographic majority of the Shias, who once made up 60% of the population. A rash of new Hindu temples, churches and Sunni mosques testifies to an influx of non-Shia foreigners. Unusually for the Gulf, Bahrain has opened its doors to Syrian Sunnis from Jordan's refugee camps. An acrid xenophobia peppers Shia discourse. Shias gibe that even the ruling Al Khalifas, who came from the Arabian hinterland over the water in 1783, are foreigners.

Communal tension is less fierce in the few places where Sunnis and Shias live together. But sects that once shared the same streets in new towns built in the 1980s are now moving apart. Flags of Shia saints hang from the homes on one side of the main road through Hamad Town; Bahraini flags of loyalist Sunnis fly from the other. Intermarriage, too, is getting rarer, says Suhail Algosaibi, who runs an interfaith group. Alone of the Gulf states, Bahrain still marks Ashoura, the holiest day in the Shia calendar, as a public holiday, but divisions are widening. Though some Sunni grandmothers still bake pomegranate cakes for Ashoura, their husbands who once joined the chest-beating rites now furtively watch from afar. For many Sunnis, Shia villages are no-go areas.

Last month Islamic State put out an hour-long video of a Bahraini ideologue from the same tribe as the royal family appealing for Sunni suicide bombers to attack the island's Shias. And on New Year's Day militant Shias broke into a high-security jail, freeing ten dissidents and prompting the opposition to ask if it might be more effective underground. "We desperately need a political process," says Jasim Hussain, a former Wefaq MP. "The country can't afford anything less."

Terrorism in Tunisia

Jihadis come home

CAIRO

Tunisia struggles with fighters returning from Iraq and Syria

f BEN GUERDANE had been located next to Falluja, we would have liberated Iraq." So (reportedly) said Abu Musab al-Zarqawi, the leader of al-Qaeda in Iraq, before he was killed a decade ago. He was referring reverentially to a town in southeastern Tunisia that is one of the world's biggest exporters of jihadists. No place better epitomises the challenges facing Tunisia's government as it tries to consolidate a wobbly democracy six years after the revolution that toppled the old dictatorship.

Hundreds of Tunisians marked the anniversary of the revolution on January 14th by taking to the streets to demand jobs. The protests began in Ben Guerdane before spreading to other poor places, such as Sidi Bouzid, Meknassi and Gafsa, where locals blocked the route of Beji Caid Essebsi, the president, who was in town to mark the anniversary. "Work is our right," yelled the protesters, using the slogans of 2011.

Work is indeed a right enshrined in the constitution, adopted in 2014. But the unemployment rate of 16% is higher than it was before the revolution. The rate for youngsters and those in the countryside is higher still. This is partly because a series of terrorist attacks has driven away tourists and foreign investors. Unemployed protesters have blocked roads leading from phosphate mines, further harming export earnings. Past governments have responded by promising to create public-sector jobs. The result is a bloated, unaffordable bureaucracy. A hiring freeze is now in effect.

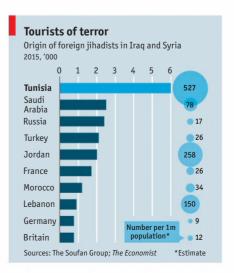
Disillusioned and aimless, youngsters in rural areas are prime targets of jihadist recruiters. Some 6,000 Tunisians have joined armed groups abroad, with most going to fight in Iraq, Syria and Libya, and some farther afield (see chart). One was Anis Amri, a 24-year-old follower of Islamic State (IS) who drove a lorry into a Christmas market in Berlin, killing 12 people. He

was later killed by Italian police.

The government is trying to stem the flow of people joining jihadists abroad. It has closed mosques led by radical preachers and keeps an eye on thousands of young suspects. Tunisians under the age of 35 are not allowed to travel to Libya, Turkey or Serbia, the main transit routes to Iraq and Syria. The borders with Algeria and Libya have been tightened. Parliament has passed an anti-terrorism law, criticised by human-rights groups, that gives the government more power to detain suspects and tap phones, among other things.

In any case, the flow is reversing, with fighters making their way home as the groups they had joined are pushed back. The interior ministry says 800 have already returned. Many fear that some will carry out attacks once back. Indeed, is has told them to do so and has claimed responsibility for several atrocities in the country. Last March a large group of Tunisian is members crossed the border from Libya to stage an assault on Ben Guerdane that left dozens dead. Tunisian security forces fear a possible Somalification of the country.

Last month Mr Essebsi played down the threat. But after much criticism, and calls to strip the militants of their citizenship, the government braced up. Youssef Chahed, the prime minister, who belongs to Nidaa Tounes, the main secular political party, has said that returning militants will immediately be arrested. Ennahda, the moderate Islamist party that shares power with Nidaa Tounes, backs this approach, though some blame it for having exacerbated the problem by previously indulging radical preachers. "We have all the details on [the returnees]," says Mr Chahed. "We know them one by one." But many probably left the country and came back without passing through customs. Moreover, the grievances that prompted so many to become jihadists have not vet been dealt with. In places like Ben Guerdane locals still feel that the government does not care very much about them.





Turkey's all-powerful president

Iron constitution

Recep Tayvip Erdogan may soon have the executive presidency he has long sought

T HAS been a U-turn to make a stunt driver proud. For the past couple of years, Devlet Bahceli, the head of the Nationalist Movement Party (мнр), the fourth-largest in parliament, had been considered one of President Recep Tayyip Erdogan's most vicious critics. Mr Erdogan's plan to replace the country's parliamentary system with an executive presidency, he once warned, was a recipe for a "sultanate without a throne" and a system with "no balances, no checks, and no brakes". Mr Bahceli opposed the constitutional overhaul as recently as October.

Today, the raspy-voiced nationalist is suddenly rolling out the red carpet for Mr Erdogan's pet project. As The Economist went to press, Turkey's parliament was poised to adopt a package of 18 amendments that would place all executive power in Mr Erdogan's hands. In the first round of voting, concluded on January 15th, each of the amendments passed with a majority of at least 330 votes. Of these, no more than 316 came from the ruling Justice and Development (AK) party. Mr Bahceli and his whips, undeterred by a mutiny that has been swelling inside their party for months, provided the remaining votes. Barring a new wave of defections, the new constitution will be put to a referendum in early April or late March.

At present Turkey's presidency is largely ceremonial—in theory. In fact, Mr Erdogan. who spent a decade as prime minister before being elected president in 2014, has continued to rule almost uncontested. Emergency law, adopted in the wake of a violent coup attempt in July, has removed most remaining checks on his power.

The proposed changes would make this situation permanent. The office of prime minister would cease to exist. Mr Erdogan would manage his own cabinet, appointing senior officials without needing approval from parliament. He could issue decrees and declare a state of emergency. His term in office would last five years, renewable once. Since the changes would kick in after the 2019 presidential elections, Mr Erdogan could remain in power until 2029. AK officials say the set-up would preclude unwieldy coalitions. Critics call it a blueprint for an elected dictatorship.

Analysts-and the handful of MHP members willing to speak to the press-are at a loss to explain what Mr Bahceli gains by backing constitutional amendments that his own voters seem to oppose. (Popular support for the changes has long languished below 50%.) Umit Ozdag, a onetime MHP deputy chairman, suggests that his former boss may have been offered cabinet posts. Others say he is paying back Mr Erdogan for a court verdict that helped him stave off a leadership challenge over the summer. Though he has never won an election, Mr Bahceli has not relinquished control over his party for two decades.

He may be pleased, however, with the

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direction which Turkey is taking. The government has disowned peace talks with Kurdish insurgents, opting instead for a ruthless military offensive, a solution Mr Bahceli has favoured for years. Since the failed coup. Mr Erdogan and his ministers have revved up nationalist rhetoric to justify a mounting crackdown against Kurdish politicians, socialists and the press. Islamists and nationalists have closed ranks. "Bahceli might be in opposition, but his ideas are in power," says Asli Aydintasbas, a fellow at the European Council on Foreign Relations. "These might be the happiest days of his life."

Wham, bam, Erdogan

The vote on the constitutional changes has been a pathetic spectacle. Ruling-party lawmakers openly flouted a rule on secret balloting, then assaulted an opposition MP who used her phone to film them. Punches, notebooks and at least one flower pot flew across the parliamentary floor during the brawls. One AK member displayed a gash on his shin, claiming to have been bitten during the melee.

The referendum, if it goes ahead, risks becoming an even worse travesty. Under the state of emergency, the government has arrested, sacked or suspended over 130,000 people, only some of them linked to July's coup. Over 100 journalists are in prison. Mainstream media outlets are increasingly wary of airing dissenting opinions. Mr Erdogan, meanwhile, retains the right to close newspapers and NGOs with a stroke of his pen. In late 2016 his own prime minister, Binali Yildirim, opined that the referendum should not take place under such conditions. Yet that is what is set to happen. On January 19th, just as parliament began voting on the amendments, emergency rule went into effect for another three months.



Emigration in eastern Europe

The old countries

VILNIUS AND RIGA

Eastern Europe is losing workers and keeping pensioners

IN THE Lithuanian town of Panevezys, a shiny new factory built by Devold, a Norwegian clothing manufacturer, sits alone in the local free economic zone. The factory is unable to fill 40 of its jobs, an eighth of the total. That is not because workers in Panevezys are too picky, but because there are fewer and fewer of them. There are about half as many students in the municipality's schools as there were a decade ago, says the mayor.

Such worries are increasingly common across central and eastern Europe, where birth rates are low and emigration rates high. The ex-communist countries that joined the European Union from 2004 on dreamed of quickly transforming themselves into Germany or Britain. Instead, many of their workers transported themselves to Germany or Britain. Latvia's working-age population has fallen by a quarter since 2000; a third of those who graduated from university between 2002 and 2009 had emigrated by 2014. Polls of Bulgarian medical students show that 80-90% plan to emigrate after graduating.

Lithuania's loss of workers is costly, says Stasys Jakeliunas, an economist. Remittances and EU money for infrastructure upgrades have helped, but labour shortages discourage foreign investment and hurt economic growth. According to the IMF, in some countries in eastern Europe emigration shaved 0.6-0.9 percentage points from annual GDP growth in 1999-

2014. By 2030 GDP per person in Bulgaria, Romania and some of the Baltic countries may be 3-4% lower than it would have been without emigration.

All of this imperils public finances. Pensions, which take up about half of social spending in eastern Europe, are the biggest worry. In 2013 Latvia had 3.3 working age adults for each person older than 65, about the same as Britain and France; by 2030 that is projected to fall to just over two, a level Britain and France will not reach until 2060. Countries are raising the retirement age (apart from Poland, which is recklessly lowering it). Benefits are already meagre, leaving little room for cuts. As a share of

Brain drain

Education level of emigrants v general population
2010

Ukraine

40

Latvia

Hungary

Lithuania

30

Czech

Poland

Estonia

Slovakia

20

Romania

Slovenia

Slovenia

10

Croatia

10

40

40

70

40

40

70

Formation

Source: IMF

GDP, social spending in Bulgaria, Romania and the Baltic states is roughly half of that in many richer European countries.

Unable to dissuade people from leaving, governments are trying instead to lure them back, inspired by successful efforts in Ireland and South Korea. Daumantas Simenas, project manager of the Panevezys free economic zone, credits his return from Britain to the country's "Create for Lithuania" programme, which matches educated professionals from the diaspora with government jobs. Having a job already lined up made the decision to return easier, he says. Plus, he adds, "home is home."

Whether such efforts can turn the tide seems doubtful. "Create for Lithuania" has brought back more than 100 people since its launch five years ago, says Milda Darguzaite, who started the programme after leaving an investment-banking career in America for a government post in Vilnius. Returnees include an MP, a deputy mayor and several advisers to the prime minister. Bringing back doctors and engineers, however, is trickier. Studies show that skilled workers from eastern Europe are attracted abroad primarily by the quality of institutions such as good schools; better social benefits matter more for unskilled migrants. Data on return migration are scanty, but a recent report by the IMF suggests it has been "modest", in some countries as low as 5% of those who left.

Firms are adapting to labour shortages. At a recent business conference in Bulgaria, employers said they are having to raise wages to entice workers from farther and farther away. In Bulgaria and the Baltic states wages have grown faster than productivity for the past five years—a trend that makes exports less competitive.

That may change. Higher labour costs are pressing firms to automate, says Rokas Grajauskas, an economist at Danske Bank. On the factory floor at Devold many tasks once done by hand, such as cutting cloth into shapes for winter pullovers, are now executed by robots.

Some countries are warming to another solution: immigrants from poorer neighbours. Estonia's population increased in 2016 for the second year in a row thanks to incomers from Ukraine, Belarus and Russia, after falling steadily since the 1990s. But immigration may not plug the brain drain. Almost all of the 400,000 Ukrainians who obtained residency permits in Poland in 2015 work in agriculture, construction or as household help. By contrast, about 30% of Polish émigrés have higher education—roughly twice the share in Poland's general population (see chart).

For those who leave eastern Europe, the freedom to live and work where one chooses is an immense boon. But the countries where they were raised face a difficult challenge. They must learn how to attract and retain new workers, or decline.

The European Parliament

A shift to the right

BRIISSELS

A new president has a shaky coalition and a tough agenda

T FIRST glance the European Parlia-A ment might look invulnerable to the populist wave sweeping across Europe. Antonio Tajani, a centre-right Italian who won the presidency of the chamber on January 17th, is the sort of bland functionary the European Union specialises in. Little on Mr Tajani's CV grabs the eye, bar an affection for Italy's long-defunct monarchy and a spell as spokesman for Silvio Berlusconi, the bunga-bungatastic former prime minister. His victory was engineered in classic EU fashion, after four rounds of voting and endless dealmaking between the parliament's sundry political groupings.

Yet Mr Tajani's win can be traced to those same disruptive forces. At the last election, in 2014, nearly one-third of the parliament's 751 seats went to anti-EU or anti-establishment outfits. That forced its two biggest groupings, the centre-right European People's Party (EPP) and the Socialists & Democrats (s&D), into a "pro-European" grand coalition. Under their deal Martin Schulz, a German Social Democrat, was to serve a two-and-a-halfyear term as president before giving way to an EPP candidate.

That pact collapsed in a style that is vintage Brussels. After the deal was struck the other two top EU jobs went to EPP figures: Jean-Claude Juncker secured the presidency of the European Commission, the EU's version of an executive arm, and Donald Tusk was appointed president of the European Council, the forum for the EU's heads



Wiles over charisma

of government. Furious at being shut out, last year the s&D reneged on the agreement. After Mr Schulz said, last November, that he would return to German politics, the s&D's parliamentary leader, Gianni Pittella, declared he would run.

The upshot was virtually unheard-of in the parliament's history: a genuine contest. Seven candidates, many of them from fringe outfits, threw their hats into the ring. Mr Tajani defeated Mr Pittella only after the EPP struck deals with the Euro-federalist ALDE grouping, led by Guy Verhofstadt, and with the European Conservatives and Reformists, a Eurosceptic outfit dominated by Britain's Conservatives. This odd threesome leaves plenty of questions.

The job of the president sits somewhere between parliamentary speaker and institutional cheerleader. After his win Mr Tajani suggested he would lean towards the former, vowing not to "push a political agenda". On his watch the parliament will not enjoy the stature it did under the bruising Mr Schulz, but after the collapse of the grand coalition, wiliness may be more important than charisma.

And there is plenty to do. The parliament is often mocked, but it plays a crucial role in EU policymaking. This year it must work on tricky reforms to Europe's migration and asylum systems, as well as ratifying a controversial trade deal with Canada. The EPP-ALDE agreement calls for action when "European principles" are breached, which could mean steps against Poland's populist government. The deal also seeks a bigger role for the parliament in Brexit talks. MEPS must approve the final settlement; their vote may take place in early 2019, just as they gear up for re-election.

One relationship to watch will be that between Messrs Tajani and Juncker. The commission president and Mr Schulz got on famously, despite hailing from different political families. That helped smooth the process of passing legislation (under EU rules the commission proposes laws, and the parliament and representatives from national governments pass them). Meanwhile, the s&D is left licking its wounds. Another European trend, then, for the parliament to follow: the collapse of the mainstream left.

Reform in Russia

Listen, liberal

Alexei Kudrin wants to save Russia's economy, but the Kremlin now thinks its model is winning

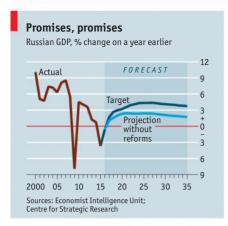
XPECTATIONS were high last week as **L** Alexei Kudrin, a former finance minister and the informal leader of a moderate liberal camp in the Russian establishment, outlined his proposed economic programme in a packed Moscow auditorium. Russia's top economic officials occupied the front row. Foreign ambassadors sat behind. Journalists stood in the aisles. The setting was the Gaidar Forum, a symposium named after the architect of Russia's market reforms in the 1990s. The date, Friday the 13th, was perhaps unfortunate.

Nine months ago, as Russia's recession deepened, Vladimir Putin drafted Mr Kudrin to come up with a new economic strategy. The former minister, who oversaw strong economic growth in the early 2000s, resigned in 2011 in protest against a massive increase in military spending. Since then he has acquired cult-like status among Russian liberals. A personal friend of Mr Putin, he is a counterweight to the hardliners of Russia's security services, and has stayed inside the system rather than becoming a dissident. Although he holds no formal position, he is seen as the most senior liberal courtier in the Byzantine world of the Kremlin.

Mr Kudrin's verdict was grim. Russia, he

said, is at a low pace of economic growth even compared with the period of stagnation in the 1970s and 1980s that led to the Soviet collapse. The reasons go well beyond low oil prices and Western sanctions: "The main problems lie within Russia and they are structural and institutional." Russia lags far behind in technology and innovation, and faces a severe demographic slump. The key problem is not a lack of intellect or business talent, but state inefficiency and dysfunctional institutions. "In our country the state dominates everything, so you have to start with reforming the state," Mr Kudrin said.

Mr Kudrin made it clear that the technical tinkering favoured by the Kremlin cannot pull Russia out of its economic trough. Reforms must involve fundamental changes to the system, particularly to the judiciary. Courts must provide justice even when that requires ruling against the state or security services. To convince his boss, Mr Kudrin framed his strategy in terms of national security and global prestige-one of the few subjects Mr Putin seems to care about. "Unless we become a technologically advanced country we face a problem of diminishing defence potential and a threat to sovereignty," he said.



Mr Kudrin presented Mr Putin with a choice. If the government does nothing, and provided oil prices do not fall, he estimates Russia's growth rate between now and 2035 will hover in the vicinity of 2% (see chart). If it implements Mr Kudrin's reforms, growth rates will top 4%—enough gradually to close the income gap with Western economies. Yet from the Kremlin's point of view Mr Kudrin's reforms are risky: they threaten to destabilise Russia's centralised, cronyistic political system.

The government is already trying to cut public spending from 37% of GDP down to 32%, creating a fight for shrinking resources that was evident at the forum. A day before his speech, Mr Kudrin moderated a panel composed of Russia's most successful and powerful regional governors. The president of the Muslim republic of Tatarstan complained of excessive centralisation and a lack of trust from Moscow. "To rule any territory, you need money and cadres," he said. Last year Moscow cut 8bn roubles (\$134m) from his budget, about 5% of his annual spending.

Instead of granting economic freedom and rewarding regional initiative, Moscow, fearful of separatism, keeps the regions dependent on hand-outs from the centre. "God forbid if your budget revenues are growing: you will immediately lose subsidies and be forced to finance other federal projects," said Anatoly Artamonov, the governor of the car-making region of Kaluga. "Transferring most executive powers to the regions is long overdue," said Sergei Morozov, the governor of the Ulianovsk region.

For Mr Putin, however, the risks of comprehensive reforms, such as decentralisation, could be greater than the benefits—especially when he faces no immediate pressure, at home or abroad. A source close to the Kremlin says the president is confident that he has earned the unwavering support of his people and no longer needs to reinforce his standing through stellar economic performance. Despite two years of recession, Russians have adjusted to falling incomes without much protest. Meanwhile, Donald Trump's election in America and the growing wave of nationalism in

Russian propaganda

Putin's prevaricating puppets

RT broadcasts drivel, but is far less influential than the West fears

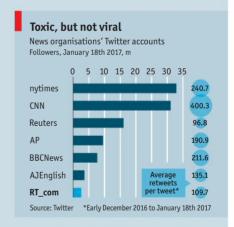
PRODUCERS at RT, the Kremlin-financed media weapon formerly known as "Russia Today", must have been glowing. More than half of the report on Russian electoral interference which America's intelligence agencies released on January 6th was devoted to warning of the network's growing influence. The report noted the "rapid expansion" of RT's operations and budgetnow \$300m a year-and cited impressive audience numbers listed on the RT website. The channel, whose professed mission is to present the Russian point of view to foreign audiences, claims to reach 550m people worldwide, with America and Britain as its most successful markets. Conclusion: RT is part of a "Kremlin-directed campaign to undermine faith in the Us Government".

That is no doubt true, but whether it is succeeding is a different question. RT has a clever way with numbers. Its "audience" of 550m refers to the number of people who can access its channel, not those who actually watch it. RT has never released the latter figure, but a 2015 survey of the top 94 cable channels in America by Nielsen, a research firm, found that RT did not even make it into the rankings. In Britain last month, it captured just 0.04% of viewers, according to the Broadcast Audience Research Board.

On Twitter and Facebook, RT's reach is narrower than that of other news networks (see chart). Its biggest claim to dominance is on YouTube, where it bills itself as the "most watched news network" on the platform. As the intelligence report fretfully notes, RT videos get m views a day, far surpassing other outlets. But this is mostly down to the network's practice of buying the rights to sensational footage, for instance of Japan's 2011 tsunami, and repackaging it

with the company logo. RT hopes that the authenticity of such raw content will draw viewers to its political stories too, explains Ellen Mickiewicz of Duke University. This sounds like a canny strategy, but it does not work. RT's most popular videos are of earthquakes and grisly accidents. Among the top 15, the closest to a political clip is one of Vladimir Putin singing "Blueberry Hill".

RT is not all strongman serenades. It broadcasts loopy conspiracy theories and fake news stories that encourage distrust of Western governments (the CIA created Ebola; the 9/11 attacks were an inside job; Ukraine crucifies babies). Ofcom, Britain's media regulator, has rebuked the network, and NATO has called for counter-messaging to combat its propaganda. But the conflation of RT with Russian hacking and espionage has made it out to be a 10-foot monster, says Samuel Charap, a Russia analyst. In fact the Kremlin cut its funds by 10% last year as it struggled to balance the federal budget. With awestruck reviews from American spooks, however, money may flow more freely in the future.



Europe have convinced many in the Kremlin that things are going their way.

State television channels ignored Mr Kudrin's speech, concentrating instead on Mr Trump's upcoming inauguration. On the largest, Channel One, announcers relished America's humiliating obsession with claims that Russia had interfered in its elections and that Mr Trump employed prostitutes while visiting Moscow. (Mr Putin discounted the allegations but noted that Russian prostitutes were "the best in the world".) The reason for America's hysteria over Russia's relationship to the president-elect, explained Valery Fadeev, the

anchor of Channel One's weekly analytical programme, is that the era of Western liberal interventionism is coming to an end. Those who attack Mr Trump's admiration of Mr Putin can see the commonalities between their approaches: "The world order can be renewed on the basis of our principles."

The popularity of this view bodes ill for Mr Kudrin's programme. Russia's long-term economic prospects may be as dire as he says. But it is unlikely to adopt liberal reforms when its elite believes that liberalism is on the retreat and a new Russian model is on the rise.

Charlemagne | Looking hairy

Europeans might hope for the best with Donald Trump, but must prepare for the worst



UST over a year ago Barack Obama decided that the European Union needed his help. His advisers devised a strategy to bolster America's European allies, incorporating transatlantic visits, political theatre and pep talks. Mr Obama talked of the dangers of Brexit in London and invited Matteo Renzi, Italy's ill-starred prime minister, to Washington to back his constitutional referendum. Last April Mr Obama's visit to Hanover, ostensibly to encourage a floundering transatlantic trade pact, occasioned a stirring defence of European unity, the memory of which still turns beleaguered Brussels bureaucrats misty-eyed.

Sharp-eyed readers will have noticed that each of these gambits failed. Britons ignored Mr Obama's warning that a post-EU Britain would be at the "back of the queue" for any new trade deals; Italians spurned Mr Renzi's constitutional changes (and forced him from office); and Donald Trump's victory, in the words of the EU's trade commissioner, put multilateral trade talks into the "freezer". All of these outcomes revealed voters' discontent with their political masters, a mood that found its fullest expression in the election of Mr Trump.

If Europeans seek change, they will receive it good and hard from America's new president. This week Mr Trump told British and German newspapers that he expected other countries to follow Britain out of the EU, which he termed "basically a vehicle for Germany". Slamming America's allies for miserly defence spending, he declared NATO "obsolete". He said he was as likely to fall out with Germany's chancellor, Angela Merkel, as with Vladimir Putin, the Russian president. These remarks hardly represented an about-face: Mr Trump has lamented security free-riding for decades, for example. But coming four days before his inauguration, they delivered a hefty payload.

Mr Trump appears to promise the biggest rupture in transatlantic relations since 1945. Should he be taken at his word? On a recent visit to Washington your columnist was urged by Atlanticists to pin his hopes on appointments like that of James Mattis, Mr Trump's pick for defence secretary. During last week's confirmation hearings General Mattis, a conventional Republican hawk, hammered Russia and declared NATO vital to American interests. What to make of such apparent conflict inside Mr Trump's cabinet? Perhaps it is a calculated strategy to confound

America's foes. More likely it reveals Mr Trump's slapdash approach to policy, and promises bureaucratic chaos those adversaries will be delighted to exploit.

Mr Trump shows little affection for Germany, despite his Bavarian grandfather. Yet if this has caused panic in Germany, it is well concealed. Charlemagne has heard an official in Berlin suggest, with a straight face, that Mr Trump would surely change his mind on Mr Putin once the intricacies of the 1994 Budapest Memorandum, under which Ukraine agreed to give up its legacy nuclear arsenal in exchange for guarantees of territorial integrity, were explained to him. Other German officials place their faith in America's institutions-Congress, the civil service, the military-to restrain the new commander-in-chief.

Very well: hope for the best. Bien-pensant Europeans were terrified of Ronald Reagan when he took office in 1981; less than a decade later they watched the Berlin Wall tumble. Mr Trump has no track record in government on which to base forecasts, and his habit of self-contradiction renders prediction impossible. Some even spy opportunity. Perhaps a Putin-friendly president could ease tensions with Russia, at least in the short term. Mr Trump's threat to withdraw America's security umbrella provides a useful argument to those Europeans pressing for more defence spending at home. Maybe the uncertainty Mr Trump has injected into global politics will galvanise Europeans into resolving their petty differences and forging a genuine common foreign policy.

Be afraid

But the risks to Europe of a Trump presidency outweigh any possible benefits. First, a fraying EU may be susceptible to the president's brand of bilateralism. Watch Britain, seeking fresh partners as it Brexits (Mr Trump pledges a trade deal "very quickly", though Brussels rules make that impossible). Poland's nationalist government, a pariah in the EU for its unconstitutional power grabs at home, is a prime candidate for Trumpian deal-making, says Jan Techau of the American Academy in Berlin, a think-tank. Watch, too, Mr Trump's choice of European friends. The roll call of visitors to his gold-plated tower since the election includes the leaders of populist outfits from Britain, Austria and France, who see in Mr Trump's victory a validation of their own assaults on the established order.

The principal victims may be outside the EU. Europe's fate lies in its own hands, Mrs Merkel said this week. But the EU struggles to extend its sway to weak countries on its fringes. Take Mr Trump's hint that he might ease sanctions on Russia, imposed in 2014 over its aggression in Ukraine. The offer carries a cost even if it comes to nothing. Without American backing the EU's consensus on Russian sanctions will evaporate (especially if François Fillon, a Putin-friendly Gaullist, wins France's presidential election in May). As the West loses its attraction Ukraine may be sucked into Russia's orbit. Atlanticists in post-Soviet states like Moldova and Georgia will be left in the cold. Tensions in the Balkans may bubble over, especially if Mr Putin steps up his meddling.

American support, both hard and soft, has always undergirded European unity, and its absence will be keenly felt. The condition may not be permanent: American presidential terms last only four years. But that is plenty of time to inflict immense harm. During his last visit to Europe, in November, Mr Obama sought to reassure his allies that the transatlantic bond would survive the Trump era. Europeans must hope that on this trip, unlike the earlier ones, the president got it right.

48 Bagehot: Let the work permits flow

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Doing it the hard way

Theresa May opts for a clean break with Europe. Negotiations will still be tricky

T MIGHT be called May's paradox. Since I she became prime minister last July, Mrs May has been urged by businesses to clarify her Brexit goals. Yet every time she has tried, investors have reacted by selling sterling, because she has shown a preference for a "hard" (or, as her advisers prefer, "clean") Brexit that takes Britain out of the EU's single market and customs union.

In fact the pound rose on January 17th when she gave a speech that set out her most detailed thinking so far about Brexit. That was partly because her decision to leave the single market and customs union had been widely trailed, causing the pound to fall in the run-up to her speech. But it may also have been because markets were pleasantly surprised by her language in setting out a dream of a liberal, open future for the country-she spoke behind the slogan "A Global Britain"-and her expressed wish for continuing friendly relations with Europe.

There is a liberal vision of a post-Brexit future in which Britain escapes the most protectionist features of the EU and opens its economy to the rest of the world. It is one that includes lower taxes, less pettifogging regulation and freer trade. During the referendum campaign it was sometimes talked of as "Singapore on steroids": a dynamic, open Britain capable of competing not just with other EU countries but with the whole world.

The trouble is that, for all her pleasing rhetoric, Mrs May is not really pursuing this vision. She has set immigration control as her priority (see Bagehot), even though today's service businesses depend on being able to move people around at short notice, as does high-tech industry. A similar drawback attaches to her insistence on escaping the jurisdiction of the European Court of Justice (ECJ). Free-trade deals require a neutral umpire. So would any effort, hinted at again by Mrs May, to secure post-Brexit barrier-free access to the EU's single market for such key industries as cars and financial services (see page 63).

Such a sectoral approach is anyway unlikely to work, for two reasons. One is that the EU will not offer favoured access to its market only for certain industries. The second is that the World Trade Organisation does not allow it. The wto accepts freetrade deals and customs unions, but only if they embrace "substantially all the trade". Were the EU to single out cars, say, for barrier-free trade with Britain, the EU would be obliged by the wto's non-discrimination rules to offer the same deal to all WTO members, including China and India.

Mrs May was frank about the trade-off between being in the single market and taking back control of borders and laws. She even declared that to stay in the single market would mean "to all intents and purposes" not leaving the EU at all. But she

was less honest in not admitting that Brexit will impose costs, and that a hard Brexit will make them heavier. A YouGov poll for Open Britain, a pro-EU group, finds that even a majority of Leave voters are not prepared to be made worse off in order to control immigration.

Mrs May's response that the economy has done better since the referendum than economists forecast is disingenuous. Not only have easier monetary and fiscal policy and the fall in sterling cushioned the impact but Brexit has not yet happened—and until recently many firms hoped to stay in the single market. Nor did Mrs May offer any solution to the problems that leaving the single market and customs union will cause for the border with Ireland, where there are currently no customs checks.

Negotiating free-trade agreements will be harder and more time-consuming than Mrs May suggests. She expressed hope that a comprehensive deal with the EU could be done in two years. But experience suggests this is highly unlikely. Many EU countries say they need to settle divorce terms (dividing up property, pensions and so on) before even talking about trade. Canada's free-trade deal with the EU has taken seven years and is not yet in force. For Britain to replicate the EU's trade deals with 53 third countries will be more testing than today's enthusiastic talk of an early agreement with America suggests (see next story). And ratification is always tricky: a recent ECJ ruling makes a free-trade deal with Britain a "mixed" agreement that must be approved by every parliament in the EU, including regional ones.

The truth is that when Mrs May formally triggers Brexit she will find the cards stacked against her. Subject to an imminent Supreme Court ruling on needing parliamentary approval, she plans to initiate >> ▶ the process in March. The divorce proceedings then have an extremely tight two-year deadline. Mrs May acknowledged the need for transition, but only as an implementation process towards a final deal. As she conceded, the other 27 EU countries have been impressively united over Brexit. They may welcome her new clarity, but for them the preservation of the union is more pressing than all else. As several leaders have said, Britain cannot have a better deal outside than inside the club.

Mrs May made helpful noises about not wishing to see the EU unravel, unlike Donald Trump. She stressed the need to retain co-operation on foreign policy and security. And she said Britain might pay modestly into the EU budget (though no longer "vast contributions", so talk in Brussels of an initial Brexit bill of upwards of €50bn, or \$53bn, may not go down well). But she also threatened her partners, calling it an act of "calamitous self-harm" if they pushed for a punitive settlement; Britain could retaliate by slashing taxes, she said. She believes her predecessor, David Cameron, made a mistake by not being ready to walk out rather than accept inadequate new membership terms. In her speech, indeed, she insisted that no deal was better than a bad deal.

As Malcolm Barr of J.P. Morgan points out, this is a dangerous line. No deal would mean falling back on WTO terms, implying not just non-tariff barriers and lost access to the single market but actual tariffs on exports of cars, pharmaceuticals, processed foods and much else. The EU would suffer too, but its goods exports to Britain are worth only 3% of its GDP; Britain's to the EU are worth 12% of its own GDP. Mrs May has made a powerful case for her version of a hard Brexit. But it is Britain, not the 27, that is the demandeur in these negotiations. And that will make securing a good outcome hard in every sense. ■

vatory at Sussex University says that British consumers could benefit if the home market were opened to cheap American food. Britain might allow in genetically modified crops, which are regulated more heavily in the EU, or buy from America's highly competitive beef farmers.

But as the car industry shows, it is not tariffs but non-tariff barriers, such as differing regulations, that most impede British-American trade. One research paper finds that in the chemicals industry, EU exports to America face non-tariff barriers equivalent to a tariff of about 20%.

Agreements to scrap non-tariff barriers would help trade along. Caroline Freund of the Peterson Institute, a think-tank based in Washington, DC, reckons that Britain and America could make progress on "digital trade", something on which negotiations between the EU and America have stalled. This could include, for instance, agreements on data sharing and copyright.

It would not all be plain sailing, however. British firms, especially small ones, would struggle to comply with American and EU standards simultaneously (a paper from 2015 noted that the area of the windscreen cleaned by wipers must in certain cases be larger for American-compliant cars than EU ones, for instance). And although Mr Trump might swallow sheep's lungs, he may play hardball with more lucrative industries. Britain, whose economy is one-sixth the size of America's, would have little bargaining power.

American negotiators could, for instance, target Britain's insurance market, extracting an agreement to lower non-tariff barriers and in so doing cutting that prized trade surplus. Britain's public-procurement market might also be of interest, in which case expect headlines about American health-care firms snapping up National Health Service contracts. British carmakers may be disappointed: Mr Trump makes political capital from protecting America's auto industry, not throwing it open to foreign competition.

Even if these bumps can be smoothed over, geography will also limit the impact of a British-American trade deal. So-called gravity models of trade reveal something very simple: nearby countries trade more with each other. It is hard for a Londonbased lawyer to provide services to a Californian client when their working days barely overlap.

Other countries "are already queuing up" for a trade deal with Britain, according to Boris Johnson, the foreign secretary. But there is a mountain to climb. One estimate suggested that quitting the EU and falling back on World Trade Organisation rules would be associated with a decline of about a fifth in Britain's total trade volumes. Mr Trump's proclamations, if of any substance, are encouraging. But Britain is not about to enter a golden era of trade.

Trade with America

The art of the deal

Don't get too excited by the prospect of a trade agreement with President Trump

T WAS music to Brexiteers' ears. In an in-Laterview with the Times and Germany's Bild, Donald Trump revealed that he wanted a trade agreement between America and Britain "very quickly". Less widely reported was Mr Trump's refusal to specify how far up his list of priorities Britain would be after he took office on January 20th. Trade deals have assumed fresh importance since Theresa May confirmed this week that Britain would leave the EU's single market and customs union, allowing it to sign trade agreements of its own. Unfortunately the probable benefits of a deal with the Donald are underwhelming-especially for Britain.

In 2015 Britain sent exports worth about £100bn (\$121bn) to America, making it Britain's biggest export destination after the EU, to which it sold goods and services worth over £200bn. Americans are heavy users of British financiers' expertise. In insurance Britain probably has a larger trade surplus with America than it does with the EU. An index of "trade complementarity" produced by the World Bank suggests that the British and American economies would be highly suitable trade partners.

However, gummy regulations hold back commerce. Britain sends relatively few cars to America, for instance, partly because America and the EU use different safety standards. America has turned its nose up at British meat since a food-safety



crisis in the 1980s. Haggis, a Scottish delicacy containing sheep heart, liver and lungs, is in effect banned.

A bonfire of rules and tariffs could help certain industries. Haggis makers are delighted by rumours that Mr Trump, whose mother was born in Scotland, wants to lift the ban. ("Consider it done," he supposedly told one hotelier following his election.) Alan Winters of the UK Trade Policy Obser-

Bagehot | Let the work permits flow

The prime minister's maximalist Brexit need not mean immigration cuts



THERESA MAY'S speech on Brexit lasted almost an hour, but five seconds would have sufficed. She could just have said: "Immigration controls will be imposed at any cost." As home secretary, she tried and failed to implement David Cameron's pledge to drive net immigration below 100,000 (it was 335,000 in the year to June 2016). After she replaced him she could easily have dumped the target, but instead cleaved to it. When Amber Rudd, her liberal-minded home secretary, suggested it be softened, Number 10 promptly overruled her. Clearly the prime minister believes it worth pulling Britain out of the European single market and the customs union to achieve this elusive goal. So expect drastic immigration cuts when, in 2019, free movement is replaced by a system of work permits.

The prime minister's thinking is not hard to fathom. Immigration was integral to the anti-EU campaign in the Brexit referendum. A poll of Leave voters' motivations commissioned by Lord Ashcroft, a Tory peer, after the vote found that regaining control of borders had been second only to casting off rules from Brussels. Dominic Cummings, the mastermind of the Brexit victory, says: "All focus groups now start with immigration and tend to revert to it within two minutes unless you stop them." One only has to join an MP on a canvassing round to see what he means: door after door, residents raise it when asked what bothers them.

Yet such sessions also make clear that immigration is no monolithic political issue. It contains multitudes. And picking these apart suggests Mrs May should think twice about slamming the door.

That starts with being frank about something politicians use patronisingly tortuous insincerities to describe: some voters just don't like immigrants. These voters are not bad people—they may be pillars of their communities, compassionate and generous to their fellow citizens—but they dislike hearing foreign languages, mistrust cultures other than the native one and assume foreigners are scoundrels and malingerers. This group is a small minority: in 2015 YouGov, a pollster, found that 10% of respondents would mind if someone of a different ethnicity moved next door; 16% if he or she married one of their children. In general, Britons like immigrants even if they dislike immigration. British Future, a think-tank, found that 84% (and 77% of Leave voters) favoured al-

lowing European residents in Britain to stay after Brexit.

Which is not to say that culture is irrelevant. Listen to voters discuss their worries about immigration and it becomes clear that these are part of a broader sense that society is unstable and unjust; that the system does not work properly. This encompasses concerns about the integrity of borders; crime and terrorism; social atomisation; the speed at which society is changing; the waning of deference. One study last year showed that people who do not feel in control of their lives are more likely to oppose immigration. Voters need have no specific quarrel with immigrants to see them as part of this phenomenon. Reducing numbers is therefore unlikely to get to the heart of their complaints.

Most of all, however, objections to immigration are material. According to polls by Ipsos Mori, the five most-cited reasons people give when asked why they consider immigration too high are: job shortages, overcrowding, pressures on the state, welfare strains and housing shortages. (Cultural factors—crime, loss of national identity and failure to integrate—are far behind, on low single digits.) In other words, though immigrants make Britain richer, locals correctly believe that the prosperity they generate is unevenly spread. Yet only a fraction of the political energy and capital invested in cutting immigration goes into thinking up and implementing ways of relieving its pressures.

Even if all this were wrong, and Britons really disliked the people who moved to join them on their islands, would shutting the borders cheer them up? Views about immigration bear only an imprecise relationship to number of immigrants. In the Brexit referendum, the parts of the country with the most foreign-born residents voted most heavily to remain; it was those areas that had seen the fastest *increase* in foreigners that were among the keenest to leave. Britons guess 31% of the population is foreign-born, when the true figure is 13%—and when confronted with the disparity they tend to question the figures rather than their assumptions. Whether voters would acknowledge, let alone notice, a large fall in immigration is therefore open to question.

Mrs May's door-slam, then, threatens to represent the worst of all worlds: creating unmeetable expectations among voters, while the fall in immigration damages the British economy, lowering tax receipts, putting services under even more strain and thus compounding the immigration "problem". As such, the coming crackdown could alienate not just cosmopolitans—a group likely to grow, given young Britons' relaxed stance on immigration—but also those nativists it is meant to placate.

Don't cut. Build

To politicians struggling with the subject: there are alternatives. Ditch the constipated talk of "concerns about immigration" (which only looks evasive) and make the honest case for the current, controlled levels. Propagate accurate facts about the numbers of immigrants, their impact and the process by which work permits are to be issued. Revive and expand the Migration Impacts Fund, a foolishly mothballed programme that channelled government resources to places experiencing fast population change. Embrace the proposals by Sajid Javid, the communities secretary, to relax the green belt to accelerate housebuilding. Have a proper debate about health-care funding, make the welfare system more contributory, put more police officers on the beat, make a period of national service compulsory for youngsters. Before reaching for reckless immigration cuts, pick the low-hanging fruit. It is plentiful.



Also in this section

50 Prizing girls in South Korea

Sex selection

Boy trouble

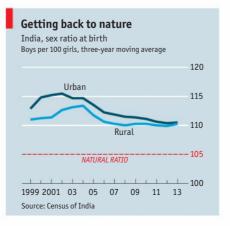
The war on baby girls has turned. Thank urbanisation, economics and soap operas

OR something so private and covert, the $oldsymbol{\Gamma}$ selective abortion of female fetuses is an oddly common topic of conversation in India. Narendra Modi, the prime minister, exhorts his countrymen to save girls and send them to school. When Sakshi Malik won India's first medal at the Rio Olympics, in wrestling, it was an occasion for regret as well as national chest-beating. Such victories are only possible when girls are not killed, commented Virender Sehwag, a dashing cricketer turned Twitter star.

India has cause to fret. According to two demographers, John Bongaarts and Christophe Guilmoto, a staggering 45m girls and women are missing from the country. Some were never born, having been detected by ultrasound scans and aborted. Others died young as a result of being neglected more than boys. Some villages in the north have an alarming surplus of boys and young men. Yet attitudes and behaviour are changing. In India, and in the world as a whole, the war on baby girls seems to be winding down.

Even without human meddling, the sex ratio is skewed. Asians and Europeans tend to have about 105 boys for every 100 girls, whereas Africans have closer to 103 boys. That seems to be nature's way of compensating for the higher death rate of boys and men; by the time men and women are ready to have children, the numbers ought to be roughly balanced. But in a few countries the ratio is unnaturally high. At the last census, in 2011, India had 109 boys aged 0-6 for every 100 girls; in Punjab, a wealthy northern state, the ratio was 118 to 100. China had 119 boys aged 0-4 for every 100 girls in 2010.

Sex ratios go out of whack when three things occur at once. First, a large proportion of couples must fervently desire boys. That happens mostly in "patrilocal" societies, where a woman moves out of her parents' home upon marriage and into her husband's home, to dote on his parents and harvest his family's crops. Second, birth rates must be low. A couple who intend to have five or six children (as Nigerians do today, for example) will almost certainly get a boy just by the law of averages, whereas a couple who would like one or



two children are more likely to try to tip the odds. Third, there must be an accessible, tolerated way of getting rid of superfluous girls. Today, that is usually abortion.

All three things used to be true of South Korea (see box on next page) and they are true today of China, India, Pakistan, Vietnam and the south Caucasus. They hold in parts of Indonesia but not the whole country. Indeed, Indonesia has an unusual group that proves the rule. The Minangkabau, from West Sumatra, practice matrilocality-that is, newly married couples move into the wife's household. They have a normal sex ratio. But birth data suggest that they are hungry for daughters. A Minangkabau who gives birth to a boy will, on average, have a second child more quickly than one who gives birth to a girl.

Uptown girl

The first signs that sex ratios might be returning to normal appeared after the last round of censuses. The sex ratio among China's children, which had risen steadily for decades, did not budge between 2000 and 2010. In India, the excess of boys over girls worsened slightly between 2001 and 2011. But more girls were counted in the states where sex selection had been most common, such as Haryana and Punjab.

Annual data on births, which are less authoritative than census figures on children but more up-to-date, suggest the tide has turned. India's sex ratio at birth has become more normal over the past decade, especially in cities (see chart). In Chinawhere, admittedly, official figures of all kinds are fishy-the sex ratio at birth has fallen from a peak of 121 boys per 100 girls in 2004 to 114 in 2015.

Vietnam still has too many male births. but the situation has not worsened since about 2010. Armenia and Azerbaijan are also holding steady; sex ratios had become >> b unbalanced in both countries in the 1990s. Sex selection is disappearing in Georgia and Taiwan. Then there is South Korea, the country that most cheers demographers. In 1990 it had a sex ratio at birth of 116 to 100. For the past three years the figure has been 105-precisely what it should be. Something is driving sex ratios back to normal levels. But what?

Not, probably, the efforts that some countries have made to crack down on sexselective abortion. Indian couples find it easy to circumvent an official ban by booking their ultrasound scans at one clinic and their abortions at another. The Chinese authorities have cracked down harder, scrutinising couples who already have a girl and are thus highly likely to abort another female fetus. The sex ratio for second births in China duly became more normal. But, as Monica Das Gupta of the University of Maryland, an expert on the subject, points out, some Chinese couples simply moved to sex-selecting in the first pregnancy.

Ms Das Gupta thinks that urbanisation is a more powerful force for change. A citydwelling couple might be teased by neighbours for having only girls, but that is nothing compared with the pressure heaped on villagers by clan patriarchs and matriarchs. And young city-dwellers tend to live apart from their parents, which removes one reason for preferring sons. Now that children tend to support their parents by sending money, daughters are just as good. Urbanites have access to the latest medical technology, but they seem less keen on using it.

As urban women grow more independent and more valuable to their parents, rural men are struggling. Years of skewed sex ratios mean there are already too many would-be grooms for every village bride. Worse, the women they might marry often head for cities, where they can find better husbands. "There's an awareness that life is not great for males," says Therese Hesketh of University College London, who follows sex ratios in China.

Indeed, rural Chinese men increasingly look like burdens on their parents. A remarkable paper by Shang-Jin Wei and Xiaobo Zhang shows that parents of sons in districts with high sex imbalances tend to save large amounts of money, fearing that they will have to splash out on houses, consumer goods and weddings if they are to snag a local girl. This effect is so strong, the authors calculate, that it explains about half the increase in China's household savings rate between 1990 and 2007.

Spying a coming social catastrophe, governments have tried to cajole citizens into prizing girls by putting up posters or even offering them money. They might have changed a few minds. But officials have often muddled their message. Under China's one-child policy, for example, couples who gave birth to a girl were often allowed to have a second child, implying

Prizing girls

Like father, like daughter

How South Korea learned to love baby girls

66 T CRIED when I heard," writes one L blogger, recalling the moment she learned that her baby was a boy. Those were bitter tears. The woman was "so envious" of a mother who had just given birth to a daughter. She was not at all unusual. South Koreans of reproductive age now prefer girls to boys (see chart). They have created a new term, "ddalbabo"-"daughter crazy"-for men who go loopy over their female offspring.

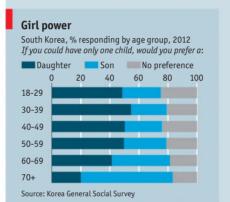
Until the early 20th century failure to bear a son was grounds for divorce. Koreans greatly preferred boys, who could not only support their parents financially but

also carry out ancestral rites. When ultrasound technology became widespread in the 1980s, many South Koreans used it to detect female fetuses and then have them aborted. Sex ratios became skewed. In 1992 twice as many fourth babies were boys as were girls.

In response to these trends the South Korean government made it illegal for doctors to reveal the sex of a fetus. It produced pro-girl slogans: "There is no envy for ten sons when you have one well-raised daughter."

That may have helped, but not as much as economic change. Following the Asian financial crisis of 1997, many women took part-time jobs to supplement the family income. Parents noticed, and began to invest more heavily in educating girls. In 2015 three-quarters of South Korean female secondary-schoolers went to university, compared with twothirds of their male peers.

Aborting girls simply because they are girls has become so unthinkable that the law has been relaxed. Since 2009 expectant parents have been allowed to know the sex of their baby after 32 weeks' gestation. Many will have found out before, from doctors who trust that parents' attitudes have changed.



that the state felt sorry for those who had failed to produce a boy. But where governments have been confused and half-hearted about the worth of girls, popular culture has been loud and insistent.

TV is good for you

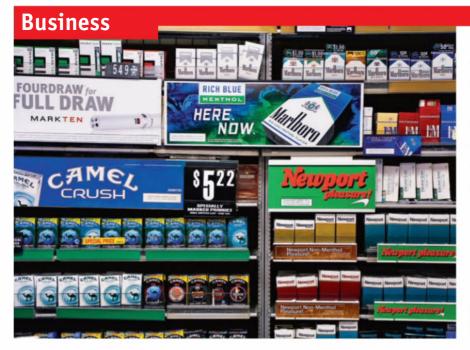
For sheer attention-grabbing power, nothing beats TV in India. One study found that 51% of women in Kurukshetra, a district in the state of Haryana, had seen a soap opera called "Na Aana Is Des Laado" (Don't Come To This Country, Beloved Daughter). That soap revolves around female infanticide: in one episode, a father murders his baby daughter by drowning her in milk. By contrast, just 5% of women in the district had seen a film produced by the government about the equality of boys and girls, and less than 1% had heard about the subject from religious leaders.

"TV is not just entertainment—it is a big source of education," says Purnendu Shekhar, a writer of soap operas. One of his soaps, "Balika Vadhu" (Child Bride), is about the evil of child marriage. Mr Shekhar thinks the show changed attitudes, and it certainly entertained the country. "Balika Vadhu" ran daily for eight years,

ending last July, and has also been popular in Vietnam. He believes even conventional soaps, which tend to hinge on conflicts between women and their mothers-in-law and dial all emotions up to 11, get viewers used to the idea of powerful women. "Stories with strong male protagonists do not work in India," he says.

Studies of India have shown that TVwatching is associated with reduced preference for sons, even after controlling for wealth and other factors. That might seem implausible. But remember that Indians often distrust politicians and public officials, says Shoma Munshi, an expert on Indian soap operas. They are at least as willing to listen to actors. That is why TV and film stars often become politicians, or are used to front public-health campaigns.

Sex ratios remain highly unbalanced in many countries. But there is an important difference between a giant social problem and an endless one, and gendercide now looks like an example of the former. Mr Guilmoto believes that sex ratios will continue to normalise until they return to natural levels. Asia has engaged in a demographic experiment with disastrous consequences. It will surely not repeat it.



Cigarette companies

Plucky strike

A merger is the latest sign of Big Tobacco's resilience

RITISH AMERICAN TOBACCO (BAT) **B** announced on January 17th a final deal to buy Reynolds American for \$49bn. BAT already owns 42% of Reynolds; buying the rest of it will create the world's largest listed tobacco company by sales and profits. It will peddle brands such as Dunhill, Camel and Newport. The casual observer might imagine the deal to be a frantic bid to revive an ailing industry. On the contrary. Cigarettes may kill you, but the big companies that make them are rather healthy.

That is despite a decline in smoking rates. In 2015 just over a fifth of adults smoked, estimates the World Health Organisation, down from almost a quarter ten years earlier. This drop hardly helps companies, but it isn't ruinous either.

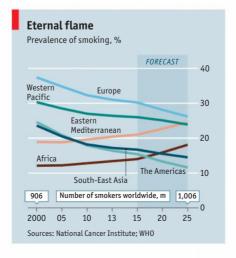
Smoking is still popular in certain spots. More than three-quarters of men light up in Indonesia, for example. The habit is becoming more common among men in Africa and the eastern Mediterranean (see chart). And though global smoking rates have fallen, population growth means that about 1.1bn people still smoke, roughly as many as did in 2005. This, combined with rising prices, means that the value of retail sales jumped by 29% in the decade to 2015, according to Euromonitor, a data firm.

The gravest threat to big cigarette makers comes from rivals. Indeed, this week's deal increases the chance that Altria, which sells Marlboro in America, will be bought by Philip Morris International,

which sells Marlboro elsewhere and is the industry's leader to date—a scary prospect even for a merged BAT and Reynolds.

Regardless of whether their rivals' deal proceeds, the merger of BAT and Reynolds has clear logic. The firms claim it could save at least \$400m each year. Reynolds will also give BAT access to America, a market that once looked repulsively litigious but now seems stable. Companies still operate under a vast settlement reached with American states in 1998, but separate classaction suits have turned out to be less costly than feared.

New regulations have not snuffed out tobacco firms, either. Countries have



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passed a battery of laws to fight smoking, including taxes and bans on advertising and on smoking in pubs. Tobacco companies have fought these ferociously, suing countries such as Australia for prohibiting logos on cigarette packs, for example, But some rules had hidden benefits. Bans on advertising lower marketing costs and make it harder for young upstarts to challenge established brands.

Electronic cigarettes would seem another existential threat. But they increasingly appear to be an opportunity. Large tobacco firms are investing in such "reduced-risk" products, as they term them. New requirements for e-cigarettes in Europe and America, finalised last year, may also hinder smaller companies' ability to innovate. That could help Big Tobacco gain even greater market share: large firms may be the only ones with resources to navigate complex rules.

Companies are particularly bullish on new products that heat tobacco, without burning it. These gadgets are more satisfying to smokers than e-cigarettes, which contain nicotine but no tobacco, so may encourage more smokers to switch. Cigarette executives claim that would be a health boon: just heating tobacco avoids much of the nasty stuff that comes with combustion.

Less encouraging for health is the prospect that some smokers might switch to the new products rather than give up tobacco completely. For years companies have sold to a shrinking share of the population. If enough would-be quitters switch to "safer" cigarettes instead, firms could slow or even reverse what had seemed a permanent downward trend. Far from fading away, Big Tobacco might be on the verge of a new boom.

If so, the company formed by BAT and Reynolds stands to gain, as it will combine >> ▶ the two firms' research into reduced-risk products. That will help it compete against Philip Morris, which has spent nearly twice as much on research as BAT. Philip Morris is now seeking approval in America to market its heated tobacco product as safer than traditional cigarettes; it submitted its application to American regulators in December. The firm already reckons the product might add \$1bn in profit by 2020.

André Calantzopoulos, Philip Morris's chief executive, describes a possible future in which his giant cigarette company phases out cigarette sales.

Many health advocates view such declarations sceptically. For now, combustible products still account for almost all of cigarette firms' revenue. And tobacco remains responsible for more than one in nine of all adult deaths.

Fiat Chrysler

Gas puzzlers

The Italian-American carmaker is in regulators' headlights over emissions

THE priorities of America's Environ-▲ mental Protection Agency (EPA) will doubtless change under Donald Trump. Mr Trump may well relax emissions rules for carmakers in return for concessions. such as keeping production in America rather than relocating to Mexico or other lower-cost countries. So it is perhaps no coincidence that on January 12th, before conditions change, the agency took action against Fiat Chrysler Automobile. It accused FCA (whose chairman, John Elkann, sits on the board of The Economist's parent company) of using software in 104,000 Dodge pickups and Jeeps that allowed them to exceed legal limits on toxic emissions of nitrogen-oxide (NOx) gases from their diesel engines.

Nervous investors feared a repeat of the huge penalty imposed on Germany's Volkswagen (vw) for cheating American emissions laws. FCA's shares plummeted by 16%, though they have since recovered slightly. A day earlier vw had agreed to pay a criminal fine of \$4.3bn for selling around 500,000 cars in America fitted with so-called "defeat devices" designed to reduce NOx emissions under test conditions. That pushes its total bill for the scandal above \$20bn. If FCA were fined on the same basis it would have to pay over \$4bn.

Yet the Italian-American carmaker may not suffer so severely. vw admitted that it had employed an illegal defeat device. FCA's engines used undisclosed software that, under some circumstances, alters the characteristics of emissions controls to exceed NOx limits. Crucially, however, the EPA has not determined whether these bits of software constitute a defeat device. Failure to disclose this type of software also breaks the rules, however. The firm must now demonstrate that it is not illegal. Important to its argument will be the fact that excessive emissions are permitted for limited periods, in circumstances where the engine may be damaged without allowing them, such as cold-weather starts.

Any wrongdoing is strongly denied by the company. Its chief executive, Sergio Marchionne, suggested that anyone drawing parallels with the vw scandal was "smoking something illegal". He called the dispute a "difference of opinion" over whether the engine's "calibrations met the regulations", insisting that FCA "may be technically deficient but not immoral". The complexities mean it will be hard to prosecute. If FCA is right it can expect a fine but nothing as severe as vw's punishment.

The Italian-American carmaker is also in the firing line in Europe. A spat with Germany's regulators has intensified. In April German authorities concluded that emissions controls were timed to turn down after 22 minutes of the engine starting in some of FCA's cars. Europe's test cycle lasts around 20 minutes. Italy's testing agency, which certifies the cars for the European market, dismissed the complaints, saying it was part of a "modulation" of the controls

designed to protect the engine. Yet on January 15th Germany's transport minister insisted that it amounted to an "illegal shutoff device" and said the cars should be withdrawn for sale.

FCA is not alone. A day after the EPA announced its investigation of FCA, French prosecutors said that they were probing Renault over abnormally high emissions from some of its diesel engines. The French carmaker's shares also dipped, but by only 6% and have since rebounded slightly too. Europe's watchdogs are much less of a threat than the EPA, largely because the continent's emissions rules are open to rather wide interpretation. Indeed, vw has reached the conclusion that its "defeat device" does not actually contravene European regulations.

Many diesels emit far more noxious gases than under test conditions. Transport & Environment, an NGO based in Brussels, reckons that new models from the worst offenders produce on average 15 times more NOx on the road than when tested. Enforcement, however, is almost non-existent in Europe and no penalties have ever been issued for carmakers contravening emissions rules. The EU is beefing up its testing system but there will still be lots of grey areas for carmakers to exploit.

FCA's biggest worry, therefore, remains the EPA. Even in the worst case—ie, its software is deemed a defeat device—a fine exceeding \$4 billion would not "break its neck in the current environment", explains Patrick Hummel of UBS, a bank. But it would scupper Mr Marchionne's target of shedding debt and having cash in the bank by 2018 in order to weather any downturn in the global car market, now widely assumed to be at a peak. It would also complicate any attempts to merge with a big carmaker, another of his ambitions, even if he can find a willing partner. Emissions can have far-reaching consequences.



An exhausting process



Samsung

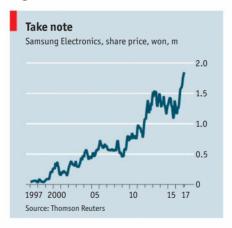
Heir of disapproval

Lee Jae-yong dodges an arrest on bribery charges

THE deal which did most to secure Lee **■** Jae-yong's control over South Korea's biggest conglomerate threatened this week to ruin him. On January 16th special prosecutors accused Mr Lee, the only son of Samsung's chairman, Lee Kun-hee, of bribery, embezzlement and perjury. But three days later a court rejected a request to arrest him, as a suspect in an investigation into a vast influence-peddling case that led last month to the South Korean president's impeachment. It saw "no reasonable grounds" to detain him while prosecutors pursue their probe.

For now, the result is a victory for Samsung. Prosecutors had accused Mr Lee of paying 43bn won (\$36m) into sports and cultural organisations controlled by Choi Soon-sil, a former confidante of Park Geunhye, the president: the biggest-ever sum in a South Korean bribery charge. In return for that grant, they allege, Samsung secured government support for a controversial \$8bn merger of two affiliates-Cheil Industries, the group's de facto holding company, and Samsung C&T, its construction arm-in July 2015. That support, they say, came from a vote cast by the state-run National Pension Service (NPS), the single biggest shareholder in C&т. (The head of the NPS, who has admitted to pushing the fund into backing the merger when he was health minister, was recently indicted.)

During intense questioning by MPS and prosecutors-including one 22-hour stretch-Mr Lee has said he provided the funds, but denies any bribery. At the time



of the merger, advisory firms such as iss urged shareholders to reject the deal because of a big discrepancy in the two firms' valuations. Because it went ahead, Mr Lee was able to gain large stakes in key affiliates at no extra cost through the group's complex web of cross-shareholdings-smoothing an eventual takeover from his father, who has been in hospital for nearly three years since a heart attack.

Legal experts say that the decision by the court, which deemed that the evidence for bribery was not persuasive enough to detain Mr Lee before any official charge was made, may yet propel prosecutors to strengthen their case. The charge, linking a corporate "princeling" to the president, is unprecedented, says Chung Sun-sup of Chaebul.com, a corporate watchdog based in Seoul, the capital. It came despite the fact that collusion between the state and its chaebol, the large conglomerates behind South Korea's economic boom, has long been tolerated.

Nowhere has that collusion been clearer than in the circus of corporate pardons: the elder Mr Lee was convicted of bribing politicians in 1996, and of tax evasion in 2008, but spent no time in prison. The miscreant bosses of CI, Hanhwa, Hyundai and sk, other chaebol, have all been sentenced to prison in the past decade. Each has also been pardoned, supposedly because of the importance of their firms to the economy. (Samsung alone accounts for one-fifth of South Korean exports and is the country's biggest employer.)

Research by Sustinvest, a proxy advisory firm, suggests that argument is dud: the performance of chaebol whose ownerfamilies have done stints in prison is usually unharmed. Lawyers for a Democratic Society, an activist group in Seoul, says that "the law has once again knelt before the wealthy". Lee Sung-bo, formerly head of Korea's anti-corruption and civil-rights agency, says citizens often misunderstand pre-charge arrests as a punishment.

The prosecution says that it will carry on its investigation "unshaken" by the court's decision. Investors seem unruffled too: they are happy with the recent stellar performance of Samsung Electronics, the crown jewel of the group (see chart), whose share price has stayed steady throughout the twists and turns of the probe. Despite quarterly losses estimated at over 2trn won after a recall last year of faulty devices, Samsung Electronics expects fourth-quarter profit, out on January 24th, to be 9.2trn won: its best performance in three years. Revived global demand for chips and screens that use OLED (organic light-emitting diode), of which Samsung Electronics produces more than any other firm, are buoying up the firm.

When the division announced in November that it would boost dividends and consider moving to a holding-company structure, its shares rose to a 40-year high on the expectation of more transparency in its Byzantine workings. A watcher at a foreign bank in Seoul says that the corruption probe, whatever its outcome, will help to speed up governance reform at the group: in a televised hearing last month, Mr Lee said Samsung should have set a better example.

The firm's image is at stake. South Koreans are fed up with the culture of impunity at its chaebol; many will see the court's decision as leniency towards them. In a recent poll, 70% thought their third-generation heirs were unfit to lead firms run to global standards. Mr Lee is trying to burnish his credentials to be the face of Samsung for the next three decades, says Mr Chung. At the moment, his image is too often used for the wrong reasons.

French and Italian firms

Into the frame

PARTS

A continental merger between Luxottica and Essilor fits a pattern

TT MAY be an exaggeration to talk of f I French firms "colonising" corporate Italy. Some Italian business leaders nonetheless fret about expansionists from across the northern border plucking control of some of their most celebrated local firms. Family-run companies, especially, can make tempting prospects: ones that make excellent products but struggle to grow, or that face agonising succession problems, are notably juicy targets.

The latest example, announced this week, is the merger between Luxottica, an Italian maker of fancy specs, and Essilor, a spiffy French producer of lenses. Together they will produce an entity with a market value of at least €46bn (\$49bn), 140,000 staff and annual revenues of €15bn. The deal, one of the largest cross-border tie-ups attempted by European firms, had long been expected by industry watchers. The idea is to produce an entity that combines Italian style and skills in marketing with deft French engineering.

The new firm will be listed on the Paris bourse (as probably its eighth-largest firm) later this year. That will mark the culmination of a long campaign by Essilor to arrange a merger. The founder and owner of Luxottica, Leonardo Del Vecchio, now 81 years old, had long resisted. But he now gushes that "two products which are naturally complementary, namely frames and lenses, will be designed, manufactured and distributed under the same roof."

His change of heart may stem from the problem of arranging for a successor. The company he founded in 1961 is widely lauded and owns global brands such as Ray Ban, Oakley and Sunglass Hut. Mr Del Vecchio himself rose from poverty (he spent some of his childhood in an orphanage) to become Italy's second-richest man, worth some €20bn. Yet for all his strengths, he could not foster a strong alternative leader and would not let any of his children (from various marriages) become managers. Colleagues felt squeezed out, seeing the boss as reluctant to delegate. One ex-employee says "90% of top management" abandoned the company in recent years.

The deal with Essilor is thus a way out, even if Mr Del Vecchio is not stepping down yet. Through his family trust, Delfin, he will be the largest shareholder in the merged entity (potentially with 38% of it) and its "executive chairman and chief executive" for the next few years. But Essilor's boss, Hubert Sagnières, who is 61 and will share equal managerial duties of the new entity, looks well placed to take charge once Mr Del Vecchio retires.

Building a bigger company looks possible. Some savings will come from knitting two teams of managers together. The global eyewear market, already worth some €90bn, is alluring. It is expected to grow as cohorts of middle-class consumers in Asia, especially, find they need eyesight correction and develop a liking for specs as accessories or protection against ultraviolet rays.

An amicable merger hardly ranks as a French assault on Italy. But it does come in the context of other Franco-Italian tie-ups. In luxury goods, for example, French conglomerates with deep pockets, notably LVMH and Kering, have been acquiring smaller Italian rivals for years. French firms first grew faster by attending to flourishing markets for accessories such as handbags. Then they paid handsomely to take over prominent Italian brands, including Gucci, Bulgari and Fendi.

The French are active in other sectors, too. Vincent Bolloré, a swaggering billionaire who is determined to grow in Italy, last year led his firm, Vivendi, to buy nearly a quarter of Telecom Italia. (Unconfirmed rumours say he might sell to another French operator, Orange.) The daring Frenchman is also pushing Vivendi in a second bold bid, for Mediaset, a company in which Silvio Berlusconi, a former Italian prime minister, and his family are the biggest owners. Vivendi now owns nearly 29% of Mediaset.

In retailing, too, a pair of French supermarket chains, Auchan and Carrefour, together operate more than 2,000 supermarkets in Italy's unusually fragmented industry. Given that many businesses in Italy are run by ageing, first-generation founders with no clear plan for succession, more targets are bound to attract buyers from its neighbour to the north.

Rolls-Royce

Weathering the storm

A big fine comes at a bad time for a large engine-maker

 $\mathbf{F}^{ ext{OR}}$ those who still associate Rolls-Royce with its past as a posh carmaker, its home on a scruffy industrial estate comes as a shock. Yet it is there the engine-maker assembles the Trent xwB, the second-biggest commercial jet engine in the world. Some components are made to a tolerance of 50 microns—the width of a human hair. The job of running the firm is a bit messier.

On January 16th, in a deal with American, British and Brazilian regulators, Rolls agreed to cough up £671m (\$809m) to settle allegations that it had in the past secured sales with bribery. The fine is the largestever imposed by Britain on a firm for criminal conduct. But given the wrongdoing the deferred prosecution agreement outlines, the firm got off lightly (the co-operation of the company's more recent management helped). It admitted a dozen counts of corruption and bribery in seven countries, spanning decades. This included giving officials money, hotel stays and even a luxury Rolls-Royce car to secure engine sales. Rolls has since cut its use of the freewheeling third-party consultants who got the company in trouble, and promises better oversight of all staff. If it errs again, the firm will be prosecuted for the original charges.

The settlement puts one source of concern to bed: shares in Rolls surged the following day. But investors have other, less tractable worries. Despite bulging orderbooks the engine-maker has been struggling to make any money.

The last three years have been fraught financially. In 2014 and 2015 Rolls issued five profit warnings in quick succession, halving the firm's share price. Last February it was humiliatingly forced to cut its dividend in two-the first such paring for more than 24 years. Next month, it is expected to reveal that profits fell from £1.6bn in 2014 to just £680m in 2016. The fine-of which £293m will be paid this year—may prevent Rolls from meeting financial targets in 2017.

By rights, Rolls should be raking it in. The market for passenger jets, the engines for which make up more than half of the company's revenues, is flying at full throttle. On January 11th Airbus revealed it had built a record 688 planes last year; Boeing a whopping 748. Orders are also solid. As engines represent a third of the price tag of a new jet, some analysts reckon that enginemakers will sell more than \$1 trillion over the next two decades.

But Rolls has been badly buffeted by >>

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Is simultaneous downturns in many of its other businesses. Both its main engine-making rivals, GE and UTC, are huge conglomerates, and churn out other products that can make up the shortfall; Rolls is more exposed. Defence cuts have hit demand for its military-jet engines. Low oil prices hurt sales of its power-generation turbines and marine engines. As a result, several investors have said it should sell off its non-aerospace divisions and focus on jet engines, which are largely responsible for the thickness of its £80bn order-book.

To tackle its problems, the engine-maker lured Warren East out of retirement in 2015 to turn the firm around. A former boss of ARM, a British chipmaker, he transformed the middling startup into a worldbeating tech giant. It was sold last year to SoftBank of Japan for £24bn. The new boss reckons that selling off Rolls's non-aerospace businesses is unwise. In November he revealed that the firm's accounting practices had been flattering the performance of its civil-aerospace engines for many years. Instead of the £800m in profit declared for 2015, that division probably made a small loss.

Engine revamp

Rolls wants growth to fill that hole. It plans to double production to 600 engines a year by 2020-the fastest increase to date in its history. The boost will increase the firm's economies of scale in its factories. And the more of its engines that are installed, the more in profit that can come from servicing them over the next decade, explains Eric Schulz, the boss of Rolls's civil-aerospace business. Each engine brings in four times as much revenue from maintenance over its lifetime as from its original sale. Costcutting is under way to try and pay for the production boost. The firm currently makes an initial loss of up to £2m on each and every engine it sells. More than 4,000 jobs have been culled (nearly a tenth of its workforce) and a third of cost centres have been eliminated.

Mr East says the cuts are ahead of schedule. But other challenges lie ahead. Brexit is one. The falling value of the pound since June has reduced its assembly costs in Britain, but leaving Europe's single market will disrupt its international supply chain. Many analysts also question the firm's decision in 2011 to exit the fastergrowing engine market for short-haul planes. Mr East hopes Rolls can consider re-entering this segment in the 2020s with the cash generated by servicing the engines it is currently building.

Although reliance on investment today for profits tomorrow has been compared to a startup's business plan, investors seem to believe in Mr East's strategy, says Sandy Morris at Jefferies, a bank. But if Rolls fails to generate the cash for Mr East's visions, recovery will be hard to engineer.

Information technology

Reboot

MUMBAI

Indian outsourcing specialists must upgrade their strategies

COMPUTERS slow as they age, and before long must be replaced by newer models. Something similar is true of the business models of Indian IT firms. Specialised in running global companies' outsourced back-offices, the likes of Infosys, Wipro and Tata Consultancy Services (TCS) used to be national champions growing at double-digit rates. Their prospects have dimmed of late; an entire industry built on the back of globalisation is fretting about the incoming American president. But Donald Trump is merely the latest threat to their operating systems.

Over three decades, Indian IT has become a \$140bn industry built on a simple proposition: rich-country companies could trim costs by getting tedious behindthe-scenes IT work done by cheap engineers in India. The Indian firms hoovered up bright graduates-the big three have over 700,000 employees in total-paying them starting salaries of \$5,000 or so, a decent local wage. After gaining some experience, tens of thousands were dispatched to client sites in Europe or America, along with a few expensive local staff. The rest ensured their clients' computer systems kept ticking over from cosy cubicles in Bangalore, Hyderabad and elsewhere.

Growth spurts and stalls are nothing new for the trio, the most international of dozens of Indian IT firms (American and European companies such as IBM, Accenture and Capgemini have large Indian presences, too). Their prospects are ultimately tied to the sluggish rich-world economies of their clients: America makes up over half of Indian IT sales, Europe a quarter. Banks and insurance companies, the



biggest customers, have been in pennypinching mode of late; ditto energy companies struck by falling oil prices.

But what felt like cyclical softness looks increasingly like it is being compounded by structural decline. Dollar-denominated growth rates have oscillated but clearly trended downwards and are now firmly in the single digits (see chart). Margins of over 20% are coming under pressure, even after a sustained fall in the rupee against the dollar increased the cost advantage of earning in America and paying staff in India.

There is still plenty of the \$900bn global IT services budget for them to capture. But some headwinds now look like they will endure. Mr Trump's swearing-in is the most immediate concern. The incoming president has railed against certain visas for skilled workers, many of which are gobbled up by Indian IT firms to send staff on stints to America. A proposal to hike the minimum salaries to qualify for such >>>



Tata Sons

Chandra's challenge

Old problems await a new boss

TT WAS a predictable end to a corporate saga which has been anything but prosaic. On January 12th Natarajan Chandrasekaran, the head of Tata Consultancy Services (TCs), became the boss of Tata Sons, its parent and India's largest company. Universally known as Chandra, and just as universally respected for helping build up the IT services firm that delivers much of the salt-to-steel conglomerate's profitability, he now takes on India's toughest corporate job.

An internal appointment seemed inevitable. Few expected an outsider after the botched defenestration of Tata's last boss, Cyrus Mistry, on October 24th. Slighted, and emboldened by his family's 18% stake, Mr Mistry has had to be eased off the boards of firms operating under the Tata aegis, but of which it is often only a minority shareholder (for now he still sits on the board of Tata Sons). As well as hiring a battalion of lawyers, Mr Mistry has thrown heaps of mud at the group, and particularly at Ratan Tata, the 79year-old patriarch who seized back the reins from him. Some of it has stuck.

Chandra's appointment should bring a modicum of peace. As boss of TCs since 2009, he has overseen steady progress, even if the company now faces head-

winds. He is a rare boss in India who started off on the shop floor, as a TCS intern three decades ago, rather than being handed the family kingdom.

But nothing will have prepared Chandra for his new job. From running a single company, he will now have to oversee around 100 businesses that make up the Tata group. Many are faring poorly, notably its European steel unit, an undersized mobile-telephony arm in India, a stalled domestic carmaker, and the struggling global chain of Taj hotels. Chandra has no experience in turning around failing businesses, let alone in any industry outside IT. Worse, he must ensure his old TCs fiefdom, whose day-to-day management he will now give up, continues to generate enough profits to prop up the duds as they are dealt with.

Mr Mistry complained he was never truly at the helm, and that all his decisions were second-guessed by Mr Tata in his role as chairman of charitable trusts that own two-thirds of the group. He is now contesting the legality of Chandra's appointment, to boot. The byzantine structure that frustrated him remains in place. Chandra will need the right ideas to get Tata back on an even keel-and the authority to put them into action.

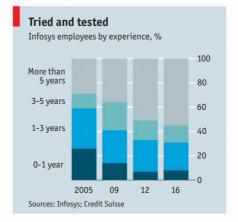
> schemes from \$60,000 to \$100,000 would make many postings uneconomical.

That would mean replacing Indian expats to America with locals, especially if the cap for the number of new visas is lowered from the existing 65,000 a year. Add in higher visa-application fees for large-scale labour importers, and that might trim up to five percentage points from IT companies' margins, analysts think. Fuzzy talk of an "outsourcing tax" will in any case hardly encourage IT procurement managers to look overseas.

Changes in how clients think about technology is a bigger worry for Indian IT firms. Budgets globally are growing steadily, at about 3% a year reckons Gartner, a research outfit. But an increasing amount of the money is spent on trendy stuff like analytics or the internet of things. Such new "digital" services will rise from a tenth of total IT spending in 2014 to over a third in 2020 according to McKinsey, a consultancy.

IT managers at big firms think they can finance the development of snazzy bigdata projects and mobile apps by trimming spending in their existing IT infrastructure, for example by replacing their own data centres (which they pay Indian firms to maintain) with cloud storage (which they do not). And some of the tasks which engineers used to do, such as tailoring software for a client, can now be done by machines. It seems that workers in India's vast codewriting centres are as much at risk of being made obsolescent by automation as those in factories making cars or shoes.

Indian firms want to get in on the new digital action, which they think is less likely to be commoditised. But they specialise in fixing problems cheaply, not driving in-



novation. Devising a mobile-banking app for millennials, say, is a far cry from parsing lines of code for bugs.

The IT firms know they need to adapt. "We will not survive if we remain in the constricted space of doing as we are told. depending solely on cost arbitrage," Vishal Sikka, the boss at Infosys, wrote in a recent letter urging staff to shape up. "If we don't we will be made obsolete by the tidal wave of automation and technology-fuelled transformation that is almost upon us."

Please wait, update in progress

Others have a head start in the race to the sunlit digital uplands. Accenture has digital-services revenue per employee around four times its Indian rivals, points out Vaibhav Dhasmana of Jefferies, a bank. It derives more than a fifth of its revenues from such work. Most Indian firms don't break out this figure, somewhat tellingly, but it is thought to be in the 10-17% range.

European and American rivals have heftier consulting arms that can shape companies' spending. They are eager acquirers of companies, often boutiques that give them skills they cannot develop internally. They spend more on research and development, too: 2% of revenues for Accenture, compared with a mere 0.5-1% of revenues at Indian firms. All this reduces profits: Accenture has margins on earnings before interest and tax of around 15%, not much more than half what Indian firms have traditionally secured.

The Indian firms are moving in this direction. All have invested in "platforms" they can sell to more than one client-for example, to analyse social media. But by their own admission progress has been limited. Pivoting towards higher-value offerings requires an overhaul of Indian companies' past models, not a tweak. The focus must now be on the quality, not the quantity, of employees. Hiring has slowed: in the nine months to end-December 2016, Infosys added 5,700 new staff, compared with 17,000 in the same period a year ago. There are fewer junior engineers-able only to carry out the most routine tasksand more relatively senior staff as a result (see chart). This middle-age bulge in staffers increases staff costs by 5-7%, says Anantha Narayan of Credit Suisse, a bank.

All this is happening as Infosys and Wipro are still adapting to a newish generation of professional managers who took over from the entrepreneurs that founded these firms. On January 12th, meanwhile, TCS lost its respected boss, Natarajan Chandrasekaran, who has been tapped to take over the reins at the firm's parent company (see box). The economics that made Indian IT such a compelling proposition are fading rather than disappearing altogether. But as with computers, it is best to replace an ageing model before it unexpectedly crashes.

Schumpeter | Six sects of shareholder value

Businesses' favourite doctrine will adapt to the age of populism



S THEY slid down the streets of Davos this week, many exec-Autives will have felt a question gnawing in their guts. Who matters most: shareholders or the people? Around the world a revolt seems under way. A growing cohort-perhaps a majority-of citizens want corporations to be cuddlier, invest more at home, pay higher taxes and wages and employ more people, and are voting for politicians who say they will make all that happen. Yet according to law and convention in most rich countries, firms are run in the interest of shareholders, who usually want companies to use every legal means to maximise their profits.

Naive executives fear that they cannot reconcile these two impulses. Should they fire staff, trim costs and expand abroad—and face the wrath of Donald Trump's Twitter feed, the disgust of their children and the risk that they'll be the first against the wall when the revolution comes? Or do they bend to popular opinion and allow profits to fall, inviting the danger that, in the run up to their 2018 annual general meeting, a fund manager from, say, Fidelity or Capital will topple them for underperformance?

Wiser executives know that shareholder value comes in shades of grey. It has been a century since the idea was baked into American law. In 1919 a court ruled that "a business corporation is organised and carried on primarily for the profit of the stockholders." In the 1990s this view spread to Europe, Asia and Latin America because of reforms to governance laws and the rising clout of institutional investors. But the doctrine is not monolithic. Schumpeter reckons there are six distinct corporate tribes, each with its own interpretation of what shareholder value means. Firms have some flexibility to choose which one they belong to.

Start at the far right of the spectrum, with the corporate fundamentalists. Boosting their profits and share price-immediately—is their goal. Firms built on these objectives rarely do well for long. Valeant, a Canadian pharmaceutical concern, is an example. In 2011-15 it raised prices, slashed investment, paid little tax and fired staff. By 2016 it faced scandals and its shares fell by 85%. Occasionally firms become so weak that they use fundamentalist tactics, temporarily, to try to restore confidence. IBM is shoring up its stock price with savage cost cuts and share buy-backs.

Shift a little to the left and there are the corporate toilers. Most Western firms place themselves in this group. They believe in the primacy of shareholder value but are prepared to be more patient. At their best these firms are consistently successful-think of Shell or Intel investing on a ten-year time horizon.

Corporate oracles, the third group, want to maximise profits within the law, but with a twist. They think the law will evolve with public opinion and so they voluntarily do things today that they may be required to do tomorrow. Most energy firms have become greener to anticipate changing public expectations on pollution and safety. Laggards discover it can be devastating when the rules of capitalism change. Shares of coal and nuclear-energy firms in the rich world have collapsed. Soft-drinks firms may be next, as attitudes and laws about sugar and obesity change.

Corporate kings are in a luxurious position. They are so successful at creating shareholder value that they have a licence to ignore it periodically. In July Jamie Dimon, the boss of JPMorgan Chase, now the world's most valuable bank, gave its lowest-paid staff a pay rise, "because it enables more people to begin to share in the rewards of economic growth". Paul Polman describes Unilever, the consumer-goods firm he runs, as a non-governmental organisation committed to cutting poverty. He can do so only because Unilever makes a stonking return on equity (ROE) of 34%.

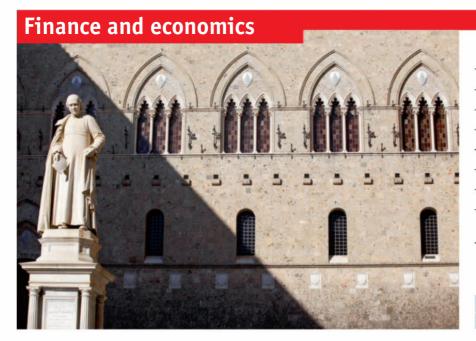
Outside Western boardrooms, the most common sect is the fifth, corporate socialists. These firms are controlled by the state, families or dominant managers. They think that shareholder value is not as important as social objectives such as employment, high pay or cheap products. But they recognise that institutional investors have some legal powers. So profits are set according to an informal quota system-outside shareholders should get the minimum required to avoid a revolt, but no more. China's state firms together book an ROE of 6-8%. Goldman Sachs is a corporate champagne socialist. It pays its shareholders the least it can get away with and allocates what is left as bonuses for its staff.

On the far left are the corporate apostates. They are organised in a corporate form but don't care about shareholders at all. Usually this is a result of political dysfunction. PDVSA, Venezuela's state oil firm, pays for much of the country's welfare state and cronyism. Fannie Mae and Freddie Mac, two state-owned American mortgage firms, are run to make cheap loans, not profits.

Sects change

Between 1990 and 2007 companies around the world drifted right, towards shareholders. Now in response to populism they may drift back. But don't expect a governance crisis. The system is adaptable. Carmakers are shifting factories to America; drugs and defence firms may slash prices. All have become oracles. They anticipate that the Trump administration will change rules on tariffs and government procurement that govern their businesses. Shareholders can object only so much. Firms become corporate socialists if they have controlling owners who demand they prioritise social objectives. There is no sign of this yet.

Many individual firms will still move the other way, towards shareholders. Google is becoming a corporate toiler, not a king, as its growth slows. After its emissions scandal, Volkswagen is dropping its extravagant ways and firing staff. Under its new boss, Tata Group in India will now start to worry about profits as much as nation-building. And in order to revive the economy, Japan's firms will need to drive their ROE above the present, sluggish 8%. In the contest between shareholders and the people, companies and bosses are caught in the middle. But there are no final victories. Just constant, pragmatic accommodations.



Italy's bank rescue

Saving Siena

The world's oldest lender provides the European Union's new bank-rescue rules with their first big test

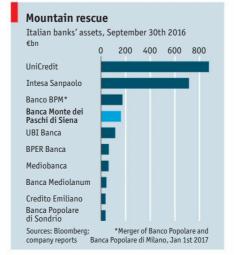
NOTHER blow to national pride: on AJanuary 13th DBRS, a Canadian rating agency, downgraded Italy's sovereign debt, stripping the country of its last A rating. Government bond-yields rose; so will the cost of funding for Italian banks. Erik Nielsen, chief economist of UniCredit, Italy's biggest lender, calls the extra €5bn (\$5.3bn) or so banks will have to put up as collateral for their loans from the European Central Bank (ECB) "immaterial". Still, it is a burden they could do without.

Weighing heaviest on bankers' minds is a planned state rescue of Monte dei Paschi di Siena, now Italy's fourth-largest lender. A private recapitalisation scheme collapsed in December, prompting it to seek government help. Days earlier, anticipating the plan's demise, the state had created a €20bn fund to support ailing banks.

Next month Monte dei Paschi's chief executive, Marco Morelli, will present a new business plan. On January 18th he confirmed to a Senate committee that 500 branches and 2,450 jobs will go within three years. Soon the bank is expected to issue a state-backed bond, for perhaps €1.5bn, to shore up liquidity; it hopes eventually to raise €15bn to replace deposits that bled away last year. Once the plan is out, negotiations between Italy and the European Commission will ensue, over the first state rescue of a big bank since the commission tightened state-aid rules.

Between 2007 and 2014 the commission approved €5trn-worth of state aid, including guarantees, for banks. Italy's share was a piffling €130bn. But "bail-in" has since replaced "bail-out". The Bank Recovery and Resolution Directive, which came fully into force last year, demands that banks receiving state help be put into "resolution"-in effect, bankruptcy. Shareholders and junior creditors cop it, for at least 8% of liabilities, if the state steps in.

For investors in Monte dei Paschi, the outlook may not be so bleak. The government plans a "precautionary recapitalisation"—allowed by the directive. To qualify, a bank must be solvent; the injection must be on market terms; and the capital must be needed to make up a shortfall identified



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in a stress test-such as one Monte dei Paschi failed last summer. That would imply "burden-sharing", converting junior debt to equity, rather than a bail-in. Separately, retail investors who were "mis-sold" subordinated bonds may be compensated.

The world's oldest bank, Monte dei Paschi was founded in 1472 by Sienese magistrates. Its recent history has been an ignoble shambles. With exquisite timing, in 2007 it bought Antonveneta, another Italian bank, from Spain's Santander for €9bn in cash. Further blunders followed. It has had two capital increases since 2014. In the year to December 23rd, when the private rescue failed and trading was suspended, its share price fell by 88%.

How much help it needs now remains unclear. The private plan, devised in July, would have stripped out and securitised €27.6bn-worth (gross) of non-performing loans and recapitalised the bank with €5bn. After it failed, the ECB told the bank that its capital shortfall, under an "adverse scenario" in the summer's stress test, had widened to €8.8bn. But the capital required will depend on Mr Morelli's revised plan, and in particular on what will be done to clean up bad loans. The conversion of bonds to equity could raise €4bn, but retail investors, who have around €2bn-worth of bonds and are in line for the same value in shares, may then be eligible for compensation. The government's total bill could amount to around €6bn.

Pier Carlo Padoan, the finance minister, says the banking system is turning a page. If he is to be proved right, Monte dei Paschi must be sorted out. Yet other signs are encouraging. On January 12th UniCredit's shareholders approved a €13bn share issue, part of an overdue overhaul. Last year was the first since 2008 in which banks' total non-performing exposures declined, according to PWC, an accounting firm. ABI, the national banking association, and >>

Finance in Cyprus

Bank from the brink

The repair job at Cyprus's biggest lender

THE banking woes of Italy, the euro area's third-biggest member, pale next to those that, four years ago, plagued Cyprus, its second-smallest. Now there is cause for cautious optimism. This month Bank of Cyprus, the biggest local lender, finished repaying €11.4bn (\$12.2bn) of emergency liquidity assistance from the country's central bank. It followed that by returning to the bond markets, raising €250m in a sale of unsecured notes, albeit with a stiff 9.25% coupon.

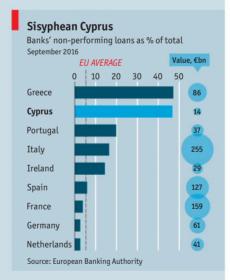
Even better, on January 19th Bank of Cyprus listed on the London Stock Exchange. This, says John Hourican, the chief executive, fulfils a promise to investors in 2014, when the bank raised €1bn of equity, to list on "a liquid, indexdriven European exchange". It is quitting the Athens bourse, now that it "no longer has any business of significance in Greece." (Its listing in Nicosia remains.) It has also rid itself of operations in Romania, Russia, Serbia and Ukraine. Although its return on equity is still meagre, just 2.7% in the third quarter, its ratio of equity to risk-weighted assets, a key gauge of strength, is respectable enough, at 14.6%.

All this marks a big improvement since 2013, when Cyprus seemed in grave danger of tumbling out of the euro area. Banks closed their doors and capital controls were imposed for the first time in the zone's existence. The price of a rescue by the IMF and the rest of the currency club was steep. Owners of bonds and uninsured deposits in Bank of Cyprus and its closest rival, Laiki, were "bailed in" (the losers included many Russians). Laiki was wound up, its bad loans were put into a "bad bank" and its good ones and deposits were transferred to Bank of Cyprus.

The last of the capital controls were lifted in 2015. The economy returned to growth the same year. It managed 2.9% in

2016; Moody's, a rating agency, expects 2.7% in 2017. But it is still smaller than before the bust. Sustained growth will be needed to grind down Cypriot banks' worryingly large heap of non-performing loans—which as a share of the total is second only to that of Greek lenders, according to the European Banking Authority (see chart). Progress in recent talks on reunifying the Greek-Cypriot south of the island and the Turkish-Cypriot north, which is recognised only by Turkey, would surely be a boon.

The bad-loan pile has, however, been shrinking for almost two years. A new foreclosure law, says Mr Hourican, has helped to hasten restructuring, by creating a "credible foreclosure threat". In the first nine months of 2016 Bank of Cyprus took €900m-worth of property onto its books, at a "sensible" discount, in swaps for defaulted debt; around €170m-worth has been sold. With a bad-loan ratio still over 40%, it has a long way to go. But 2017, at any rate, has begun well.



Cerved, a ratings agency, predict that by 2018 bad loans will almost be back to their pre-crisis level—although that may depend on what happens to Monte dei Paschi. The plan to securitise its portfolio was intended to kick-start a market in duff debt.

Italy's fragmented banking industry is also consolidating. The resolution in November 2015 of four tiny banks, in which bondholders were bailed in, caused uproar. Now UBI Banca, the fifth-largest lender, hopes to buy three of the four "good" residual banks for €1. A merger finalised on January 1st created Banco BPM,

now Italy's third-biggest bank. Another is on the horizon, of two Venetian banks. Analysts at Credit Suisse suggest that the government's €20bn fund should suffice to plug any remaining capital gaps.

All this is necessary—but not sufficient. Most banks need to slash costs and get rid of dud loans. With interest rates in the cellar, revenue is hard to find. And without stronger growth than Italy's recent pitiful record, many lenders will find life a grind. Forecasters say GDP will expand by just 0.7% this year and 0.8% next. The vicious cycle will be hard to break.

Ukraine's economy

The other war

KYIV

Ukraine's conflict with Russia is also being waged on the financial front

IN THE tense, uncertain days of late 2013, when Ukrainians filled Kyiv's Independence Square in protest at their government's turn towards Russia, the then president, Viktor Yanukovych, grabbed a lifeline. To bolster his resolve in resisting the demands of pro-EU protesters, Russia lent Ukraine \$3bn in the form of a bond. Mr Yanukovych was subsequently ousted anyway. Russia and Ukraine went to war. The money was never paid back.

So Russia took legal action against Ukraine. The bond was issued under English law, and a hearing began this week in London. Those on the Ukrainian side say the country has no case to answer. In 2015 a group of creditors agreed to a debt restructuring on favourable terms: Russia refused to take part. And Russia made it harder for Ukraine to repay the bond by annexing Crimea and stoking war in the Donbass region. Moreover, it has fiddled with gas supplies to the country and slapped on trade sanctions. In 2013-15 Ukraine's GDP dropped by 15%. The purchasing power of ordinary folk has fallen far more. In 2013 eight hryvnias bought one American dollar; it now takes more than 25.

It is not clear, however, that English courts, which pride themselves on their political impartiality, would wish to rule definitively that Russia was responsible for Ukraine's economic woes. Awkwardly, Ukraine continued to pay interest on the bond in part of 2015, when it was in the depths of recession. And Crimea was reliant on subsidies from the Ukrainian government. So Russia's annexation, perversely, may have made it easier in some respects for Ukraine to repay the bond.

The legal spat comes as the Ukrainian economy is looking stronger. The weak hryvnia is helping to lift exports; in October the IMF predicted 2.5% growth in GDP for 2017. A building boom is under way in Kyiv and the shopping malls off Independence Square are now filled with people eating noodles and hamburgers. A few months ago Uber, a car-hailing app, launched in Kyiv. Markets do not seem overly concerned by the prospect of a pro-Russian Donald Trump becoming American president: the hryvnia has weakened only slightly since November.

Were \$3bn eventually extracted from Ukraine as a result of the Russian lawsuit, however, the hryvnia would come under renewed pressure. Repaying Russia would also infuriate ordinary Ukrainians. Al->>>

ready, the next few years look tough. To service other dollar debts Ukraine will have to fork out about \$15bn in 2017-20-an amount roughly equivalent to its current reserves of foreign exchange. Should those reserves fall below about \$10bn, investors will start to worry about the country's financial health. Ukraine's bail-out programme with the IMF, agreed in 2015, should soften the blow, but it is behind schedule. Last year Ukraine received just \$1bn in disbursements from the fund.

Bond repayment or no bond repayment, Ukraine's economic to-do list is daunting. Far-reaching reforms are needed to stamp out corruption and improve the rule of law. Some progress has been made. The recent nationalisation of the nation's biggest lender, the struggling PrivatBank, has maintained financial stability, says Tomas Fiala of Dragon Capital, an investment bank based in Kyiv. Raising heavily subsidised gas prices has improved the finances of the state monopoly, Naftogaz.

These positives aside, however, reform momentum has slowed recently. Hopes that Ukraine's market for agricultural land would be thrown open to foreign investors have been dashed. Ukraine's sprawling pension system needs change: spending on public pensions is worth 13% of GDP, extremely high by international standards.

Popular disillusionment has set in about the government's reformist zeal. Elena Besedina of the Kyiv School of Economics points out that no big names from the old regime have been thrown in jail for their wrongdoing. GDP per person is less than a tenth of America's, yet luxury-car dealers and fashion boutiques still do a surprisingly brisk trade. With elections scheduled for 2019, populist vote-winning measures will doubtless be wheeled out. And this time, Russia will not be financing any part of the bill.

Buttonwood | Zombies ate our growth

Investors should be aghast at the trend towards a more active industrial policy

EQUITY markets have shrugged off the Brexit and Trump votes. Indices in London and New York have reached new highs. But individual stocks and industries have had the odd wobble, not least when they have been the subject of a hostile tweet from the incoming president. "You've been fired at" may turn out to be a dominant meme of the next four years.

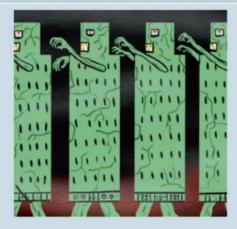
Indeed, what seems to be emerging on both sides of the Atlantic is a new version of industrial policy, in which Brexit negotiations, tax laws and trade talks are used as a way to favour some industries and punish others. And that ought to be cause for real investor concern.

The standard criticism of industrial policy is that it is all about "picking winners". But the real problem is that it is more about protecting the position of established corporations-cosseting losers, in other words.

Which companies are most likely to get protected? The obvious answer is incumbent groups that possess lobbying clout. Many companies have expressed concern about Brexit, but it is to Nissan, a Japanese car giant, that the British government has made an undisclosed commitment. Startups are unlikely to be afforded the same courtesy. The danger is that this cements in place the existing structure of the corporate sector and prevents the emergence of more efficient firms that can drive forward productivity improvements. This has been called the "zombie company" phenomenon.

A new paper* from the OECD finds a link between the proportion of zombie firms surviving in an economy and declining productivity. Specifically, a 3.5% increase in the zombie share is associated with a 1.2% decline in labour productivity across industries.

The paper defines zombie firms as



those aged ten years or older with an interest-coverage ratio (the ratio of operating income to interest expenses) of less than one in each of the preceding three years. In a harsher age, their creditors might have finished them off. But today the zombies shuffle on, discouraging more efficient firms from investing and making it harder for rivals to earn increased profits and gain market share. Worse still, the decline in new business formation may be partly caused by the suffocating impact of zombies.

Europe, for example, often gets criticised for its economic inflexibility-particularly in the labour market, where the difficulty of firing workers makes companies reluctant to hire them in the first place. But the OECD study suggests that the problem of corporate ossification may be even more widespread.

The issue may also help to explain why the productivity performance of the global economy has been so disappointing. Figures released by the US Conference Board, a research group, earlier this month showed that total factor productivity (TFP) globally fell in 2015 and had been flat in the previous two years. (TFP is that element of growth that cannot be explained by the use of increased labour or capital.)

The new versions of industrial policy are likely only to exacerbate this problem. They look worryingly like the "Latin American" model of the 1960s and 1970s (ie, an import-substitution policy). If a company makes an investment decision on the back of a tax break or a threatening presidential tweet, then it is probably not making the most efficient use of its capital. It may seem like good news in the short term for the workers who keep their jobs. But it is not good in the long run. The companies they work for will be less competitive in international markets; and, as consumers, workers will either pay higher prices or buy inferior goods. Instead of an inflexible labour market, you get an inflexible corporate market.

It all adds up to a double problem for equity investors. For now the market may be benefiting from a couple of sugar highs: in Britain, the impact of a falling pound on the overseas earnings of multinationals; and in America, the hopes for fiscal stimulus and lower corporate taxes. But in the long run, a more interventionist government policy is likely both to weigh on economic growth and to make equities riskier. Who knows, after all, which sectors will fall out of favour?

Imagine the reaction of investors if left-wing leaders were in charge. If President Bernie Sanders were berating American companies on Twitter, or Jeremy Corbyn was pledging unquantified British government support to manufacturers, markets would be plunging.

[&]quot;The Walking Dead: Zombie Firms and Productivity Performance in OECD Countries" by Mûge Adalet McGowan, Dan Andrews and Valentine Millot

Indonesian capital flows

Heavy baggage

JAKARTA

The economy is not as fragile as officials' nervousness suggests

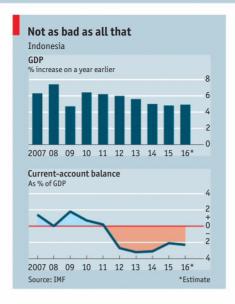
IN RECENT weeks signs have appeared in the poky arrivals hall at Soekarno-Hatta airport in Jakarta, Indonesia's capital, exhorting visitors to shun the dollar in the name of national sovereignty. "Use rupiah for all transactions in Indonesia!" travellers are told, as they wait, interminably, at the luggage carousels. That reflects old suspicions of foreign interference in the economy, South-East Asia's largest, coupled with newer concerns about the currency's vulnerability to capital flight.

In 2013, when the Federal Reserve's "tapering" of its asset purchases led to a 21% slide in the rupiah against the dollar, Indonesia was seen as one of the "fragile five" emerging markets. Of late, anxieties have resurfaced. On December 14th the Fed raised interest rates for the first time in a year. More rises are expected this year. Higher yields in advanced economies draw capital from emerging markets, putting pressure on their currencies. The rupiah fell by 3.7% against the dollar in November, the steepest monthly decline for more than a year, as part of a wider sell-off of emerging-market currencies.

This partly explains why Indonesian officials are so prickly. On January 3rd the finance ministry severed all business ties with J.P. Morgan, after the American investment bank downgraded its view of Indonesian equities to "underweight" following Donald Trump's election victory. Sri Mulyani Indrawati, the finance minister, said that financial institutions have a responsibility to create positive sentiment. On January 16th J.P. Morgan partially backtracked, shifting to a "neutral" stance and saying the post-election volatility it had feared had "played out".

It is not the first time Indonesian officials have penalised banks for their research. In 2015 Bambang Brodjonegoro, Ms Mulyani's predecessor, memorably told J.P. Morgan analysts responsible for a similarly critical note to do 100 press-ups. Ms Mulyani, however, is widely regarded as the cabinet's most pro-market member, following a previous, reformist stint as finance minister in 2005-10. Markets rallied when the president, Joko Widodo, brought her back in a reshuffle last July. So her actions took observers aback.

Indonesia relies on foreign capital to finance a current-account deficit (see chart). Foreign reserves amount to a hefty \$116bn, but are among the lowest in Asia relative to the economy's overall financing needs.



Foreigners hold nearly 40% of Indonesia's local-currency bonds. So it is vulnerable to souring sentiment.

Still, the economy seems better placed to withstand shocks than a few years ago. The trade surplus rose to \$8.8bn last year, the highest level since 2011. Exports are recovering rapidly, boosted by higher prices for coal and other commodities. At 1.8% of GDP, in the most recent quarter the current-account deficit is less than half what it was in 2013. External debt is relatively low.

Alarmist signs at the airport and lashing out at banks for their research tend to bury rather than highlight such positive indicators. Not for the first time, Indonesian nervousness risks making the country appear weaker than it actually is.

American financial regulation

Not with a bang

NEW YORK

Recent legal cases raise big questions about America's financial markets

'HIS week, Credit Suisse and Deutsche ■ Bank became the latest banking giants to finalise multi-billion dollar settlements with American authorities over misdeeds in the mortgage market in the run-up to the financial crisis. But other, less publicised settlements have hissed out of the waning Obama administration like a series of slow punctures: with Moody's, a leading credit-rating agency; with Citadel Securities, a critical component of America's equity-trading system; and with the Port Authority of New York and New Jersey. High-profile defendants all, but the most striking characteristic of the deals is how gently their tyres were let down.

The Moody's deal, about high ratings

accorded securities that crashed during the crisis, was announced late on January 13th, the Friday before a holiday weekend. The other cases were resolved almost as discreetly. Admittedly the amounts involved were comparatively small (Moody's will pay \$864m, Citadel \$23m, and the Port Authority a mere \$400,000). But the cases were bigger than the numbers suggest.

The Moody's settlement will inflame suspicions that Wall Street is infested with conflicts of interest. As part of it, the firm admitted that it vitiated its stated standards for evaluating securities in an area where those standards put in question its ability to win business. It could still assert, however, that the "settlement contains no finding of any violation of law."

The case involving the Port Authority stems from its failure to provide investors with critical information on the risks of a \$2.3bn bond offering. Disclosure violations are not particularly unusual. The penalty, however, surely is. The cost will be levied on the Port Authority itself, which is financed by local taxpayers. No individuals were punished. This, says the Securities and Exchange Commission (SEC), is the first time a municipality admitted wrongdoing in an enforcement action. So it opens the door to further actions against municipalities ever keener to raise debt.

The Citadel settlement, which was revealed on January 13th, revolved around charges that unfavourable prices were used to consummate trades from retail customers on orders routed from other brokers. Clients, the SEC concludes, were misled. That is a particularly jarring revelation: investors have little or no control over where their trades are filled and little ability to detect such problems on their own. Citadel neither admitted nor denied guilt.

The business prospects of none of the defendants seem to have suffered much harm from these investigations. Citadel remains a huge factor in its business. The Port Authority keeps borrowing. Moody's, along with s&P Global Ratings, still dominate their industry, accounting for 84% of all ratings issued in 2015, according to a report issued by the SEC in December. Revenues have kept rising for years. The large agencies have had the heft to comply with a costly regulatory framework imposed after the crisis. Smaller ones struggle.

It is worth wondering whether these three entities would fare worse if their legal travails were better known. The Port Authority, for example, might be required to disclose its failure prominently on its website, for local residents to see. Similarly, Citadel could be required to note its settlement on trade confirmations sent to clients. And Moody's could add a footnote to ratings citing its admission. That would be consistent with the original mission of the SEC: to provide relevant, timely information to the market.



Brexit and financial regulation

Lost passports

How the City hopes to secure its future after a hard Brexit

THERESA MAY'S speech on January 17th L set Britain definitively on a path to a "hard" Brexit, in which it will leave not just the EU but the European single market. This was not what the City of London wanted to hear. The prime minister did at least pick out finance, along with carmaking, as an industry for which "elements of current single-market arrangements" might remain in place as part of a future trade deal. The City is holding out hope that a bespoke deal built on the existing legal concept of "equivalence" could still accord it a fair degree of access to Europe.

"Passporting", which allows financial firms in one EU member state automatically to serve customers in the other 27 without setting up local operations, was always going to be difficult after Brexit. Outside the single market, says Damian Carolan of Allen & Overy, a law firm, the "passport as we know it is dead." Already, two big banks, HSBC and UBS, this week each confirmed plans to move 1,000 jobs from London.

Financial companies all have to firm up their contingency plans. For the City, these focus on so-called "equivalence" provisions, allowing third-country financial firms access to the EU if their home country's regulatory regime is deemed equivalent. Currently only some regulations, such as those governing clearing houses and securities trading, contain the provisions. Much of finance, notably bank lending and insurance, is not covered. And even where the provisions exist, applying them will, in effect, be a political decision.

Optimists hope equivalence could not just form the basis of a feasible deal, but Inequality

A minivan of Mammon

Are eight men as wealthy as half the world's population?

EVERY ten minutes, black Volkswagen shuttle vans ferry delegates from their hotels in Dayos, Switzerland, to this year's World Economic Forum, held from January 17th to 20th. If you could squeeze the world's eight richest men into one of these vans, they might feel cramped. But they could comfort themselves with an extraordinary statistic: according to Oxfam, a charity, they own as much wealth (\$426bn) as half the world's population combined (\$409bn).

To make this striking calculation, the charity draws on data from Forbes magazine, which lists the wealth of the billionaires, and Credit Suisse, which estimates the smaller holdings of everyone else, thanks to painstaking work by three scholars of wealth, Anthony Shorrocks, Jim Davies and Rodrigo Lluberas.

Pedants can nonetheless criticise Oxfam's headline-grabbing comparison for its handling of debt, the dollar, labour and data. The world's least wealthy include over 420m adults whose debts exceed their assets, leaving them with negative net worth. Most of this net debt is owed by people in high-income countries. There are, for example, over 21m Americans with a combined wealth of minus \$357bn. Only people with relatively good prospects, by global standards, can be so poor; the wretched of the earth could never borrow so much. If all of the people with sub-zero wealth are exclud-

ed from the comparison, the poorest half of the remaining population would have a combined wealth equivalent to the richest 98 billionaires.

The Credit Suisse team converts the world's wealth into dollars at market rates. But the dollar stretches further in poor countries. So studies of global poverty typically make currency conversions at "purchasing-power parity" (PPP) instead. Wealth data also exclude the poor's biggest asset: their labour or "human capital". The returns on that assetsuch as wages—do however appear in income statistics. So whereas the bottom half of the global population have a negligible share of global wealth (only 0.15% at market exchange rates, according to Credit Suisse), they have a bigger share of global income (10.6% at PPP in 2013, the latest number available, according to Christoph Lakner of the World Bank).

In valuing the poor's wealth at \$409bn, Oxfam also seems to have committed a rounding error. The figure should be just \$384bn, according to Mr Shorrocks (although the data are too patchy to allow much precision). For what it's worth, \$384bn is less than the wealth of the world's seven richest men. There would be no need to squeeze Michael Bloomberg, the world's eighthrichest person, into the minivan. That would leave room for the magnificent seven to stretch their legs.

might even allow Britain to remove some onerous regulations. Jonathan Herbst of Norton Rose Fulbright, another law firm, notes that precedents exist for "variable geometry" in regulation. For instance, to gain access to American clients, some British clearing houses already submit to partial American regulatory oversight. If they deal in euro-denominated trades, nothing seems to stop them from submitting to, say, direct oversight by the European Central Bank without leaving London.

Such proposals may be stymied by cold political considerations. Equivalence determinations are at the full discretion of EU regulators, and the status can be withdrawn at short notice. Britain, as a current EU member, starts with identical rules. In a charged political environment, even a small future divergence could be construed as moving away from equivalence. For all the creative solutions proposed by lawyers in London, Europeans are not minded to let Britain off the hook by allowing it easily to "cherry-pick" sectoral carve-

outs. Even before the Brexit referendum in June the ECB had sought to move euro clearing into the euro area.

Yet that is not a reason to dismiss equivalence altogether. It would seem strange, as Mr Herbst points out, to admit Canadian banks into the EU on the back of the recent EU-Canada free-trade deal under better terms than British banks. (Indeed, many Canadian banks have their main European presence in London.)

Even on clearing, it is more likely that euro-denominated derivatives would move to New York rather than continental Europe. According to Mr Carolan, it would be tricky for the ECB to stop this unless it were to forbid European banks from using non-European clearing houses, which would deprive them of access to liquidity. It might be in the ECB's interest, then, to agree on a bespoke arrangement on clearing. Other financial-market activities may prove harder nuts to crack-especially if, as seems possible, broader Brexit negotiations descend into acrimony.

Free exchange | Tariff-eyeing policy

Both economics and politics could confound Republican tax plans

AMONG other things, the start of Donald Trump's presidency this week heralds a collision between campaigning rhetoric and legislative and economic reality. What follows will be a learning experience for all, it is fair to say. Though not perhaps the most consequential of the looming reality checks, the outcome of a brewing debate over a proposed border-adjusted tax plan could prove a taste of things to come. As Mr Trump and his Congress work to make policy, there are many ways for things to go awry.

Both Mr Trump and congressional Republicans are keen to cut taxes on corporations. America's inefficient corporate-tax system has remarkably high rates but leaks like a sieve, yielding a pitiful tax take (see chart). As a solution, Mr Trump favours a large cut in the corporate-tax rate, from 35% to 15%, and a chance for companies to repatriate foreign profits at a tax rate of 10%. Paul Ryan, Speaker of the House of Representatives and chief Republican policy wonk, has something very different in mind.

At present American firms are assessed for tax on their global income. This encourages multinationals either to use clever accounting to book profits in foreign subsidiaries, or to "invert": to relocate their headquarters, at least on paper, to countries with more favourable tax regimes. Mr Ryan's radical solution is to scrap the tax on corporate income and replace it with a modified value-added tax (VAT). The new tax, assessed at a rate of 20%, would apply to all domestic sales while exempting foreign ones. This "destination-based" system would reduce the incentive to move profits or operations abroad. As is common in VAT systems, the plan includes a border adjustment: imports would be subject to the tax while firms would receive a credit for their exports. And that is where things get tricky.

Many suppose that a VAT, because of the adjustment, provides the countries which use it with an export advantage. Some Republicans have argued in favour of their reform plan on just those grounds. Imposing a 20% VAT means adding 20% to the price of imports while rebating domestic firms 20% of the value of their exports. The combination of import tax and export subsidy certainly sounds like a boon to exporting firms. Yet economists are practically unanimous in their view that it is not.

To see why, imagine that Congress were to impose a universal sales tax on all coffee mugs sold in America, regardless of origin. The tax would have no effect on the price of American coffee mugs sold abroad and therefore would not give a boost to exporting American mugmakers. Suppose the tax were then extended

The American exception Tax revenue as % of GDP, 2015 Corporate-tax rate. % Corporate tax Value-added tax 10 Australia³ 30.0 32.1 Japan Canada 26.7 Sweden Britain 20.0 **United States** 39.0 France 38.0 Germany 30.2 Source: OECD *2014 to include foreign sales of American mugs. The American tax would then come on top of whatever sales taxes were in place in foreign markets, leaving the American mugs at a significant disadvantage relative to competitors. The rebate paid to exporters is the way the government prevents what is essentially a national sales tax from penalising domestic firms seeking to compete in foreign markets. A value-added tax with border adjustments has no effect on export competitiveness whatsoever. Sad!

That is not quite the end of the story. Republican leaders do not consider their plan to be a VAT. That is partly because labelling it as such might discomfit rank-and-file Republicans accustomed to seeing VAT as a money-generating machine, fit to support a European-style welfare state. More substantively, Mr Ryan's reform also exempts labour costs: a practice common in corporate income-tax regimes but not VATs.

Exempting firms' wage bills would add an additional subsidy to exporters' rebates, which might cause the plan to run afoul of the rules of the World Trade Organisation (or at least to attract a challenge from other countries). Still, the effect of the wage exemption is similar to that of a cut in payroll tax. It can hardly be taken as a ham-fisted attempt to sock it to foreign competitors. Perhaps this should come as no surprise. Mr Ryan unveiled his plan in June of last year, long before election day, in a distant past when Republicans were less supportive of trade restrictions. It is tempting to suspect congressional leaders of trying to slip a non-protectionist tax plan past Mr Trump under the cover of "border adjustment" language.

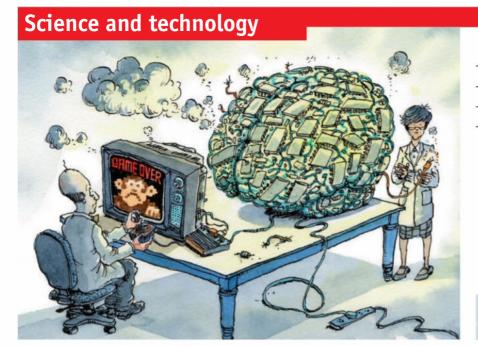
If so, Mr Trump is on to them. In a recent interview with the Wall Street Journal he criticised the complexity of the plan, adding: "Anytime I hear 'border adjustment', I don't love it." A more straightforwardly mercantilist policy such as import tariffs might not please him any better, even if he could wring one out of Congress. In a world of flexible exchange rates, policies which reduce demand for foreign goods—and, correspondingly, for foreign currency—generate exchange-rate shifts which offset much of the competitiveness effect.

We've had enough of exports

Indeed, plans for tariffs could generate a speedy rise in the dollar, squeezing goods exporters before tariffs take effect (and hurting exporters of services who could not expect much help from tariffs in the first place). American exporters would suffer in the short run, and a rising dollar could exacerbate global financial stress. Mr Trump seems to be aware of that threat as well. In the same interview he suggested the time was right for a dollar decline, as the currency's strength, as he put it, is "killing us". In this area, as in others, the need to make real-world policy decisions will reveal to Mr Trump previously unappreciated inconsistencies in his policy preferences.

In practice, the impact that competing Republican tax plans have on exports will be a sideshow. Centre stage will be occupied by other issues: the impact of tax changes on inequality, for example; and separate policy debates such as over the repeal of Obamacare. Overshadowing it all will be the unceasing, stomach-churning drama to be expected in the presidency of Mr Trump. But the tax-policy battle will reveal how well he and Congress can manipulate each other. And it will give a taste of how the president reacts when economies fail to do as they are told.

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Modelling brains

Does not compute

A cautionary tale about the promises of modern brain science

EUROSCIENCE, like many other sciences, has a bottomless appetite for data. Flashy enterprises such as the BRAIN Initiative, announced by Barack Obama in 2013, or the Human Brain Project, approved by the European Union in the same year, aim to analyse the way that thousands or even millions of nerve cells interact in a real brain. The hope is that the torrents of data these schemes generate will contain some crucial nuggets that let neuroscientists get closer to understanding how exactly the brain does what it does.

But a paper just published in PLOS Computational Biology questions whether more information is the same thing as more understanding. It does so by way of neuroscience's favourite analogy: comparing the brain to a computer. Like brains, computers process information by shuffling electricity around complicated circuits. Unlike the workings of brains, though, those of computers are understood on every level.

Eric Jonas of the University of California, Berkeley, and Konrad Kording of Northwestern University, in Chicago, who both have backgrounds in neuroscience and electronic engineering, reasoned that a computer was therefore a good way to test the analytical toolkit used by modern neuroscience. Their idea was to see whether applying those techniques to a microprocessor produced information that matched what they already knew to be true about how the chip works.

Their test subject was the MOS Technology 6502, first produced in 1975 and famous for powering, among other things, early Atari, Apple and Commodore computers. With just 3,510 transistors, the 6502 is simple enough for enthusiasts to have created a simulation that can model the electrical state of every transistor, and the voltage on every one of the thousands of wires connecting those transistors to each other, as the virtual chip runs a particular program. That simulation produces about 1.5 gigabytes of data a second—a large amount, but well within the capabilities of the algorithms currently employed to probe the mysteries of biological brains.

The chips are down

One common tactic in brain science is to compare damaged brains with healthy ones. If damage to part of the brain causes predictable changes in behaviour, then researchers can infer what that part of the brain does. In rats, for instance, damaging the hippocampuses-two small, bananashaped structures buried towards the bottom of the brain-reliably interferes with the creatures' ability to recognise objects.

When applied to the chip, though, that method turned up some interesting false positives. The researchers found, for instance, that disabling one particular group of transistors prevented the chip from running the boot-up sequence of "Donkey

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Kong"-the Nintendo game that introduced Mario the plumber to the worldwhile preserving its ability to run other games. But it would be a mistake. Dr Ionas points out, to conclude that those transistors were thus uniquely responsible for "Donkey Kong". The truth is more subtle. They are instead part of a circuit which implements a much more basic computing function that is crucial for loading one piece of software, but not some others.

Another neuroscientific approach is to look for correlations between the activity of groups of nerve cells and a particular behaviour. Applied to the chip, the researchers' algorithms found five transistors whose activity was strongly correlated with the brightness of the most recently displayed pixel on the screen. Again, though, that seemingly significant finding was mostly an illusion. Drs Jonas and Kording know that these transistors are not directly involved in drawing pictures on the screen. (In the Atari, that was the job of an entirely different chip, the Television Interface Adaptor.) They are only involved in the trivial sense that they are used by some part of the program which is ultimately deciding what goes on the screen.

The researchers also analysed the chip's wiring diagram, something biologists would call its connectome. Feeding this into analytical algorithms yielded lots of superficially impressive data that hinted at the presence of some of the structures which the researchers knew were present within the chip. On closer inspection, though, little of it turned out to be useful. The patterns were a mishmash of unrelated structures that were as misleading as they were illuminating. This fits with the frustrating experience of real neuroscience. Researchers have had a complete connectome of a tiny worm, Caenorhabditis elegans, which has just 302 nerve cells, >> since 1986. Yet they understand much less about how the creature's "brain" works than they do about computer chips with millions of times as many components.

The essential problem, says Dr Jonas, is that the neuroscience techniques failed to find many chip structures that the researchers knew were there, and which are vital for comprehending what is actually going on in it. Chips are made from transistors, which are tiny electronic switches. These are organised into logic gates, which implement simple logical operations. Those gates, in turn, are organised into structures such as adders (which do exactly what their name suggests). An arithmetic logic unit might contain several adders. And so on.

But inferring the existence of such highlevel structures-working out exactly how the mess of electrical currents within the chip gives rise to a cartoon ape throwing barrels at a plumber-is difficult. That is not a problem unique to neuroscience. Dr Jonas draws a comparison with the Human Genome Project, the heroic effort to sequence a complete human genome that finished in 2003. The hope was that this would provide insights into everything from cancer to ageing. But it has proved much more difficult than expected to extract those sorts of revelations from what is, ultimately, just a long string of text written in the four letters of the genetic code.

Things were not entirely hopeless. The researchers' algorithms did, for instance, detect the master clock signal, which coordinates the operations of different parts of the chip. And some neuroscientists have criticised the paper, arguing that the analogy between chips and brains is not so close that techniques for analysing one should automatically work on the other.

Gaël Varoquaux, a machine-learning specialist at the Institute for Research in Computer Science and Automation, in France, says that the 6502 in particular is about as different from a brain as it could be. Such primitive chips process information sequentially. Brains (and modern microprocessors) juggle many computations at once. And he points out that, for all its limitations, neuroscience has made real progress. The ins-and-outs of parts of the visual system, for instance, such as how it categorises features like lines and shapes, are reasonably well understood.

Dr Jonas acknowledges both points. "I don't want to claim that neuroscience has accomplished nothing!" he says. Instead, he goes back to the analogy with the Human Genome Project. The data it generated, and the reams of extra information churned out by modern, far more capable gene-sequencers, have certainly been useful. But hype-fuelled hopes of an immediate leap in understanding were dashed. Obtaining data is one thing. Working out what they are saying is another.



Panda genetics

Hey, dude. Give me six!

Two strange mammals illuminate the process of natural selection

ONVERGENT evolution—the arrival, independently, by different species at the same answer to a question posed by nature-is a topic of great interest to biologists. One aspect of the phenomenon which has not yet been much looked at, however, is its underlying genetics. In particular, an issue not previously addressed is how often such changes arise from similar mutations in the two convergent lines, and how often they have different genetic causes that happen to have similar effects on the organisms' forms and functions. That has now been rectified by an examination of two creatures which, though only distantly related, share an unusual feeding habit, an unusual anatomical feature and an unusual name: panda.

The giant panda is a black and white bear. The red panda (pictured above) is related to weasels, raccoons and skunks. Their habitats-mountainous areas of southern China and its neighbours-overlap, but their last common ancestor lived 43m years ago. They do, though, share a limited kinship, for both are members (along with dogs, cats, hyenas, mongooses, seals and so on) of the mammalian order Carnivora. Which is curious, because both are vegetarian.

More intriguing still, both subsist almost entirely on bamboo (some etymologists think their mutual name is derived from the Nepali phrase nigalya ponya, meaning "bamboo-eater"). And most curi-

ously of all, both have a sixth digit on their forepaws-a kind of ancillary thumb derived from one of the bones of the wrist that helps them hold bamboo stalks for consumption. These common features led Hu Yibo of the Institute of Zoology, in Beijing, and his colleagues, to wonder if the two vegetarian carnivores also shared genetic modifications that might explain those features. And, as Dr Hu observes in a paper just published in the Proceedings of the National Academy of Sciences, they do.

To search for such genetic commonalities, Dr Hu and his colleagues compared the DNA of the two pandas with that of four other members of the Carnivora: polar bears (close relatives of giant pandas), ferrets (close relatives of red pandas), and tigers and dogs (close relatives of neither). If pandas share features of their DNA with each other, but not with the four comparison species, he reasoned, then it is likely that those features encode recent adaptations common to the two of them.

Altogether, the team identified 70 genes (out of the 20,000 or so that mammals have) which sport bits of DNA that seemed to be shared. They also found ten genes which have been disabled by crippling mutations in both of the pandas, but not in the other four species. Not all of the shared genetic features obviously tied in with the shared peculiarities of pandas, but some did. These fell into three categories: genes affecting anatomy, genes affecting appetite >> > and genes affecting the digestion and metabolism of nutrients.

The anatomy-related adaptations were those that seemed to control the development of the pandas' second thumbs. Two genes in particular, DYNC2H1 and pericentrin, have mutations that cause identical changes in each type of panda in the proteins encoded by these genes. In mice, mutations in these genes are known to encourage extra digits to grow, so it is not unreasonable to suspect that they are also the cause of this in pandas.

The appetite-modifying change involved one of the disabled genes. When working, this gene encodes a protein which forms part of the tongue's taste buds for umami, a savoury "meatiness" separate from the other four tastes of sweetness, sourness, bitterness and saltiness. Umami perception is stimulated by glutamic acid, one of the 20 amino acids that make up proteins-but one that is more characteristic of animal proteins than plant ones. Sensitivity to umami is valuable to a carnivore but unnecessary (and possibly harmful) to a herbivore.

The other genetic convergences Dr Hu recorded were related to the digestion and metabolism of substances scarce in, or absent from, bamboo. He and his colleagues noted parallel changes in the genes for three digestive enzymes whose job is to liberate two particular amino acids, lysine and arginine, from proteins. Both lysine and arginine are abundant in meat, but in short supply in bamboo. The team also noted parallel changes in four genes that encode proteins involved in the metabolism of two vitamins, A and B12, and of arachidonic acid, a lipid essential for bodily function. All of these are scarce or non-existent in bamboo as well. Exactly how the genetic changes seen alter the effectiveness of the proteins involved remains to be determined. But the prediction would be that they enhance the availability of the nutrients in question.

The upshot is that the two pandas do indeed seem to have similar genetics underlying their similar peculiarities. Such similarities are, admittedly, easier to find than different genetic routes to the same outcome would be. But Dr Hu has established that, at least in the case of pandas, natural selection has often taken the same paths to arrive at the same outcomes.

The Richard Casement internship

We invite applications for the 2017 Richard Casement internship. We are looking for a would-be journalist to spend three months of the summer working on the newspaper in London, writing about science and technology. Applicants should write a letter introducing themselves and an article of about 600 words that they think would be suitable for publication in the Science and Technology section. They should be prepared to come for an interview in London or New York, A stipend of £2,000 a month will be paid to the successful candidate. Applications must reach us by January 27th. These should be sent to: casement2017@economist.com

Solar physics and palaeontology

Set in stone

An ancient forest reveals the sun's behaviour 290m years ago

EVERY 11 years or so, a new sunspot cycle begins. Sunspots are apparent blemishes in the sun's photosphere, the layer which emits its light. Though still hot (about 3,500°C), they are cooler than their surroundings (about 5,500°C) and thus appear dark by contrast. A cycle starts with spots appearing at mid-latitudes in both northern and southern hemispheres. Over time, the spot-generating areas migrate towards the equator. As they do so, the amount of light and other radiation the sun emits first increases to a maximum and then decreases to a minimum, until the spots vanish and the cycle renews.

On Earth, the increased illumination of solar maxima drives photosynthesis, and thus plant growth. That permits botanists to use trees' annual growth rings to work out what sunspot activity was like hundreds, and occasionally thousands, of vears ago. Determining solar activity millions of years ago, though, has not been so easy. But it is of interest to solar physicists, who wonder how far back into the past the oscillations of the sun's magnetic field that drive the cycle go, and how they might have changed over the course of time.

Now, Ludwig Luthardt and Ronny Rössler of the Natural History Museum of Chemnitz, in Germany, have cracked the problem. They have been able to apply the tree-ring method to petrified trunks from a

nearby fossil forest. This forest (imagined in an artist's impression below) was buried by a volcanic eruption 290m years ago, during the Permian period. And, as they report in Geology, Mr Luthardt and Dr Rössler have found that the sunspot cycle was little different then from what it is now.

The Chemnitz fossil trees, mostly conifers and ferns, are particularly well preserved. Volcanic minerals seeped into them soon after the eruption and petrified them before bacteria and fungi could rot their tissues away. Mr Luthardt and Dr Rössler selected 43 of the largest specimens and looked at their growth rings.

They found 1,917 rings which were in a good enough state to be measured under a microscope. They knew that the trees had died simultaneously, giving them a baseline to work from, and so were able to compare the rings from different plants. They were stunned by how clearly they could see the cycles.

About three-quarters of their specimens showed synchronous growth peaks like those caused by modern sunspot activity. In total, the rings they measured let them study 79 years of forest growth before the eruption. During this period, the solar cycle averaged 10.6 years. That compares with 11.2 years in the modern era, although this figure conceals wide variation in the lengths of individual cycles. Within statistical limits, then, it seems that the sunspot cycle was the same in the early Permian as it is now, suggesting that the sun's magnetic oscillations were the same then as they are at present. Whether that is a coincidence has yet to be determined, but there is no reason why the method Mr Luthardt and Dr Rössler have developed should not be applied to other petrified forests, from different periods, to find out.



Down in the forest, something stirred



Submarine warfare

Torpedo junction

A new Russian weapon may give that country an underwater advantage

HEN introduced 40 years ago, the Soviet Shkval ("Squall") torpedo was hailed as an "aircraft-carrier killer" because its speed, more than 370kph (200 knots), was four times that of any American rival. The claim was premature. Problems with its design meant Shkval turned out to be less threatening than hoped (or, from a NATO point of view, less dangerous than feared), even though it is still made and deployed. But supercavitation, the principle upon which its speed depends, has continued to intrigue torpedo designers. Now, noises coming out of the Soviet Union's successor, Russia, are leading some in the West to worry that the country's engineers have cracked it.

Life in a bubble

Bubbles of vapour (ie, cavities) form in water wherever there is low pressure, such as on the trailing edges of propeller blades. For engineers, this is usually a problem. In the case of propellers, the cavities erode the blades' substance. Shkval's designers, however, sought, by amplifying the phenomenon, to make use of it. They gave their weapon a blunt nose fitted with a flat disc (pictured above) that creates a circular trailing edge as the torpedo moves forward. They also gave it a rocket motor to accelerate it to a speed fast enough for that edge to create a cavity consisting of a single, giant bubble which envelopes the entire torpedo except for the steering fins.

The result is that most of the torpedo experiences no hydrodynamic drag, greatly enhancing its potential velocity. To take advantage of this it is propelled, when the booster rocket runs out of oomph, by a hydrojet-a motor fuelled by a material, such as magnesium, that will burn in water.

Shkval's problems are threefold. First, it has a short range-around 15km compared with around 50km for America's principal submarine-launched torpedo, the Mk 48. Second, the hydrojet is noisy, so opponents can hear the weapon coming. Third, it cannot track its target. Most torpedoes use sonar to home in on the ship they are intended to sink. Because Shkval travels inside a bubble, any sonar needs to be mounted on the cavitation disc, which is too small for the purpose. In addition, returning sonar pings would be drowned out by the hydrojet's noise. As a consequence, Shkval's only guidance is an autopilot which steers it towards the place where its target was located at the moment of launch, in the hope that the target has not moved.

These deficiencies have not stopped Western countries trying to build supercavitating torpedoes of their own. Diehl, a German firm, announced a programme for such a weapon, Barracuda, in 2004. In 2006 General Dynamics, a big American firm, was commissioned to look into the matter (though its brief did not include the word "torpedo", referring only to an "undersea transport") by the country's Defence Advanced Research Projects Agency.

The firms' engineers tried to overcome the guidance problem by developing a new type of cavitator. Rather than a flat disc, General Dynamics' design had a curved surface, increasing the area available for sonar reception. In addition the sonar's transmitters, mounted on the torpedo's steering fins, were separate from the receiver, and the interference caused by engine noise was reduced by special filters. In the end, though, these efforts ran into the sand. Barracuda was never completed. General Dynamics' project was shelved after a year. American naval research into supercavitation in general ended in 2012, though which particular problems proved insurmountable has never been revealed.

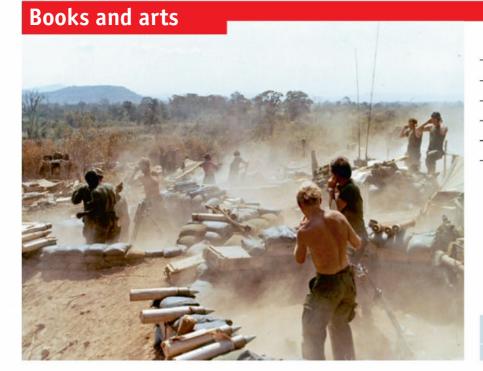
Russia, though, has not given up on the idea. In October 2016 plans emerged for a new supercavitating torpedo, Khishchnik ("Predator"). Few details have been released, except that the work is being carried out by Elektropribor, a design bureau specialising in high-precision systems for submarines. Combining a General Dynamics-style sonar with a better motor could, however, result in a weapon that the world's navies would truly have to fear.

Such a motor is possible, according to Georgiy Savchenko of the Institute of Hydromechanics at Ukraine's National Academy of Sciences. His supercavitationresearch group estimates that with the right fuel (perhaps lithium, which packs more energy per kilogram than magnesium) a new torpedo could have ten times the range of Shkval. It would still be noisy, but, added to its speed, such a combination of range and tracking ability would make it hard to evade. Moreover, there is no theoretical reason why Khishchnik should not travel quite a lot faster than Shkval does. In laboratory tests, supercavitating projectiles have clocked more than 5,000kph.

Kanyon diabolo

The supercavitating design being developed for Khishchnik might also feed into the Kanvon project, a giant nuclear-powered torpedo with a nuclear warhead that is intended to attack coastal targets. In what was either a deliberate leak or a piece of disinformation, this project was revealed to the world in 2015 during a televised meeting between Vladimir Putin, Russia's president, and senior officers of the country's armed forces. The camera, looking over one of these officers' shoulders, gave a picture of plans for the putative device, annotated with helpful information such as "speed of travel-185kph".

The leaked design did not appear to use supercavitation—but if Kanyon is genuine, then thoughts of adding it cannot have escaped its designers. Even if Kanyon is smoke and mirrors, though, Khishchnik seems real enough. Perhaps, this time, aircraft-carrier skippers should be worried.



America's secret war

They just kept coming

America bombed Laos for a decade, killing a tenth of its population. Why was this not considered more of an outrage?

THE bombing of Laos in the 1960s and L early 1970s always used to be referred to as America's "secret war". This was not just a mistake or even a misunderstanding: it was a terrible misnomer. For the Laotians who cowered in caves to escape what is considered the heaviest bombardment in history, the campaign was certainly not a secret. America's involvement was well known in the capital, Vientiane, and covered in the international press. Eventually it became well publicised and was even investigated by Congress. But the "secret" label stuck to America's war in Laos, in part because of official denials and in part because of public indifference.

At last the secret is out in full. This was brought home during President Barack Obama's visit to the tiny South-East Asian nation in September, when he pledged more money to remove unexploded American bombs, though without offering any formal apology. For those looking for more, the war's entire compelling tale can be found in the lucid prose and revelatory reporting of Joshua Kurlantzick's new book, "A Great Place to Have a War". Fresh interviews and newly declassified records document how American involvement escalated and then swiftly ended, leaving America's Laotian partners holding the bag. But Mr Kurlantzick, a senior fellow at the Council on Foreign Relations and a for-

A Great Place to Have a War: America in Laos and the Birth of a Military CIA. By Joshua Kurlantzick. Simon & Schuster, 320 pages; \$28

mer contributor to this newspaper, enriches his study even further by connecting the CIA's unprecedented paramilitary activities in Laos to the secret wars of today in Yemen, Somalia and elsewhere.

In 1961 Laos was the focal point of America's containment strategy against communism in South-East Asia, with President Dwight Eisenhower giving it priority in a pre-inauguration briefing to his successor, John Kennedy. A CIA operation then began to train and fight alongside an army taken mostly from the Hmong ethnic minority against the Pathet Lao-translated as "Lao Nation"-who were backed by North Vietnam. Hitting the Pathet Lao in the north and on the Ho Chi Minh trail in the south, the American air force unleashed an average of one attack every eight minutes for nearly ten years. By 1970 tens of thousands of American-backed fighters were involved, at an annual cost of \$3.1bn in today's dollars. By the time the campaign ended in 1973, a tenth of Laos's population had been killed. Thousands more accidental deaths would follow from unexploded bombs left in the soil.

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In his book Mr Kurlantzick paints a vivid picture of protagonists like Vang Pao, a military leader who emigrated to America, where he was arrested in 2007 for plotting a coup against the Laotian government, and Tony Poe, a hard-drinking CIA operative who lived in the jungle and collected severed enemy ears. Mr Kurlantzick concludes that, in the future, "the CIA would not lock up men like Poe; instead, it would find many more Tony Poes." But the book is not just a polemic against the agency. Mr Kurlantzick looks into allegations that the CIA sold heroin and opium. He finds no evidence of this, although the agency was happy to look the other way when the Hmong sold drugs.

One question is why the CIA's conduct did not spark outrage, or even much interest, among the American public. More Americans died in Laos than in Cambodia, but it was the bombing of Cambodia that sparked protests including at Kent State University in Ohio in May 1970, where four students were killed by the national guard. Even a high-profile hearing, when Senator Ted Kennedy challenged the war, provoked little public reaction. Heavier media coverage of the bombing in Cambodia may have contributed, as did the CIA's attempts at a cover-up in Laos and the fact that the American dead were clandestine advisers rather than young draftees.

Laos was a model. Successive American administrations went on to wage "secret" wars in Central America and the Middle East with minimal American casualties and without congressional interference. The CIA viewed its Laotian operation as a success, even though the Pathet Lao took over after America's withdrawal, and are still in power. In Laos, however, the wounds have yet to heal.

19th-century French literary history

When Emile Zola fled Paris

The Disappearance of Emile Zola: Love, Literature and the Dreyfus Case. By Michael Rosen. Faber & Faber; 302 pages; £16.99

EMILE ZOLA came to London in 1893 and was "received like a prince". Some disapproving bishops and headmasters thought his novels, particularly "La Terre" ("The Earth"), to be corrupting. But with his wife, Alexandrine, he stayed in the Savoy Hotel, met leading literary figures and addressed thousands at banquets at Crystal Palace and the Guildhall. By contrast, when he arrived at Victoria Station in July 1898 he was alone, a fugitive, carrying a nightshirt wrapped in newspaper. In "J'accuse", his open letter in L'Aurore, a French newspaper, he had attacked the authorities for their shameful anti-Semitic conduct in the political scandal that came to be known as the Drevfus affair. Found guilty of libel and sentenced to prison, Zola fled to England with no idea of when it might be safe to return.

He was to stay for almost a year, and it is



Accuser-in-chief

the story of this little-known episode that Michael Rosen tells in characteristically engaging style. Assisted by one of his English translators, Ernest Vizetelly, Zola moved from one safe-house to another before taking refuge "in a suburban hotel in Norwood". There he established his routine: writing "Fécondité" ("Fruitfulness"), cy-

cling, taking photographs, communicating with his friends and family in France, pondering "the effect of the capital 'I' on English character", complaining about the tasteless food and bemoaning the fact that British journalists wrote anonymously—still the practice in *The Economist*.

Zola's wife joined him from time to time, and so, for idyllic weeks and with her permission, did Jeanne, his other, younger, chère femme, and the children he had had with her, whom he adored. Their hopes for his swift return from exile were continually disappointed, as was his desire that his son, Jacques, should work hard and come top of the class. Eventually the French government relented, the innocent Dreyfus's case was reopened, though he was not yet pardoned, and Zola could return to France. However, there was no happy ending: in 1902 Zola died, possibly murdered, of carbon-monoxide poisoning.

Some of the book's charm lies in its snippets of information: in France children are happy as chaffinches, rather than larks; "a big snooze" is un gros dodo. A chillier note appears towards the end. Forty years after Zola's death "a tragic rerun" of anti-Semitism saw Mr Rosen's great-uncles deported to Auschwitz, along with 76,000 other French Jews. Religious divisions in France have a doleful way of enduring.

The joys of smoking

Naughty, but nice

Nicotine. By Gregor Hens. Translated by Jen Calleja. *Other Press; 176 pages; \$16.95. Fitzcarraldo Editions; £12.99*

Gregor Hens, a German author and an accomplished translator, at the start of his memoir about smoking. Yet write it he does, disguised as a quest to understand why: why did he do it? And, though this is a modest book concerned only with the memories and motivations of its author, why, by extension, does anyone?

The fact is, as every smoker knows but few admit, nicotine is easy enough to kick. The physiological addiction can be overcome with patches, with hypnosis, with self-help books, with good old-fashioned will power. Nicotine is the least of any smoker's problems. The truth is that every ex-smoker is and always will be a smoker. This book is, he admits, "a continuation of my addiction via other means."

Why do smokers do it? Because, as Mr Hens writes, "every cigarette that I've ever smoked served a purpose—they were a signal, medication, a stimulant or a sedative, they were a plaything, an accessory, a fetish object, something to help pass the time, a memory aid, a communication tool or an object of meditation. Sometimes...all at once." Cigarettes represent youth, rebellion, wilful disregard for sensible advice.

They function as punctuation for life. They make it coherent and add drama, inserting commas and semi-colons and ellipses (and, in the end, an inarguable and often premature full stop). "Whether I actually smoke or not, my personality is a smoker's personality," Mr Hens writes. To stop smoking isn't just to give up the intake of that toxic, redeeming air into your lungs. It is to cease being yourself. That is why quitting is so hard.

Readers and smokers and especially readers who smoke will be grateful that Mr Hens wrote "Nicotine" despite the risk of relapse. It is that rare book on addiction: neither preaching nor self-loathing, lapsing only occasionally into romanticism. And like the best cigarettes, it is over too soon. Though any more would probably be too much.

The AIDS crisis in America

Chronicles of death foretold

How to Survive a Plague: The Inside Story of How Citizens and Science Tamed AIDS. By David France. Knopf; 640 pages; \$30. Picador; £25

NEWS of a fatal new disease affecting gay men first broke in 1981. But it took many years and very many deaths before the public noticed. In New York, the plague's epicentre, a new case of AIDS was soon being diagnosed every day, yet Ed Koch, the mayor, did next to nothing to prevent its spread. According to a new book, "How to Survive a Plague", the virus had infected 7,700 people in America by 1984 and killed 3,600, yet a question about it at a White House press conference aroused laughter. It was only in 1985, after Rock Hudson, a Hollywood star, was hospitalised with AIDS, that President Ronald Reagan publicly acknowledged the virus. But he did little to help the epidemic's largely gay victims. In 1987, after nearly 20,000 Americans had died, he quipped: "When it comes to preventing AIDS, don't medicine and morality teach the same lessons?"

David France's masterful account of the epidemic offers plenty of opportunity for outrage. America's response to this public-

▶ health crisis was one of federal neglect, bureaucratic incompetence, corporate greed and brazen prejudice. AIDS would claim over 300,000 Americans—a third of them in New York-before a pharmaceutical breakthrough in 1996 enabled the infected to lead ordinary lives. For those who have survived, Mr France writes that the betrayal of so many politicians, doctors, clergymen and family members remains "impossible to forget".

At a time when several states still banned gay sex, many Americans saw AIDS as a punishment for sinful behaviour. Early patients were thrown out of hospitals, ignored by ambulances and locked out of their homes. Nearly every New York undertaker refused to handle the corpses. The popular press initially avoided the story; it took two years and 600 dead before the New York Times covered it on the front page. When reports became inevitable, editorials frequently castigated gay men as public-health menaces. Antigay hate crimes surged, rarely resulting in arrests. Gay foreigners entering the country were often quarantined and deported.

HIV, which causes AIDS, was a tenacious foe, genetically far more complex than other known retroviruses. AIDS suppressed the immune system and by 1990 one American was dving from the disease every 12 minutes, often after succumbing to a preventable infection. But even as hospitals overflowed with AIDS patients, the federal government failed to help states treat and prevent the disease, and federal research remained sluggish and disorganised. Drugs that officials called promising in 1985 had still not been tested five years later. Others that were transforming lives in off-market experiments, such as an antiblindness drug called DHPG, still awaited clinical trials, ensuring that many AIDS patients would go blind unnecessarily. Federal officials dithered for years before issuing guidelines on treatable infections. Nine years of the country's war on AIDS had extended the average 18-month lifespan of patients by a mere three months.

Public indifference and political ineptitude drove activists to take matters into their own hands. Gay men began circulating materials promoting "safe sex" in 1983. Condoms became popular, bath houses closed and transmission rates for all sex-related diseases slowed dramatically. Yet it would take over a decade for Washington to fund a safe-sex campaign nationally. The government's flat-footed strategy for researching and testing new drugs and the cripplingly high costs of developing therapies spurred black-market clubs that peddled unapproved drugs by the truckload. Activists staged protests to highlight the cost of federally approved drugs, and they learned enough about virology, chemistry and immunology to propose essential drug-trial innovations. Federal and private researchers eventually took note of what they were saying. Never before had a group of patients done so much to guide the agenda of so-called experts.

As a gay man in New York during this time, Mr France buried many friends and lovers. His own story is one of those he knits together in this riveting account of the men and women who refused to surrender in the face of AIDS. Despite its grim subject, this is an inspiring book. At a time when many Americans are worried once again about the wisdom and compassion of their elected leaders, "How to Survive a Plague" offers a salient reminder of what can be achieved by citizens who remain unbowed and unbroken.

The Elbphilharmonie

Worth the wait. and the cost

A new concert hall will make the Hanseatic city a cultural destination

N OCTOBER 31st, the lights on the new concert hall in Hamburg spelled out fertig-"finished", and the city heaved a sigh of relief. The history of the crazily ambitious project known as the Elbphilharmonie had been chequered. Conceived in 2003 at a projected cost of €77m (\$82.3m), it ended up costing ten times that and was completed seven years late. It survived disputes, lawsuits and a parliamentary inquiry. No wonder its architects, Jacques Herzog and Pierre de Meuron-creators of Tate Modern and, along with Ai Weiwei and others, of the "bird's nest" Olympic Stadium in Beijing-feared at one point that the job would destroy their Basel-based firm. In 2011 Barbara Kisseler, Hamburg's out-



Making waves

spoken culture senator, neatly summed up her fellow-citizens' ambivalence: "The Elbphilharmonie is very dear to us, in both senses of the word."

The tallest building in town, its roof covered in giant sequins, it sits on the end of a busy wharf and has been likened to a crystal on a rock, a bubble-wrapped ice-cube and a ship under sail. The hull has been constructed from a converted cocoa warehouse. The sails are a technical marvel: 1,000 plate-glass panels, heated to 600°C to curve, bulge or pucker, each imprinted with a seemingly random pattern of metal dots that change colour in response to the shifting light. This is kinetic art on a gargantuan scale.

The hall had to fit into a very small footprint, so the architects had to think vertically. Their acoustics expert was the celebrated and demanding Yasuhisa Toyota. His 30-year-old Suntory Hall in Tokyo is still a benchmark for acoustic refinement and visual elegance. His customary terraced "vineyard" seating design-pioneered at the Berlin Philharmonie in the 1960s-is now widely adopted. The traditional "shoebox" design has good seats and bad seats, but the more democratic "vinevard" has no "best" seats. At the Elbphilharmonie in Hamburg no one is more than 30 metres from the stage.

Achieving the sound that Mr Toyota wanted meant hanging the hall like a cocoon from the roof and surrounding it with feather pillows to isolate the building from external industrial noise. The interior is clad with 10,000 distressed gypsum panels, each individually computer-designed both to diffuse the sound and to keep it rich. Hollowed-out like a cave, and conceived in curves and swirls with not a straight line in sight, the space feels as if it has been crafted entirely by hand.

The inaugural concert on January 11th, programmed to show off the acoustic flexibility, was a triumph. Whether for a small period-instrument ensemble or a massive Wagner orchestra, for Sir Bryn Terfel's clarion baritone or Philippe Jaroussky's ethereal falsetto, the sound was balanced and warm with absolute clarity of detail. The bare oak foyers, with their vast flights of stairs, are spartan, reflecting the tastes of a city that is elegant yet restrained.

The main hall is only part of the project. There is also a smaller chamber hall and a substantial education department. The resident NDR Elbphilharmonie Orchester is there, as is Resonanz, a radical experimental string ensemble. What impresses most is the programme being devised by Christoph Lieben-Seutter, the Elbphilharmonie's general director. This features not just glittering names, though there are plenty of those, but also breadth and variety, and a determined drive to bring in new audiences. "Salaam Syria" in mid-March will be a three-day festival devoted to the >> music of the world's most strife-torn country, with performances from the players of the Syrian Expat Orchestra. Since Hamburg is home to many migrants, this is more than a gesture. It is telling that every concert in the opening season sold out within hours of tickets going on sale.

Concert halls are increasingly a political matter. Angela Merkel and five other members of the federal government attended the birth of the already-beloved "Elphie". Four months ago the depressed Ruhr-valley city of Bochum opened a charming new concert hall which had been in part crowdfunded by 20,000 local

residents. Two years ago the superb Philharmonie de Paris opened its doors to near-universal acclaim, after a three-decade campaign for its creation led by Pierre Boulez and other French musicians. In Paris the mainspring was left-wing politics: the Philharmonie makes a point of drawing audiences from poor areas, and it encourages children to learn to play instruments from other cultures. Yet another hall, the mostly publicly funded Seine Musicale, is due to open in Paris soon.

London may be the outlier here. A proposed new hall for the Barbican Centre, which would probably cost £400m

(\$493m), has its cheerleaders in the press. But the project, promoted with implausible bombast about "outreach" but increasingly seen as a metropolitan vanity, has few friends even in the music profession, let alone outside it. It would of course be nice for London to have its own state-of-the-art concert hall, but with the already-existing Southbank and Barbican halls, imperfect though they may be, musical life is perfectly liveable without one. Hamburg, however, is a different story. One of the richest cities in Europe, it has never been seen as a top-tier cultural destination. The Elbphilharmonie may change that. ■

Johnson One country, two systems

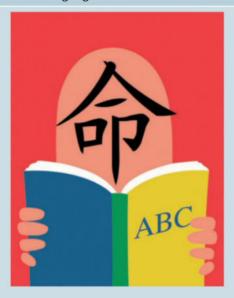
The coexistence of pinyin and Chinese characters highlights the role of emotion in language decisions

FEW people live to 111. Fewer still leave as big a mark on linguistic lives as Zhou Youguang, who died on January 14th. Mr Zhou was the chief architect of pinyin, the system that the Chinese use to write Mandarin in the roman alphabet.

Pinyin has not, of course, replaced the Chinese characters. Rather, it is used as a gateway to literacy, giving young children a systematic way to learn the sounds of the thousands of characters required to be literate in Chinese. Pinyin is also used by most Chinese people to input Chinese characters into computers: type a word like wo (meaning "I") and the proper character appears; if several characters share the same sound (which is common in Chinese), users choose from a short menu of these homophonic characters.

In other words, the primary way that the Chinese interact with their language in the digital age is via an alphabet borrowed by Communist China from its ideological enemies in the 1950s. The tale is an odd one. Mao Zedong (who was Mao Tse-tung before pinyin, under the "Wade-Giles" romanisation system) wanted a radical break with old ways after 1949, when the civil war ended in mainland China. He was hardly the first to think that China's beautiful, complicated and inefficient script was a hindrance to the country's development. Lu Xun, a celebrated novelist, wrote in the early 20th century: "If we are to go on living, Chinese characters cannot.'

But according to Mr Zhou, speaking to the New Yorker in 2004, it was Josef Stalin in 1949 who talked Mao out of full-scale romanisation, saying that a proud China needed a truly national system. The regime instead simplified many Chinese characters, supposedly making them easier to learn—but causing a split in the Sinophone world: Taiwan, Hong Kong and



other overseas Chinese communities still use the traditional characters.

Mr Zhou, who had been working for a Chinese bank in New York (he was largely self-trained as a linguist), had returned home in a burst of patriotic optimism after 1949. He was drafted by Zhou Enlai, Mao's premier, in the 1950s to create a system not to replace, but to complement, the Chinese characters. After three years' work, pinyin was ready. It used just the standard Roman letters and a few (often omitted) diacritical marks, especially over vowels to show the "tones": steady, rising, dipping or falling pitch. People joked that Mr Zhou's team had taken three years to deal with just 26 letters. But pinyin dealt neatly with all of the sounds of Mandarin with a minimum of tricky typography: even q and x were used (for what had been ch' and hs in Wade-Giles). These letters do not always sound the same as they do in Western languages, but pinyin overall was a hit, credited plausibly with a huge boost in literacy in China. Even the Taiwanese, who abhor Mao's simplified characters, are gradually adopting Mr Zhou's pinyin (which they had also once abhorred), making the use of pinyin one of the few practical things the two countries can agree on.

Why don't the Chinese just adopt pinyin? One is the many homophones (though these are not usually a problem in context). Another is that Chinese characters are used throughout the Chinesespeaking world, not just by Mandarinspeakers but also speakers of Cantonese, Shanghainese and other varieties. These are as different from each other as the big Romance languages are, but the writing system unifies the Chinese world. In fact, character-based writing is, in effect, written Mandarin. This is not obvious from looking at the characters, but it is obvious if you look at pinyin. If China adopted it wholesale, the linguistic divisions in China would be far more apparent.

But there is another reason for attachment to the characters. They represent tradition, history, literature, scholarship and even art on an emotional level that many foreigners do not understand. Outsiders focus so much on efficiency probably because those who do try to learn the characters cannot help but be struck by how absurdly hard they are to master.

There is a real trade-off between efficiency and culture. English-speakers have rejected most efforts to clean up the language's notorious spelling, making coff, ruff, thru, tho and bow from cough, rough, through, though and bough. The Irish accept the expense of keeping Irish on signs and in classrooms, even if it isn't efficient. In language, as in love, the heart is often the master of the head. Pinyin, which has helped the Chinese have a bit of both, will long outlast the long-lived Mr Zhou.

Courses 73





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Deadline for applications is March 1, 2017.

For more information please visit

www.hks.harvard.edu/centers/mrcbg/about/fellows/srfellows

Tenders 75

If you can imagine it. We can create it.

Inviting Expression of Interest for preparation of Master Plan for Corporate Park at Kharghar, Navi Mumbai, Maharashtra, India

Navi Mumbai is one of the largest planned cities in the world. The city with population of 2 million+ people is an outstanding example of planned urban development. Navi Mumbai, is poised to witness explosive growth with investments of more than US\$ 6 billion slated in & around the city. To add to this vibrant development, CIDCO [City & Industrial Development Corporation Ltd.] the town-planning agency of Navi Mumbai has taken up an ambitious project of developing Corporate Park at Kharghar.

120 ha. of strategically located land in Kharghar is earmarked for Corporate Park & envisaged to house corporate offices and financial institutions coupled with residential apartments. Kharghar is centrally located and is accessible by Mumbai-Pune Expressway, Metro and mere 3 km from the upcoming Navi Mumbai International Airport [NMIA].

CIDCO is issuing a call for Expression of Interest [EOI] for preparation of Master Plan for Corporate Park at Kharghar, Navi Mumbai. Interested Urban Planners, Urban Designers, should submit sealed copies of EOI prepared in English on an A4 size along with a report. The details regarding participation are available on www.cidco.maharashtra.gov.in.



The entries marked with caption 'EOI for preparation of Master Plan for Corporate Park at Kharghar, Navi Mumbai,' on the envelope should reach the following address latest by 21st March 2017.

Chief Architect & Planner

CIDCO Ltd. CIDCO Bhavan, 4th floor,
CBD Belapur, Navi Mumbai 400614, India.
T: +91-22- 67918475/8469 | E: cp@cidco.maharashtra.gov.in
For more information log on to www.cidco.maharashtra.gov.in



URBAN PLANNING AND DESIGN . INFRASTRUCTURE . TRANSPORTATION . HOUSING . URBAN MANAGEMENT

CIDCO/PR/434/2016-17

GENERAL PROCUREMENT NOTICE

Kingdom of Bahrain Bahrain Authority for Culture & Antiquities Directorate Of Human Resources & Finance

MUHARRAQ PEARLING HERITAGE CONSERVATION AND URBAN ECONOMIC REVIVAL (Istisna'a No. BH0061-)

The Directorate of Human & Financial Resources invites quotations for the following tender:

Tender Title							
Construction of the				Day	Date	Time	
Pearl Path Public Squares	2016/09	5000	50	Wednesday	01 Mar 2017	13:30	

The Government of the Kingdom of Bahrain has received financing from the Islamic Development Bank (IDB) towards the costs of the Muharraq Pearling Heritage Conservation and Urban Economic Revival Project in the city of Muharraq and intends to apply the proceeds to payments for the eligible goods and works to be procured under this project. The project involves the rehabilitation and conservation of 12 historical buildings (inscribed on the UNESCO World Heritage List) linear historical buildings (inscribed on the UNESCO World Heritage List) linear historical buildings (inscribed on the UNESCO World Heritage List) linear historical state of the Pearling Pathway, In addition to these buildings, a number of properties of significant historic value shall also be conserved and rehabilitated under this project also involves construction of 17 open public spaces, a visitor center, pedestrian bridge and 4 parking buildings.

The object of this procurement notice is the execution contract for the construction of 17 open public spaces along the Pearling Pathway. Designed by Office KGDVS and equipped with trees providing shading and lighting elements, these spaces are destined to be appropriated by the all members of the community in a multitude of ways, improving the outdoor experience of the Muharraq streets and providing a place for gathering, leisure, recreation, and rest. They are also markers for visitors to find their way along the Pearling Pathway and are connected by lighting elements to facilitate the way finding process. The dimensions of the Public spaces vary between 90 and 400 square meters.

Bidding will be conducted using International Competitive Bidding procedures among IDB member countries as specified in "the Guidelines for Procurement of Goods and Works under Islamic Development Bank Financing" (current edition), and is open to all eligible bidders as defined in the guidelines. Those who are Capable and want to participate in the above tender has to call the Administration Services Section (Tet+973 17299878) or (+973 17299876) or (+973 17299873) during the working hours; and log in the website (https://etendering.tenderboard.gov.bh) to purchase the documents using the company's user name and password, on 29/12/2016. Last date for collection Tender documents is 01/03/2017 and to Enclose with his offer the Initial Bond for the amount specified above provided that no initial bonds value 1% from the total cost or shall be less than BD. 100/- . The initial bond should be in the form of a Certified Cheque, Bank Guarantee, cash or Insurance Policy valid for the duration specified in the tender documents.

- For assistance in using the website mentioned above, participants can call help desk (+973 17566617) or (+973 17566641).
- · Offers should be deposited in the tender box provided at Tendering submission office, Tender Board's Office at Al Moayeed Tower, Seef Area, (7th Floor).
- In addition these conditions has to be considered:
- 1. Form no.)TB 02 (is to be filled completely, mentioning the Total Tender Value and Unit Price (accordingly).
- 2. All tender documents (Original / Copy) which has been submitted with the offers should be stamped with the company's Stamp.
- This advertisement is considered to be a supplementary to the tender Documents.



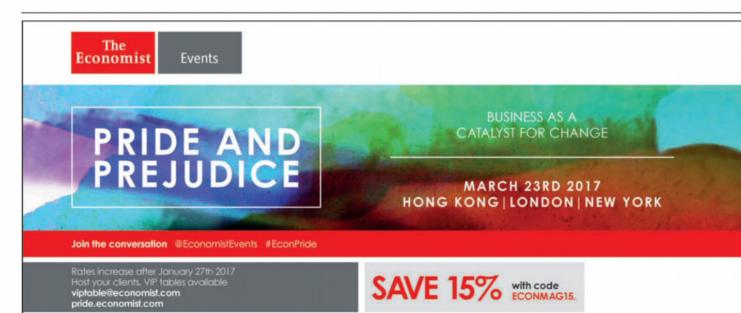


Economic and financial indicators

Economic data

% change on ye	-			Industrial				Current-accou		Budget balance	Interest rates, %		
	Gross dom			production			Unemployment	latest 12	% of GDP	% of GDP	10-year gov't		units, per \$
	latest	qtr*	2016 [†]	latest	latest	2016†	rate, %	months, \$bn	2016 [†]	2016†	bonds, latest	Jan 18th	year ago
United States	+1.7 Q3	+3.5	+1.6	+0.5 Dec	+2.1 Dec	+1.4	4.7 Dec	-476.5 Q3	-2.6	-3.2	2.35	-	-
China	+6.7 Q3	+7.4	+6.7	+6.2 Nov	+2.1 Dec	+2.0	4.0 Q3§	+264.6 Q3	+2.3	-3.8	2.99§§	6.83	6.58
Japan	+1.1 Q3	+1.3	+0.9	+4.6 Nov	+0.5 Nov	-0.2	3.1 Nov	+189.1 Nov	+3.7	-5.6	0.05	113	117
Britain	+2.2 Q3	+2.3	+2.0	+1.9 Nov	+1.6 Dec	+0.7	4.8 0ct ^{††}	-138.1 Q3	-5.6	-3.7	1.37	0.81	0.70
Canada	+1.3 Q3	+3.5	+1.2	+1.6 0ct	+1.2 Nov	+1.5	6.9 Dec	53.6 Q3	3.5	-2.5	1.71	1.31	1.45
Euro area	+1.7 Q3	+1.4	+1.6	+3.2 Nov	+1.1 Dec	+0.3	9.8 Nov	+384.3 0ct	+3.3	-1.8	0.36	0.94	0.92
Austria	+1.2 Q3	+2.4	+1.5	+0.2 Oct	+1.4 Dec	+1.0	5.8 Nov	+8.0 Q3	+2.2	-0.9	0.52	0.94	0.92
Belgium	+1.3 Q3	+0.7	+1.2	+2.8 0ct	+2.0 Dec	+1.9	7.6 Nov	+3.4 Sep	+0.9	-3.0	0.73	0.94	0.92
France	+1.0 03	+1.0	+1.2	+1.8 Nov	+0.6 Dec	+0.3	9.5 Nov	-28.6 Nov‡	-1.2	-3.3	0.78	0.94	0.92
Germany	+1.7 Q3	+0.8	+1.8	+2.1 Nov	+1.7 Dec	+0.4	6.0 Dec	+296.9 Nov	+8.8	+1.0	0.36	0.94	0.92
Greece	+1.6 Q3	+3.1	+0.4	+2.3 Nov	nil Dec	nil	23.0 Oct	-1.0 Oct	-0.3	-7.7	7.05	0.94	0.92
Italy	+1.0 Q3	+1.0	+0.9	+3.2 Nov	+0.5 Dec	-0.1	11.9 Nov	+49.5 Oct	+2.4	-2.6	1.97	0.94	0.92
Netherlands	+2.4 Q3	+3.1	+2.1	+2.9 Nov	+1.0 Dec	+0.2	6.6 Nov	+57.1 Q3	+8.6	-1.1	0.43	0.94	0.92
Spain	+3.2 Q3	+2.9	+3.2	+4.6 Nov	+1.6 Dec	-0.3	19.2 Nov	+23.0 Oct	+1.7	-4.6	1.40	0.94	0.92
Czech Republio	+1.6 Q3	+0.9	+2.4	+7.1 Nov	+2.0 Dec	+0.6	5.2 Dec§	+3.7 Q3	+1.5	nil	0.35	25.3	24.9
Denmark	+1.1 Q3	+1.5	+1.0	+13.3 Nov	+0.5 Dec	+0.6	4.2 Nov	+23.9 Nov	+7.5	-1.0	0.38	6.95	6.86
Norway	-0.9 Q3	-1.9	+0.6	+2.6 Nov	+3.5 Dec	+3.5	4.8 Oct ^{‡‡}	+18.0 Q3	+4.4	+3.5	1.62	8.45	8.90
Poland	+2.0 Q3	+0.8	+2.6	+3.3 Nov	+0.8 Dec	-0.7	8.3 Dec§	-3.1 Nov	-0.5	-2.7	3.63	4.08	4.10
Russia	-0.4 Q3	na	-0.5	+2.6 Nov	+5.4 Dec	+7.0	5.4 Nov§	+22.2 Q4	+2.3	-3.7	8.19	59.3	79.1
Sweden	+2.8 Q3	+2.0	+3.1	+0.1 Nov	+1.7 Dec	+1.0	6.2 Nov§	+22.2 Q3	+4.9	-0.3	0.60	8.91	8.59
Switzerland	+1.3 Q3	+0.2	+1.4	+0.4 Q3	nil Dec	-0.5	3.3 Dec	+68.2 03	+9.4	+0.2	-0.18	1.00	1.01
Turkey	-1.8 Q3	na	+2.7	+4.6 Nov	+8.5 Dec	+7.8	11.8 Oct§	-33.7 Nov	-4.7	-1.8	11.33	3.77	3.03
Australia	+1.8 Q3	-1.9	+2.4	-0.2 Q3	+1.3 Q3	+1.3	5.8 Dec	-47.9 Q3	-3.2	-2.1	2.68	1.32	1.45
Hong Kong	+1.9 Q3	+2.5	+1.6	-0.1 Q3	+1.3 Nov	+2.4	3.3 Nov ^{‡‡}	+13.3 Q3	+2.9	+1.6	1.76	7.76	7.80
India	+7.3 Q3	+8.3	+7.0	+5.7 Nov	+3.4 Dec	+4.9	5.0 2015	-11.1 Q3	-0.6	-3.8	6.45	68.1	67.7
Indonesia	+5.0 Q3	na	+5.0	-2.3 Nov	+3.0 Dec	+3.5	5.6 Q3§	-19.2 Q3	-2.1	-2.3	7.48	13,343	13,933
Malaysia	+4.3 Q3	na	+4.3	+6.2 Nov	+1.8 Dec	+2.1	3.4 Nov§	+5.6 Q3	+1.7	-3.4	4.26	4.44	4.40
Pakistan	+5.7 2016**	na	+5.7	+8.0 Nov	+3.7 Dec	+3.8	5.9 2015	-5.0 Q4	-1.4	-4.6	8.03†††	105	105
Philippines	+7.1 Q3	+4.9	+6.9	+14.6 Nov	+2.6 Dec	+1.8	4.7 Q4§	+3.1 Sep	+0.9	-2.3	4.29	49.8	47.7
Singapore	+1.1 Q3	+9.1	+1.8	+11.9 Nov	nil Nov	-0.5	2.1 Q3	+63.0 Q3	+22.5	+0.7	2.32	1.42	1.44
South Korea	+2.6 Q3	+2.5	+2.7	+4.8 Nov	+1.3 Dec	+1.0	3.2 Dec§	+99.0 Nov	+7.2	-1.3	2.13	1,167	1,211
Taiwan	+2.0 Q3	+3.9	+1.1	+8.8 Nov	+1.7 Dec	+1.4	3.8 Nov	+74.7 Q3	+13.0	-0.4	1.18	31.5	33.6
Thailand	+3.2 Q3	+2.2	+3.2	+3.8 Nov	+1.1 Dec	+0.2	1.0 Nov§	+47.9 Q3	+11.8	-2.3	2.61	35.3	36.3
Argentina	-3.8 Q3	-0.9	-2.1	-2.5 Oct	_ ***		8.5 Q3§	-15.7 Q3	-2.6	-5.3	na	16.0	13.4
Brazil	-2.9 Q3	-3.3	-3.4	-1.1 Nov	+6.3 Dec	+8.4	11.9 Nov§	-20.3 Nov	-1.2	-6.3	10.77	3.22	4.03
Chile	+1.6 Q3	+2.5	+1.8	-1.4 Nov	+2.7 Dec	+3.8	6.2 Nov§‡‡	-4.8 Q3	-1.9	-2.7	4.16	659	730
Colombia	+1.2 Q3	+1.3	+1.6	+1.6 Nov	+5.7 Dec	+7.5	7.5 Nov§	-13.7 Q3	-4.8	-3.7	6.91	2,935	3,301
Mexico	+2.0 Q3	+4.0	+2.1	+1.3 Nov	+3.4 Dec	+2.9	3.6 Nov	-30.6 Q3	-2.8	-3.0	7.74	21.8	18.3
Venezuela	-8.8 Q4~	-6.2	-13.7	na	na	+424	7.3 Apr§	-17.8 Q3~	-2.9	-24.3	10.43	10.0	6.31
Egypt	+4.5 Q2	na	+4.3		+23.3 Dec	+13.2	12.6 Q3§	-20.8 Q3	-6.8	-12.2	na	18.9	7.83
Israel	+5.2 Q3	+3.6	+3.3	-0.8 Oct	-0.2 Dec	-0.5	4.5 Nov	+13.3 Q3	+2.8	-2.4	2.32	3.81	3.95
Saudi Arabia	+1.4 2016	na	+1.4	na	+2.3 Nov	+3.6	5.6 2015	-46.8 Q3	-5.5	-11.2	na	3.75	3.75
South Africa	+0.7 Q3	+0.2	+0.5	+0.5 Nov	+6.8 Dec	+6.3	27.1 Q3§	-12.3 Q3	-3.9	-3.4	8.64	13.5	16.8

Source: Haver Analytics. *% change on previous quarter, annual rate, †The Economist Poll or Economist Intelligence Unit estimate/forecast. \$Not seasonally adjusted. †New series. ~2014 **Year ending June. ††Latest 3 months. ††3-month moving average. \$5-year yield. ***Official number not yet proved to be reliable; The State Street PriceStats Inflation Index, Nov 35.38%; year ago 25.30% †††Dollar-denominated bonds.



Markets

		%	change o	n
			Dec 31st	2015
	Index Jan 18th	one week	in local currency	in \$ terms
United States (DJIA)	19,804.7	-0.7	+13.7	+13.7
China (SSEA)	3,259.8	-0.7	-12.0	-16.4
Japan (Nikkei 225)	18,894.4	-2.4	-0.7	+5.4
Britain (FTSE 100)	7,247.6	-0.6	+16.1	-2.8
Canada (S&P TSX)	15,397.9	-0.6	+18.4	+25.6
Euro area (FTSE Euro 100) 1,114.0	-0.5	+1.8	+0.2
Euro area (EURO STOXX 5	0) 3,294.0	-0.4	+0.8	-0.8
Austria (ATX)	2,659.3	-0.4	+10.9	+9.2
Belgium (Bel 20)	3,584.3	-1.0	-3.1	-4.6
France (CAC 40)	4,853.4	-0.7	+4.7	+3.0
Germany (DAX)*	11,599.4	-0.4	+8.0	+6.3
Greece (Athex Comp)	643.5	-3.0	+1.9	+0.3
Italy (FTSE/MIB)	19,358.1	-0.7	-9.6	-11.0
Netherlands (AEX)	484.8	-0.4	+9.7	+8.0
Spain (Madrid SE)	946.8	-0.3	-1.9	-3.4
Czech Republic (PX)	925.9	-0.2	-3.2	-4.7
Denmark (OMXCB)	805.2	-0.7	-11.2	-12.3
Hungary (BUX)	32,841.3	-0.4	+37.3	+38.7
Norway (OSEAX)	774.5	nil	+19.3	+25.0
Poland (WIG)	53,431.9	-0.5	+15.0	+11.3
Russia (RTS, \$ terms)	1,151.7	-0.3	+23.6	+52.1
Sweden (OMXS30)	1,516.0	+0.3	+4.8	-0.9
Switzerland (SMI)	8,312.4	-1.4	-5.7	-5.8
Turkey (BIST)	82,779.3	+6.6	+15.4	-10.6
Australia (All Ord.)	5,733.7	-1.5	+7.3	+10.6
Hong Kong (Hang Seng)	23,098.3	+0.7	+5.4	+5.3
India (BSE)	27,257.6	+0.4	+4.4	+1.5
Indonesia (JSX)	5,294.8	-0.1	+15.3	+19.1
Malaysia (KLSE)	1,665.0	-0.6	-1.6	-5.0
Pakistan (KSE)	48,642.2	-1.5	+48.2	+48.1
Singapore (STI)	3,000.2 2,070.5	nil -0.2	+4.1 +5.6	+3.9
South Korea (KOSPI) Taiwan (TWI)	9,342.0	-0.2 nil	+12.0	+16.7
Thailand (SET)	1,560.8	-0.8	+21.2	+23.5
Argentina (MERV)	18,870.1	+2.2	+61.6	+30.9
Brazil (BVSP)	64,149.6	+2.7	+48.0	+81.9
Chile (IGPA)	21,264.1	+1.3	+17.1	+25.9
Colombia (IGBC)	10,161.5	-1.2	+18.9	+28.6
Mexico (IPC)	46,360.6	+0.9	+7.9	-14.5
Venezuela (IBC)	30,166.8	-7.9	+107	na
Egypt (EGX 30)	13,304.4	+1.6	+89.9	-20.9
Israel (TA-100)	1,261.0	-1.2	-4.1	-2.0
Saudi Arabia (Tadawul)	6,853.5	-0.6	-0.8	-0.8
South Africa (JSE AS)	52,933.3	+0.9	+4.4	+20.0
(//	,			

New passenger-car registrations

China's car industry boomed last year: the world's largest auto market saw the number of passenger cars sold swell by 15%, thanks to government tax incentives. Growth will probably slow this year as the stimulus is phased out. New passenger-car registrations in the European Union rose for the third consecutive year. Although Volkswagen saw its share of the European market shrink following its emissions-testing scandal, it remained the best-selling brand. Sales in Britain do not seem to have been strongly affected by the Brexit referendum; and low interest rates could keep sales buoyant. Although 17.6m cars were sold in the United States last year, sales are expected to plateau or decline.

Other markets

		% change on				
			Dec 31st 2015			
	Index	one	in local in\$			
	Jan 18th	week	currency terms			
United States (S&P 500)	2,271.9	-0.2	+11.2 +11.2			
United States (NAScomp)	5,555.7	-0.1	+10.9 +10.9			
China (SSEB, \$ terms)	332.4	-2.9	-18.0 -22.0			
Japan (Topix)	1,513.9	-2.4	-2.2 +3.9			
Europe (FTSEurofirst 300)	1,434.0	-0.6	-0.2 -1.8			
World, dev'd (MSCI)	1,785.7	+0.4	+7.4 +7.4			
Emerging markets (MSCI)	897.9	+1.3	+13.1 +13.1			
World, all (MSCI)	431.1	+0.5	+7.9 +7.9			
World bonds (Citigroup)	892.6	+1.5	+2.6 +2.6			
EMBI+ (JPMorgan)	785.4	+0.9	+11.5 +11.5			
Hedge funds (HFRX)	1,207.2§	-0.3	+2.8 +2.8			
Volatility, US (VIX)	12.5	+11.3	+18.2 (levels)			
CDSs, Eur (iTRAXX)†	70.0	+1.2	-9.3 -10.7			
CDSs, N Am (CDX)†	66.4	+0.3	-24.8 -24.8			
Carbon trading (EU ETS) €	4.9	-4.0	-42.1 -43.0			
Sources: Markit; Thomson Re	uters. *Tot	al return	index.			

Indicators for more countries and additional series, go to: Economist.com/indicators

†Credit-default-swap spreads, basis points. §Jan17th.

2016, % change on a year earlier

	24	18	12	6 - 0 +	6	12	18	
Italy								1.8
China*								24.3
Spain								1.1
Belgiun	n							0.5
Europed Union	an							14.6
France								2.0
German	ıy							3.4
Britain								2.7
United States*	†							17.6
Japan								4.1
Russia*	‡							1.4
Brazil						Tota	al, m	1.7
Sources: ANFAVEA JAMA; TI	A; Auto	data;		‡Includes				*Sales ght trucks al vehicles

The Economist commodity-price index

2005=100			% change or		
	Jan 10th	Jan 17th*	one month	one year	
Dollar Index					
All Items	144.7	148.1	+4.3	+19.8	
Food	157.0	161.0	+4.0	+10.7	
Industrials					
All	131.9	134.7	+4.7	+33.4	
Nfa⁺	141.9	146.4	+7.3	+37.4	
Metals	127.6	129.7	+3.6	+31.5	
Sterling Index					
All items	216.0	223.3	+6.8	+40.4	
Euro Index					
All items	169.9	173.7	+2.1	+23.1	
Gold					
\$ per oz	1,188.1	1,202.5	+6.3	+10.7	
West Texas Inte	ermediate				
\$ per barrel	50.8	52.5	+1.1	+85.0	
Sources: Bloombe	rg; CME Group	; Cotlook; Darme	enn & Curl;	FT; ICCO;	

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.



Sniffing the breezes

Clare Hollingworth, foreign correspondent, died on January 10th, aged 105

WELL into her 80s Clare Hollingworth would sleep on the floor every week or so, just to prevent her body from getting "too soft". Her passport was to hand, with visas up to date, just in case the foreign desk rang. She liked to have two packed suitcases, one for hot climates, one for cold, though her wardrobe was notoriously sparse: in later life she was seldom seen in anything but a safari suit and cloth shoes. And all you really needed, she said, were the "T & T"—typewriter and toothbrush.

Hardiness and bravery were her hall-marks. Neither shot nor shell ruffled herexcitement trumped fear, she said. She admitted to disliking only rickety lifts, and fleas in her hair. But she didn't mind bedbugs, going without food for five or six days, or not washing for even longer (despite entreaties from her colleagues).

She could swim, ride, ski, fly a plane and jump with a parachute. And shoot: during the war she slept with a revolver under her pillow; spares included a small pearl-handled one for her evening bag. Aged nearly 80, she was seen climbing a lamppost to gain a better look at the crackdown in Tiananmen Square. She once avoided arrest in Bucharest by staying wrapped only in a towel. Romanian secret police might strip a woman, she reckoned, but would not dress one by force.

Her wiles were legendary. She ruthlessly trounced rivals, broke rules and exploited an unmatched array of contacts. When India banned foreigners from covering the war with Pakistan in 1965, she cajoled the prime minister, Indira Gandhi—whom she knew from a previous posting in Paris—into making an exception. She then asked to bring along two "servants" (in fact, they were colleagues). She had a knack for the telling detail: still-wet concrete in a Polish gun emplacement as the country buckled under the German assault, or insanitary plumbing in a supposedly advanced Chinese arms factory.

Laconic and unadventurous in print, she was better at getting the story than telling it. Her husband, Geoffrey Hoare, also a journalist, would briskly correct the spelling, enliven the prose, and unearth the lead—which she tended to bury five paragraphs down, prefaced, cryptically, with "according to certain sources".

And what sources they were. She quizzed and befriended generals, prime ministers and spymasters, politely but relentlessly. She gained the first interview with the last Shah of Iran in 1941; after his fall in 1979, he said he would speak only to her. Another scoop, in 1968, was the plans for peace talks to end the Vietnam war, brought to her in Saigon cathedral by an

anonymous source. At an age when most journalists are contemplating retirement, she moved to Beijing to open the *Daily Telegraph* bureau. Though she spoke not a word of Chinese (languages were not her thing) she became a notable China-watcher. Scoops there included Mao's stroke in 1974 and Deng Xiaoping's rise. Both were met with scepticism; both proved true.

It all started in August 1939, when, aged 27 and a foreign correspondent for barely four days, she commandeered a British consulate car and drove into Germany from Poland. A gust of wind lifted a road-side hessian screen, revealing Hitler's army, mustered for the invasion. It was to be the scoop of the century, though at first nobody believed her. On her return she had to produce her shopping—German products unavailable in Poland—to show she had crossed the border.

It was a similar story with her next scoop, that the invasion had started. The official line was that talks were still continuing—so she held her telephone out of the window to prove to Warsaw that tanks were indeed roaring into battle. When she deduced that Kim Philby, a former British spy, had defected to Moscow, her editors sat on that story for three months (she later took over his job, writing for this paper from Beirut).

She was sometimes thought to be a spy herself—a notion she airily dismissed by saying that there was no need: if she found out anything like that she would tell the British military attaché anyway. In fact, the spy world originally regarded her with deep mistrust for helping some undesirable communists reach Britain (part of her unsung, pre-journalistic work with refugees in pre-war Poland).

Pots and kettles

She was loyal when it mattered. In Algiers she marshalled her fellows into a 30-strong posse to accompany (and save the life of) a journalist arrested by paramilitaries. But she was mostly a difficult colleague. As an editor in London, she habitually second-guessed her correspondents: "clare-voyance", they called it crossly. She struck most people as driven and unreflective. But a biography compiled from diaries and letters revealed a more three-dimensional picture, including a conversion to Catholicism prompted by her husband's adultery (she also threatened to shoot his mistress). Her own love life was discreetly lively, too.

She was ferociously competitive, unabashedly criticising female colleagues for being "pushy", or for—perish the thought—using their femininity to get ahead. Retirement was also anathema. Even in her final, half-blind years she haunted the Foreign Correspondents' Club in Hong Kong, poring over the news, with passport at the ready, just in case.