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

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The world this week

Politics



A record audience tuned in to the first presidential debate of the election campaign. Polling suggested that most voters thought Hillary Clinton put in a better performance than Donald Trump. He blamed the moderator and a defective microphone, and said he had held back because he "didn't want to hurt anyone's feelings".

Congress overrode a presidential veto by Barack Obama for the first time, voting overwhelmingly to reinstate a bill that allows Americans to sue foreign governments if they are found to have played a role in terrorist attacks. Mr Obama had vetoed the bill on the ground that it would open America to reciprocal lawsuits from foreign countries.

The number of murders in America rose by 10.8% last year, according to the FBI, the sharpest rise in decades. The murder rate rose to 4.9 for every 100,000 people, the highest since 2009.

Peace in our time

The government of Colombia and the FARC guerrilla army signed an agreement to end their 52-year-long war. Colombia's president, Juan Manuel Santos, and the FARC's leader, known as Timochenko, used a pen fashioned from a bullet casing to sign the accord. Colombians are to vote on the peace deal in a referendum on October 2nd.

Brazilian police arrested Antonio Palocci, a former finance minister and chief of staff of the former president,

Dilma Rousseff, in connection with the corruption scandal centred on Petrobras, the statecontrolled oil giant. Mr Palocci's lawyers say he did nothing wrong.

Unrelenting

Russian and Syrian air strikes continued in Aleppo, where rebel forces occupy the eastern part of the city. Most of their stronghold is now without water. No aid is getting in, and hospitals and bakeries are being targeted.

Shimon Peres, a former president and prime minister of Israel, died at the age of 93. He was the last of Israel's founding fathers and the architect of its nuclear programme. Mr Peres shared the Nobel peace prize in 1994 for his efforts to bring peace to the Middle East.



Around 15,000 Saudi women signed a petition to abolish laws barring them from marrying, travelling or working without permission from a male guardian.

A jihadist who had pleaded guilty at the International Criminal Court to destroying ancient shrines in Mali was sentenced to nine years in prison. It was the first case of its kind to be heard at the ICC.

The long arm of the law

China criticised America's decision to impose sanctions on a Chinese company dealing in industrial machinery. The Treasury banned American firms from doing business with Dandong Hongxiang because of alleged links to North Korea's nuclear programme. China had said it was investigating the links itself. It accused America of attempting "long-arm jurisdiction".

Chinese fighters and bombers flew close to Japanese territory on their way to take part in an exercise in the western Pacific. They traversed the Miyako Strait between Taiwan and the Japanese island of Okinawa. Japan said it was the first time that Chinese aircraft had used the route. It scrambled its own jets, but no violations of Japan's airspace were reported.

India said it had carried out strikes against Pakistan-based militants on the border with the disputed state of Kashmir. Two Pakistani soldiers were killed in the barrage. With tensions on the rise, India decided to boycott a regional summit in Pakistan, and also threatened to review watersharing agreements and trade arrangements with its neighbour.

A court in Malaysia jailed an opposition politician, Tian Chua, for sedition. He had urged the public to protest against the government.

Amnesty International cancelled a public briefing about torture in Thailand after the police said the speakers would face arrest. A Thai government committee ordered Yingluck Shinawatra, a former prime minister ousted in a military coup, to pay a fine of \$1 billion for negligence related to a subsidy scheme for rice farmers. Ms Yingluck said the fine was politically motivated.

The evidence mounts

A Dutch-led criminal investigation found that a Malaysian Airlines flight, MH17, was shot down over Ukraine in 2014 by а вик anti-aircraft missile that had been brought in from Russia, and fired from territory held by Russian-backed separatist rebels. The investigators released telephone intercepts of Russian-speaking forces requesting the missiles to stop Ukrainian air-force attacks.

Italy's prime minister, Matteo Renzi, set December 4th as the date for a national referendum to approve constitutional changes simplifying the country's Byzantine parliamentary system. Mr Renzi, a reformist centre-leftist, has staked his political future on the referendum's success.

Moody's, a credit-rating agency, downgraded Turkey's bonds to junk status. A government adviser compared the ratings decision to the failed coup attempt in July, and the prime minister declared it was "not impartial".

François Hollande, the president of France, promised to demolish the migrant camp outside Calais known as "the Jungle". Mr Hollande said that the agreement under which British border checks take place on the French side would stand, but vowed to press Britain for more aid for the refugees drawn by the tunnel.



Jeremy Corbyn won re-election as leader of Britain's Labour Party, slightly increasing his share of the vote to 61.8%. The bulk of his support came from members who joined after the general election in 2015. The result will not resolve the party's deep divisions. John McDonnell, the shadow chancellor, promised to bring socialism back to the mainstream, which is unlikely to be popular with voters.

Sam Allardyce resigned as the manager of **England's** football team after a newspaper caught him on camera advising a fake Asian firm on how to circumvent Football Association rules. Several football agents were filmed making various claims about corruption, with one saying the problem was worse in England than in his native Italy. Another said one manager had taken more backhanders than Wimbledon.

The world this week The Economist October 1st 2016

Business

Deutsche Bank denied reports that it had discussed a rescue package with the German government following a request from American regulators that it pay \$14 billion to settle claims related to mortgage-backed securities. Speculation about the discussions further spooked investors already jittery about its weak capital position. Trying to address some of those concerns, Deutsche this week sold its Abbey Life insurance business, raising \$1.2 billion.

On the defence

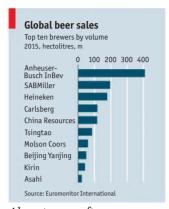
Mario Draghi, the president of the European Central Bank, was dragged into the furore over Deutsche when he went to Germany to face lawmakers who have voiced doubts about the ECB's policies. His first such trip in four years came amid intensifying criticism in Germany that low interest rates are hurting the economy.

The state of California suspended its business dealings with Wells Fargo in response to the bank's admission that employees created up to 2m fake customer accounts to hit sales targets. The bank's board stripped John Stumpf, the beleaguered chief executive, of \$41m in stock awards and his bonus for the year. Mr Stumpf was once again hauled in front of Congress this week.

The Chicago Board Options Exchange, best known for its Vix indices of market volatility, agreed to buy BATS Global Markets for \$3.2 billion. Based in Kansas, BATS started life only in 2005 and is now America's second-largest equities exchange.

Taking markets by surprise, OPEC announced that its members had reached a preliminary deal to reduce oil output, the first cut in production since 2008. Oil prices surged after the announcement. However, few details were provided about how much each country would trim back. OPEC said the spe-

cifics would be thrashed out at a meeting in November, but given long-standing disputes between Iran and Saudi Arabia, doubts were raised that the plan would come to pass.



Almost a year after announcing their intention to merge, and having sold off assets to satisfy antitrust regulators, shareholders in both Anheuser-Busch InBev and SABMiller agreed to the deal. The more than \$100 billion acquisition creates a brewer with 30% of the global market.

Google's autonomous-car technology hit a bump in the road when another of its vehicles was involved in a crash. Described as the worst accident so far, the car was hit by a van that passed a red light. Google's cars have been in-

volved in a number of collisions but most, including the latest incident, have been the fault of the other car. It has 58 vehicles on the road, which in August covered a total distance in autonomous mode of 126,000 miles (200,000km). That is more than the average American drives in ten years.

Politicians in America demanded more information from Yahoo about the hacking of 500m customer accounts in 2014. Thought to be the biggest data breach to date, Yahoo says that it only discovered the hack this summer. Questions were asked about how quickly it moved to inform investors and users.

A former addiction

BlackBerry threw in the towel and announced that it will no longer design or make smartphones, and instead outsource their development to other companies so that it can focus on software and services.

BlackBerry shaped the emerging smartphone industry of 15 years ago, but rapidly fell behind its rivals: it now has less than 1% of global sales.

It was a big week for techtakeover rumours. **Twitter's** share price surged amid reports that Salesforce, a provider of cloud-based software, was interested in taking it over. Other companies, including Disney and Google, are also said to be tempted. And **Spotify** was rumoured to be in talks to buy **SoundCloud**, which would shake up the digitalmusic industry.

After toying with the idea for years, **Pfizer** decided not to split into two companies. It said the financial incentive for hiving off its business in drugs that are no longer protected by patents had narrowed.

Rocket man

Elon Musk set out his longawaited vision for sending people to Mars. The founder of Spacex and Tesla Motors thinks this could be possible within ten years if there are no hitches, though he admits there is a "good chance" of not succeeding that quickly. His detractors decried it as pure science fiction; his backers point out that Spacex has already overturned conventional wisdom about rocketry. Mr Musk says his goal is to bring the cost of going to Mars down to \$200,000 for a ticket, though it is unclear if this is for a one-way trip or a return.

Other economic data and news can be found on Pages 84-85



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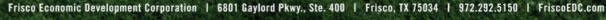
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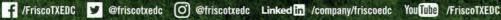














Why they're wrong

Globalisation's critics say it benefits only the elite. In fact, a less open world would hurt the poor most of all



N SEPTEMBER 1843 the Liverpool Mercury reported on a large free-trade rally in the city. The Royal Amphitheatre was overflowing. John Bright, a newly elected MP, spoke eloquently on the merits of abolishing duties on imported food, echoing

arguments made in The Economist, a fledgling newspaper. Mr Bright told his audience that when canvassing, he had explained "how stonemasons, shoemakers, carpenters and every kind of artisan suffered if the trade of the country was restricted." His speech in Liverpool was roundly cheered.

It is hard to imagine, 173 years later, a leading Western politician being lauded for a defence of free trade. Neither candidate in America's presidential election is a champion. Donald Trump, incoherent on so many fronts, is clear in this area: unfair competition from foreigners has destroyed jobs at home. He threatens to dismantle the North American Free Trade Agreement, withdraw from the Trans-Pacific Partnership (TPP) and start a trade war with China. To her discredit, Hillary Clinton now denounces the TPP, a pact she helped negotiate. In Germany, one of the world's biggest exporters, tens of thousands took to the streets earlier this month to march against a proposed trade deal between the European Union and the United States (see page 67).

The backlash against trade is just one symptom of a pervasive anxiety about the effects of open economies. Britain's Brexit vote reflected concerns about the impact of unfettered migration on public services, jobs and culture. Big businesses are slammed for using foreign boltholes to dodge taxes. Such critiques contain some truth: more must be done to help those who lose out from openness. But there is a world of difference between improving globalisation and reversing it. The idea that globalisation is a scam that benefits only corporations and the rich could scarcely be more wrong.

The real pro-poor policy

Exhibit A is the vast improvement in global living standards in the decades after the second world war, which was underpinned by an explosion in world trade. Exports of goods rose from 8% of world GDP in 1950 to almost 20% a half-century later. Export-led growth and foreign investment have dragged hundreds of millions out of poverty in China, and transformed economies from Ireland to South Korea.

Plainly, Western voters are not much comforted by this extraordinary transformation in the fortunes of emerging markets. But at home, too, the overall benefits of free trade are unarguable. Exporting firms are more productive and pay higher wages than those that serve only the domestic market. Half of America's exports go to countries with which it has a freetrade deal, even though their economies account for less than a tenth of global GDP.

Protectionism, by contrast, hurts consumers and does little for workers. The worst-off benefit far more from trade than the rich. A study of 40 countries found that the richest consumers would lose 28% of their purchasing power if cross-border trade ended; but those in the bottom tenth would lose 63%. The annual cost to American consumers of switching to non-Chinese tyres after Barack Obama slapped on anti-dumping tariffs in 2009 was around \$1.1 billion, according to the Peterson Institute for International Economics. That amounts to over \$900,000 for each of the 1,200 jobs that were "saved".

Openness delivers other benefits. Migrants improve not just their own lives but the economies of host countries: European immigrants who arrived in Britain since 2000 have been net contributors to the exchequer, adding more than £20 billion (\$34 billion) to the public finances between 2001 and 2011. Foreign direct investment delivers competition, technology, management know-how and jobs, which is why China's overly cautious moves to encourage FDI disappoint (see page 62).

What have you done for me lately?

None of this is to deny that globalisation has its flaws. Since the 1840s advocates of free trade have known that, though the great majority benefit, some lose out. Too little has been done to help these people. Perhaps a fifth of the 6m or so net job losses in American manufacturing between 1999 and 2011 stemmed from Chinese competition; many of those who lost jobs did not find new ones. With hindsight, politicians in Britain were too blithe about the pressures that migration from new EU member states in eastern Europe brought to bear on public services. And although there are no street protests about the speed and fickleness in the tides of short-term capital, its ebb and flow across borders have often proved damaging, not least in the euro zone's debt-ridden countries.

As our special report this week argues, more must be done to tackle these downsides. America spends a paltry 0.1% of its GDP, one-sixth of the rich-country average, on policies to retrain workers and help them find new jobs. In this context, it is lamentable that neither Mr Trump nor Mrs Clinton offers policies to help those whose jobs have been affected by trade or cheaper technology. On migration, it makes sense to follow the example of Denmark and link local-government revenues to the number of incomers, so that strains on schools, hospitals and housing can be eased. Many see the rules that bind signatories to trade pacts as an affront to democracy. But there are ways that shared rules can enhance national autonomy. Harmonising norms on how multinational firms are taxed would give countries greater command over their public finances. A co-ordinated approach to curbing volatile capital flows would restore mastery over national monetary policy.

These are the sensible responses to the peddlers of protectionism and nativism. The worst answer would be for countries to turn their backs on globalisation. The case for openness remains much the same as it did when this newspaper was founded to support the repeal of the Corn Laws. There are more-and more varied-opportunities in open economies than in closed ones. And, in general, greater opportunity makes people better off. Since the 1840s, free-traders have believed that closed economies favour the powerful and hurt the labouring classes. They were right then. They are right now. ■

Leaders The Economist October 1st 2016

Election 2016

Lessons of the debate

The first presidential debate underlined how much Donald Trump diverges from long-held Republican ideals



MUCH analysis of the first presidential debate between Donald Trump and Hillary Clinton focused on Mr Trump's boorishness. Mrs Clinton accused him of having called a beauty queen "Miss Piggy". Mr Trump explained the

next day that the lady in question had "gained a massive amount of weight". No one in the audience, which included 85m Americans and many others around the world, was reminded of the Lincoln-Douglas debates.

The evening did underline, however, vast differences of substance between the two candidates. On policy, Mrs Clinton is solidly within the mainstream of the Democratic Party and not much different from her predecessor. Mr Trump represents something completely new for the Republican Party, as a comparison of his performance on September 26th with the arguments made by Mitt Romney in the debates four years ago makes clear.

In 2012 the Republican nominee chided Barack Obama for his naive attempts to reset relations with Russia, suggesting that Mr Obama had been conned by an ex-KGB spy. In 2016 the Republican nominee praises Vladimir Putin, even as Russian planes rain death on Syria, and reckons that the FBI is mistaken when it suggests that Russian hackers targeted the Democratic National Committee's computers. In 2012 the Republican nominee was a strong supporter of trade with Mexico and Canada, and hoped to pursue more free-trade deals. In 2016 the Republican nominee calls NAFTA "the worst trade deal maybe ever signed anywhere", and chides unpatriotic American firms for moving jobs to Mexico. Mr Romney fretted about the national debt; Mr Trump would send it soaring.

Four years ago, Mr Romney was thought to have made a

costly mistake when he dismissed the 47% of Americans who pay no federal income tax as moochers. Mr Trump boasted about his skill in reducing his tax bill ("That makes me smart"). After Mr Romney lost the election in 2012, some Republican strategists concluded that he had seemed too much like a CEO. In the first debate, Mr Trump gave a class on his company's finances ("I'm extremely under-leveraged"), on its terrific assets and why he sometimes didn't pay contractors (see Lexington).

Until this year, a conservative record on questions of faith and personal morality was a prerequisite for winning the Republican nomination. During the 2012 primaries there was speculation about whether Mr Romney's quiet Mormon faith would put off such values voters. In 2016 this has all been erased. When Mr Trump divorced the first of his three wives, Ivana, he let the New York tabloids know that one reason for the separation was that her breast implants felt all wrong.

Wanted: any good ideas

Just over a month from the election is a good time to wonder why the Republican Party has a nominee who has abandoned so many conservative ideas and trampled over conservative values. One charitable interpretation is that everything can be explained by Mr Trump's fame and charisma, which enable him to tap into a deep vein of voter vitriol against established politicians and give him permission to do and say things that other candidates cannot. Another is that, for some Republicans, hatred of Mrs Clinton has become more important than any idea or principle. Most simply, this election has laid bare the party's intellectual exhaustion. Conservative leaders have spent years draping a tired tax-cutting agenda in populist slogans. Now a true populist has taken charge, and party grandees can only hope he does not mean all that he says. It is a stunning shift. And it matters. Presidential elections, unlike beauty contests, have consequences.

The war in Syria

Grozny rules in Aleppo

Why the West must protect the people of Syria, and stand up to Vladimir Putin



JUST when it seems that the war in Syria cannot get any worse, it does. On September 19th Syrian and Russian planes struck a convoy about to deliver aid to besieged parts of Aleppo. The attack wrecked the ceasefire brokered by America and Rus-

sia, and was followed by the worst bombardment that the ancient city has yet seen. Reports speak of bunker-buster, incendiary and white phosphorus bombs raining down.

Bashar al-Assad, Syria's president, is destroying his country to cling to power. And Vladimir Putin, the Russian president, is exporting the scorched-earth methods that he once used to terrify the Chechen capital, Grozny, into submission. Such savagery will not halt jihadism, but stoke it. And American inaction makes it all worse. The agony of Syria is the biggest moral stain on Barack Obama's presidency. And the chaos rippling from Syria—where many now turn to al-Qaeda, not the West, for salvation—is his greatest geopolitical failure.

Mr Obama thinks that resolutely keeping out of the Syrian quagmire is cold, rational statesmanship. He may be "haunted" by the atrocities, but is convinced there is nothing he can usefully do. "Was there some move that is beyond what was being presented to me that maybe a Churchill could have seen, or an Eisenhower might have figured out?" Mr Obama mused >>>



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in a recent interview with Vanity Fair. Mr Obama is right to think that the world's problems cannot all be solved by American power, and that ill-considered intervention can make them worse, as when America invaded Iraq. But Syria's agony shows that the absence of America can be just as damaging.

Cool, rational and wrong

As America has pulled back, others have stepped in—geopolitics abhors a vacuum. Islamic State (1s) has taken over swathes of Syria and Iraq. A new generation of jihadists has been inspired to fight in Syria or attack the West. Turkey, rocked by Kurdish and jihadist violence (and a failed coup), has joined the fight in Syria. Jordan and Lebanon, bursting with refugees, fear they will be sucked in. The exodus of Syrians strengthens Europe's xenophobic populists and endangers the European Union. A belligerent Russia feels emboldened.

By sending warplanes to Syria to prop up Mr Assad, Mr Putin has inflamed the struggle between Shia and Sunni Muslims. Mr Putin and Mr Assad now seem determined to take control of "useful Syria"—the line of cities from Damascus to Aleppo, and the territories to the west, forsaking the desert and the Euphrates valley—before a new American president takes office next year. Hence the ferocity of the assault on east Aleppo, the last major rebel-held urban area.

None of this is in America's interest. Being cool and calculating is not much use if everybody else thinks you are being weak. Even if America cannot fix Syria, it could have helped limit the damage, alleviate suffering and reduce the appeal of jihadism. This newspaper has long advocated safe areas and no-fly zones to protect civilians. The failure to strike Mr Assad's regime after he crossed the "red line" on the use of chemical weapons damaged American credibility, as many around Mr Obama admit. Now it is Russia that sets the rules of the game. Western action that once carried little risk now brings the dan-

ger of a clash with Russia.

Mr Obama says that Mr Assad eventually must go, but has never willed the means to achieve that end. (Some rebel groups receive CIA weapons, but that is about it.) Instead he has concentrated on destroying the caliphate: its Syrian capital, Raqqa, is under threat, and the assault on the Iraqi one, Mosul, is imminent. The president wants to avoid thankless statebuilding and focus on fighting terrorists. This is important, but jihadism is fed by war and state failure: without a broader power-sharing agreement in Syria and Iraq any victory against IS will be short-lived; other jihadists will take its place. To achieve a fair settlement, the West needs greater leverage.

We still hope that Mr Obama will take tougher action. More likely, he will leave the Syrian mess in his successor's in-tray. Any Western strategy must start from two realisations. First, the most important goal in the Middle East is to assuage Sunnis' grievances enough to draw them away from the death-cult of jihadism and into more constructive politics. Second, Russia is not part of the solution, but of the problem.

The West must do more to protect Syrians, mostly Sunnis, who are still beyond the grip of Mr Assad. An undeclared nofly zone over Aleppo may be feasible. America could retaliate against Mr Assad's forces after particularly egregious actions. It could air-drop aid into besieged areas (see page 45). In zones freed from 1s, America should establish a secure hinterland where an alternative government can take root.

As a Dutch-led inquiry into the destruction of flight MHI7 over Ukraine in 2014 makes clear (see page 51), the challenge of Russia is not only, and not mainly, in Syria. The West must keep talking to Mr Putin, but resist his adventurism—starting with the maintenance of EU sanctions. Mr Putin is a bully, but not irrational. He will keep gambling for advantage for as long as he thinks the West is unwilling to act. But he will, surely, retreat as soon as he feels it is serious about standing up to him.

Ending Latin America's oldest war

A messy but necessary peace

Colombians should vote to approve the peace deal with the FARC



FOR longer than most Latin Americans have been alive, Colombia has been at war. The conflict has claimed perhaps 220,000 lives, displaced millions and made Latin America's third-most-populous country far poorer than it would other-

wise have been (see pages 21-24). Its main belligerent was the Revolutionary Armed Forces of Colombia (FARC), a Stalinist rural army that outlived the cold war by turning to drug-dealing and extortion. Now, at last, Colombians have a chance to make peace. In doing so, they could offer an example to other war-racked countries.

The agreement between the government of President Juan Manuel Santos and the FARC, signed in the presence of a dozen heads of state in a moving ceremony in Cartagena on September 26th, carries an unavoidable tension: between justice and peace. If Colombia had insisted that the guerrillas who maimed and murdered be properly punished for their crimes,

they would have no incentive to lay down their arms. That is why in Northern Ireland, South Africa and Central America the settlement of armed conflicts involved amnesties.

International law now requires a greater measure of justice. In Colombia the insurgents will not just disarm but will also appear in court. FARC leaders accused of crimes against humanity will appear before a special peace tribunal to face charges brought by Colombia's attorney-general. Anything less than a full confession, up front, and they will go to jail (albeit for shorter-than-normal periods). Confess, and they will face several years of "effective restrictions on their liberty". The agreement places the victims of the conflict at the centre of the judicial process. The aim is "restorative" justice: no court can bring back a murdered relative, but FARC leaders may be ordered to remove anti-personnel mines they laid, or rebuild shattered villages.

Colombians will be the judge of this compromise, in a plebiscite on October 2nd. Polls suggest they will back the deal, but referendums are unpredictable (remember Brexit?). Critics complain that it offers impunity for heinous crimes. It is in-

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▶ deed hard to accept that FARC leaders who were responsible for holding hostages in chains for years on end, or for terrorist bombs against a Bogotá club and defenceless villagers, should end up in congress rather than in jail, as may happen. But the concessions the government has made are smaller than they look. The tribunal is likely to be rigorous. Colombian public opinion will demand that. And so will the International Criminal Court, which is watching closely.

Álvaro Uribe, a former president, accuses Mr Santos of handing Colombia over to "Castro-chavismo". That shows little faith in his compatriots. The country has a strong and long-standing commitment to democracy, and Colombian voters have shown no liking for Marxists. It will take a generation, genuine contrition and an ideological conversion for the FARC to become electorally competitive. The notion that the agreement will generate further violence, because it rewards crime, is similarly hard to credit. The security forces can now crack down on the remaining illegal armed groups in Colombia, including the organised criminal gangs related to the drug trade. They will have a free hand, too, to tackle any backsliding by the FARC. In Central America, peace was followed by spiralling crime. Because Mr Santos rejected the FARC's demand to

weaken the security forces, Colombia can avoid that.

Advocates of a "No" vote say it would allow a renegotiation, and tougher terms. That is unlikely. The accord comes after four years of hard talking by an able team of government negotiators. The FARC, though weakened, was not defeated. The alternative to the deal is years of further bloodshed.

Peace will not come overnight. The government has pledged to bring roads, public services and development to the remote rural areas hit hardest by the war. The FARC has promised to get out of drugs. Mr Santos says he will pay farmers to grow things other than coca, despite Colombia's squeezed budget. It is vital that Colombians in conflict areas feel a swift improvement in their lives.

Peace, or more war?

Despite its imperfections, the peace agreement deserves voters' backing. Its biggest prize is the least noticed one. The FARC has accepted democracy, the rule of law and the market economy—exactly the things the Colombian state has been struggling for decades to extend to the whole country. That represents enormous progress. Colombia could set an example for other war-torn places to imitate—if Colombians vote "Yes". ■

Colonising Mars

For life, not for an afterlife

Seeking to make Earth expendable is not a good reason to settle other planets



MARS has been much possessed by death. In the late 19th century Percival Lowell, an American astronomer, persuaded much of the public that the red planet was dying of desertification. H.G. Wells, in "The War of the Worlds", imagined Mar-

tian invaders bringing death to Earth; in "The Martian Chronicles" Ray Bradbury pictured humans living among Martian ghosts seeing Earth destroyed in a nuclear spasm. Science was not much cheerier than science fiction: space probes revealed that having once been warmer and wetter, Mars is now cold, cratered and all-but-airless.

Perhaps that is why the dream of taking new life to Mars is such a stirring one. Elon Musk, an entrepreneur, has built a rocket company, Spacex, from scratch in order to make this dream come true. On September 27th he outlined new plans for rockets that dwarf the Apollo programme's Saturn V, and for spaceships with room for around 100 passengers that can be refuelled both in orbit and on Mars. Such infrastructure, he says, would eventually allow thousands of settlers to get there for \$200,000 each—roughly the median cost of an American house. To deliver such marvels in a decade or so is an order tall enough to reach halfway to orbit itself (see page 74). But as a vision, its ambition enthralls.

How odd, then, that Mr Musk's motivation is born in part of a fear as misplaced as it is striking. He portrays a Mars colony as a hedge against Earth-bound extinction. Science-fiction fans have long been familiar with this sort of angst about existential risks—in the 1950s Arthur C. Clarke told them that, confined to Earth "humanity had too many eggs in one rather fragile

basket." Others agree. Stephen Hawking, a noted physicist, is one of those given to such fits of the collywobbles. If humans stick to a single planet, he warns, they will be sitting ducks for a supervirus, a malevolent artificial intelligence or a nuclear war that could finish off the whole lot of them at any time.

Claptrap. It is true that, in the long run, Earth will become uninhabitable. But that long run is about a billion years. To concern oneself with such eventualities is to take an aversion to short-termism beyond the salutary. (For comparison, a billion years ago the most complex creature on the planet was a very simple seaweed.) Yes, a natural or maliciously designed pandemic might kill billions. So might a nuclear war; at a pinch climate change might wreak similar havoc. But extinction is more than just unprecedented mass mortality; it requires getting rid of everyone. Neither diseases nor wars do that.

Otherworldly concerns

An asteroid as big as the one that dispatched the dinosaurs might take out the whole species, but humans have had the foresight to catalogue the asteroids up to the task and none is coming close in the foreseeable future. So the chance of earthly extinction from any known cause in the next few centuries is remarkably low. As for the unknown—an evil AI, or predatory aliens with intellects as "vast and cool and unsympathetic" as those of Wells's Martians, or the good old-fashioned wrath of God—why would they wipe humans from the face of one planet while leaving those on the rock next door in peace?

If worrying about imminent extinction is unrealistic, trying to hide from it is ignoble. At the margins, it is better that the best and brightest share Earth's risks than have a way to run away from them. Dream of Mars, by all means, but do so in a spirit of hope for new life, not fear of death. ■

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It's no secret: business has changed—in every way, for every business. Modern technologies have brought new opportunities and new challenges, like BYOD and a mobile workforce, that old networks just weren't built for. While demand on these networks has increased exponentially, networking costs have skyrocketed and IT budgets haven't kept pace.

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Casualty



You are right, if hardly alone, in pointing out that the National Health Service is in a mess ("Accident and emergency", September 10th). But perhaps you are a little late? A royal commission reported in 1979 that, with an older population and often-expensive technical advances, costs would inevitably grow. We concluded that society must therefore "establish priorities" that would "satisfy reasonable expectations". To do so would require extensive discussions that must be "conducted in public" and "illuminated by fact".

Reorganisation has been succeeded by reorganisation for nearly 40 years, but this basic debate has never been held, for unfortunately obvious reasons. Any admission that health demands must be modified and services restricted, which reasonable expectations and priorities must imply, would be politically embarrassing. But the pill, if bitter, must be swallowed, and the sooner the better. FRANK WELSH Member of the Royal Commission on the NHS 1976-79 Confolens, France

The prescriptions you offered for the ailing NHS were almost as adroit as the overall diagnosis. However, introducing additional fees at the point of access would be a mistake. A five pence charge for plastic shopping bags has suppressed frivolous demand for them because consumers are well placed to balance the pros and cons. The inherent information asymmetry within a consultation carried out by a general practitioner makes it

hard for patients to know whether getting that funny mole seen to is worth £10 (\$13). The fact that those with the lowest incomes tend to have the worst health compounds the problem.

Regressive fees exacerbate inequalities and encourage patients to present themselves later on with more advanced disease. Financial reform should promote equity and prevention. User fees are the wrong kind of medicine. DR LUKE ALLEN Academic clinical fellow University of Oxford

I applaud you for calling for a health model focused on prevention, and for highlighting the cost savings of tackling obesity rather than spending 10% of the NHS budget on treating diabetes. Yet when I attended my local GP centre I sat in the waiting room next to large machines selling cola. Lucozade and Mars bars. We are very far from a joined-up system when commissioned services are allowed to pursue short-term income at the expense of their own patients' longer-term health. PAUL KEEN Sheffield

Politics in Hong Kong

We would like to respond to your article on elections in Hong Kong ("A spot of localist bother", August 27th). You erroneously said that "China insisted on being able to vet the candidates through an 'election committee' dominated by the party's sympathisers in Hong Kong". The committee in question is not the election committee. It is the nomination committee charged with nominating candidates for election by universal suffrage. This is a provision in the Basic Law, Hong Kong's mini-constitution passed by China's National People's Congress in 1990. Student protesters were calling for "civic nomination", which is not part of the Basic Law.

You also said that the University of Hong Kong's recommendation of Johannes Chan

as its deputy vice-chancellor was "vetoed by a governing council packed with outside members appointed by Mr Leung". But only seven of the university's 24 council members are appointed by Hong Kong's chief executive, C.Y. Leung, acting as chancellor of the university. Upon taking office Mr Leung followed the rule of reappointing some of these seven members who were appointed by his predecessor and who had served for less than their six-year terms.

Finally, you suggested that "the direction of travel under a man assumed to be a closet member of the Communist Party" is clear. Mr Leung has categorically stated that he has never been a member of the Communist Party in any form or description. Indeed, he made public statements to this effect and signed a declaration as required by law upon his election. He has not joined any political party since then. ANDREW FUNG Information co-ordinator Office of the Chief Executive of

Hong Kong

The localists' desire to change Hong Kong's status as an "inalienable" part of China is doomed and there are legitimate questions to be asked regarding their motives, arguments and strategy. Localist Cantonese sentiment in Hong Kong is remarkably similar to that of Brexit: inward-looking, chauvinistic and hindered by a misplaced superiority complex. Besides rattling China, their all-or-nothing approach is sending chills through Hong Kong's establishment. A substantial part of the population has a strong interest in holding on to the status quo. They have a lot to lose and are reluctant to provoke China and harm their unique position to surf on the surging wave of its prosperity.

By taking on both the Chinese and the Hong Kong governments the localists not only diminish their chances of success but also pose a threat to the city's future. Enter Hong Kong's youth who, despite being dependent on China, resolutely reject everything

Chinese. International firms increasingly rate young mainland Chinese as more worldly. more flexible, better at English and better educated all round.

In the meantime, the media in the West look on approvingly, wishing the localists success in a war no one else is prepared to wage. JOSEPHINE BERSEE Hong Kong

To AV and AV not

You warn Labour centrists against splitting from the party, noting how hard it is to break through under a first-past-thepost electoral system ("Salvaging Jerusalem", September 17th). You should take your share of the blame. Britain had a chance in a referendum to modestly improve its electoral system in 2011, to one that would let social democrats stand against Corbynites without splitting the vote. But you rejected it, complaining that "it encourages voters to flirt with extremists, knowing they can make centrist parties their second preference" ("Yes or No?", April 28th 2011).

Well, now we know. It would have encouraged voters to flirt with centrists, knowing they could make Jeremy Corbyn's Labour their second preference. IAN MCDONALD

London

Only here for the beer

With reference to your article on socialist beer ("You must remember this", September 17th) Pilsner Urquell, brewed in the Czech city of Plzen, is the oldest brand of pale ale and the origin of the term "pils". It used to be widely available in Europe and America but seems to have been squeezed out of the market almost entirely now. WALTER LASSALLY

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

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A chance to clean up

For all its imperfections and complexities, the agreement between the government and the FARC can transform a country that has been at war for 52 years

FEW decades ago, Tumaco must have Abeen a kind of paradise. Built on two small islands in the glaucous shallows of a large bay on the Pacific, its beaches are watched over by frigate birds and pelicans. Now its population of 115,000, most of whom are Afro-Colombians, live in some of the most deprived conditions in Colombia. Yet bottles of Royal Salute 21-year-old whisky, priced at 500,000 pesos (\$172), "sell like water", says a sales assistant in one of the port's liquor stores.

The reason why can be found an hour's drive east and a further hour's ride in a fast launch up the Mira river. El Playón is a clutch of huts and bars blasting out vallenato folk music. The ensign of the Revolutionary Armed Forces of Colombia (FARC)-the national flag with an image of two AK-47 rifles crossed over a map of Colombia superimposed on it-flies from a tall pole at the waterside.

For most of this century, the slice of land between the river and Ecuador has been FARC territory. That has helped the coca trade that entrenches inequality and violence-and drives the demand for pricey Scotch-down on the coast. It also led to almost daily firefights with government troops. Until a few weeks ago it would have been unthinkable for your correspondent to drop in unannounced.

But if all goes well, El Playón will soon be becoming a normal part of Colombia. In October some 200 FARC troops here, like up to 15,000 of their comrades across the country, will assemble at a designated area and start putting their weapons into containers under the watchful eyes of a UN mission that will later supervise their destruction. "There's optimism, but there's also a lot of mistrust," says a burly man who is the civilian leader in the FARC territory and gives his name as "Grossman".

The FARC's disarmament and conversion into a political party is the crux of a peace agreement forged over four years of hard talking in Havana and signed in Cartagena on September 26th. It is not quite true to say, as Juan Manuel Santos, the president, told the UN General Assembly on September 21st, that "the war in Colombia is over." There are other illegal armed groups. But the struggle between the FARC and the state, exacerbated in earlier years by right-wing paramilitaries, was by far the biggest conflict (see chart on next page). It was responsible for most of the 220,000 deaths due to conflict and thousands of kidnappings seen over the past five decades. It displaced perhaps 6m people.

The agreement comprises 297 dense pages. It is of enormous complexity and involves controversial trade-offs, especially

between peace and justice. Politically, if not legally, it can only come into effect if it is ratified by Colombian voters in a plebiscite on October 2nd. Polls suggest that around 60% of those that turn out will vote Yes. But will enough do so to meet the minimum 4.5m votes (13%) required by the law under which it is being held? The country has been split by a campaign in which the naysayers, inspired by Álvaro Uribe, a former president, accuse Mr Santos of selling out democracy and claim he could and should have struck a harder bargain. The Yes campaign counters that its opponents really favour war. "This is the best agreement that was possible," Mr Santos told The Economist.

A libertarian streak

Most Colombians yearn to see the back of a conflict that is unique in Latin America in both its longevity and intensity. It owes much to both geography and history. The size of France and Spain combined, Colombia's mountain chains, deep valleys, trackless tropical lowlands (llanos) and inhospitable coasts make it hard for the state to control. Its people have long had a libertarian streak. "We always thought we could rebel against an unjust order. That's how we Colombians were brought up," says César Gaviria, a former president. Colombia was exceptional in Latin America in having just one military president in the 20th century—and only for four years.

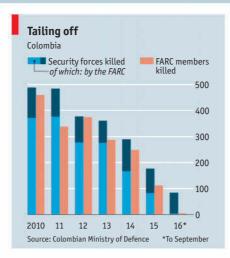
That did not make it peaceful. Two political parties, the Liberals and Conservatives, fought periodic civil wars. The FARC, founded in 1964, grew out of communist peasant guerrillas in the mountains south of Bogotá who had supported the Liberals >> in the last of those civil wars. In its first two decades its impact was marginal. But in the early 1980s Colombia became the supply hub for the growing demand in the United States for cocaine. Taxing drug production, along with kidnapping and extortion, gave the FARC the resources to expand even though it had little popular support—a lack which distinguished this conflict from the earlier civil wars. It built a rural army that had some 20,000 troops, at its peak, backed by a mainly urban militia of similar size and, for a while, a legal political party, the Patriotic Union (UP); the aim was to take over the state.

The threat the FARC posed engendered a lawless response. Land-owner self-defence groups, later reinforced by drug-trafficker foot-soldiers, created a national paramilitary structure which, with the complicity of some army officers, slaughtered some 3,000 UP members and visited terror upon villages seen as sympathetic to the FARC-which responded with terrorism of its own. By the turn of the century, Colombia began to look like a failed state. In 2002, normally moderate voters turned in desperation to Mr Uribe, a rancher-politician who promised to hound the FARC to defeat and, to popular acclaim, presided over a big security build-up.

Mr Uribe and Mr Santos, his defence minister in 2006-09, pushed the FARC back, away from the cities, deeper into the mountains and jungles. Using precision bombs, helicopters and much better intelligence, the government killed three of the FARC's senior leaders. Desertion thinned its rank and file. The FARC knew it could no longer win the war.

The negotiations launched by Mr Santos in 2012 had a single aim: to end the conflict. Two things made them difficult. The vast majority of Colombians abhor and mistrust the FARC. And international law is much tougher than it was. Colombia used to use unconditional amnesties to curtail conflicts—it did so in the 1950s and





1989-91—but these are now frowned upon under the Rome statute which set up the International Criminal Court.

Apart from procedures for the FARC's disarmament, the agreement covers just four points. One commits the government to rural development and land reform—something Colombia, one of the world's most unequal countries, needs anyway, as Sergio Jaramillo, one of the government's negotiators, points out. Another commits the FARC to stop drug trafficking and help government attempts to eradicate coca. And then there are the provisions under which the FARC will submit to justice and take part in democratic politics, which form the deal's controversial core.

The agreement applies the principles of transitional justice, a branch of international law which tries to reconcile the tension between justice and peace in conflictresolution. The FARC rank-and-file will receive amnesties. Leaders who are charged with crimes against humanity, which include kidnapping, rape and recruitment of child soldiers as well as murder, must go before a Special Peace Tribunal which will be appointed by a panel drawn from respected Colombian and international institutions. Those who make a full confession up front will face five to eight years of "effective restriction of liberty"; how restricted will be up to the tribunal. Those who do not confess and who are found guilty will go to jail. The tribunal will also have jurisdiction over crimes by members of the armed forces, and the power to review sentences currently being served.

A free pass to politics

The agreement allows the FARC's leaders to run for office (though the tribunal might restrict those who had confessed to war crimes from serving in office if they won). For the next two elections, it sets aside a minimum of 10 seats in the legislature for the FARC's future political party, five in the 166-seat house of representatives and five in the 102-seat senate. The accord also creates 16 seats in areas battered by the con-

flict where only locals will be able to run.

Add all this up and it amounts to "impunity for the FARC" and its crimes, says Ivan Duque, a senator who heads the No campaign. At the very least, he thinks those guilty of crimes against humanity should serve time on prison farms and be barred from taking part in politics while doing so. As for the FARC's new party, "It's crazy that they have these benefits that parties which didn't kill don't get, when they haven't said sorry or renounced their Marxist-Leninist ideology," argues Rafael Nieto, a deputy iustice minister under Mr Uribe. The free pass into Congress is even harder for many Colombians to swallow than lenient treatment by the courts.

His critics accuse Mr Santos of being in too much of a hurry to sign a deal, motivated by vanity and a desire to win the Nobel peace prize (which he might). Had he held out, they say, he might have got the FARC to hand over its ill-gotten gains to victims. He bridles at the suggestion: "At the outset of the process I set out my red lines and we haven't crossed any of them". There was, for example, no question of amnesties for crimes against humanity. And some tougher demands might have meant no deal. The talks stalled for almost a year on the government's initial requirement that at least some FARC leaders go to jail. "You can't ask a guerrilla movement to go into politics without its leaders," says Malcolm Deas, a British historian of Colombia.

Despite its length and detail, the agreement leaves a lot to be fudged and finessed (what one source involved in the talks, referring to the president, calls "Santista constructive ambiguity"). The tribunal, which will play a key role in the interpretation of all those details, is likely to have a bias for rigour. Its 74 judges, including 15 foreigners, will receive charges and evidence from Colombia's powerful attorney-general's office. Néstor Humberto Martínez, the attorney-general, says he has prepared eight detailed reports on more than 100,000 FARC crimes. He will seek to track down any assets the FARC does not declare.

One of the criticisms of the agreement is that it will be incorporated into the constitution. This was something that the FARC insisted on, following the Colombian habit of trying to write everything into law rather than trusting in political guarantees. Enshrining the agreement's publicpolicy choices (some of them politically justifiable but less than optimal, such as subsidies for peasant farming and FARC cooperatives) in the country's basic law looks bad. But the appearance is probably worse than the reality. "It's not a constitutional reform by the back door," says Humberto de la Calle, the government's chief negotiator. "It's a transitional article to guarantee that future governments comply with the agreements." Some parts of the agreement may not survive the scrutiny of Colom->>

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Briefing Colombia's peace The Economist October 1st 2016



Concord in Cartagena

bia's powerful constitutional court.

Much will depend on the speed and effectiveness with which the agreement is implemented. Shortly after the plebiscite the FARC will assemble in 27 areas across the country, including the one over the river from El Playón; 30 days after the signing ceremony its soldiers must start placing their weapons in the UN's containers, a process to be completed four months later. The guerrillas, many of whom were recruited as peasant children, will be trained in trades and, where necessary, taught to read; they will also get a subsidy equal to 90% of the minimum wage for two years.

Because a group of serving generals joined the Havana talks, trust between the FARC's military leaders and the armed forces is surprisingly high. And because this time few doubt that the FARC has given up its war for good, there is little likelihood that its new political party will suffer the fate of the UP. One small FARC front on the Brazilian border has rejected the peace agreement. But the vast bulk of the guerrillas are set to demobilise. Guerrilla delegates from around the country endorsed the agreement at a FARC conference held in the llanos in September.

The big security worry concerns who will fill the vacuum the FARC will leave behind in the areas they controlled. One candidate is the ELN, a much smaller guerrilla group that shows no sign of wanting peace. Then there are organised criminal gangs which include recycled paramilitaries. According to General Óscar Naranjo, a former national police chief and a member of the government negotiating team, there are some 5,000 people in the three biggest gangs, 2,000 of them armed. They are reported to be offering mid-ranking FARC commanders \$300,000 each to join them.

The defence ministry is implementing a plan to move beyond the all-consuming focus on the FARC that has shaped the security forces over the past 15 years. The

army is stepping up operations against the ELN and against cocaine laboratories, and is forming a joint task force with the police to tackle organised crime, according to Luis Carlos Villegas, the defence minister. "We have begun to occupy FARC territory" to prevent criminals from doing so, he adds.

What looks neat and tidy in Bogotá looks messier on the ground. Take the Tumaco area, where under the FARC's aegis, coca cultivation has surged from 1,800 hectares (4,500 acres) in 2000 to 16,900 hectares in 2015; critics of Mr Santos blame his decision to stop spraying coca crops. In the port the FARC's militias have degenerated into sicarios (guns for hire) and are in the process of switching to the Urabeños, a criminal gang. A community policing scheme exists, in theory; but where General Naranjo, who introduced such schemes nationally, recommended 12 officers per barrio, here there are only two. Nobody doubts that the battle for control of drug exports to Mexico is the main driver of violence.

From Bogotá to reality

Government officials see the peace agreement as offering the first real opportunity to wipe out coca for good. Some 40% of Colombia's coca is in just 11 FARC-dominated municipalities, says Rafael Pardo, Mr Santos's minister for the post-conflict. Now the government plans to combine attacks on drug processing with voluntary agreements for eradication and substitution.

Will it work? "Every farmer here has coca, not because we support drug trafficking but because nothing else gives you a decent income," says Mr "Grossman" in El Playón. "We don't trust the state, there's corruption, but if there's money from the United States, you could have substitution." (So much for the FARC's anti-imperialism.) Creating viable economic alternatives depends on building roads and providing technical support, and the cash

for such ventures will be tight; peace has come at a time of low oil prices. The myriad government agencies involved find it hard to co-ordinate with each other and with local government. "The first thing they have to do is de-Bogotá-ise this," says Edwin Palma, the secretary of Tumaco's town council.

The most overblown of the many fears surrounding the peace agreement is the notion that the FARC will win power at the ballot box. The guerrillas are the political bosses of only 500,000 Colombians (barely more than 1% of the population) and impose their domination by force. "They can't go on threatening and narco-ing to the same extent as they did in the past," points out Mr Deas. That means their power will decline, not increase.

For these reasons, Claudia López, a senator from the centre-left Green Alliance. doubts that the FARC's candidates will win many of the 16 new electoral districts. But the FARC's irruption, and its money, will prompt a realignment on Colombia's left, which the conflict has made unusually weak. "This has been a country in which it's been easier to exterminate political foes rather than compete with them," says Ms López. Even so, she doubts any coalition containing the FARC would get more than 5% of the vote in 2018. Its chances depend on it communicating a genuine sense of contrition for its crimes, and abandoning the Stalinist dogmatism that few share.

Amid the arguments over detail, some Colombians risk losing sight of what they are gaining. At the opening of the talks Iván Márquez, the FARC's chief negotiator, demanded: "a peace which implies a profound demilitarisation of the state and radical socioeconomic reforms to found true democracy, justice and freedom...Today we've come to unmask that metaphysical assassin that is the market, to denounce the criminality of finance capital, to put neoliberalism in the dock as the hangman of peoples and the manufacturer of death."

None of that happened. The agreement involves the FARC's acceptance, for the first time, of democracy, the rule of law and the market economy. Back in 2001, during a failed peace process, Alonso Cano, then the FARC's number two, told *The Economist*: "Our struggle is to do away with the state as it now exists in Colombia." He added that the FARC would not demobilise for "houses, cars and scholarships...or a few seats in Congress". That is more or less what they are about to do.

Many of the poorest areas of the country, like Tumaco, can now be connected to the national market for the first time and receive the public services they lack. And with the war with the FARC over, the Colombian state can concentrate on tackling organised crime, which is responsible for most of the remaining violence. Whatever the caveats, these are enormous gains.



The Clintons' financial affairs

Bill and Hillary Inc.

NEW YORK

The Clintons' activities outside politics are both inspiring and worrying

PEVERAL years ago your correspondent Dattended a talk that Bill Clinton gave to the rich and powerful of a megacity in Asia. On a sweltering night the former president discussed his philanthropic foundation and the global battle against AIDS, climate change and poverty. The host, the boss of a local bank, then asked Mr Clinton to give the audience a special insight into whether his wife would run again for president. Mr Clinton sidestepped the question-while trying to give the star-struck crowd a sense that they really had a window into American power. His financial disclosures later indicated he was paid \$500,000 for the speech, one of hundreds of talks he has done for his personal benefit, not for his charity.

The mix of politics, profit and philanthropy evident that evening has become a problem for the Clintons. Their foundation and financial affairs are now a liability: a swirl of truth, innuendo and crazed conspiracy theories. What shortcomings there are, it is true, pale into insignificance compared with Donald Trump's empire of lies and misconduct (see box on next page). But Mrs Clinton has been repeatedly forced to defend her own financial affairs, weakening her campaign.

Scrambling to limit the damage, the Clintons say they will wind down part of their activities, including the Clinton Global Initiative (CGI), a philanthropic event that operates as a division of the Clinton Foundation, their charity. In New York on September 21st, at the CGI's final gathering, Mr Clinton croaked that it had "turned out better than I ever dreamed". The crowd, including the actor Ben Affleck, New Zealand's prime minister, activists and weepy billionaires, hugged to John Lennon's "Imagine". Yet a review of the Clintons' affairs suggests there are things to worry about as well as admire.

You may say I'm a dreamer

The Clintons' activities have three pillars. First, their role as politicians and the holders of public office. Second, their private income-generating activities, mainly "forprofit" speeches that they give for their own gain rather than for the foundation or other causes. The Economist estimates that, based on their tax returns and other disclosures, the couple have given 728 such talks since Mr Clinton left office in 2001, making \$154m of fee income. Of this, 86% came from Mr Clinton. Mrs Clinton gave no forprofit speeches while in office, but because of Mr Clinton's speaking tours, \$49m, or 32% of the couple's for-profit speech revenue, was made while she was secretary of state in 2009-13. Some gigs echoed the banality of the campaign trail-try the American Camping Association in Atlantic City. Others were far-flung, with visits to Moscow, Jeddah and Beijing. About 43% of total

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revenue came from events abroad.

After the crisis of 2008-10 concerns rose about banks "capturing" regulators and politicians, so payments from these firms are controversial. The frequency of the Clintons' for-profit speaking appearances at some banks does raise evebrows: 13 talks for Toronto Dominion, 12 for Goldman Sachs and ten for UBS. Of the 23 Western banks that regulators classify as systemically important, 12 have paid the Clintons on a for-profit basis. Still, overall only 15% of the Clintons' cumulative speech income came from financial firms. Mrs Clinton's campaign declined to comment on the figures in this article.

The third pillar is the Clinton Foundation, a sprawling philanthropic conglomerate. It was formed in 1997 to fund Mr Clinton's presidential library and then morphed into something bigger. Mr Clinton says the inspiration came just after he left office, in 2001, when he was based in Harlem and helped local firms there. He realised the benefits of partnerships. After the attacks of September 11th 2001, he raised funds to help the victims' children. In 2002 the foundation took on HIV in the emerging world. Since then, new divisions have been added to respond to new problems. Today it has 12 divisions, including its health activities abroad, the CGI events and its work in Haiti.

The foundation's expansion and operating performance have been impressive. But its governance, sources of capital and approach to related parties are flawed.

Revenues from donations and grants rose from \$10m in 2001 to \$338m in 2014, the last year for which accounts are available. Assets rose from \$21m to \$440m. Unlike many foundations, the Clinton Foundation operates projects on the ground and employs 2,000 staff. It runs a fairly tight >> 26 United States The Economist October 1st 2016

Donald Trump's finances

Touching the void

NEWYORK

Weeks from a presidential vote, one candidate's finances are impenetrable

fT'S about time that this country had somebody running it that has an idea about money," Donald Trump said during the presidential debate on September 26th. Yet Mr Trump's finances are the murkiest of any candidate in memory. He makes the Clintons look like paragons, and also makes a mockery of disclosure rules for candidates.

There are four problems. First, Mr Trump's business is baffling. There is no holding company with accounts, and no major part of it has been publicly listed for long. Mr Trump has made a 104-page declaration of wealth to the electoral authorities. But the rules governing these forms are hopeless-they do not distinguish between revenue and profit, and any asset worth over \$50m need not have its precise value specified. Mr Trump says he is worth \$10 billion. An analysis by The Economist in February suggested \$4 billion, but without audited accounts, who knows? The same forms show that Hillary Clinton is worth \$11m-53m. This appears to exclude property and, perhaps, some of Bill's assets.

Second, Mr Trump has not made public his tax returns. During the debate he again claimed that he is unable to because the Internal Revenue Service is auditing him, but the IRS says he is free to reveal what he likes. His reticence may be because he has paid little tax (the Clintons have paid a rate of 37-46% over the

past decade). But he may also be nervous because the tax returns will show that he is fibbing about how rich he is. It seems impossible to establish the truth.

The third problem is that unethical conduct may have taken place within Mr Trump's realm. Accusations of dubious behaviour abound, from casino deals and defaults in Atlantic City, to the fate of students at the failed Trump University. This month the Washington Post reported that Mr Trump's small foundation used \$258,000 of donors' cash to settle his commercial legal disputes. Mr Trump's spokesman says the report is "peppered with inaccuracies and omissions".

Finally, it is unclear how financial conflicts of interest would be managed by a President Trump. He wants to put his business friends into his cabinet. By convention businessmen-turned-politicians put their activities into blind trusts, as Ross Perot promised to in 1992 and 1996. But Mr Trump has indicated that any trust would be run by his children, who are involved in his campaign.

The complete absence of a boundary in Mr Trump's mind between politics and profit was shown during the debate, when he gave a thinly disguised plug for one of his new hotels. Perhaps, if he wins, he will shift America's seat of government from 1600 Pennsylvania Avenue, Washington, DC, to Trump Tower at 725 Fifth Avenue, New York.

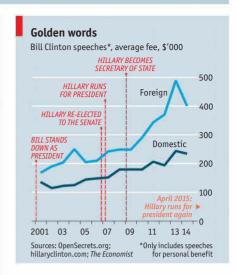
ship, with 64% of revenues in 2014 spent on its projects rather than on overheads.

The foundation is surrounded by hyperbole, so judging the outcomes it has delivered is difficult. It claims to have helped 100m people, and if you include the activities by participants at CGI events, this number rises to 535m, or one in every 14 people on Earth. Even if you discount this figure by 90%, it would be a major achievement. About two-thirds of the foundation's spending is by the division that works on HIV. Here its record is indisputably good, particularly in working to reduce the price of antiretroviral drugs.

The foundation's governance shows little sign of independence from the family or their political careers. Chelsea Clinton acts as vice-chairman. (Dynastic appointments are common in American philanthropy: Michael Bloomberg's daughters are on his foundation's board, for example.) The chairman, president and several senior executives worked for the Clintons in government or on their political campaigns.

Mr Clinton wanted a philanthropic empire, but unlike America's tycoons he had to do it with other people's money. The foundation is mainly financed by the pillars of society, for example the Gates Foundation. But an estimated \$181m, or 9%, of its cumulative revenues has come from foreign governments and \$54m of that, or 3% of the total, from autocratic states such as Saudi Arabia and Kuwait. A further 40% has come from other foreign sources, including multilateral bodies and companies. Donations are either earmarked for specific projects, or go into a general kitty.

An obvious question is what ancillary benefits donors thought they were getting, and here the Clintons' sloppy approach to conflicts of interest is evident, with the three pillars of their activities—public, private and charitable—colliding. Donors to the foundation attempted to get, and on occasion may have got, favours from Mrs Clinton while she was secretary of state. Most of these requests appear to have been for meetings with her. There was a flow of



communication between donors, aides and Mrs Clinton's government office.

The \$154m that the Clintons have made from for-profit speeches also involves potential conflicts of interest. You might expect the cost of hiring an ex-president for an evening to atrophy over time as his proximity to power declines. But Mr Clinton's for-profit speaking fees have risen since Mrs Clinton became a big political figure in her own right, especially for events abroad (see chart). The benign explanation is that there has probably been a general inflation in the fees famous speakers get over the past decade. But the Clinton Foundation has sustained Mr Clinton's profile. And some customers may have perceived that Mr Clinton's marriage gave him an insight into the government while Mrs Clinton was secretary of state.

Belatedly the Clintons have realised how damaging their arrangements are. If Mrs Clinton becomes president, Mr Clinton says he will step down from the foundation and that it will stop taking donations from foreigners and private firms. In a similar effort to resolve potential conflicts of interest, Tony Blair, who seems to have mimicked the Clintons' business model, said this month that he would cease much of his commercial work and focus on his charitable activities. It seems likely that the Clinton Foundation will eventually be broken up, with each division having to secure its own donors.

The foundation has done many good works. But it grew in an innocent phase of globalisation, when the public were a little more forgiving of politicians getting rich while simultaneously seeking office, helping the needy and raising funds from business people and foreign governments. After the financial crash, and at a time when a majority of Americans feel the economy is rigged by an elite, the collision of politics, power, money and suffering seems tawdry. It will become tragic if the Clintons' financial affairs assist the election of a demagogue.

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Saudi Arabia and 9/11

Enter the lawyers

WASHINGTON, DC

The president's veto is ringingly overturned by Congress

NDER pressure from families bereaved by the terror attacks of September 11th 2001, and with the threat from Islamic extremism a potent talking-point in the general-election campaign, Congress has voted overwhelmingly to allow Americans to sue foreign governments for aiding and abetting terrorist acts in America. The decision on September 28th overturned a veto by President Barack Obama and brushed aside furious lobbying by Saudi Arabia, the primary target of the new law. A vote in the Senate passed 97-1, followed by a 348-77 vote in the House of Representatives, easily clearing the two-thirds hurdle for a veto override: the first of Mr Obama's time in office.

The vote prompted something close to presidential scorn, with Mr Obama, in an interview with CNN television, calling the congressional decision a "mistake", driven by the desire not to be seen "voting against 9/11 families right before an election". His press spokesman went further, calling the Senate vote "the single most embarrassing thing" the chamber had done in decades.

The law, the Justice Against Sponsors of Terrorism Act (JASTA), weakens the long-standing principle of "sovereign immunity", under which governments are mostly shielded from lawsuits filed in the courts of another country. Before its passage such officials as John Brennan, director of the

Demanding justice, at a price

CIA, John Kerry, the secretary of state, and the chairman of the joint chiefs of staff, General Joseph Dunford, all expressed concerns that the law may harm security co-operation with allies and prompt other countries to pass reciprocal laws, potentially exposing American troops, spooks and envoys to lawsuits.

Mr Obama raised the hypothetical example of an attack in America by a radicalised British citizen, prompting a victim to use the new law to sue the British government, "our closest ally", allowing lawyers to demand "all kinds of documents" from Britain. He further imagined American troops facing lawsuits after a traffic accident during disaster relief in, say, the Philippines, noting that America's ability to secure immunity from local prosecution for its personnel is "mainly" based on offering reciprocal rights to foreign governments.

Supporters of JASTA, who come from both parties, say that the law merely gives September 11th victims a chance to hold foreign sponsors of terrorism to account, and to explore in an American court long-standing allegations that Saudi authorities knew about or supported the hijacking plot, which involved 15 citizens of that country—though Saudi officials deny such

links, and the formal 9/11 Commission that probed the attacks found no evidence that the Saudi government as an institution was involved. Backers of JASTA note that sovereign immunity is already not absolute, because lawsuits are allowed under some circumstances against countries that have been officially designated as "state sponsors of terrorism" by the American government. Only three countries—Iran, Sudan and Syria—currently labour under that badge of dishonour, which is imposed after lengthy official review.

Politicians made uneasy by JASTA include the chairman of the Senate Foreign Relations Committee, Bob Corker of Tennessee, a Republican. Shortly before the vote to override the president's veto, Mr Corker told reporters that the danger of the new law was that "you end up exporting your foreign policy to trial lawyers". Even some co-sponsors of JASTA admit that their bill may have "ramifications" that have not been properly considered.

Members who think JASTA a mistake may return to the law after November 8th and seek legislative fixes, perhaps by narrowing its scope to the victims of the 2001 attacks. Congress is not at its bravest weeks before a general election.



The campaigns

Heard on the trail



Ladies' night

"She gained a massive amount of weight and it was a real problem."

Donald Trump fat-shames Miss Universe 1996. Fox and Friends, post-debate

A bad workman ...

"My microphone was terrible. I wonder, was it set up that way on purpose?" Mr Trump explains his poor debate performance. Fox News

... blames his tools

"Anybody who complains about the microphone is not having a good night." Hillary Clinton responds

American History X

"I think even most eight-year-olds will tell you that whole slavery thing wasn't very good for black people." Barack Obama takes issue with Mr Trump's assertion that blacks have never been worse off. ABC News

Grumpy old men

"He's up in years." Donald Rumsfeld, 84, judges former president George H.W. Bush, 92, on his rumoured support for Mrs Clinton. MSNBC

The enemy of my enemy

"Trump...[says] anything that comes to his tongue."

Taliban leaders on the debate. They were sorry Afghanistan got no mention. NBC

Selling your soul

"I'm just trying to get this Cruz sticker off my car."

Ted Cruz's ex-spokesman decries his endorsement of Mr Trump. New York Times

Art for art's sake

"We found Mr Trump. He arrived some time after five. He has damage." Miami police announce the recovery of a nude Trump statue. Palm Beach Post

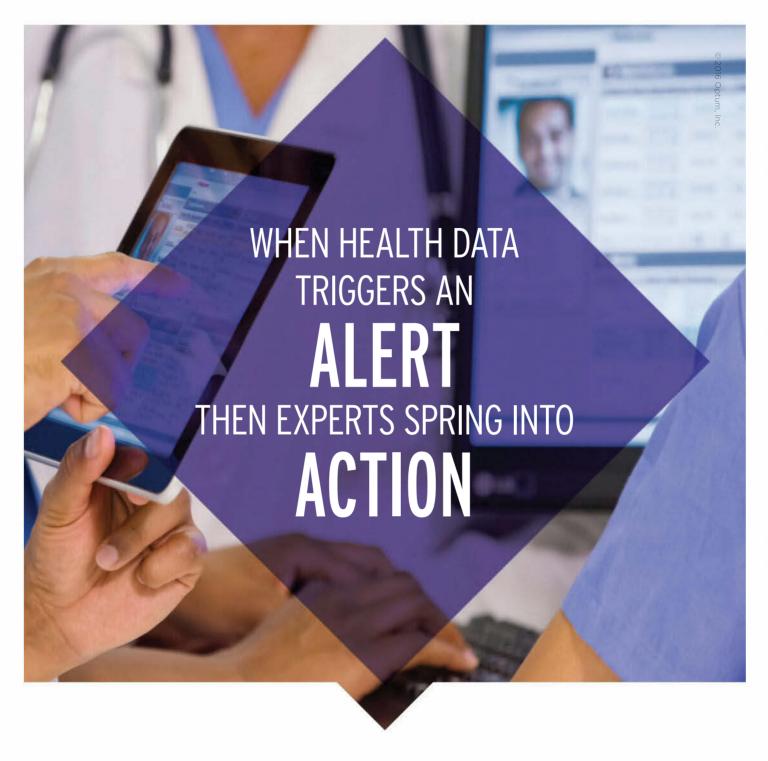
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"REMINDER... being mad at a presidential candidate in a debate is NOT a reason to call 911."

The Lawrence, Kansas, police department appeals for calm

Whoops

"Today I received an e-mail from @real-DonaldTrump asking for money ... Of course I had an answer for him." Vicente Fox, former president of Mexico





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Florida

Where past and future collide

KISSIMMEE AND MELBOURNE

The most important state battle looks likely to be another nail-biter

DAMARIS OLLER came to America from the Dominican Republic in 1974, worked hard, lived legally and raised two children. But she did not become a citizenbecause she saw no need to—until last April. "It was because of that man," she explains at the El Jibarito café in Kissimmee, in central Florida, where she serves tasty slow-roast pork, plantains and beans. "I was afraid that if Donald Trump becomes president I'd be kicked out the country."

Ms Oller is the Hispanic voter of Hillary Clinton's dreams. Frightened and disgusted by Mr Trump's promise to deport 11m undocumented people, and by his slandering of Mexicans as rapists and the Spanish language as unAmerican, she says she will vote for the Democratic nominee as if her life depended on it: "Estoy con ella" ("I'm with her"). She is also a Floridian Hispanic, which makes her one of the most important voters in America.

Florida is the biggest swing state, with 29 electoral-college votes up for grabs, so more likely to determine who wins on November 8th than any other. Shifting from red to blue to red, then blue again, Floridians have picked the winner in the past five elections. And if Mrs Clinton can muster a big turnout among Hispanics—only around 25% of whom say they are for Mr Trump—they will probably pick her.

Once staunchly Republican, Hispanic Floridians were already turning deep blue, as the community gets younger and less dominated by conservative Cuban-Americans, even before Mr Trump's obscenities.

In 2012 60% of them backed Barack Obama, which helped him win the state by less than one percentage point. A subsequent increase in the Hispanic population, partly driven by a massive influx of Puerto Ricans propelled by the economic crisis on their island, should help Mrs Clinton emulate that success. She would probably then become president. Because while she, at a pinch, could lose Florida and still triumph overall-provided she wins one or two other big swing states, such as Pennsylvania and Virginia-Mr Trump's lower threshold in the electoral college means he does not have that luxury. Lose Florida, and he is probably toast.

Hence the huge effort Mrs Clinton has been putting into the Sunshine State. Her campaign has opened 57 field offices there, staffed by several hundred paid employees, and plans to spend \$36.6m on television advertising, especially in central Florida—the epicentre of the battleground state. There, along the densely populated route of the interstate highway that links Tampa to Daytona Beach, the state's ethnically diverse and Democratic-voting south meets its more conservative, whiter north-and Florida's elections are traditionally settled. Yet Mrs Clinton is currently getting a poor return on her efforts. Last month she was around five points up in Florida. Now she and Mr Trump, who has spent little on his campaign by comparison, are tied.

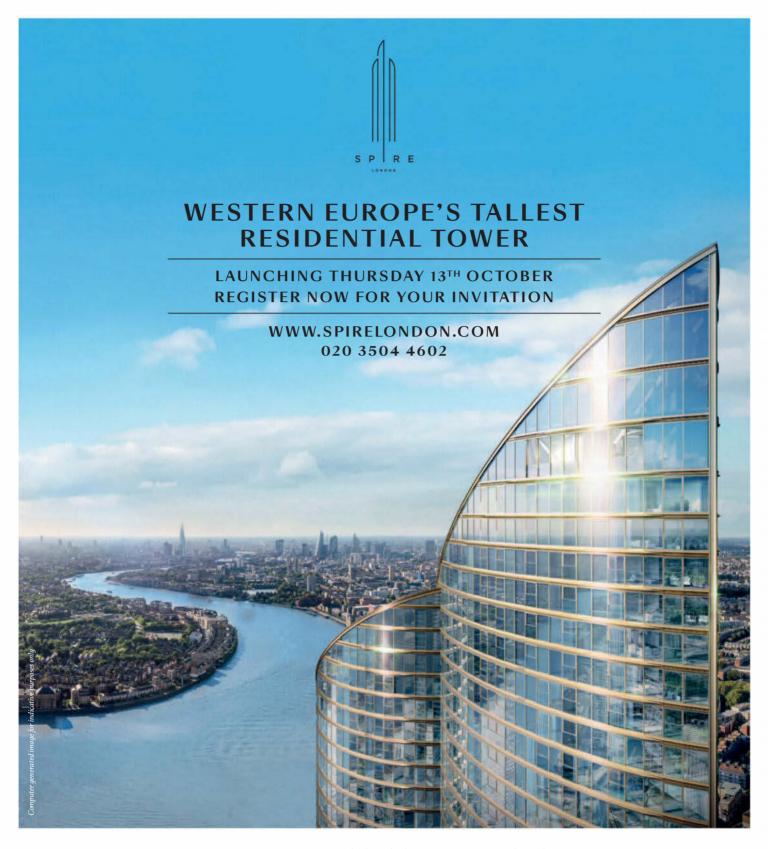
In part, this illustrates what a weirdly deadlocked condition Florida is in. It is where America's past and future collide—a

destination for aged middle-class white sun-seekers and working-class Hispanics, a place where pick-up trucks flying Confederate flags roar through Spanish-speaking enclaves. As a political counterweight to the growing Hispanic population, the influx of white pensioners, who are likelier to vote Republican and to vote at all, largely explains why Florida's Republican past is proving so unyielding. Of the 1.46m people added to the state between 2010 and 2015, 46% were aged over 65, and most of those were white. That is a group Mr Trump should win handsomely.

At a rally held in an airport hangar in Melbourne, south of Daytona Beach, on September 27th, the enthusiasm of his supporters was impressive. It was his first appearance since the debate with Mrs Clinton, which many in the huge crowd felt he had fluffed-but none seemed to care. "He dropped the ball, but then he's not a professional politician, and that's what we need," said Josh, a self-described professional hunter, "It's time we had an honest person in the White House," said his wife, Susie, a housewife. When Mr Trump's vast, Trump-branded plane landed and came sharking towards the hangar, the huge crowd surged towards it, phone cameras raised, mouths gaping. When their champion (and he alone) stepped from the plane's belly and surveyed the Earth, like some visiting alien in a business suit, they gasped in wonder. The contrast with Mrs Clinton's smaller, more downbeat rallies is hard to exaggerate. No wonder her supporters, in Florida and elsewhere, are worried.

The polls suggest she is on course to lose white Floridians by around 20 points-almost as badly as Mr Obama did in 2012. Despite the Trumpian bogey, she is meanwhile getting only around 55% of Hispanics. She is also slightly lagging Mr Obama's imposing 95% success rate with black voters, the state's third-biggest ethnic group. Mrs Clinton's best hope of winning Florida is to compensate for these shortfalls, and counter Mr Trump's more fired-up supporters, with a brilliant voterturnout operation. To that end, her campaigners are labouring to help tens of thousands of Puerto Ricans, who have settled in and around Orlando, to register to vote.

It is a laborious task; on an afternoon in the arcades and Puerto Rican cafés of Kissimmee, with one of Mrs Clinton's registration teams, no one was added to the electoral roll except Ms Oller. Grumbling also abounds about Mrs Clinton's campaign; it is said to be making too much of Mr Trump's remarks on immigration, which Puerto Ricans, as American citizens, only care about up to a point. That may well be so; though carping about a campaign, five weeks before an election, is often a proxy for shaky confidence. That would be understandable. Florida is shaping up to be a nail-biter.



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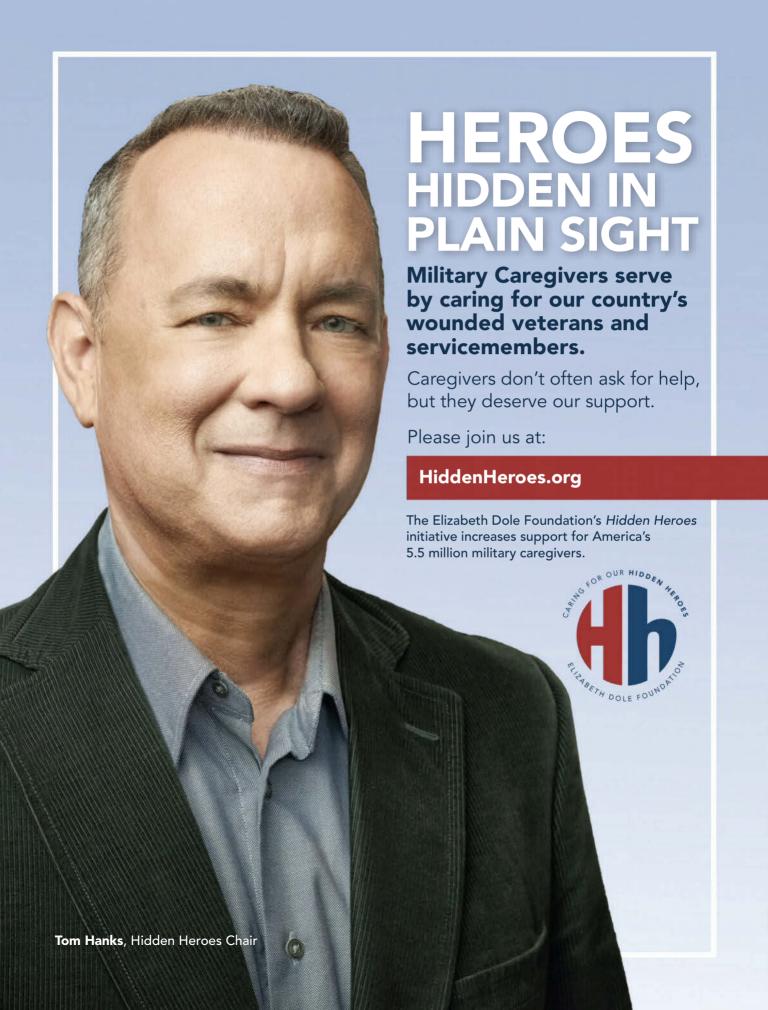
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Election brief: climate change

Notes from the undergrowth

Hillary Clinton's environmental plans are pragmatic. Donald Trump's are non-existent

DESPITE deluges in the South, droughts in the West and fires throughout national forests this year, the words "climate" and "change" have seldom been uttered together on the campaign trail. Fifteen of the 16 hottest years on record have occurred since 2000. Yet Donald Trump has claimed that global warming is a Chinese hoax designed to thwart American businesses (he also denied saying so at the first debate between the candidates, on September 26th). Hillary Clinton believes that "climate change is real" and that dealing with it will create jobs in the renewable-energy sector. In sum, the two candidates offer completely different environmental platforms.

Uncoupling emissions growth and economic expansion is important to slowing climate change. Total energy consumption in America has dropped 1.5% since Barack Obama became president, according to the White House; in that time the economy has swelled by 10%. America now generates more than three times as much electricity from wind, and 30 times as much electricity from solar, as it did eight years ago.

Most voters accept that climate change is happening. But Republicans and Democrats disagree as to why, according to the Yale Programme on Climate Change Communication, a research group. Half of Mr Trump's supporters reckon natural causes explain it, whereas three in four of Mrs Clinton's backers say, with almost all climate scientists, that man-made emissions are to blame.

In 2015 the most robust deal yet on curbing global carbon emissions emerged. The Paris Agreement aims to limit global warming to "well below" 2°C above preindustrial temperatures. For its part, America promised to lower its emissions of carbon dioxide by 26-28% by 2025, as measured against the levels of 2005.

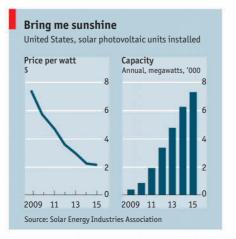
An important step to achieving this goal was unveiled last year: the Clean Power Plan. This proposes the country's first national standards to limit carbon-dioxide emissions from power plants—America's largest source of greenhouse gases. Legal challenges from fossil-fuel groups and two dozen mostly Republican-led states saw the Supreme Court put it on hold eight months ago. Some opponents argue the plan is unconstitutional; far stronger claims are made that the Environmental



In Flint, don't drink the water

Protection Agency (EPA) is overstepping its remit. Hearings on the plan began on September 27th. Whatever the outcome, the EPA retains the right to regulate carbon dioxide: the justices ensured that by declaring it a pollutant in 2007.

This is one area where Mrs Clinton is running for a third Obama term. She intends to make America a "clean energy superpower" by speeding up the process of greening that Mr Obama began. Within four years she wants half a billion solar panels installed, and by 2027 she plans for a third of electricity to come from renewables. Mrs Clinton laments that poorer areas are often the most polluted—citing, for example, the filthy water in Flint, Michigan. States and cities which build greener



infrastructure, such as more thermally efficient buildings, will get handouts worth \$60 billion. Mrs Clinton is vague about how she would pay for this, but slashing fossil-fuel subsidies could be part of the answer. Such handouts came to nearly \$38 billion in 2014, according to Oil Change International, a research outfit, though estimates vary wildly.

Green types argue that such ambitious plans are possible. But since America is already lagging on its climate pledges for 2025, according to a study just published in Nature Climate Change, such optimism appears misplaced-especially as Mrs Clinton has no plans either to price or to tax carbon. In this she has learned from Mr Obama's failures. His attempt to pass a cap-and-trade bill floundered in 2010, and he has tried to avoid Congress on environmental issues ever since. The Clean Air Act of 1963, for example, supposedly underpins the Clean Power Plan, allowing him to dodge the Senate. Mr Obama has also used his executive authority to ratify the Paris climate deal and to create the world's largest protected marine area off Hawaii.

Mrs Clinton may follow suit with environmental executive actions of her own, according to hints from her campaign chief, John Podesta, Mr Obama's environmental mastermind. She may seek to regulate methane leaking from existing gas installations and to tighten fuel-efficiency standards.

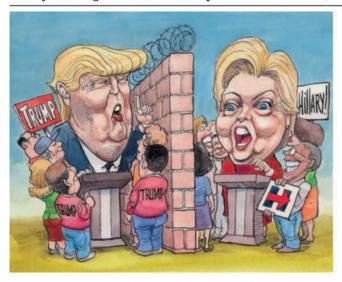
But what one president enacts, the next can challenge. Mr Obama's penchant for executive action leaves the door open for Mr Trump to stall and perhaps reverse environmental policies if he becomes president. His intention to rip up the Paris Agreement will prove hard to carry out in a single term, however: it comes into force before January, and untangling America from its provisions could take around four years. Mr Trump favours oil and gas production on federal lands and opening offshore areas to drilling. He also plans "a topdown review of all anti-coal regulations". Such moves could imperil the Paris deal anyway. If the world's second-largest polluter shirked its pledges to cut emissions, many other countries would wriggle out of theirs.

Either candidate, as president, would be at the mercy of the markets. A glut of fossil fuels means that coal production has declined by almost a quarter since the highs of 2008. Improvements in fracking technology may see American shale output stabilise, and perhaps even grow, if it allows firms to compete more efficiently with rivals in Saudi Arabia. But the cost of solar and wind power, and of the storage needed to smooth out their variations, will keep dropping. If Mr Trump becomes president, energy firms may reduce emissions anyway. If Mrs Clinton does, they may give her green policies a needed boost.

United States The Economist October 1st 2016

Lexington | No happy ending

Hillary Clinton goaded Donald Trump into rash admissions, but America remains divided



LIVE in a world that has walls. And those walls have to be guarded by men with guns," snarls the demonic Colonel Jessep at the end of "A Few Good Men". Moments later he admits that, to maintain standards in his front-line unit, he ordered the fatal bullying of a young Marine: "You're goddamn right I did." It is one of cinema's great confession scenes, and unexpectedly came to mind during the first presidential debate at Hofstra University on Long Island, on September 26th.

Time and again Donald Trump was baited by Hillary Clinton into outbursts of Jessep-like candour. Reminded that in 2006 he had wished aloud for the property crash that would cost millions their homes, deeming such a slump a chance to "make some money", Mr Trump leaned to the mic and growled: "That's called business, by the way." Another rash boast concerned Mr Trump's refusal to release his tax returns. Perhaps, Mrs Clinton mused, her rival does not want Americans to know that he is not as rich as he claims, or that in the only annual returns that he has ever made public (while seeking a casino licence), he paid no federal income taxes. "That makes me smart," snapped Mr Trump.

What about Mr Trump's reputation for refusing to pay contractors in full after they install marble in his hotels, or design his latest golf course, Mrs Clinton demanded to know? Why, she told her opponent, in a small flourish of political theatre, an architect whom you failed to pay is in the debate audience tonight. Mr Trump scoffed: "Maybe he didn't do a good job." He was as defiant when the moderator, Lester Holt of NBC television, asked what he would say to non-white Americans after years of promoting the racially charged conspiracy theory that President Barack Obama was not born in America. "I say nothing," retorted Mr Trump, instead praising himself for forcing Mr Obama to release his long-form birth certificate in 2011.

The surface explanation is that Mr Trump is too thin-skinned to help himself. Certainly Mrs Clinton provoked her opponent masterfully. She cast him as a child of privilege, bankrolled with millions from his late father's property empire (which was sued for racial discrimination, she noted). This worked, up to a point. A distracted Mr Trump used debating time to quibble about his father's generosity—"a very small loan". In an ambush that was still generating headlines days later, Mrs Clinton reminded him of his

insults towards a woman in a beauty contest that he oversaw, whom he mocked as "Miss Piggy" and, allegedly because she is Latina, as "Miss Housekeeping".

Mr Trump's nastiness helped Mrs Clinton all the more because she did not make the best use of her own speaking time, too often reciting wish-lists of policies as if reading the minutes from a committee meeting. In part, she waffled because she has some real political vulnerabilities. Mr Trump was effective (if wrong in his economic analysis) when he attacked Mrs Clinton in harsh, simple terms for supporting the NAFTA trade pact with Mexico and Canada in the 1990s, and for initially endorsing a big new push for a Trans-Pacific Partnership (TPP) opening up trade with Asia-Pacific countries. Mr Trump accused Mrs Clinton of turning against the TPP after hearing him criticise the deal. The sad reality, for free-trade advocates, is that Mrs Clinton was not just frightened by Trump rallies in rustbelt swing states. She also ran scared of the TPP-bashing wing of her own party, stirred up by the old leftist who made her Democratic presidential primary such a slog, Senator Bernie Sanders of Vermont.

But there is a deeper explanation for Mr Trump's willingness to admit to dodging taxes and bilking small contractors. Though the businessman lacks the medals and the coiled-spring physique of the fictional Colonel Jessep (played by a wolfish Jack Nicholson), both men confess out of defiant pride, not shame. Both prize their personal codes of hyper-masculine, authoritarian success above the complaints of soft, hand-wringing critics. And both love walls. "You fuckin' people. You have no idea how to defend a nation," spits the colonel at his tormentors, a team of city-dwelling, highly educated military lawyers. More important, many Trump supporters would cheer that sentiment. It is one reason why they forgive their candidate, though they hardly love all rich men who avoid taxes, or rip off small businesses.

What makes a good man, anyway?

The first presidential debate exposed, with unhappy clarity, how the candidates are speaking to two different Americas. The Trump and Clinton coalitions do not just disagree about tax rates or health policy. Their worlds hardly overlap. Among white men without college degrees, Mr Trump leads Mrs Clinton four-toone, while she leads him among non-whites by three-to-one. Among college-educated white women (normally a swing voter bloc), Mrs Clinton has an almost two-to-one edge. Vitally, their coalitions subscribe to different value systems. To Mr Trump and his backers, politicians like Mrs Clinton have allowed jobs to be stolen, let murderous immigrants and terrorists stream across open borders, and spent American blood and treasure on naive attempts at nation-building in far-flung corners of an ungrateful world. And by failing to secure America, such self-dealing, rotten elites have lost the right to be heard on any other subject. Meanwhile, in pressing the case that Mr Trump is guilty of racism and sexism, Mrs Clinton is appealing to slices of the electorate that she needs in her corner-black voters, Hispanics, young people and college-educated whites-and whose moral code says that an unrepentant bigot can hardly claim to be a good person.

Colonel Jessep meets a satisfying fate, raging as he is led away by grim-faced military police. But that is because in court, laws beat personal honour codes. No consensus exists among American voters about what qualifies a leader to rule. Whoever wins the 2016 election, half the country will think them a disgrace on Day One. This is a drama with no neat ending.



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Venezuela

The angry 80%

How a much loathed regime hangs on to power

E ARE the 80%!" declared Henrique Capriles, governor of the Venezuelan state of Miranda and a leader of the opposition to the country's autocratic left-wing government. He was one of a parade of speakers who took to a makeshift stage at the Miranda sports complex in Caracas on September 26th to rail against the regime. The week before it had taken steps that will make it far more difficult to remove the president, Nicolás Maduro, by constitutional means.

Protests will start immediately, said the opposition Democratic Unity alliance (MUD). October 12th will be "a special day of national mobilisation". It will be followed by the "real conquest of Venezuela", on October 26th-28th. Those are the days fixed by the national electoral council (CNE) to record public support for launching a referendum to recall Mr Maduro.

Mr Capriles is right. Venezuelans have been driven to near-desperation by shortages of food, medicines and other basic goods and by inflation of around 700%. Millions are having to skip at least one meal a day. According to one recent poll, 84% would vote to remove Mr Maduro from office. But the regime is manoeuvring to ensure they do not get that chance, or that it happens too late to trigger a fresh presidential election. Despite economic catastrophe and popular rage, the government is finding ways to cling to power.

The most blatant is its control of institu-

tions that should be independent. The opposition rally was a response to a decision by the CNE on September 21st to put up every obstacle it could think of to an early recall referendum. Under the constitution, 20% of the electorate must register their support for the initiative. The CNE ruled that this must take place on three days at polling stations that will be open for seven hours a day (they will close for lunch). It will make available less than a third of the 19,500 voting machines the opposition asked for. People will have no more than 90 seconds to cast their votes, if the threshold is to be crossed in the time allocated.

Recall waiting

Although the 20% bar set by the constitution is a national one, the CNE insists that the opposition meet it in each of Venezuela's 24 states. The biggest hurdle thrown up by the CNE is its ruling that the referendum, if it takes place, will be held in the middle of the first quarter of 2017 at the earliest. If Venezuelans vote Mr Maduro out of office after January 10th the vice-president will serve out the rest of his term, which ends in January 2019. That job is now held by Aristóbulo Istúriz, who may be marginally less dogmatic than Mr Maduro. But Mr Maduro, or factions in the regime that may prove to be more powerful than he is, can change the vice-president at any time. The opposition's plan to hold a referendum this year never had a chance, sneer senior officials.

The regime shows no desire to correct policies that have wrecked the economy, such as price controls and artificial exchange rates. But it is finding ways to stop a horrible situation becoming worse, at least for a while. Despite a fall in oil production. a recent modest recovery in its price helps. The heavily indebted state oil company, PDVSA, is trying to stave off the threat of default by offering to swap \$5.3 billionworth of bonds held by investors for new bonds with longer maturities. China, which has lent Venezuela at least \$50 billion in return for oil, is thought to be accepting later deliveries.

After widespread looting in June, the regime found enough money to import more flour. It has partly reopened its border with Colombia after shutting it last year (largely to stop smuggling of fuel and other subsidised goods into Colombia). Thousands of Venezuelans have crossed over to shop in Colombia's relatively well-stocked stores. The army took over the distribution of essential goods in July, putting one general in command of toilet paper, another in charge of potatoes and so on. Bizarre though it is, the "Great Mission of Sovereign Supply" may be reducing the leakage of goods to the black market. Bimonthly deliveries of subsidised goods are now arriving on time in many states. Queues still snake outside bakeries, but supplies of bread now sometimes last until those at the back reach the tills.

None of this has assuaged the anger of ordinary Venezuelans or of the organised opposition. "This government is going to fall," proclaim graffiti daubed on city walls. That slogan is chanted by participants in small sporadic protests that have broken out across the country. The MUD, while united in wanting to end the ruinous reign of chavismo, which began under the late Hugo Chávez in 1999, has been divided on >> 36 The Americas The Economist October 1st 2016

how to bring that about. Luis Vicente León, a pollster, identifies three "clusters" of opinion within the opposition: those who want to pursue the referendum despite the CNE's intransigence, those who want to boycott it and a smaller group that calls for a mass uprising.

The plan put forth by the MUD has the assent of all three tendencies but no one pretends it is a blueprint for the "real conquest of Venezuela". Protests big enough and prolonged enough to rattle the regime require sacrifice and staying power from beleaguered Venezuelans. Many are too caught up in the struggle for survival to fill

the streets for weeks on end. Selective repression frightens many. Some opposition supporters admit that the government will survive at least until 2019.

That does not preclude change. The embattled president is hinting that he may become a bit more pragmatic. At the signing of an accord to end Colombia's war with the FARC guerrilla army on September 26th, he invited the American secretary of state, John Kerry, to visit Venezuela this year. Mr Maduro said that he hoped this would lead to a "new era of good relations" with the country he (falsely) blames for Venezuela's economic woes. José Luis

Zapatero, a former Spanish prime minister, has been a frequent visitor to Caracas. He is trying to broker a dialogue between the regime and the opposition, the release of political prisoners and measures to safeguard the powers of the opposition-controlled national assembly.

Mr Maduro might not be the one to preside over such an arrangement. Even if the referendum to topple him fails, *chavistas* may replace him with a less discredited figure well before the next election. His enemies "are coming from inside", says Mr León. But it will take more than a new figurehead to win over the 80%.

Bello | A discredited profession

Young Latin Americans are political, but are not becoming politicians

N THE eve of independence day in Mexico last month, thousands of protesters marched through the capital to demand the resignation of the president, Enrique Peña Nieto. The demonstration was not huge, and in other countries would have been unremarkable. But not in Mexico, where the presidency has long been viewed with deference.

Mexicans blame Mr Peña for a sluggish economy, a renewed rise in violent crime, perceived (though denied) conflicts of interest and, most recently, for inviting and then being humiliated by Donald Trump. His approval rating of 23% is the lowest for a Mexican president since records began. Yet Mr Peña is not the most unpopular leader in Latin America. That dubious honour does not even belong to Venezuela's Nicolás Maduro (21%) but rather to Luis Guillermo Solís of Costa Rica (10%), according to Consulta Mitofsky, a Mexican pollster. Chile's Michelle Bachelet languishes in the low 20s. Colombia's Juan Manuel Santos has only recently risen above that, in part because of his peace deal. Only half a dozen of the region's presidents, headed by Danilo Medina of the Dominican Republic, get a thumbs-up from their electorates.

A few years ago leaders were generally popular. That was largely thanks to the commodity boom, which gave them money to splurge on social programmes and subsidies. Now governing is harder: money is tighter, and public intolerance of corruption has grown. That has prompted an anti-incumbent mood, but not yet an opening for a new generation of leaders. Rather, a gulf has opened up between an increasingly dynamic civil society and fossilised political systems.

Peru's election in June was won by Pedro Pablo Kuczynski, then 77 years old. Chile's contest next year is likely to be be-

tween Ricardo Lagos (who will be 79) and Sebastián Piñera, both former presidents. Polls for Mexico's election in 2018 are headed by Andrés Manuel López Obrador, who will run for the third time, and Margarita Zavala, whose husband, Felipe Calderón, was president in 2006-12. In Brazil no new faces are among the leading candidates to succeed Michel Temer (aged 76), who took over from the impeached Dilma Rousseff.

What is preventing political renewal? The discredit of politics and the alienation of the young are common to democracies around the world. So are political parties based on 20th-century ideologies that are struggling to adapt to a new world of individuals empowered by social media. It is particularly worrying that bright young people are turned off politics as a career in Latin America because of the weight of its "millennials": 156m Latin Americans, or 26% of the total population, are aged 15-29. "Everybody thinks that politics is for the corrupt, for opportunists, so the challenge now is to give it a new meaning and a new value," according to Cecilia Chacón, a youngish city councillor in La Paz.

A factor blocking renewal is presiden-



tial re-election, allowed in 14 countries. Even when this is non-consecutive, "it sends presidents not into retirement but to the substitutes' bench, from where [as in basketball] they expect to return," says Daniel Zovatto of IDEA International, a body that promotes democracy.

A second factor in some countries is that the battle against corruption risks degenerating into a demagogic criminalisation of politics, says Luiz Felipe d'Avila of the Centre for Public Leadership, an NGO in São Paulo. Brazilian prosecutors have rightly pursued the huge corruption scandal centred on Petrobras, but honest ministers may spend years fighting lawsuits.

Mr d'Avila does sees new leadership emerging, but at local level, where entrepreneurs and activists are running in mayoral elections this month. Those with a local reputation have less need of a party machine or corporate donations. He hopes new local leaders will go on to run for congress.

It is not that young Latin Americans are apolitical. Street demonstrations demanding accountability from leaders have become a feature of the region. Many home-grown NGOs have sprung up (in the past they tended to depend on foreign charities, with their own agendas). As well as wanting better health care, education, public services and more opportunities, millennials mobilise about other issues, ranging from gay marriage and animal rights to climate change.

There are some younger entrants to formal politics, such as former student leaders still in their 20s who are now in Chile's congress. But in the region's established political parties, it is hard to rise to the top. Unless the parties find ways to adapt to rapidly changing societies, they risk paving the way for a new crop of populist outsiders or for chronic conflict.

Asia



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Thailand's economy

The dangers of farsightedness

The junta lavishes attention on the economy's future but neglects the poor of today

'N PLANNING for the future, democratic L politicians dare not look far beyond the next election, lest they lose power before the future arrives. Thailand's military rulers have no such qualms. They have rewritten the constitution to guarantee themselves a guiding hand over future governments even after elections resume. That has given them the confidence to draw up a 20-year plan for the economy. In a speech in Bangkok on September 28th, Prayuth Chan-ocha, coup leader and prime minister, promised to turn Thailand into a developed country by 2036.

The junta sees Thailand climbing to a fourth stage of economic development ("Thailand 4.0") beyond agriculture, light manufacturing and heavy industry. This next stage will feature new "growth engines", such as biotechnology, the internet of things and "mechatronics" (a fusion of mechanics and electronics).

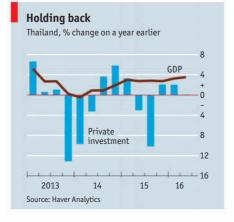
In pursuit of this vision, some welcome structural reforms are under way. The junta has passed an inheritance tax; one on land and property will follow. It has also begun to reform the corporate governance of the country's 56 state-owned enterprises, hoping to free them from political interference, even if not from public ownership. To bind the country closer together, the government is contemplating big outlays on infrastructure, including \$51 billion to be spent on railways, roads and airports.

Much remains to be done. Thailand's

service sector is the most protected in South-East Asia. Neither America nor the European Union is willing to negotiate a free-trade deal with the junta, even as they talk to such regional rivals as Indonesia, the Philippines and Vietnam.

Nonetheless, the regime's economic plan has left it open to an unusual charge: it is holding too many seminars on the long term and neglecting the short term, says Suradech Taweesaengsakulthai, a businessman in Khon Kaen, a north-eastern provincial capital. The junta's efforts to advance structural reform are more impressive than its efforts to revive demand. That is not something that can be said about most of the world's governments.

A revival of domestic demand is neces-



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sary. Thailand's economy is operating well below capacity. Inflation is far less than the central bank's target; the current-account surplus is strikingly high (about 10% of GDP); private credit is subdued (growing by 5% in the first quarter) and sovereign debt is modest (44% of GDP in 2015). Public investment, thanks to the junta's big plans, is growing at a double-digit pace, but Thailand's indebted consumers remain cautious and private investment is stagnant (see chart).

The overall shortfall in demand will amount to about 1.4% of GDP this year, according to the IMF. Strip out spending by foreign tourists and the gap is even larger, as the current-account surplus attests. This lack of spending is manifest in the inflation figures: consumer prices fell for 15 straight months last year and this. They rose by only 0.3% in the year to August.

Stagnant demand is especially visible in the provinces. The rural economy has contracted for seven quarters in a row. Nongpetch Khunnasarn, a used-car dealer outside Khon Kaen city, the political heartland of the government ousted by the junta, has not made a sale for two months. Under Yingluck Shinawatra, the deposed prime minister, she sold one a week.

In Ban Phue, an hour's drive from Khon Kaen, two years of drought and falling agricultural prices have led to a collapse in farm incomes. Last year Bangkok ordered farmers not to plant a second crop, because of poor rains. This year farmers are running a lottery to determine who can draw stored rainwater.

Thailand's farmers used to rely on ballots, not lottery tickets, to get what they needed. When Thaksin Shinawatra, Yingluck's brother, became prime minister in 2001 he aimed to bolster the income of the poor who voted for him. He introduced cheap medical care, accessible rural credit, >> higher minimum wages and generous price floors for agricultural goods. At one point in his sister's tenure, a tonne of rice brought in as much as 20,000 baht (\$625). It now fetches 8,000 baht, thanks to the fall in global prices and the removal of the government's price floor. "If the government does not pay more, what can we do?" asks Anong Wannasupring, a farmer.

For all of its waste and corruption, the Shinawatra style of clientilistic mass politics helped to spread spending power to the poorer regions, where local bigwigs doled out funds disbursed from the central government. All that has changed under the junta, which has kept a firmer grip on the purse-strings.

The National Village Community Fund, which has allocated 500,000 baht each to almost 80,000 villages for rural projects, is now administered by the ministry of interior. The state's Special Financial Institutions, which provide rural credit, are now regulated by the central bank, having previously been the playthings of provincial

politicians. These days, if you wait for money from Bangkok, "you'll wait forever," says Mr Suradech.

His complaint is confirmed by a startling calculation. The World Bank reckons that over 70% of Thailand's public expenditure in 2010 benefited Greater Bangkok, home to 17% of the country's population. In no other economy with a comparable level of income is government spending as skewed, say the bank's economists.

Rather than lift the shopping power of the rural masses, the junta has aimed to boost spending by tourists and urbanites. It has cut taxes markedly for the relatively few businesses and people that pay them. It has also succeeded in doubling the number of visitors from China to 10m a year.

Bangkok's efforts to claw back fiscal decision-making may curb clientelism. But this reconcentration of power may also result in a reconcentration of prosperity. The renewed centrality of "one man in Bangkok", says Ms Nongpetch, the used-car dealer, has been bad for business.

three employees of an environmental NGO were convicted, despite the prosecutor admitting in court that there was no evidence to support the charge.

Mr Hun Sen fears a repeat of the election of 2013, in which the CPP won only a narrow victory over the Cambodia National Rescue Party (CNRP), amid an atmosphere of general discontent. The CNRP alleged election fraud and declared it would boycott parliament; violent protests followed, in which at least four people died.

Unlike other regional strongmen, such as Prayuth Chan-ocha in Thailand, or the leaders of Vietnam and Laos, both avowedly single-party states, international opinion matters to Mr Hun Sen. Cambodia relies on foreign aid and NGOs; to keep funds flowing, he must maintain at least a veneer of democracy. A genuine opposition party and a lack of electoral blood-shed are essential.

The trick is keeping the opposition genuine but unthreatening. One tactic is to alternate between conciliation and repression. The government lured the CNRP's president, Sam Rainsy, back from his Parisian exile in 2013 with swiftly broken promises of reform. Mr Sam Rainsy returned to Paris last year, pursued by an arrest warrant. The party's second-in-command, Kem Sokha, has been holed up in its headquarters since May to avoid appearing in court in various cases related to his alleged affair with a hairdresser. On September 9th a court convicted him in absentia of refusing to appear for questioning, sentencing him to five months in prison and a fine of 800,000 riel (\$200). He should have parliamentary immunity, but the courts say it does not apply, although CPP officials have ignored summonses to appear before the tribunal investigating atrocities under the Khmer Rouge regime without consequence. Mr Kem Sokha reportedly plans an appeal; if it is denied, he will be expelled from parliament.

Since the trial, the government has taken to staging military exercises near the CNRP headquarters. The CNRP has threatened massive demonstrations. In turn, Mr Hun Sen has vowed to "eliminate" protesters. One rumour holds that tanks and other military gear have been redeployed from the Thai border to Phnom Penh.

In recent days cooler heads have prevailed: Mr Kem Sokha has urged followers to avoid "violent, rude or attacking" speech, and Mr Hun Sen has declared a temporary "ceasefire" for the Pchum Ben holiday this week. The CNRP said on September 27th that it would end its boycott of parliament; the next day representatives of the two parties met for talks. The CNRP has a list of demands. The government may agree to some of them, and may even honour its word for a few months. But Cambodians are familiar with this pantomime. It never ends well for the opposition.

Cambodian politics

The velvet glove frays

PHNOM PENH

A strongman falls back on old habits

Like many old people new to social media, Hun Sen, Cambodia's longtime strongman, has swiftly gone from sceptic to oversharer. Visitors to his Facebook page see him not only praying at temples and gravely shaking hands with world leaders; he also mugs for selfies with adoring crowds, plays with his grandchildren and hacks his way around a golf course. Scarcely a moment of his recent tour of the provinces went undocumented.

Politicians everywhere use social media to humanise themselves and connect directly with voters. Mr Hun Sen faces local elections next year and a national contest in 2018. On his recent provincial swing he pressed flesh, announced local infrastructure projects as though they were acts of personal largesse and even freed birds from captivity—a ritual good deed in local Buddhist practice. But in case his efforts to win hearts and minds fall short, he appears to have a contingency plan: intimidate the opposition and civil society.

At a meeting of the UN Human Rights Council this week, Samol Ney, Cambodia's ambassador, insisted: "The judiciary is...an independent institution." But in July the *Phnom Penh Post* published minutes from a central-committee meeting of the ruling Cambodian People's Party (CPP): it said that, to avoid being toppled by

popular protests, it would have to "strengthen the state's equipment of power, especially the armed forces and the courts". The government has brought defamation suits against an array of opposition politicians and activists, including Ny Chakrya, a human-rights advocate sentenced on September 22nd to six months' imprisonment and a hefty fine. In August



An opposition politician's lot

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Asia 39



Protest in South Korea

Death by water cannon

SEOIII

The violent demise of a demonstrator touches a chord

ANOTHER has been killed like this, again," lamented the mother of Lee Han-yeol, who was fatally injured by a tear-gas canister in 1987 during a demonstration against the military regime of Chun Doo-hwan. She was among many attending the funeral of Baek Nam-gi, a 69-year-old South Korean activist and farmer. Mr Baek was knocked over by a blast from a police water cannon during a demonstration last year; after ten months in a coma, he died on September 25th.

Clashes between demonstrators and police have a special resonance in South Korean politics. The death of Mr Lee became one of the defining moments of the country's transition to democracy. As he lay in a coma, fellow students circulated a photograph of him, bloodied and slumped in the arms of a friend. Almost 30 years on, protests, frequent and raucous, are still a big part of public life. But just how far it is legitimate for protests to go, and how police should respond, are still matters of fierce debate.

Mr Baek's death struck a chord in part because he epitomised the dogged activism that helped to put an end to the authoritarian order that endured from the second world war until the late 1980s. He first protested against Park Chung-hee, president from 1962 to 1979 and father of South Korea's current, democratically elected president, Park Geun-hye. He was twice expelled from university in Seoul in the 1970s for his dissent.

At one point, when a warrant was put out for his arrest, he found refuge in a cathedral, and subsequently spent five years as a monk. The law did eventually catch up with him: he spent time in prison for violating the strict restrictions on political activity imposed by martial law. He was so committed to the cause that he named one of his children Minjuhwa, which means "democratisation".

Even after a series of former opposition figures were freely elected president (starting in 1992), Mr Baek continued to join protests, in support of another cause dear to many Korean hearts: rice farming. The protest during which Mr Baek was injured was intended to persuade the new President Park to keep her promise to maintain huge subsidies and an artificially high price for rice, which had fallen thanks to free-trade agreements, but is still double the world price. At least 68,000 farmers, unionists and other activists (130,000, according to the organisers) faced off against 20,000-odd police (the authorities typically aim for an overwhelming police presence at big demonstrations).

The police shot water laced with pepper spray at protesters from their cannons, and continued to blast water at Mr Baek even as he lay on the ground. A photograph of the scene was shared widely on social media, prompting outrage. Many of the protesters, some of whom carried iron bars, were also violent: 100 policemen were injured and 40-odd police buses damaged.

When two farmers objecting to early plans to open the rice market a little died after a battle with police in 2005, the president of the day, Roh Moo-hyun, a former human-rights advocate, sacked senior officers and apologised. Ms Park, a conservative, has not apologised for Mr Baek's treatment. The police said apologising for every injury was "inappropriate"; they have repeatedly requested an autopsy (a court ordered one on September 28th), presumably in the hope of being exonerated. The UN's special rapporteur on freedom of assembly this year noted "a slow, creeping inclination" in South Korea to erode it; the use of water cannons to target lone protesters, he said, was "difficult to justify".

Im Byeong-do, a blogger, says that South Korea's democratic governments still view demonstrations as a challenge to their authority. Han Sang-gyun, a union leader who helped organise the rally in November, was held accountable by the courts for the violence that ensued and sentenced to five years in prison—an unusually harsh penalty. As democracy has flourished, the nature of protests has shifted. Candlelit rallies, for example, have become common. Yet those too are still often treated as riots, says Mr Im—and that pressure may in turn be hardening the culture of protest.

Mould-breaking politicians (1)

Going into battle

τοκγο

A new governor takes on vested interests, up to a point

IN HER first two months on the job Yuriko Koike, Tokyo's governor, has ruffled many feathers. She began before she was even elected, by running without the endorsement of the Liberal Democratic Party (LDP), of which she is a member but which supported another candidate. Since taking office she has revealed that the site to which the city's main fishmarket is supposed to move has not been properly decontaminated; she is banning her staff from working past 8pm in the name of "life-work balance" and she has declared war on financial waste and corruptiontaking the lead by pledging to halve her own salary. The hallmark of her tenure, she says, will be "major change" to the way the city is run.

In fact, it is a major change simply having someone like her as governor—mayor, in effect, of Tokyo prefecture, with a population of 13.6m and an economy roughly the size of Canada's. Not only is she a woman (unlike 87% of Japanese parliamentarians). She is also neither a political dynast (unlike five of the past seven prime ministers), nor a party stalwart. That played to her advantage in the election, but, alas, will limit her clout when taking on the old-boys' network of city politics, as she has promised to do.

Pledges to take on vested interests tend to be popular in Japan. Fully 85% of Tokyoites approve of Ms Koike's handling of the fishmarket issue, for instance. But changing her pay and her staff's working hours is one thing; shaking things up outside her austere, cavernous offices in north-western Tokyo is quite another.

Ms Koike may well be able to rein in the rapidly rising budget for the 2020 Olympics, which Tokyo will host. And she seems likely to triumph in the row about the fishmarket, although it has infuriated developers and brought her into conflict with Shintaro Ishihara, a former governor who is being blamed for the failure to decontaminate. But she will struggle to eliminate incestuous practices, such as amakudari, or "descent from heaven", the system by which senior bureaucrats glide into cushy jobs in one of the many public or private bodies affiliated with the city government after retirement, earning as much as 10m yen (\$100,000) a year. "She is in a bind," says Koichi Nakano of Sophia University. "She needs popular support and that means looking unafraid of vested interests, but if she continues like this she will face a nasty counter-attack." As it is, the tabloid press has begun to publish unfavourable stories.

Ms Koike, who has changed party several times, has a knack for political survival. But her record is not quite as iconoclastic as she suggests. Although she was Japan's first female defence minister, she resigned after less than two months in office, over a minor scandal. She is best known for promoting "cool biz" dress during a stint as minister of environment, an effort to get businessmen to doff jackets and ties in summer to save electricity.

Some observers speculate that Ms Koike will take her battle against corruption only so far, and focus on other priorities instead. One pledge she highlights is a plan to provide more nurseries, making it easier for mothers to work-something needed to ease Japan's labour shortage and stubborn sexism. That is an indication of her pragmatism: as a conservative and member of Nippon Kaigi, a nationalist group which champions traditional values, this is not natural ground for her. She is also likely to reach an accommodation of some kind with the LDP, on similar grounds. She does not rule out setting up a party of her own, boasting, "I could create a party in three days." But she would probably prefer to have the LDP's imprimatur as she confronts many of the party's members and allies in Tokyo. Just how far the confrontation will go, however, remains an open question.

leader on a sectarian basis.

The campaign for governor seems to be following a similar pattern. Amien Rais, a former speaker of parliament, recently labelled Ahok a "false prophet", only to be shouted down by various Islamic authorities. At a gathering at Jakarta's biggest mosque, several speakers claimed it was "haram", or sinful, for Muslims to vote for a non-believer. But Muhammadiyah, one of Indonesia's biggest Muslim organisations (formerly headed by Mr Rais, as it happens) swiftly condemned such talk.

Encouragingly, Ahok's main rival for the governorship, Anies Baswedan, until recently education minister in Jokowi's government, is a noted moderate. The other candidate is Agus Yudhoyono, the eldest son of Indonesia's previous president, who revealed his resignation from the army on the day of the deadline to file his papers, catching everyone by surprise. Neither looks the type to resort to dog-whistle politics.

As the election draws nearer, however, chauvinist attacks will doubtless proliferate. Moreover, not all Indonesians are as open-minded as Jakartans. Elections will also be held early next year for thousands of posts in local government across the sprawling archipelago. Minorities, many of whom have been targeted by discriminatory local by-laws in recent years, worry that they will face more hostility during the campaign.

Even in Jakarta, Ahok is by no means a shoo-in. Polling shows that Mr Baswedan, a charismatic academic who made his name through a volunteer scheme that sends young graduates to teach in remote corners of the country, poses a credible challenge. With luck, whichever candidate triumphs, it will be because of his ideas and abilities, not his background.

Mould-breaking politicians (2)

Twice a minority

JAKARTA

An unlikely candidate is leading in the race to run Indonesia's capital

ANY pundits have predicted that the race to become the next governor of Jakarta will be an especially nasty one, fraught with racial and religious discord. It began harmoniously enough on September 24th, the day after the deadline to register as a candidate, with all three contenders and their running-mates smiling and laughing as they posed together for a photo. But the front-runner, Basuki Tjahaja Purnama, known to all as Ahok, is both Christian and of Chinese descent—and thus a member of two tiny minorities in a mostly Muslim, Malay country. How voters will respond is anyone's guess.

Ahok is already governor (in effect, mayor) of Indonesia's teeming capital, a city of about 10m people. He had been deputy governor, but won an automatic promotion when his predecessor, Joko Widodo, stood down to run for president in 2014. That means he has never faced the voters at the top of a ticket, only as the running-mate of Jokowi, as the president is known, during the previous election for governor in 2012.

As recently as 1998 hundreds of ethnic Chinese were raped and killed in riots in Jakarta. Christians have been the victims of pogroms elsewhere in the country in recent years too. Were Ahok to secure his own mandate in the upcoming elections, which are scheduled for February 15th, it would be startling and heartening proof of Indonesians' open-mindedness.

Throughout Ahok's four years in office hardline Islamists have sought to unseat him, staging frequent rallies against him (one is pictured on the right) and deriding him as a "kafir", or infidel. But his blunt speech and impatience with pettifogging bureaucrats have won over many in Jakarta. A recent survey by Poltracking, a local pollster, put his approval rating at a towering 69%. Voters seem to care more about his efforts to curb Jakarta's notorious floods and traffic jams and spur the local economy than they do about his race or religion. Evan Laksmana of the Centre for Strategic and International Studies, a think-tank in Jakarta, says they realise that they will end up "paying the price" of poorer municipal services if they elect a



The anti-infidel lobby



Regional development

Rich province, poor province

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BETITNG

The government is struggling to spread wealth more evenly

ARLY in the summer Xi Jinping, China's **E** president, toured one of the country's poorest provinces, Ningxia in the west. "No region or ethnic group can be left behind," he insisted, echoing an egalitarian view to which the Communist Party claims to be wedded. In the 1990s, as China's economy boomed, inland provinces such as Ningxia fell far behind the prosperous coast, but Mr Xi said there had since been a "gradual reversal" of this trend. He failed to mention that this is no longer happening. As China's economy slows, convergence between rich and poor provinces is stalling. One of the party's much-vaunted goals for the country's development, "common prosperity", is looking far harder to attain.

This matters to Mr Xi (pictured, in Ningxia). In recent years the party's leaders have placed considerable emphasis on the need to narrow regional income gaps. They say China will be a "moderately prosperous society" by the end of the decade. It will only be partly so if growth fails to pick up again inland. Debate has started to emerge in China about whether the party has been using the right methods to bring prosperity to backward provinces.

China is very unequal. Shanghai, which is counted as a province, is five times wealthier than the poorest one, Gansu, which has a similar-sized population (see map, next page). That is a wider spread than in notoriously unequal Brazil, where the richest state, São Paulo, is four times richer than the poorest, Piauí (these comparisons exclude the special cases of Hong Kong and Brasília).

To iron out living standards, the government has used numerous strategies. They include a "Go West" plan involving the building of roads, railways, pipelines and other investment inland; Mr Xi's signature "Belt and Road" policy aimed partly at boosting economic ties with Central Asia and South-East Asia and thereby stimulating the economies of provinces adjoining those areas; a twinning arrangement whereby provinces and cities in rich coastal areas dole out aid and advice to inland

Faltering progress China's provincial income inequality* 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 finite administration builting 1975 80 85 90 95 2000 05 10 15 *Dispersion index, using the ratio of the standard deviation of provincial Source: Gavekal GDP per person relative to the mean

counterparts; and a project to beef up China's rustbelt provinces in the north-east bordering Russia and North Korea. The central government also gives extra money to poorer provinces. Ten out of China's 33 provinces get more than half their budgets from the centre's coffers. Prosperous Guangdong on the coast gets only 10%.

The number, range and cost of these policies suggest the party sees its legitimacy rooted not only in the creation of wealth but the ability to spread it around. Deng Xiaoping's economic reforms, launched in the late 1970s, helped seaboard provinces, which were then poorer than inland ones, to catch up by making things and shipping them abroad. (Mao had discouraged investment in coastal areas, fearing they were vulnerable to attack.) In the 1990s the coast pulled ahead. Then, after 2000, the gap began to narrow again as the worldwide commodity boom-a product of China's rapid growth-increased demand for raw materials produced in the interior (see chart). That was a blessing for Mr Xi's predecessor Hu Jintao, who made "rebalancing" a priority after he became party chief in 2002. It also boosted many economists' optimism about China's ability to sustain rapid growth. Even if richer provinces were to slow down, they reckoned, the high growth potential of inland regions would compensate for that.

But convergence is ending. GDP growth ▶

China The Economist October 1st 2016

In slowed across the country last year, but especially in poorer regions. Seven inland provinces had nominal growth below 2%, a recession by Chinese standards (in 2014 only one province reported growth below that level). In contrast, the rich provincial level municipalities of Shanghai, Beijing and Tianjin, plus a clutch of other coastal provinces including Guangdong, grew between 5% and 8%. Though there were exceptions, the rule of thumb in 2015 was that the poorer the region, the slower the growth. Most of the provinces with belowaverage growth were poor.

Of course, 2015 was just one year. But a longer period confirms the pattern. Of 31 provinces, 21 had an income below 40,000 yuan (\$6,200) per person in 2011. Andrew Batson of Gavekal Dragonomics, a research firm, says that of these 21, 13 (almost two-thirds) saw their real GDP growth slow down by more than 4 points between 2011 and 2014. In contrast, only three of the ten richer provinces (those with income per person above the 40,000 yuan mark) slowed that much. In 2007 all of China's provinces were narrowing their income gap with Shanghai. In 2015 barely a third of them were. In other words, China's slowdown has been much sharper in poorer areas than richer ones.

There are three reasons why convergence has stalled. The main one is that the commodity boom is over. Both coal and steel prices fell by two-thirds between 2011 and the end of 2015, before recovering somewhat this year. Commodity-producing provinces have been hammered. Gansu produces 90% of the country's nickel. Inner Mongolia and Shanxi account for half of coal production. In all but four of the 21 inland provinces, mining and metals account for a higher share of GDP than the national average.

Commodity-influenced slowdowns are often made worse by policy mistakes. This is the second reason for the halt in convergence. Inland provinces built a housing boom on the back of the commodity one, creating what seemed at the time like a perpetual-motion machine: high raw-material prices financed construction which increased demand for raw materials. When commodity prices fell, the boom began to look unsustainable.

The pace of inland growth was evident in dizzying levels of investment in physical assets such as buildings and roads. Between 2008 and last year, as a share of provincial GDP, it rose from 48% to 73% in Shanxi, 64% to 78% in Inner Mongolia, and from 54% to an astonishing 104% in Xinjiang. In the country as a whole, investment as a share of GDP rose only slightly in that period, to 43%. In Shanghai it fell.

This would be fine if the investments were productive, but provinces in the west are notorious for waste. In the coal-rich city of Ordos in Inner Mongolia, on the edge of the Gobi desert, a new district was built, designed for 1m people. It stood empty for years, a symbol of ill-planned extravagance (people are at last moving in).

Investment by the government is keeping some places afloat. Tibet, for example, logged 10.6% growth in the first half of this year, thanks to net fiscal transfers from the central government amounting to a stunning 112% of GDP last year. Given the region's political significance and strategic location, such handouts will continue—Tibet's planners admit there is no chance of the region getting by without them for the foreseeable future.

Tibet is an extreme example of the third reason why convergence is ending. Despite oodles of aid, both it and other poor provinces cannot compete with rich coastal ones. In theory, poorer places should eventually converge with rich areas because they will attract businesses with their cheaper labour and land. But it turns out that in China (as elsewhere) these advantages are outweighed by the assets of richer places: better skills and education, more reliable legal institutions, and so-called "network effects"—that is, the clustering of similar businesses in one place, which then benefit from the swapping of ideas and people. A recent study by Ryan Monarch, an economist at America's Federal Reserve Board, showed that American importers of Chinese goods were very reluctant to change suppliers. When they do, they usually switch to another company in the same city. This makes it hard for inland competitors to break into export markets.

There are exceptions. The south-western region of Chongqing has emerged as the world's largest exporter of laptops. Chengdu, the capital of neighbouring Sichuan province, is becoming a financial hub. But by and large China's export industry is not migrating inland. In 2002 six big coastal provinces accounted for 80% of manufactured exports. They still do.

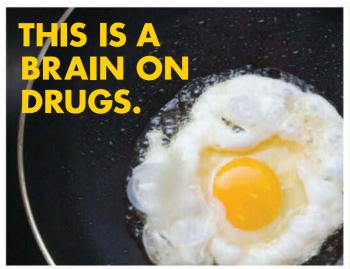
This contrast is worrying. Though income gaps did narrow after 2000 and only stopped doing so recently, provinces have not become alike in other respects. Rich ones continue to depend on world markets and foreign investment. Poor provinces increasingly depend on support from the central government.

A divergence of views

Officials bicker about this. Mr Xi asserted the Robin-Hood view in Ningxia that regional gaps matter and that redistribution is needed. "The first to prosper," he said, "should help the latecomers." But three months earlier, an anonymous "authoritative person" (widely believed to be Mr Xi's own adviser, Liu He) took a more relaxed view, telling the party's mouthpiece, the People's Daily, that "divergence is a necessity of economic development," and "the faster divergence happens, the better."

It is unclear how this difference will be resolved, though the money must surely be on Mr Xi. Economically, though, Mr Liu is right. Regional-aid programmes have had little impact on the narrowing of income gaps. More of them will not stop those gaps widening. Socially, a slowdown in poorer provinces should not be a problem so long as jobs are still being created in richer ones, enabling migrants from inland to find work there and send money home. But politically the end of convergence is a challenge to Mr Xi, who has been trying to appeal to traditionalists in the party who extol Mao as a champion of equality. Wasteful and ineffective measures to achieve it will remain in place.





ANY QUESTIONS?









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Banyan | The eyes have it

It is not easy to capture China's contradictions on film. But it is possible



ABOUT 30 years ago, Er Housheng, a folk singer from Inner Mongolia, slept with another man's wife. In revenge, the outraged husband and his brothers ambushed him and gouged out his eyes. At first the singer wanted to die. Then he turned his trauma into a hit song. Now in his 50s, he still performs, travelling from stage to stage across the Mongolian grasslands, counting with his fingers the 100-yuan bills he earns.

Mr Er's life and music is depicted in "Cut Out the Eyes", a documentary by Xu Tong which was screened in September at a film festival in Hong Kong. The film, like its protagonist, has led an itinerant life. It was scheduled to appear as one of 31 documentaries at the Beijing Independent Film Festival in 2014. But the event became a high-profile victim of China's new climate of censorship. The authorities cut electricity to the venue, hired goons to block the path of attendees and briefly detained the festival's organisers, who had to cancel the event. Independent documentaries are one way a country as complex and compelling as China can see itself. But the government seems increasingly determined to gouge out those eyes.

No vulgarity, please, this is China

To make an independent film in China, film-makers must apply for what is sometimes called a "dragon" licence, named after the logo of the Film Bureau of the State Administration of Radio, Film and Television. What the Communist Party expects from China's artists was laid out by Xi Jinping, China's president, party leader and chief critic, in 2014. He expressed disapproval of nakedly commercial works that "blindly chase...vulgar interests", an accusation that cannot be levelled at the loss-making documentaries that fill most festival schedules. He also warned about art in which "good and evil cannot be distinguished...and the dark side of society is over-emphasised". That sounds like many of Banyan's favourite films.

Mr Xi's tastes have left space in China for lots of documentaries that conform to what Tammy Cheung of Visible Record (the organiser of Hong Kong's recent film festival) calls "TV style". These are mostly less than an hour long, with clunky voice-overs and staged interviews. More challenging documentaries find an audience outside the Chinese mainland—gracing festivals in Hong

Kong and abroad and appearing on public television channels. At home they remain obscure, shown only at low-key events, often in academic settings. To screen such films in China now requires greater caution than a secret love affair, as one Chinese director put it to Shelly Kraicer, a critic in New York. "It's almost as if we've already gone to sleep with other men's wives."

But censorship has not stopped documentarians making their films, any more than Mr Er's attackers stopped his songwriting. (Even the closure of the Beijing festival was turned into a film in its own right.) And despite the obstacles, documentary-making in China still has a number of things going for it. To start with the most obvious: everyone now has a smartphone or camera. One of the most memorable films of recent years is "Disorder", an artful weaving together of artless footage of Chinese cities on the boil. After the Sichuan earthquake in 2008, amateur footage of death, destruction and despair was sold on DVDs to visiting disaster tourists. The grisly images escaped official censorship—as well as any standards of decency or taste.

China also has no shortage of drama to document. The Sichuan earthquake inspired Du Haibin's well-received film "1428" (named after the time the disaster struck) as well as films like "Shangshu Seminary", which appeared at the Hong Kong festival. The seismic movements in China's economy have also inspired memorable work. "Last Train Home", a film launched in 2009 by Lixin Fan, followed a family of factory workers back to their native village for the Chinese new year. The multitude of migrants fighting to board trains allowed an intimate tale to double as an economic epic. A similar magic is at work in the opening eight-minute tracking shot in "Manufactured Landscapes", a film released in 2006 by a Canadian, Jennifer Baichwal. The camera takes the audience past row after row of assembly lines in a factory that makes coffeemakers and irons (for clothes, not for whacking golf balls). What begins as a mundane shot becomes mesmerising as minutes go by and the factory floor rolls on.

Sometimes it is not necessary to emphasise the dark side of society. It emphasises itself. In his latest film, "A Young Patriot", Mr Du turns away from migrants, vagabonds and disaster victims to focus instead on a fierce nationalist, Zhao Changtong. Mr Zhao, who shares a birthday with Mao, waves a red flag and shouts anti-Japanese slogans in the streets of his picturesque hometown of Pingyao in Shanxi province. He hopes to become a propaganda photographer for the army—the kind of documentarian of whom Mr Xi would no doubt approve. His gratitude to his country is deeply felt and finely observed. When he was young, his TV antenna hung from a poplar tree, he points out. Now he watches television with a remote control, cosy on his sofa.

Then things change. Over the next three years, Mr Zhao enters university, joins the student union propaganda unit, finds a girl-friend and gradually loses his idealism. He is charmed by the simply dressed Japanese guests, who carry their own luggage at the hotel where he works briefly as a doorman. He is confused by the downfall in 2012 of Bo Xilai, a charismatic, Mao-loving party chief in Chongqing, a south-western region. During 15 days as a volunteer teacher in a remote, mountain village, he complains that party-picked legislators are all "fucking CEOS" and political mobilisation is "brainwashing". He still has enough patriotic feeling to raise a red flag outside the one-room school and teach his pupils the national anthem. But their commitment, like his, wavers. As the lesson proceeds, the camera is distracted by a cock fight. Disillusionment is, in some ways, as powerful as dissent.

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SPECIAL REPORT THE WORLD ECONOMY

October 1st 2016



An open and shut case









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The consensus in favour of open economies is cracking, says John O'Sullivan. Is globalisation no longer a good thing?

THERE IS NOTHING dark, still less satanic, about the Revolution Mill in Greensboro, North Carolina. The tall yellow-brick chimney stack, with red bricks spelling "Revolution" down its length, was built a few years after the mill was established in 1900. It was a booming time for local enterprise. America's cotton industry was moving south from New England to take advantage of lower wages. The number of mills in the South more than doubled between 1890 and 1900, to 542. By 1938 Revolution Mill was the world's largest factory exclusively making flannel, producing 50m yards of cloth a year.

The main mill building still has the springy hardwood floors and original wooden joists installed in its heyday, but no clacking of looms has been heard here for over three decades. The mill ceased production in 1982, an early warning of another revolution on a global scale. The textile industry was starting a fresh migration in search of cheaper labour, this time in Latin America and Asia. Revolution Mill is a monument to an industry that lost out to globalisation.

In nearby Thomasville, there is another landmark to past industrial glory: a 30-foot (9-metre) replica of an upholstered chair. The Big Chair was erected in 1950 to mark the town's prowess in furniture-making, in which North Carolina was once America's leading state. But the success did not last. "In the 2000s half of Thomasville went to China," says T.J. Stout, boss of Carsons Hospitality, a local furniture-maker. Local makers of cabinets, dressers and the like lost sales to Asia, where labour-intensive production was cheaper.

The state is now finding new ways to do well. An hour's drive east from Greensboro is Durham, a city that is bursting with new firms. One is Bright View Technologies, with a modern headquarters on the city's outskirts, which makes film and reflectors to vary the pattern and diffusion of LED lights. The Liggett and Myers building in the city centre was once the home of the Chesterfield cigarette. The handsome building is now

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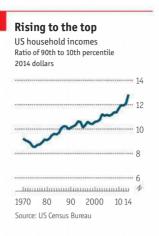
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• filling up with newer businesses, says Ted Conner of the Durham Chamber of Commerce. Duke University, the centre of much of the city's innovation, is taking some of the space for labs.

North Carolina exemplifies both the promise and the casualties of today's open economy. Yet even thriving local businesses there grumble that America gets the raw end of trade deals, and that foreign rivals benefit from unfair subsidies and lax regulation. In places that have found it harder to adapt to changing times,



the rumblings tend to be louder. Across the Western world there is growing unease about globalisation and the lopsided, unstable sort of capitalism it is believed to have wrought.

A backlash against freer trade is reshaping politics. Donald Trump has clinched an unlikely nomination as the Republican Party's candidate in November's presidential elections with the support of blue-collar men in America's South and its rustbelt. These are places that lost lots of manufacturing jobs in the decade after 2001, when America was hit by a surge of imports from China (which Mr Trump says he will keep out with punitive tariffs). Free trade now causes so much hostility that Hillary Clinton, the Democratic Party's presidential candidate, was forced to disown the Trans-Pacific Partnership (TPP), a trade deal with Asia that she herself helped to negotiate. Talks on a new trade deal with the European Union, the Transatlantic Trade and Investment Partnership (TTIP), have stalled. Senior politicians in Germany and France have turned against it in response to popular opposition to the pact, which is meant to lower investment and regulatory barriers between Europe and America.

Keep-out signs

The commitment to free movement of people within the EU has also come under strain. In June Britain, one of Europe's stronger economies, voted in a referendum to leave the EU after 43 years as a member. Support for Brexit was strong in the north of England and Wales, where much of Britain's manufacturing used to be; but it was firmest in places that had seen big increases in migrant populations in recent years. Since Britain's vote to leave, anti-establishment parties in France, the Netherlands, Germany, Italy and Austria have called for referendums on EU membership in their countries too. Such parties favour closed borders, caps on migration and barriers to trade. They are gaining in popularity and now hold sway in governments in eight EU countries. Mr Trump, for his part, has promised to build a wall along the border with Mexico to keep out immigrants.

There is growing disquiet, too, about the unfettered movement of capital. More of the value created by companies is intangible, and businesses that rely on selling ideas find it easier to set up shop where taxes are low. America has clamped down on so-called tax inversions, in which a big company moves to a low-tax country after agreeing to be bought by a smaller firm based there. Europeans grumble that American firms engage in too many clever tricks to avoid tax. In August the European Commission told Ireland to recoup up to €13 billion (\$14.5 billion) in unpaid taxes from Apple, ruling that the company's low tax bill was a source of unfair competition.

Free movement of debt capital has meant that trouble in

one part of the world (say, America's subprime crisis) quickly spreads to other parts. The fickleness of capital flows is one reason why the EU's most ambitious cross-border initiative, the euro, which has joined 19 of its 28 members in a currency union, is in trouble. In the euro's early years, countries such as Greece, Italy, Ireland, Portugal and Spain enjoyed ample credit and low borrowing costs, thanks to floods of private short-term capital from other EU countries. When crisis struck, that credit dried up and had to be replaced with massive official loans, from the ECB and from bail-out funds. The conditions attached to such support have caused relations between creditor countries such as Germany and debtors such as Greece to sour.

Some claim that the growing discontent in the rich world is not really about economics. After all, Britain and America, at least, have enjoyed reasonable GDP growth recently, and unemployment in both countries has dropped to around 5%. Instead, the argument goes, the revolt against economic openness reflects deeper anxieties about lost relative status. Some arise from the emergence of China as a global power; others are rooted within individual societies. For example, in parts of Europe opposition to migrants was prompted by the Syrian refugee crisis. It stems less from worries about the effect of immigration on wages or jobs than from a perceived threat to social cohesion.

But there is a material basis for discontent nevertheless, because a sluggish economic recovery has bypassed large groups of people. In America one in six working-age men without a college degree is not part of the workforce, according to an analysis by the Council of Economic Advisers, a White House think-tank. In Britain, though more people than ever are in work, wage rises have not kept up with inflation. Only in London and its hinterland in the south-east has real income per person risen above its level before the 2007-08 financial crisis. Most other rich countries are in the same boat. A report by the McKinsey Global Institute, a think-tank, found that the real incomes of two-thirds of households in 25 advanced economies were flat or fell between 2005 and 2014, compared with 2% in the previous decade. The few gains in a sluggish economy have gone to a salaried gentry.

This has fed a widespread sense that an open economy is good for a small elite but does nothing for the broad mass of people. Even academics and policymakers who used to welcome openness unreservedly are having second thoughts. They had always understood that free trade creates losers as well as winners, but thought that the disruption was transitory and the gains were big enough to compensate those who lose out. However, a body of new research suggests that China's integration into global trade caused more lasting damage than expected to some rich-world workers. Those displaced by a surge in imports from

Cause for concern US merchandise trade with China, \$bn Imports from China 400 Exports to China 100 200 0 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 Source: US Census Bureau

▶ China were concentrated in pockets of distress where alternative jobs were hard to come by. It is not easy to establish a direct link between openness and wage inequality, but recent studies suggest that trade plays a bigger role than previously thought. Large-scale migration is increasingly understood to conflict with the welfare policy needed to shield workers from the disruptions of trade and technology. The consensus in favour of unfettered capital mobility began to weaken after the East Asian crises of 1997-98. As the scale of capital flows grew, the doubts increased. A recent article by economists at the IMF entitled "Neoliberalism: Oversold?" argued that in certain cases the costs to economies of opening up to

Multiple hits

capital flows exceed the benefits.

This special report will ask how far globalisation, defined as the freer flow of trade, people and capital around the world, is responsible for the world's economic ills and whether it is still, on balance, a good thing. A true reckoning is trickier than it might appear, and not just because the main elements of economic openness have different repercussions. Several other big upheavals have hit the world economy in recent decades, and the effects are hard to disentangle.

First, jobs and pay have been greatly affected by technological change. Much of the increase in wage inequality in rich countries stems from new technologies that make college-educated workers more valuable. At the same time companies' profitability has increasingly diverged. Online platforms such as Amazon, Google and Uber that act as matchmakers between consumers and producers or advertisers rely on network effects: the more users they have, the more useful they become. The firms that come to dominate such markets make spectacular returns compared with the also-rans. That has sometimes produced windfalls at the very top of the income distribution. At the same time the rapid decline in the cost of automation has left the low- and mid-skilled at risk of losing their jobs. All these changes have been amplified by globalisation, but would have been highly disruptive in any event.

The second source of turmoil was the financial crisis and the long, slow recovery that typically follows banking blow-ups. The credit boom before the crisis had helped to mask the problem of income inequality by boosting the price of homes and increasing the spending power of the low-paid. The subsequent bust destroyed both jobs and wealth, but the college-educated bounced back more quickly than others. The free flow of debt capital played a role in the build-up to the crisis, but much of the blame for it lies with lax bank regulation. Banking busts happened long before globalisation.

Superimposed on all this was a unique event: the rapid emergence of China as an economic power. Export-led growth has transformed China from a poor to a middle-income country, taking hundreds of millions of people out of poverty. This achievement is probably unrepeatable. As the price of capital goods continues to fall sharply, places with large pools of cheap labour, such as India or Africa, will find it harder to break into global supply chains, as China did so speedily and successfully.

This special report will disentangle these myriad influences to assess the impact of the free movement of goods, capital and people. It will conclude that some of the concerns about economic openness are valid. The strains inflicted by a more integrated global economy were underestimated, and too little effort went into helping those who lost out. But much of the criticism of openness is misguided, underplaying its benefits and blaming it for problems that have other causes. Rolling it back would leave everyone worse off.



Free trade

Coming and going

Truth and myth about the effects of openness to trade

IN MARCH 2000, two months before a crucial vote in America's Congress on whether to make normal trading relations with China permanent, Bill Clinton gave a press conference. In the first year of his presidency, 1993, he had made a bold case for the North Atlantic Free Trade Agreement (NAFTA) with Canada and Mexico, claiming it would create 200,000 jobs in America. Now, in the final year of his second term, he was even more bullish about a trade pact with China, which would allow that country to join the WTO. It would require China quickly to cut its average import tariff from 24% to 9%, to abolish import quotas and licences and to open up some industries to American investment. America, for its part, would not have to do anything. "This is a hundred-to-nothing deal for America when it comes to the economic consequences," said Mr Clinton.

Sixteen years on the mood is rather different. Job losses in manufacturing states such as Michigan, Ohio and Pennsylvania have made trade a key issue in America's presidential election. Donald Trump has risen to prominence in part by promising to impose steep tariffs on imports from China and Mexico, claiming America's trade deficit with both countries (see chart, next page) shows it is "losing". Hillary Clinton is no longer supporting the TPP trade deal she had earlier favoured. The demise of furniture-makers and textile firms, unable to compete with low-cost imports, belies the predictions made by her husband. Bernie Sanders, Mrs Clinton's opponent in the Democratic Party primaries, said trade deals had been "a disaster for American workers". A YouTube clip earlier this year showing the graceless manner in which bosses of Carrier, a maker of air-conditioners, told its workforce that it was moving production to Mexico seemed to >>

The Economist October 1st 2016

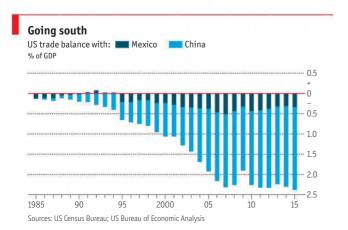
confirm every fear about the exodus of jobs and the heartlessness of capitalism.

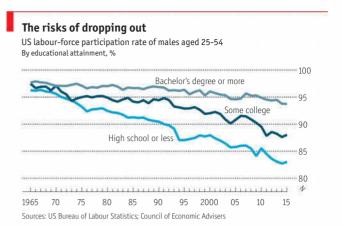
What is behind the change in mood? The years after the NAFTA agreement came into force, in 1994, were actually rather good ones for America's economy, including manufacturing. But China's accession to the WTO caused a big shock. The country's size, and the speed at which it conquered rich-world markets for low-cost manufacturing, makes it unique. By 2013 it had captured one-fifth of all manufacturing exports worldwide, compared with a share of only 2% in 1991.

This coincided with a fresh decline in factory jobs in America. Between 1999 and 2011 America lost almost 6m manufacturing jobs in net terms. That may not be as dramatic as it sounds, since America is a large and dynamic place where around 5m jobs come and go every month. Still, when David Autor of the Massachusetts Institute of Technology (MIT), David Dorn of the University of Zurich and Gordon Hanson of the University of California, San Diego, looked into the job losses more closely, they found something worrying. At least one-fifth of the drop in factory jobs during that period was the direct result of competition from China.

Moreover, the American workers who had lost those jobs neither found new ones close by nor searched for work farther afield. They either swelled the ranks of the unemployed or, more often, left the workforce. That contradicts the widespread belief that America's jobs market is fluid and flexible. When men lose a factory job, they often stay put. Those who managed to find new jobs were paid less than before and were working in industries that were vulnerable to competition from imports. In subsequent research, the authors found that lost factory jobs also had a depressing effect on aggregate demand (and thus non-manufacturing jobs) in the affected areas. In total, up to 2.4m jobs may have been lost, directly and indirectly, as a consequence of imports from China.

In other rich countries, regions or industries with heavy exposure to Chinese imports also suffered material losses in factory jobs. A study of Spain's jobs market by Vicente Donoso, of the Complutense University of Madrid, and others found that provinces with the greatest exposure to Chinese imports saw the largest falls in the share of manufacturing employment between 1999 and 2007, but this was compensated for by an increase in non-factory jobs. Research in Norway, though, found that the main effect was to raise unemployment. João Paulo Pessoa of the London School of Economics found that British workers in industries exposed to high levels of import competition from China spent more time out of work than those in other industries. A wide-ranging study of the effect on Germany of more trade with





China and eastern Europe in the two decades after 1988 concluded that industries competing with imports suffered job losses. but these were outweighed by job gains in regions focused on export industries. Those gains were due almost entirely to trade with eastern Europe, not China.

China's accession to the WTO was supposed to be a great bonus for America. So why was its impact on trade and jobs so unexpectedly large? One reason was that China got a very significant advantage out of the pact. A paper by Justin Pierce, of the Federal Reserve, and Peter Schott, of Yale School of Management, argues that joining the WTO removed the risk for China of a steep increase in America's tariffs, making it less perilous for its companies to invest in new factories. The authors found that industries where the threat of tariff increases was most reduced suffered the greatest job losses in America. But the lopsided nature of trade between China and the rich world also played a part. After China joined the WTO, its current-account surplus widened from an average of around 2% of GDP in the 1990s to about 5% in the following decade. In other words, China saved more. That helps explain the modest offsetting gains in exports in the regions affected by Chinese imports.

Done workin'

It is important to note that America's growing inability to bounce back from losing manufacturing jobs predates the rise of China as an exporting power. A report published in June by the Council of Economic Advisers (CEA) charts the long-term decline in prime-aged men in America's workforce. It shows that in the mid-1960s almost all men aged between 25 and 54 were either in work or looking for a job, but that in the past half-century the participation rate for this group has dropped below 90%. In every recession the rate falls more sharply, and when the economy picks up again it fails to make up all the lost ground.

But there are big differences between the participation rates of different groups of men. In 1964 male high-school graduates were about as likely to be in the workforce as college-educated men, but now only 83% of those with a high-school degree or less are in the workforce, against 94% of those who finished college (see chart). This mirrors a growing divergence in wages. In the mid-1960s the pay of less educated men averaged 80% of collegeeducated ones, but by 2014 that proportion had fallen to 60%.

It is unlikely that men are dropping out of work voluntarily. More than a third of inactive men live in poverty; less than a quarter have a working spouse. So the most obvious explanation is a fall in demand for less-skilled men. That in turn is partly linked to a long-term decline in manufacturing, whose share of the jobs market peaked in the days when almost all prime-age men worked. The CEA study found that states with a higherthan-average share of jobs in construction, mining and (to a lesser degree) manufacturing tend to have more prime-age men in the workforce. It does not help that men who lose their jobs are increasingly rooted in unemployment black spots. The propensity of people to move in search of work has dropped sharply since the early 1990s, for reasons that are not yet fully understood.

A steady drop in the share of prime-age men in the work-force going back half a century cannot be pinned on America signing free-trade agreements or China's emergence as an exporter of manufactures, both of which happened fairly recently. Factory jobs peaked in the 1970s, but manufacturing output has continued to increase. Indeed, America's share of world manufacturing output, on a value-added basis, has been fairly stable at a bit under a fifth for the past four decades. Thanks to advances in technology, fewer workers are needed to produce the same quantity of goods. But since trade with lower-cost countries and technological change have similar effects on labour-intensive production in the rich world, it is hard to disentangle their effects.

Still, some rich countries, such as Germany, Britain and Canada, have done rather better than America at keeping primeage men in work, though others, including France, Italy and Spain, have done even worse. That is partly a matter of policy. Members of the OECD, a club of mostly rich countries, set aside an average of 0.6% of GDP a year for "active labour-market policies"—job centres, retraining schemes and employment subsidies—to ease the transition to new types of work. America spends just 0.1% of GDP. By neglecting those whose jobs have been swallowed by technology or imports, America's policy-makers have fuelled some of the anger about freer trade.

Have trade deals really been a disaster for American workers? Trade with China seems to have had an unusually large effect. Since 1985, America has signed 15 free-trade agreements (FTAS) covering 20 countries. Exports to these countries account for nearly half of all the goods America sells abroad, even though FTA countries make up just a tenth of GDP outside America. In the five years after a new trade pact comes into force, America's exports to new FTA partners typically grow around three times as fast as its overall exports, at least keeping pace with imports. In 2012, exports to the 20 countries covered by FTAS grew twice as fast as the average. In America, exporting firms pay a wage premium of between 13% and 18%, compared with non-exporters. This is hardly a disaster.

America has run a trade deficit every year since 1976. On the other side of the global ledger are countries that consistently run big trade surpluses. These days the record is held not by China but by Germany, which last year had a current-account surplus of 8% of GDP (see chart). But this does not mean that America is "losing" at trade, as Mr Trump suggests, and China and Germany are winning. The purpose of exports is to pay for imports, either now or later. A trade surplus is not a virility symbol. In some cases, it is a sign of a strong national preference for saving (though other countries might describe it as a symptom of weak domestic demand). Countries rarely have balanced trade, where the value of exports and imports is exactly the same. It might seem plausible that restricting trade to eliminate deficits will create jobs, channelling existing demand towards goods made at home. But the reality is more complicated. In most rich countries, particularly America, the trade deficit widens when GDP growth is strong, and shrinks during recessions. The factors that drive demand for imports are the same as those that drive overall demand, and thus jobs. To balance trade, Americans would have to invest less or save more. Neither would create jobs.

It would help a sluggish world economy if surplus countries, like China and Germany, were to spend more on imports.

But for America to aim to balance trade with any one country would be pointless. In any case, a finished product exported from China to America, say, will include components made in third countries, and probably only a small fraction of the value will have been added in China itself. Four-fifths of all trade takes place along supply chains within, or organised by, multinational firms. Slapping a tariff on imports of intermediate goods from, say, Mexico would raise the price of America's exports, which would probably be bad for its trade balance. Around 40% of the value of Mexico's exports of final goods to America, for instance, was added in America itself.

Sober advocates of free trade know that over time the gains from it come from greater efficiency, not from more jobs, the number of which is largely determined by demography and the strength of aggregate demand. It is easier to spot the link between freer trade and factory closures than the more dispersed benefits trade brings to workers across other industries. Exporting firms in all countries and across a variety of industries are more productive, grow faster and pay higher wages than non-exporting firms. But a lot of the gains from trade come from the direct benefit of cheaper imports and their indirect effect on productivity.

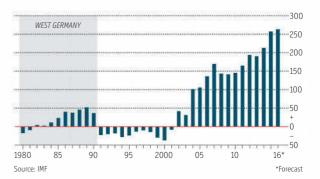
The cost of protectionism

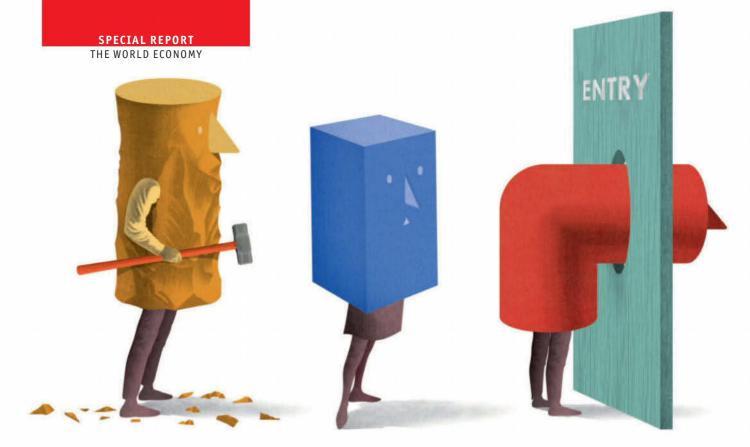
A study by Pablo Fajgelbaum of the University of California, Los Angeles, and Amit Khandelwal, of Columbia University, suggests that in an average country, people on high incomes would lose 28% of their purchasing power if borders were closed to trade. But the poorest 10% of consumers would lose 63% of their spending power, because they buy relatively more imported goods. The authors find a bias of trade in favour of poorer people in all 40 countries in their study, which included 13 developing countries. An in-depth study of European industry by Nicholas Bloom, of Stanford University, Mirko Draca of Warwick University and John Van Reenen of the LSE found that import competition from China led to a decline in jobs and made life harder for low-tech firms in affected industries. But it also forced surviving firms to become more innovative: R&D spending, patent creation and the use of information technology all increased, as did total factor productivity.

Taken together, these are large and permanent benefits. What is clear from the studies of Mr Autor and others is that the one-off integration of China had bigger and more lasting effects than expected. Too little attention has been paid in America to those whose jobs are displaced by new technology or imports. That has given an opening to protectionists, who are peddling a solution that will hurt the poor most. A similar sort of populism is rearing its head in Europe in response to migration.

Saving glutton

Germany's current-account balance, €bn





Migration

Needed but not wanted

Economic migrants are seen as a threat to jobs and the welfare state. The reality is more complex

STOKE-ON-TRENT in northern England is home to the world's second-oldest professional football club, Stoke City FC. Founded in 1863, it enjoyed its heyday in the mid-1970s, when the club came close to winning the top division. The playing style was described by its manager, Tony Waddington, as "the working man's ballet". These days the flair is often provided by players from far afield. More than half the first-team squad comes from outside Britain, mostly from other parts of Europe. But that is about as far as Europhilia in Stoke goes. In June's referendum on Britain's European Union membership, the city voted strongly for Brexit.

A study by Italo Colantone and Piero Stanig of Bocconi University in Milan found that areas where jobs are vulnerable to competition from Chinese imports, mainly those in Britain's faded industrial north, tended to be in favour of leaving. Stoke City FC are known as the Potters in tribute to the city's once-great pottery industry. But Stoke also seemed predestined to be a Brexit supporter on another count. An analysis by *The Economist* earlier this year found that in places such as Stoke, where the foreignborn population had increased by more than 200% between 2001 and 2014, a vote to leave was almost certain.

Immigration of low-skilled workers has become an increasingly contentious political issue in both America and Britain. Voters in host countries often see a sudden influx of people from places with lower wages, poorer working conditions and a less generous welfare system as a threat to their livelihoods and living standards. In America the debate is about whether migrants hold down the wages of native workers. In Britain the

main concern is that migrants put additional pressure on housing, public health services, schools and transport systems.

Along with trade, migration is one of the two main sources of public anxiety about globalisation. For the host economy, the gains and drawbacks are similar to those from trade. Immigration enriches the workforce, allowing for a more finely graded specialisation that raises average productivity and living standards. Diverse workforces are likely to be more productive, especially in industries where success depends on specific knowledge, such as computing, health care and finance. By easing labour bottlenecks, low-skilled migrants help to keep down prices of goods and services.

The drawback for native workers is competition for jobs and public services. In principle, an influx of low-skilled workers depresses wages for competing native workers, in the same theoretical way that opening up to trade with poor countries does. The balance of benefits and costs will depend on income: the rich are likely to do better out of the bargain. Economists dispute the extent of the overall gains and losses to hosts and laboursending countries respectively.

Come pick my strawberries

Some benefits are uncontested. For immigrants from poorer countries moving to Stoke, or indeed to any part of Britain, there are clear gains. They can hope for a better job, a marked improvement in their quality of life and access to better public services such as health care. Economic migrants are by definition a mobile labour force. Migration helps to deal with labour shortages in low- or mid-skilled industries, such as mining or agriculture, and in remote places where it is difficult to attract native workers. Migrants are also often granted work visas on the strength of having scarce skills.

Other elements of migration are more controversial. If host countries benefit from immigrants, then the countries that send them must be losing out on manpower, skills and tax revenue. The people who move are often the brightest and best—those with the get-up-and-go, the languages and the connections—so their country of origin may suffer a brain drain. A recent paper from the IMF puts a number on this. Between 1990 and 2012 al-

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The Economist October 1st 2016

most 20m people moved from central, eastern and south-eastern Europe to richer countries in western Europe. This east-west migration accelerated after 2004 when eight eastern European countries, including Poland, the Czech Republic and Hungary, joined the EU. The IMF researchers reckon this exodus lowered cumulative population growth in labour-sending countries by eight percentage points. If those mostly young and skilled workers had stayed put, the gap with the EU in income per person would have been five percentage points narrower.

These results are open to dispute. Migrants typically move from places where economic prospects are poor, making it hard to establish whether weak growth is a cause or a consequence of their leaving. The chance of a better life elsewhere may also create a stronger incentive for those who remain to acquire new skills. Michael Clemens of the Centre for Global Development and Satish Chand of the Australian National University used a natural experiment provided by a military coup in Fiji in 1987 to study the effects of emigration on that country. The economy was split between indigenous Fijians and those of Indian origin. A large chunk of the second group, generally high-skilled, left after the coup. Most of them went to Australia and New Zealand, which admitted well-qualified migrants. It seemed the ideal opportunity to measure the effects of a brain drain.

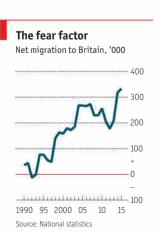
What the researchers found was that the Indian Fijians who stayed behind started to acquire skills at a faster rate in order to be able to emigrate (or at least to have the option of doing so). They also concentrated on disciplines that allowed them to meet

the skills-based immigration criteria most efficiently. The increased investment in skills was large enough to raise the stock of human capital net of the first wave of emigration, in which a fifth of the Indian-Fijian population left. The brain drain was fully offset.

What about the impact on host countries? Many native workers see uncontrolled

immigration as a break with an implicit contract: that the state will look after its own. It creates a tension between immigration and the welfare state. That tension, though, is mostly policy-related. Where migrants' employment rate is higher than that of natives (as is the case with migrants within the EU), fears that immigration will add to the welfare burden are largely unfounded, though much depends on how welfare policies are designed. In America, for instance, only those who have paid into the public Social Security (pension) scheme for at least ten years are entitled to benefits. A well-designed policy could make immigration and welfare provision complementary.

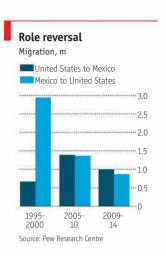
The trouble is that at local level there is often a mismatch



between the extra resources that immigrants add and the extra demand they create. Additional pressures on local public services are a particular problem in Britain, where central government raises taxes and allocates spending. Centralised budgets make it difficult for local authorities to respond flexibly to changes in local conditions, and strict planning rules limit the construction of new homes when demand surges.

Some other European countries deal with economic migration rather better than Britain does. In Denmark a lot of budgetary policy is made at municipal level, says Jacob Kirkegaard of the Peterson Institute for International Economics. If an area has an influx of migrants, it receives more local tax revenues to expand public amenities, build more schools, hire more doctors and so on.

Another concern among natives has been that immigrants put downward pressure on wages. In theory they should, but empirical studies come to different conclusions. On one side is George Borjas, of Harvard



University, whose study in 2006 found that although immigration did not depress overall wages between 1980 and 2000, it did hold down the pay of the low-skilled by 5-10%. On the other side, David Card, of the University of California, Berkeley, concluded that there was no effect. His view was based on a study of the "Mariel boatlift", an unexpected surge in Cuban migrants to Miami in 1980. Mr Card reckoned that Miami had become accustomed to handling large inflows of unskilled migrants. Mr Borjas

Many native workers see uncontrolled immigration as a break with an implicit contract: that the state will look after its own

has recently looked at Mr Card's analysis again and claims that high-school dropouts, a subset of the low-skilled native workers in Mr Card's study, did in fact suffer a material fall in wages.

Until quite recently the academic literature treated migrants as substitutes for native workers. But what if they were complements; if low-skilled migrants helped to boost the productivity of low-skilled natives? Gianmarco Ottaviano, of the University of Bologna, and Giovanni Peri, of the University of California, Davis, find that for workers with at least a high-school qualification, the wage effects of low-skill immigration are positive if you drop the assumption that workers of the same age and education are perfect substitutes and that workers of one skill level, say cooks, do not affect the productivity of workers at other skill levels, say waiters or restaurant managers. The effect on the wages of high-school dropouts is only mildly negative. A paper by Marco Manacorda, Alan Manning and Jonathan Wadsworth, of the London School of Economics, similarly concludes that immigrants to Britain are imperfect substitutes for native-born workers, so they have little impact on natives' job prospects or wages. New immigrants tend to affect only the pay of recently arrived immigrants.

From these muddy waters, it is possible to draw two tentative conclusions about the broad impact of migration on wages. First, the effect on the bulk of low-skilled native workers has been fairly muted—perhaps because the way work is done changes in response to large-scale migration. However, the pay of some narrow categories of workers (say, farm labourers in Britain or high-school dropouts in America) may still be affected.

To deal with the tension between immigration and the welfare state, three rules suggest themselves. First, make benefits

THE WORLD ECONOMY

conditional on having paid into the system. Second, tie the funding of local public services to local tax revenues to ensure an automatic response to an influx of migrants. Third, restrict migration to prime-age, skilled workers who are more likely to get jobs and less likely to lose them in a recession.

But this may not be as straightforward as it sounds. Almost two-thirds of the new jobs that will be added to America's economy in the next decade will be low-skilled or mid-skilled jobs. according to a projection by the country's Bureau of Labour Statistics. Care workers, kitchen staff, auxiliary nurses and builders will be in strong demand in Europe, too. Such demand may not easily be met by indigenous workers, even at higher wages.

Will these jobs be filled in a black market or in a formal labour market? This is a question America has faced before. In the 1980s the baby-boomers were moving towards middle age, causing a spike in demand for young, low-skilled labour. This coincided with a demographic bulge in Mexico. An overhaul of America's immigration rules in 1986 regularised those Mexican workers who had arrived before 1982. Henceforth work visas would be granted only to high-skilled migrants. The interplay of supply and demand created a black market, causing the number of illegal migrants to reach 12m in 2007, when policing of the border was stepped up. It was only quite recently that the flow of migrants was reversed (see chart, previous page).

Europe now faces a supply-demand dynamic similar to America's in the 1980s. It has an ageing population, whereas on its doorstep, in the Middle East and Africa, populations are young and growing rapidly. A lesson from America's engagement with Mexico is that a formal system for low-skilled immigration, perhaps with fewer entitlements than for skilled workers, is far preferable to turning a blind eye to informal migration.

Only within the EU's borders is the free movement of people tied to the free movement of trade and capital. For the most part, enthusiasts for globalisation have rooted only for freer trade and open capital markets, not migration. Yet many of them are now having second thoughts about the benefits of unfettered capital too.

Capital mobility

The good, the bad and the ugly

Foreign direct investment is mostly welcome, but large short-term flows spell trouble

SHANNON AIRPORT ON Ireland's west coast has been a gateway from Europe to America since the 1940s. It was built across the estuary of the river Shannon from Foynes, a small town that had served in the interwar years as a refuelling stop for seaplanes and passengers on their way across the Atlantic. A local chef, Joe Sheridan, came up with the idea of Irish coffee when he added whiskey to the hot drinks served to shivering passengers from a Pan Am flying boat. In 1947 a catering manager, Brendan O'Regan, set up the world's first duty-free shop at Shannon, allowing transit passengers to buy tax-exempt goods.

Capital also disembarks in this part of Ireland, a country that, more than most, has been transformed by flows of capital from other places. In the 1980s Ireland seemed destined to be western Europe's perennial laggard: "The poorest of the rich", as a survey by The Economist put it in 1988. But within a decade Ire-



land had transformed itself into the Celtic tiger, Europe's unlikely answer to the booming economies of South-East Asia.

Central to this shift were American companies seeking a foothold in the EU ahead of the creation of the single market in goods in 1992 and lured by a well-educated, English-speaking workforce. The state offered inducements, such as grants and a low corporate-tax rate. Intel, a chipmaker, started production in Dublin in 1990. Other big firms followed. Boston Scientific, a maker of medical devices, set up shop in 1994 in Galway, an hour's drive from Shannon. A medical-technology and pharmaceutical cluster emerged in the region.

A textbook example

Thanks to foreign direct investment (FDI) of this kind, Ireland went from the poorest of the rich to among the richest. It was a textbook example of the benefits of capital flows. But Ireland is also an archetype of the malign side-effects of capital mobility. As it became richer, other countries took exception to its low corporate-tax rate, which they saw as simply a device to allow global companies to book profits in Ireland and save tax.

The scale of the problem was highlighted in July when Ireland's statistical office revealed that the country's GDP had grown by 26% in 2015. The figure said little about the health of the Irish economy. First, it was inflated by "tax inversions" in which a small Irish company acquires a bigger foreign one and the merged firm is registered in Ireland to benefit from its low corporate taxes. Last year saw a rush of transactions before a clampdown by America. Second, the GDP figures were distorted by the aircraft-leasing industry. The world's two largest lessor fleets are managed from Shannon, though many of the 4,000 registered aircraft will never touch down there.

But it is the damage wrought by short-term capital flows in Ireland that is most striking. After the launch of the euro in 1999, would-be homeowners were seduced by irresistibly low interest rates set in Frankfurt. Irish banks borrowed heavily in the euro interbank market to fuel the property boom and to speculate on assets outside Ireland. Bank loans to the private sector grew by almost 30% a year in 2004-06, at the peak of the boom. When that boom turned to bust, the country suffered a brutal recession and had to be bailed out by the IMF. Ireland still bears the scars. Preliminary figures from this year's census show that almost 10% of homes in Ireland are permanently empty. Some of the worst-affected areas are in the west of Ireland, up or down the coast from Shannon. Ghost estates and failed bed-and-breakfast places are the legacy of a building boom that by 2007 had drawn one in eight of all workers into the construction industry.

Unimpeded capital flows should be a boon. Like global free trade, global capital markets offer broader opportunities. More and better openings usually make people richer. Globalised capital breaks the tie between domestic saving and investment, giving poor and low-saving countries the wherewithal to speed up GDP growth. For developing economies, capital mobility is a conduit for new technology, management know-how and business networks. It also allows investors to vote with their feet, encouraging governments to follow prudent regulatory, monetary and fiscal policies.

For a long time the liberal orthodoxy was against any kind of restriction on cross-border finance. A succession of financial calamities, starting in Latin America in the 1980s and continuing with the East Asian crisis of 1997-98, prompted a rethink. Rather than imposing discipline, access to foreign capital seemed to allow countries to get into bigger messes. Whereas academics argue about the pros and cons of free movement of goods or people, they now mostly agree that liberalising capital flows can sometimes do more harm than good. Politicians may occasionally rue the fickleness of international investors, but capital mobility is not, for the most part, a target for popular anger in the way free trade and immigration often are.

There is plenty of evidence of the trouble that floods of short-term capital can cause. In a paper published earlier this year, Atish Ghosh, Jonathan Ostry and Mahvash Qureshi, of the IMF, identified 152 "surge" episodes (periods of abnormally large capital flows) between 1980 and 2014 in 53 emerging markets. A fifth of such episodes subsequently led to a banking or currency crisis. The surges most likely to end in tears were those made up mainly of cross-border bank lending; FDI-based ones were less likely to create trouble. The euro crisis in general, and Ireland's spectacular banking bust in particular, have shown that the syndrome is not confined to developing countries.

Markets for capital are error-prone in a way that markets for goods are not. Stocks, bonds and property are subject to wild

Too volatile for comfort? Global gross capital flows, \$trn 02 03 04 05 06 08 swings in value. When capital moves across borders, these failures are amplified by distance, unfamiliarity and exchange-rate risk. There is more scope for getting things wrong, and the resulting economic crises are typically on a larger scale. It is fine for foreign companies to build or buy offices, factories and infrastructure, but the benefits of foreigners buying bonds or stocks are less obvious, and such investments tend to be volatile. Developing countries' financial systems are not necessarily equipped to put inflows of this kind to productive use, still less to handle their sudden exit. Short-term foreign borrowing is often used to finance long-term domestic loans. The mismatch becomes even starker when the borrowing is in foreign currency. And countries subject to sustained inflows of hot money often contract "Dutch disease", a condition that drives up their currency beyond its fair value, leaving their export businesses unable to compete in international markets.

Filtering the flows

Limits on capital flows other than FDI thus seem like a good idea. In 2012 the IMF conceded that capital controls of a temporary and targeted nature were warranted, as a last resort, where the scale of capital inflows put financial stability at risk and conventional monetary or fiscal policy was unable to respond effectively. But what can be done to stop bad capital flows while letting through the good ones?

One approach is an entry (or Tobin) tax, proportionate to the size of the capital inflow and levied at the time when currencies are exchanged. Such a tax would bear more heavily on shortterm inflows. Until recently controls of this kind were believed to have little effect on capital inflows. But a recent paper by Marcos Chamon, of the IMF, and Márcio Garcia, of PUC-Rio, suggests that they may be more effective than previously thought.

The authors looked at the experience of Brazil, which in October 2009 imposed a 2% entry tax on portfolio investments. This was meant to stop the country's currency, the real, from appreciating further. It was soon raised to 4% and then to 6% in short order. At first the measures did not seem to work, but that changed when in mid-2011 they were supplemented with a tax on the notional value of derivatives. Messrs Chamon and Garcia estimate that up to 10% of the subsequent fall in the real was due to the intervention.

Once the real had fallen, in 2012, Brazil started to dismantle its capital controls. But if hot-money flows are an ever-present threat, would it not make more sense to have controls permanently in place? Michael Klein, of Tufts University, makes a distinction between "gates", episodic controls in response to sudden inflows of a certain kind, and "walls", long-standing controls on a broader range of assets. In a study of 44 countries between 1995 and 2010, he concluded that gates do not curb exchange-rate appreciation, raise GDP growth or stop the build-up of financial risks. But long-standing capital controls (walls) might.

The ten countries in Mr Klein's study with capital "walls", including China, on average saw a slower rate of growth in private debt relative to GDP and weaker growth in bank lending than the 34 other countries. They were also less likely to experience abnormal capital surges. That suggests walls are effective. But countries with walls are generally poorer than countries with gates. And when Mr Klein controlled for GDP per head, the statistical distinction between gated and walled countries mostly disappeared. Neither type of capital control had much effect.

This is an awkward finding. In principle, the flexibility of gates should make them a better instrument of control than walls, which can deter even the right sort of capital. Ideally capital controls should be tightened as inflows intensify. But gates may be ineffective for practical reasons. The tax rate required to stem a flood of inflows might be unfeasibly high. And gates are likely to be more permeable than walls, because countries with long-standing controls will have learned how to police capital inflows effectively. China, for instance, has been able to control its nominal exchange rate from behind its imposing capital walls.

The best policy might be a mixture of both. Not everyone is convinced by Brazil's experiment. It showed that a tax has to be fairly high and broadly applied before it has much effect. That makes it difficult to levy it only on "bad" capital flows. And just as heavier policing in one area may simply shift crime to a neighbouring area, Tobin taxes may simply divert capital flows rather than deter them altogether. A study by Kristin Forbes, now a member of the Bank of England's monetary-policy committee, and others suggests that Brazil's Tobin tax encouraged emergingmarket bond and equity funds to flood into other commodity-rich countries instead.

Observers with longer memories recall that before Brazil's experiment, Chile was held up as an exemplar of the wise use of capital controls. In the 1990s capital imports into Chile were subject to an interest-free deposit of 30% of the investment. Chile's central bank has since eschewed controls in favour of direct intervention in currency markets (selling pesos to build reserves when inflows are strong), a policy that has the virtue of being hard to circumvent. This helps guard against incipient Dutch disease, but it does little to deter inflows. If the main worry is too much lending on property, then macroprudential policy is probably a better bet. One useful measure is to limit the amount banks can lend as a proportion of the value of the property.

A taxing question

Economists in Ireland once made a distinction between the Celtic Tiger phase of the country's economic boom, which was powered by FDI, and a second, "bubble", phase, inflated by low interest rates and short-term capital. But these days FDI does not always result in a new factory, research facility or office building, with new jobs to match it. Often it amounts to a transfer of intangible assets for the purpose of lowering corporate tax.

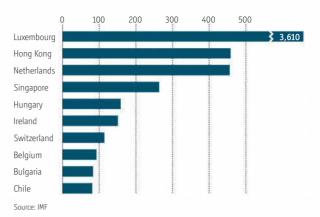
Ireland is among the world's top countries for foreign direct investment relative to GDP (see chart). Most of the others on the

The growing practice of using offshore investment to avoid corporate tax might make capital mobility the target of popular anger



Where it matters

Foreign-direct-investment stock as % of GDP, selected countries, 2014



list are also small countries with low rates of corporation tax. Luxembourg, for instance, accounts for 10% of the stock of global FDI but only 0.07% of world GDP. Competition is generally a good thing, but in matters of taxation that is not always true.

Multinational companies are able to avoid tax because there are so few generally agreed principles of cross-border taxation. One approach, taken in America, is to tax a company's global income on the basis of where it is "resident" (where its head-quarters are), regardless of where its profits are made. A second method, widely adopted in Europe, is to tax profits where they are generated. In practice the two are often used in combination. "You can play one country off against another so you're not resident anywhere," says an expert on the subject.

Globalisation and the growing importance of intangible assets, such as patents, have made concepts such as residence and sources of income much less useful. Supply chains are now so complex that it is hard to know where a source-based tax on profits should be applied. If the value of a drugs company lies mostly in its patents, for example, it can move to a tax haven and enjoy low taxes without uprooting any of its physical operations.

Purists argue that, since all taxes are ultimately borne by individuals, there is little point in chasing elusive companies all over the globe; better to abolish corporation tax and increase sales taxes instead. There are two objections to this. First, for reasons of equity it may be preferable to tax shareholders rather than consumers. Second, corporate taxes make up a large share of revenues in resource-rich poorer countries, where few workers are on formal payrolls and sales taxes are easy to evade.

One way of dealing with that might be a special regime of royalties or land taxes levied on mining companies. Michael Devereux, a tax expert at Oxford's Said Business School, predicts that in the long run tax competition and avoidance will erode rich countries' corporate-tax base. He proposes a value-added tax with deductions for labour costs and other inputs. That would approximate to a tax on excess profits, or "rents".

True FDI is an unalloyed benefit. But the growing practice of using offshore investment to avoid corporate tax might make capital mobility the target of popular anger, alongside trade and immigration. The EU's case against Apple may be just the beginning. Many people see footloose global companies and deregulation as the handmaidens of the worst kind of corporate practice. Yet economic ills such as weak real incomes, inequality and immobile workers may be partly due to a failure to liberalise product markets further.

THE WORLD ECONOMY

Deregulation and competition

A lapse in concentration

A dearth of competition among firms helps explain wage inequality and a host of other ills

IN "THE FUGITIVE", a 1960s television drama, David Janssen plays Richard Kimble, a doctor wrongly convicted of murdering his wife who escapes on the way to his execution. He claims, but cannot prove, that he encountered a one-armed man minutes before he discovered his wife's dead body. After his escape he drifts from town to town trying to find the ghostly figure and to elude the man obsessed with recapturing him.

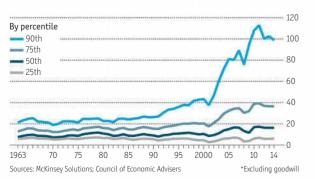
The damage that globalisation has done to America's economy is as obvious to some as Dr Kimble's guilt was to his pursuers. Careful academic studies have linked competition by Chinese manufacturers to the growing propensity of prime-aged men to drop out of the labour force. A pillar of trade theory says that increased commerce with labour-rich countries will depress the pay of the low-skilled; and some reckonings of wage inequality in America pin part of the blame on trade and migration. GDP growth has been sluggish during the long hangover from the financial crisis. The globalisation of finance provided the kindling for America's subprime crisis and spread its effects around the world. Globalisation is on the run. But might there be another brigand who bears responsibility for its alleged crimes?

An intriguing line of research identifies an increase in the incidence of economic "rents" (profits over and above the levels needed to justify investment or input of work) as a possible villain. A study last year by Jason Furman, of the Council for Economic Advisers (CEA), and Peter Orszag, a former budget director for Barack Obama, found that the top 10% of firms by profit have pulled away sharply from the rest (see chart). Their return on capital invested rose from more than three times that of the median firm in the 1990s to eight times. This is way above any plausible cost of capital and likely to be pure rent. Those high returns are persistent. More than four-fifths of the firms that made a return of 25% or more in 2003 were still doing so ten years later.

Other research suggests that this increasingly skewed distribution of profits goes a long way to explaining the rise in wage inequality. A paper in 2014 by Erling Bath, Alex Bryson, James Davis and Richard Freeman found that most of the growing

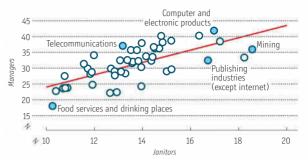
Well-fed top dogs

US publicly traded non-financial firms, return on invested capital*, %



A rising tide floats all boats

US, average hourly wages by industry, 2003-12, \$, 2012 prices



Sources: LIS Census Bureau: LIS Bureau of Labour Statistics: Council of Economic Advisers

dispersion in individual pay since the 1970s is associated with variations in pay between companies, not within them. In other words, the most profitable companies pay handsomely and people who work for them earn more than the rest.

This finding was confirmed in a more recent study by Nicholas Bloom and David Price, both of Stanford University, with others, which found that virtually all of the rise in income inequality is explained by a growing dispersion in average wages paid by firms. This finding, the authors conclude, holds across all industries, regions and firm sizes. One of the most striking implications is that inequality within firms has not changed much: the relationship between managers' and shop-floor workers' pay in each firm is still roughly the same. But the gap between what the average and the best firms pay their workers at all levels has widened. Alan Krueger, of Princeton University, illustrated this point nicely at a presentation he gave while working at the CEA in 2013. Using data from the decade after 2003, he showed that where managers are well paid, so are janitors (see chart).

More power, more profit

This wider range of profits is likely to be related to increases in market power. Some of this is due to the rise of internet giants, which dominate their respective markets thanks to network effects. But many of America's industries have also become more concentrated by a slow creep of acquisitions. A study by The Economist earlier this year divided the economy into 900-odd sectors covered by the five-yearly economic census and found that two-thirds of them were more concentrated in 2012 than they had been in 1997. The weighted average share of the total held by the leading four firms in each sector rose from 26% to 32%.

America used to be famous for its workers' willingness to follow the jobs, but they have become far less mobile. A paper by Raven Molloy and Christopher Smith of the Federal Reserve and Abigail Wozniak of the University of Notre Dame finds that over the past three decades migration rates between states have fallen by at least a third for most age groups. For those aged between 20 and 24, the most mobile group, the annual rate of internal migration fell from 5.7% in 1981-89 to 3.3% in 2002-12.

Many of the reasons put forward for this are not wholly convincing. It cannot be the rise of the two-income family, because the trend to less mobility holds for workers of all ages. Nor is it the housing boom and bust: the decline in mobility started long before that, in the early 1990s, and has continued since. It is certainly not trade unions (membership of which has declined), labour-market regulation or unemployment benefits, claims for which have dropped sharply.

A few researchers have made an intriguing link between >>

• the decline in labour mobility and wider profit dispersion. The argument has several steps. The average age of established businesses has risen steadily because fewer new firms are formed. Startups have a high labour turnover, but in mature firms fewer people join and leave in any given year. The lower the churn rate of jobs, the fewer the opportunities for job-changers to find new work. So it is possible that less dynamism in American business, characterised by industry concentration and lower job turnover, has reduced the incentive for jobseekers to go and look for work in another state.

Another reason may be rent-seeking within the labour force itself. Another paper from the CEA finds that the share of America's workforce covered by state-licensing laws has risen to 25%, from less than 5% in the 1950s. Much of this red tape is unnecessary. On the most recent estimates, over 1,000 occupations are regulated in at least one state but only 60 are regulated in all states. The scope of the rules vary from state to state. A licensed security guard requires three years of training in Michigan but only around two weeks in most other states, for instance. Licensed workers can command higher pay than the unlicensed kind because entry to the occupation is restricted, so consumers have to pay more.

Success stories

For much of the past 40 years economic liberals have argued for the dismantling of barriers to the free flow of commerce, such as state monopolies, trade unions and restrictive practices. Such policies have produced some clear successes. In Britain the privatisation of monopoly utilities, such as British Telecom, and the opening up of other sectors to competition was a spur to productivity and innovation, leading to better and cheaper services for customers. In America the deregulation of airlines brought lower fares and an increase in the number of trips. Labour markets in America and Britain became more flexible, and unemployment has generally been lower than in continental Europe.

Deregulation is almost always a difficult task. Those whose interests are hurt by such reforms protest noisily. The political

costs quickly become apparent, whereas the gains may not become clear before the next polling day. It is even harder to make changes when so many people feel that the cost of liberalising markets in the past was unfairly distributed. Critics of such liberalisation point to a decline in labour income as a share of GDP as evidence that wage earners have the odds stacked against them. They argue that blue-collar workers provide the flexibility, having to accept lower pay and less job security, whereas white-collar workers and bosses are protected. Increased openness to trade and the growing mobility of capital have made it harder for workers to push for pay rises, so they cling to the jobs they have. In an age of insecurity, it is hard to persuade anyone that they should give up such protections for the greater good.

Market power is supposed to be policed by competition agencies, but they have lost some of their vim, particularly in America, where competition cases are fought out in the courts. A landmark Supreme Court judgment in 2004 said monopoly profits were the just reward for innovation. That has made it harder for trustbusters to root out rent-seeking or block mergers. Most big firms got where they are by being good at what they do, not because of coddling by regulators. But if firms can hold onto their market share for years, they create distortions in the rest of the economy. Incumbent firms are powerful lobbyists.

Big tech firms also have a penchant for so-called "shootout" acquisitions, whereby a startup is bought to eliminate a budding rival. For many tech startups and their financiers, a buyout by one of the big platform companies is a badge of success. But if small firms cannot become independently big, the market power of incumbents is not sufficiently challenged.

Competition policy faces difficult questions in an age of superstar firms that dominate global markets. But the trickiest political problem for reformers is how to inject some dynamism into the economy without getting people even more worried about their livelihoods. Raising import tariffs or closing borders to people and capital is not the answer. Instead, policymakers should encourage more competition while putting in place adequate protections for those who lose out from it.



Saving globalisation

The reset button

How to make economic liberalism fairer and more effective

THERE MAY be few better advocates of the benefits to America of an open economy than Pin Ni, boss of Wanxiang America Corporation, part of a private firm based in Hangzhou that his father-in-law started as a bicycle-repair shop. Mr Ni launched the American subsidiary in 1994, suspending his studies at the University of Kentucky. He has been there ever since.

During the car-industry meltdown in 2007-09 the company began buying moribund car-part suppliers and restoring them to health. It pushed its acquisitions to concentrate on their strongest suits, usually the relationship with the car manufacturers and engineering. It helped them to source components more cheaply and to gain a foothold in the Chinese market. Mr Ni is effusive about the prospects for American exporters. America has firms with technology and brands that are coveted around the world, he says.

Such optimism about globalisation is all too rare these days. Neither candidate in America's presidential race is an advocate of free trade. "If Trump is elected, it's a mandate for

isolationism," says a seasoned observer at a think-tank in Washington, DC. "If Clinton is elected, the best we can hope for is we don't go back very far." Britain's trading relationships with the rest of the world are up in the air, following the vote in June's referendum to leave the EU. France is hostile to TTIP, a proposed trade agreement between the EU and America. Even in Germany, the self-declared world export champion, politicians are turning against the deal in the face of public opposition. Globalisation is increasingly blamed for job losses, rising wage inequality and sluggish GDP growth.

How should politicians respond? Closing borders to trade, capital and people would cause great harm and do very little to tackle inequities in the economy. In some respects it would increase them. People on low pay spend a far greater proportion of their income on imports than the well-off. A growing body of research links economic maladies to more oligopolistic economies. Blocking imports would only entrench the market power of rent-seeking firms, further harming the prospects for higher productivity and pay.

Easing the pain

As borders have been steadily opened up, policies needed to complement globalisation have not kept pace, particularly in America. They need to catch up. A good place to start is demand management. The stability of the labour market depends on macroeconomic policies, not trade. In Europe the most effective policy would be to use public money to fix the banks. With monetary policy overstretched and bond yields low or negative, it is a shame that countries with room to borrow more, notably Germany, are seemingly addicted to thrift. The case for free trade is undermined when many countries in Europe are free to rack up persistent trade surpluses, which are a drag on global demand.

In America and Britain, a strong case can be made for locking in low-cost long-term funding to finance a programme to fix

potholed roads and smarten up public spaces. Private pension funds with expertise in infrastructure have a role to play in such schemes. Rich-country central banks, notably the Federal Reserve, can afford to be more relaxed about the threat of inflation. An economy at full pelt begins to draw people into the workforce who were thought to have opted out for good. "Ex-felons were doing pretty well in 2000," notes Larry Mishel, of the Economic Policy Institute, a think-tank in Washington, DC. The risks of slamming the brakes on too quickly outweigh those of excessive policy stimulus.

Demand management is (or ought to be) the bread and butter of economic policy. Curing the ills that feed public opposition to globalisation requires efforts to address two other problems. The first is the job churn caused by shifts in trade and technology. Too little effort and money has been expended on taking care of those who have been hurt by the opening up of markets. America in particular makes little attempt to assist people find new jobs to replace lost ones. Extra help need not blunt the incentives to look for work. For instance, more generous jobless benefits could be made conditional on attending a back-to-work programme. A valid criticism of government training schemes is that they cannot keep up with the fast-changing demands of the jobs market. A better option would be a system of wage insurance. That would nudge workers to acquire new skills by taking a less well-paid job when they lose a good one.

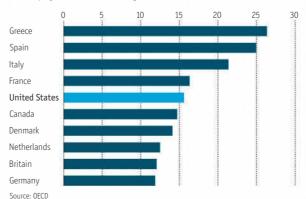
More competition is a hard sell when many people are already anxious about their jobs and income

Yet there is little point in helping people change careers if a lack of dynamism in the economy means that too few good jobs are being created. So a second prong of reform should be to spur greater competition so that startups can thrive and incumbent firms are kept on their toes. More competition is a hard sell when many people are already anxious about their jobs and income; but without it there is less chance of the dynamism that boosts productivity (and earnings) and creates new job opportunities. Europe has long been notorious for restrictive practices such as occupational licences, but state-level licences in America have proliferated almost unnoticed. Some are necessary, but most are simply a way of keeping prices higher and restricting entry.

Competition policy needs to become more vigorous. In America the startup rate (the share of new firms in the total num-

Idle hands

Non-employment rates of males aged 25-54, 2015, %



The Economist October 1st 2016

THE WORLD ECONOMY

ber) has fallen steadily since 1980. Most industries have become more concentrated. The profits of the leading companies have pulled well ahead of the rest. America's courts have tended to view windfall profits as the rightful reward for innovation. There is much to be said for redrawing the boundaries of intellectual property so that incumbents can be more readily challenged. The growing habit of big tech firms to swallow startups that might become rivals is worrying. Such deals often suit both sides—the buyer gets the innovation and the startup makes a lucrative exit—but the practice saps dynamism from the economy. Trustbusters might be given more discretion when making judgments about how markets might evolve in future, though this is difficult to do well.

Make it a threesome

16

A three-pronged agenda of demand management, active labour-market policies and boosting competition would go a long way to tackling the problems that are unfairly laid at the door of globalisation. But a lot of the policies to make globalisation work better need international agreement to be fully effective. For instance, tackling troublesome capital flows requires co-ordination. A country might be able to head off capital inflows by taxing them, but it would only be diverting them to other countries that are more reluctant to impose capital controls. The best course would be to have a global standard on what sorts of controls are permissible and in what circumstances. The goal should be to ensure that individual countries retain control over their monetary policy.

One way to put a speed limit on short-term capital flows is to require asset managers globally to lock in investors in funds specialising in less liquid emerging or frontier markets. Long-term capital flows are generally more beneficial, but they will lose public support if they are seen primarily as a way of avoiding tax. There are few agreed international rules on the taxation of cross-border firms, though the OECD has started to work on this. Dani Rodrik, of Harvard University, argues that a good way to build public support for globalisation would be to link trade pacts with agreements on, for instance, the taxation of multi-

national companies. Such a deal would give national governments more rather than less policy autonomy.

Sceptics say that those who stand to lose from globalisation are given little thought when trade deals are signed. That is a fair point. But there is also a risk of the opposite error: that the enormous good that free trade has done for the bulk of humanity in both rich and poor countries over several decades is forgotten at times when people are feeling anxious about it. The benefits of globalisation are widely dispersed, often unseen and thus all too easily taken for granted.

There is a wrong-headed tendency to conflate support for liberal internationalism with pushing the interests of big companies to the detriment of the less well-off. The opposite is true. This newspaper started in 1843 to campaign for free trade in general, and in particular for the repeal of the Corns Laws, which increased the price of imported grain to the advantage of



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landowners. Richard Cobden, the manufacturer who led the campaign against the Corn Laws, remarked that the main barrier to repeal was the self-interest of the landowning classes, the "bread-taxing oligarchy, unprincipled, unfeeling, rapacious and plundering."

Cobden argued that free trade would have four benefits. It

would underpin the success of British manufacturing by providing access to bigger markets. It would lower the price of imports, notably food, for the poorer classes. It would make English farming more efficient by creating more demand for its products in cities and manufacturing regions. And it would usher in a new era of international peace and amity by fostering trade that would be to the benefit of all countries that took part in it.

In contrast to popular caricature, freetraders are enemies of rent-seekers and those who are trying to protect their economic privileges. James Wilson, the founder of *The Economist*, said of the Corn Laws: "They are, in fact, laws passed by the seller to compel the buyer to give him more for his article than it is worth. They are laws enacted by the noble shopkeepers who rule us, to compel the nation to deal at their shop alone."

What Cobden and Wilson argued in the 19th century still holds. The free movement of goods, capital and people across borders is a source of greater choice and opportunity for those on both sides of the trade. What gives these arguments their force and staying power is that they happen to be true.





Syria's civil war

The agony of Aleppo

GAZIANTEP

America's ceasefire deal with Russia never stood a chance

N THE past week eastern Aleppo, a rebel-I held area that is home to more than 250,000 people, has endured a typhoon of shrapnel. Rebel groups say the regime of Bashar al-Assad is pursuing "a scorched earth policy to destroy the city and uproot its people". Mr Assad is trying to regain full control over the western slice of the country, where some 70% of Syrians live. His Russian allies are helping, using the same tactics and some of the weapons that turned the Chechen capital, Grozny, into a smouldering ruin in 1999.

Since the collapse of the short-lived ceasefire brokered by America and Russia, hundreds of air strikes and shells have slammed into the eastern part of the city. Activists counted 250 separate strikes on a single day last week as the regime seeks to seize the opposition's last big urban stronghold. On September 27th the regime, backed by Shia militias from Iraq, Iran and Lebanon, launched a ground assault targeting rebel positions across the divided city.

"The situation is intense," says one of the few remaining paediatricians in eastern Aleppo, who calls himself only Dr Hatem. "Many children have died. There is a shortage of medical staff, food and fuel. Everything is terrible now. It is as if they want to delete more than 250,000 people from the Earth's surface." The White Helmets, a volunteer civil-defence group, says that 450 people have been killed and 1,600 injured since fighting started again. Save the Children, a charity, says that half of the casualties at the medical facilities it supports in the east have been children.

Adding to the slaughter, the Russian air force is using more sophisticated weapons. Among them are the TOS-1A, a form of giant flamethrower that can also fire thermobaric missiles that suck oxygen out of the air and create huge blast waves; the BETAB-500, a massive bomb that penetrates buildings before exploding; and the RBK-500, an incendiary cluster munition.

When there is a brief pause in the bombing people come out of their homes and shelters to look for food and medicine, but there is little left in the markets and the price of meat has rocketed. They know they have only a couple of hours before the bombing resumes. "Every day when I leave my home to look for supplies, I tell myself that this will be the last time I see my family," says one Aleppo resident. "This is the worst bombing we've seen since the start of the war. The new weapons make the ground beneath our feet shake. It feels like the end of the world." Many stay hunkered inside in cellars or in makeshift bomb shelters underground.

"What Russia is sponsoring and doing is not counter-terrorism, it is barbarism," America's ambassador to the UN. Samantha Power, told the Security Council on September 25th. "Instead of pursuing peace, Russia and Assad make war. Instead of helping get aid to civilians, Russia and Assad are bombing the humanitarian convoys, hospitals and first responders who

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are trying desperately to keep people alive." Britain's envoy, Matthew Rycroft, said that Russia was "partnering with the Syrian regime to carry out war crimes".

For months the regime has slowly tightened its grip on eastern Aleppo. Food is so scarce that many people survive on only one meal of rice a day. Medical supplies are running dangerously low as hospitals overflow with wounded patients. The World Health Organisation says there are only 35 doctors left in the city and that all of the 25 medical facilities that still stand are on the verge of complete destruction. No aid is getting into Aleppo at all.

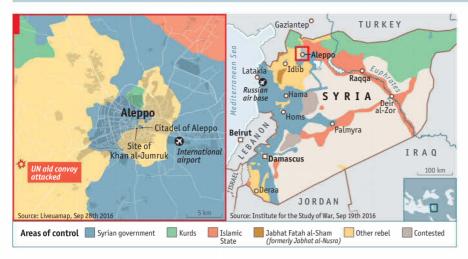
What quagmire?

In the year since Russia came to the rescue of Mr Assad's brutal regime, the course of the Syrian civil war has fundamentally shifted. Russia's decision was prompted by fears that its ally was about to be overthrown. Barack Obama said that Russia was stepping into a quagmire-perhaps projecting his own fears. That now looks wide of the mark. At relatively little costabout \$480m and the loss of 20 servicemen-Russia appears well on the way to preserving the regime and making itself the arbiter of any eventual settlement.

More secure than at any time since 2011, Mr Assad is now confident that a victory that will leave him in control of most of western Syria is within reach. With Mr Obama congratulating himself for his wisdom in not intervening in the civil war more forcefully, the regime and its Iranian and Russian backers are calculating that they will have a free hand over the next five or six months to establish control over more territory before a new president can reset America's policy, should he or she even wish to. Mr Obama disposed of Syria in just two sentences in his valedictory speech at the UN last week.

It is against this backdrop that John Ker-

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ry, America's secretary of state, laboured for months to stitch together the temporary cessation of hostilities deal that fell apart as soon as it began. The deal was doomed from the outset. Russia and America have wholly divergent aims in Syria. Vladimir Putin wants Mr Assad to be part of any transitional political arrangements; Mr Obama sees him as the main obstacle.

Even the hope that they could find common ground on fighting two terrorist groups-Islamic State and al-Qaeda's recently rebranded Syrian affiliate, Jabhat Fatah al-Sham (JFS)-has been dashed. The Russians regard any rebel group that fights alongside JFS (formerly Jabhat al-Nusra), including those supported by America, as a legitimate target. The main purpose of the JFS tactic of distancing itself from al-Qaeda was to reassure other less extreme outfits that it shares their patriotic ambitions and does not have some wider jihadist agenda. It is apparently working. In Aleppo, the sense of abandonment by the West has driven more moderate groups into the arms of JFS.

Winter is coming

Fred Hof, a former adviser on Syria at the State Department, brands Mr Kerry's efforts as "the sad, pointless diplomacy of desperation and wishful thinking". Michael O'Hanlon of the Brookings Institution, a think-tank, sees little hope of the fighting easing because Aleppo is so important to both sides. He argues that with winter coming and the siege continuing, a huge programme of humanitarian air drops may be the only way to keep the city's inhabitants alive. It would require coordination with the Russians and the regime, but they would know that the opportunities for weapons smuggling would be far less than with aid brought in by road.

Despite the ferocity of the bombardment of the past few days and the start of a new ground offensive, the regime and its allies will struggle to take and hold territory unless they can traumatise the civilian population into a mass exodus. That is not yet happening. With only about 25,000 troops to call on, the regime lacks the numbers both to occupy eastern Aleppo and to continue the campaign against rebel groups in neighbouring Idlib province.

For their part, the rebels remain defiant. Yasser al-Yousef, a political officer with the Nur el-Din el-Zinki group, the largest rebel unit in eastern Aleppo, says that "this is a fight for our existence. Our front lines are fully prepared...Assad will have to turn

Aleppo into sand to win. We have no choice but to resist." He claims there are "tens of thousands of fighters in Aleppo". Although few military supplies are getting through now, there are reports of the Saudis and Qataris preparing to send more heavy weapons to the defenders, including shoulder-fired anti-aircraft missiles.

The priority for Mr Obama's successor will be to find a policy that provides America with at least some leverage over what happens in Syria's endgame, rather than giving Russia free rein. Mr O'Hanlon says that the willingness to use some force is essential, both through air power and a few more boots on the ground. He advocates establishing a number of protected areas-"inkspots"-which could become autonomous zones in a more confederal Syria. To that end, he suggests carrying out reprisal strikes against Syrian aircraft and artillery units attacking civilians. He believes it would be relatively easy to take out Syrian aircraft once they had landed and that a "very careful, very selective" approach would avoid hitting Russian planes but would "let them know you are serious". There would be some risk, he admits. But fears that it could start a war with Russia are probably wide of the mark.

The destruction of Aleppo

Crushed flowers

A historical and cultural treasure is being bombed to rubble

ALEPPO'S location was always a blessing and a curse. It lay at the fork on the Silk Road where goods went south to Africa and the Middle East or north into Eurasia. Merchants milked the proceeds, helped by carrier pigeons from Baghdad bringing daily updates on shifting commodity prices. But it was also a prize. Empires battled for its wealth.

In the tenth century it shifted from Christian Byzantine to Shia Fatimid to Sunni Abbasid hands, sometimes every few days. Merchants nodded, checked the wind and kept out of the fray. Its location was too important not to overcome earthquakes or sacking by the Mongols or Tamerlane. "It was just about trading," says Philip Mansel, who this year published a timely book on Aleppo's rise and fall.

Prosperous local merchants invested in music, poetry and food, rather than shrines, of which there are remarkably few. "Excess is obnoxious, even in religious worship," is an oft-quoted Aleppo proverb. Unlike Damascus, which traditionally was more devout, Aleppo embraced Turkish-speaking Ottoman rulers as readily as French imperialists. Access to their new markets was too attractive to

do otherwise. The Ottomans made it their second city after they seized it in 1516. It was the only Arab city where their sultans spent much time.

Aleppo's architecture and culture reflected its grandeur. The Prophet Muhammad had likened the gardens around Damascus to paradise. But Abu al-Tayyib al-Mutanabbi, considered the greatest of the classical Arabic poets, deemed them merely a route to something even better. Aleppo, he wrote, was his destination.

Many others followed suit. Jews poured in after the Spanish Inquisition. Armenians did likewise when the Turks cleansed Anatolia of Christians. While other cities indulged in occasional bouts of sectarian bloodletting, Aleppo welcomed all comers. Sultan Suleiman the Magnificent celebrated the entrepot's pluralism and diversity as "a quantity of fine flowers of diverse colours". And now the list of lost buildings reads like a register of UNESCO World Heritage Sites. One of the world's oldest vaulted markets lies torched and ruined. Khan al-Jumruk, which once housed the English, French and Dutch consulates, has gone. While the world does nothing, Russia's bombers are turning history into rubble.

Morocco's elections

A "weird and strange" campaign

CASARLANCA

The ruling Islamists face strong and unusual opposition

SINCE making gains in municipal elections last year, things have gone downhill for Morocco's ruling Justice and Development Party (PJD). First, a former candidate was accused of sexual harassment. Then in July a party member was arrested with three tonnes of cannabis. One of its governors is accused of trying to influence a big property deal. And in August two sexagenarian leaders of the party's religious wing, one married, were caught by police in a "sexual position" on a beach.

This would be bad for any party, but the PID is Islamist and its members are prone to moralising. So some Moroccans have revelled in its misfortune, especially as it comes in the run-up to parliamentary elections on October 7th. Over 30 parties will compete for 395 seats, but the real battle is between the PID and the Party for Authenticity and Modernity (PAM), which vows to "liberate" Morocco from the Islamists. The PAM won about the same number of votes as the PJD in the municipal polls.

These are the second parliamentary elections since thousands of Moroccans took to the streets in 2011 demanding curbs on the near-absolute monarchy. That year King Muhammad vi ceded some of his power to parliament and the people, and thereby avoided the worst of the Arab spring. But many people think the royal palace is now conspiring against the PJD in favour of the PAM. The latter's founder is now a royal adviser. "Weird and strange things are happening," wrote Mustapha Ramid, the PJD's justice minister, on Facebook this month.

On September 18th hundreds gathered

in Casablanca, the commercial capital, ostensibly for a rally against "Islamisation". But when questioned, some protesters said they did not know the meaning of the word. The PJD suspects that the PAM was behind the event, egged on by the interior ministry, which is led by a royal appointee. A week earlier the ministry rejected the candidacy of a conservative cleric from Marrakech allied to the PJD. Many Moroccans also question the party's recent troubles. "Those 'scandals' were used to disqualify the PJD," says Muhammad Sammouni, who will vote for a third party. "The police reports that should have been secret were given to certain press and published."

On the issues, the PJD rightly argues that it has made tough decisions to put the country's finances in order. These include cutting subsidies, reforming the pension system for public servants and freezing government hiring. As a result, the country's fiscal deficit dropped from 7.3% of GDP in 2012 to 4.3 % last year. Low oil prices have helped Morocco cut its current-account deficit, too. Analysts are generally bullish on the country's prospects.

But a drought has hit the economy hard and unemployment remains stubbornly high, "The executive of the PID promised a growth rate of 7%," says Samir Aboulkacim of the PAM. "We ended up with 1.5%." The PJD's promise to root out corruption, a centrepiece of its last campaign, has gone largely unfulfilled. Forces close to the king still control key sectors of the economy. The PAM, for its part, promises to lower state debt and create 150,000 jobs per year.

While the economy is voters' main concern, some fear that Morocco's movement towards a more democratic system—and a more constrained monarchy-is faltering. "The big issue here is to respect the will of the Moroccan voters and not to go back to the days where the results were cooked by the regime," says Najib Chaouki, a journalist. He believes the PJD would win free and fair elections. But even it does not challenge the authority of the king.



The forces of Justice and Development

Nigerian vigilantes

The home guard

MATDUGURT

The volunteers who helped beat back Boko Haram are becoming a problem

OHAMMED JAAFAR, a commander of Nigeria's Civilian Joint Task Force (CJTF), recalls his first arrest with relish. It was in 2013, shortly after the vigilante group had been formed to fight the Islamist rebels of Boko Haram. A distressed neighbour appeared at his door in Maiduguri, the birthplace of Boko Haram, reporting that a radicalised relative was hiding in his house. "I knew I was now a target," Mr Jaafar says. So he summoned his men, scaled his neighbour's wall and seized the suspect, who was an emir: one of Boko Haram's spiritual leaders.

Many Nigerians are proud of such derring-do on the part of the CJTF, which has swollen into an army of over 26,000 in Borno, the state worst affected by the insurgency. As north-easterners, its members claim to know the suspects in their communities, saving innocent by standers from being rounded up by ill-informed regular soldiers. They tried to protect their towns when Nigerian troops fled the front line (a common occurrence until early last year). Some fought bravely alongside the army, too. As Boko Haram advanced on Maiduguri in 2014, for example, the vigilantes helped avert the fall of the city, which was then home to about 2m people. Today, they man checkpoints on roads and at refugee camps, logging trucks and farmers in tatty notebooks as they pass.

The CITF has lost about 600 members, often to suicide-bombers whom they frisk at mosques and in market places: quite a sacrifice, especially given that only 1,800 of them receive a salary, a mere \$50 a month. Many left good jobs to serve as volunteers. Mr Jaafar, a former cosmetics seller, reckons the vigilantes have handed over 5,000 jihadists to the army-some captured as far away as Lagos. That may be an exaggeration: at the height of the insurgency, American officials said that Boko Haram had between 4,000 and 6,000 "hard-core" fighters. Either way, the soldiers are mostly grateful for the help.

Yet the vigilantes, like the regular army, are accused of abuses. A video released by Amnesty International in 2014 appeared to show them, together with soldiers, slaughtering men beside a mass grave. When unarmed suspects escaped from a barracks at Giwa the same year, locals recall that the volunteers cordoned off streets in Maiduguri and killed them. More recently the CITF has been implicated in the diversion of food destined for starving families. ("If >> Middle East and Africa The Economist October 1st 2016

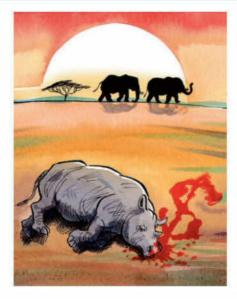
they get rations, then why not us?" asks a perfectly healthy guard from his sandbag checkpoint.) Men who escape occupied villages complain of beatings in camps, where women and girls are subjected to systematic sexual violence, according Human Rights Watch, a New York-based monitor. On certain posts, the volunteers are clearly children.

Only a tiny fraction of the vigilantes have received any military training, yet many are armed with cutlasses or handmade muskets known as "Dane guns" (after the European traders who first introduced firearms in the 19th century). Some of those who helped the army reclaim towns that were once occupied by Boko Haram say that the soldiers taught them how to handle automatic weapons, which they picked up from fallen fighters. "They don't know how many guns their volunteers have, or under what circumstances they are used," says Mausi Segun, a researcher at Human Rights Watch. At one camp visited by your correspondent, a CJTF recruit fires a warning shot over an unruly crowd. As Boko Haram retreats, a partially armed militia is being left in its wake. "All these people know how to operate AK-47s," Mr Jaafar says. "What does the government have planned for us? If there are no jobs, there will be trouble."

Recognising this, the government has already absorbed 500 CJTF members into the armed forces. A couple of thousand more will be employed as firemen and "vehicle inspectors" in Borno; a "sizeable chunk" will be sent to farm with "modern agricultural equipment", says the state's attorney-general.

Yet good jobs are hard to create and sustain in the poor north-east of Nigeria—which is reckoned to be one of the reasons why the insurgency started there in the first place, back in 2009. And weak administration often causes plans to fall through. Jobs promised under an amnesty for militants in the oil-producing south, for instance, mostly failed to materialise. Borno's governor, Kashim Shettima, seems understandably nervous: "If we can't educate them, we have created a Frankenstein's monster," he says.





Endangered species

To sell or not to sell?

JOHANNESBURG

Conservationists argue about ivory and rhino horn

T THE biggest-ever global wildlife con-Aference, khaki-clad hunters rub shoulders with animal-rights activists, nerdy scientists and blustering politicians. All have one thing in common: a desire to save endangered species from extinction. The similarity ends there. Pelham Jones, a South African, leads a group of private rhino owners arguing that legal trade in horn would stop the slaughter of their animals by criminal gangs. Across from his booth sits a Vietnamese delegation that claims to have reduced demand among consumers back home, where rhino horn is proudly used as "medicine". Around the corner are conservation groups that think legalising the trade will doom the rhino to extinction. "It's very clear in this room there is total polarisation," Mr Jones says.

This is the first time for 16 years that Africa has hosted the Convention on International Trade in Endangered Species (CITES), which regulates trade in plants and animals. This one has record attendance: some 3,500 participants are meeting from September 24th to October 5th in Sandton, a swanky suburb of Johannesburg. The stakes are high for the continent's most iconic fauna. Rhino poaching in Africa reached record levels last year, while the African elephant population is facing a precipitous fall. Census figures released at CITES show a continental decline of 110,000 elephants, to 415,000, over the past decade, though there are striking regional

The central issues at the conference con-

cern the ban on trading ivory. Elephants are mostly listed under Appendix I of CITES, which prohibits all trade in animal parts. In southern Africa, though, they come under Appendix II, which permits regulated trade. That said, those countries still abide by a complete ban on the sale of ivory. Namibia and Zimbabwe, with support from South Africa, want to open the ivory trade in certain cases, arguing that elephant populations in southern Africa are large, growing and damaging to habitat. They have in the past threatened to withdraw from the ivory ban unless it is loosened. But a coalition of 29 African countries wants all elephants to be moved to Appendix I. Another attention-grabbing proposal, from Swaziland, seeks to legalise trade in rhino horn. This is expected to fail, though South Africa may decide to reopen the issue in the next few years.

Bigger questions include whether trade bans work and, in the absence of trade that would allow private and public owners of wildlife to get an income from their animals, how to pay for conservation. There is friction between strict conservationists and those who support the "sustainable use" of wildlife—a euphemism for regulated hunting and trade. All sides say that, unless governments follow their prescriptions, the animals will die out.

Countries such as Zimbabwe, as well as South Africa's mostly white hunters, chafe at the West telling them what to do with their wildlife. John Hume, who owns 1,410 rhinos—more than any other private owner in the world—has five tonnes of horn stockpiled that he is not allowed to sell. He wants to be able to make money from his valuable property, and deter poachers, by cutting and selling their horns (which grow back, like hair and nails). "I breed and protect rhinos. That's what I do. And I think that's what we need to do to save them," he says.

Thumbing their noses

Many conservationists think legalising trade in either ivory or horn is too risky, since demand is hard to predict. Regulated exports might not dislodge the poached stuff, as the criminal product might still be cheaper. And demand might be stimulated by marketing, leading to more poaching, not less. Dan Ashe, the head of the Us Fish and Wildlife Service, calls the rhino horn proposal "a dangerous experiment with the future of this magnificent species".

But too often forgotten in the debate are the Africans, many of them poor, who live alongside elephants and rhinos. Ross Harvey, a researcher at the South African Institute of International Affairs, says it is vital that conservation should provide them with economic benefits. (Tourism is one, but not enough.) Otherwise, saving endangered animals "is going to be seen as a very middle-class issue".

Congo's political crisis

A burnt-out case

KINSHASA

An outburst of violence becomes a bargaining chip for the opposition

ROM the outside, the offices of FONUS, $oldsymbol{\Gamma}$ a political party in Congo's capital, Kinshasa, look relatively unchanged. The gate is still in the blue and vellow colours of the national flag; the party president's picture still hangs in the doorway. Inside, however, is chaos. Two large printing machines have been turned into a pile of blackened and twisted metal. The corrugated iron roofing is on the floor. A party member explains how at 3am on September 20th two jeeps full of soldiers arrived, broke in and poured petrol everywhere. Then one of them fired a rocket into the printing room.

The FONUS office was not alone. The road it sits on, opposite the national football stadium, is lined with buildings festooned with political flags and posters. Several of them, all from opposition parties, now have smashed windows and blackened walls. They were attacked after a protest on September 19th against President Joseph Kabila's failure to organise elections. That turned into a looting spree, which was in turn put down with bullets by Mr Kabila's personal guards. Around 50 people were killed; two police officers were lynched in the street. It was an unhappy taste of what the Democratic Republic of Congo may face as Mr Kabila comes to the end of his second and supposedly final term in office.

The crisis in Congo has been building for some time. In 2006 Mr Kabila, who took power after the assassination of his father Laurent in 2001, became Congo's first elected president since 1960. He helped write a new constitution, limiting a president to two five-year terms. Since then, he has apparently changed his mind. After trying, and failing, twice to change the rules to allow him to run again, Mr Kabila has opted for a strategy of "glissement", or slippage. He has refused to organise elections, citing logistical problems, while manoeuvring to stay in power after his term ends on December 19th.

Not many people in Congo much like the president. Conspiracy theories fly that he is not really Congolese, or not really his father's son. Educated in Tanzania, he speaks Lingala, the language of the Kinshasa street, poorly. And he is rarely seen in public: on September 26th he appeared for the first time since the protests: in Rome, shaking hands with the Pope. He is particularly unpopular in Kinshasa, a filthy, buzzing mega-city of perhaps 13m people, where the economy is turning sour. "The misery is at a level we have never seen," says Jean-Pierre Tshibangu, who runs a street stall selling milk, sugar and rice. "The government gives us nothing."

Mr Kabila's strategy for the past six months has been to try to buy off the opposition. The idea was to bring other parties into a "national dialogue" that would agree how to hold elections-and buy him another year or two as head of a "transitional government". But so far the conversation has been rather one-sided, as Congo's two biggest opposition figureheads have refused to join. In July Etienne Tshisekedi, an elderly politician who ran against Mr Kabila in 2011, returned from Belgium to Kinshasa to huge crowds, starting a new opposition alliance called Le Rassemblement ("The Rally", in French). Moïse Katumbi, a flamboyant and wealthy former governor who fled Congo in May, is still abroad, but his money appears to be bankrolling opposition unity.

Worn away by weather and patience

What happens now depends on how the events of September 19th changed the bargaining power of each side. For the opposition, the protests proved that they can get people onto the streets and cause havoc. But Mr Kabila also showed that his personal security services remain loyal and will happily shoot at crowds. That may make it harder to get protesters out again, says Jason Stearns of the Congo Research Group, a New York-based outfit.

What the opposition hopes instead is to

force Mr Kabila into new talks. Delly Sesanga, an MP who is an ally of Mr Katumbi, says that his group is willing to re-enter the dialogue on certain conditions. A new mediator must be appointed; political prisoners must be released; and charges against Mr Katumbi must be dropped. But crucially he says that Mr Kabila can stay as president if he agrees to organise elections in 2017, promises not to stand and gives up some day-to-day power.

According to Soraya Aziz, a campaigner for better governance, the opposition parties are probably hoping to get Mr Kabila to give them big jobs in government, in particular the post of prime minister. In Congo, that means access to money, and they hope to build war-chests for the eventual election. They hope that, with luck, they will then be able to eject the president.

It is possible that Mr Kabila will accept such a deal. He is already on the ropes economically, says one businessman: the money he needs to pay the salaries of the police could run out in months. Over the past year the local franc has lost 20% of its value against the dollar. On September 28th, two senior security officials were hit with American financial sanctions, freezing their assets. Others may follow. Making some concessions would buy Mr Kabila time, with which he could look for a new opportunity to change the constitution, or at the least to promote a successor who as president would protect his interests.

Mr Kabila has constraints of his own. Not all of his allies will want to risk giving up power meekly; some would probably prefer to shoot more protesters and lock up more opposition leaders than lose their seats. And not everyone in the opposition will compromise. Mr Tshisekedi, for example, wants to be president-and at 83, he cannot wait much longer. As Mr Kabila's time runs out, this latest outburst of violence may just be the beginning of a round of bloody confrontations.



Kabila's not going anywhere

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Polls predict a comfortable majority of voters will choose "no". Outside Budapest and the major cities, Hungary is a conservative and insular country, where many people speak no foreign languages and have little experience of those with different skin colours or faiths. But more than 50% of Hungary's roughly 8m eligible voters must turn out for the result to be valid, and they may not. An invalid result would be seen as a failure for Mr Orban and his ruling Fidesz party, says Peter Kreko of Political Capital, a Budapest think-tank.

One reason for the government to worry is that people have grown more sanguine about migration. At the height of the crisis in August 2015, thousands of migrants poured across the Hungarian border every day. Since then the government has built razor-wire fences along the frontiers with Serbia and Croatia. Of the handful of migrants who still enter, most are caught and expelled. The government, say critics, is diverting attention from issues such as corruption, health care and education.

The reduction in migration has been purchased with cruelty, say human-rights groups. A report this week from Amnesty International claims that asylum-seekers in Hungary, including unaccompanied children, suffer abuse, violence and unlawful detention. "Orban has replaced the rule"

Hungary's anti-migrant vote

Boundary issues

BUDAPEST

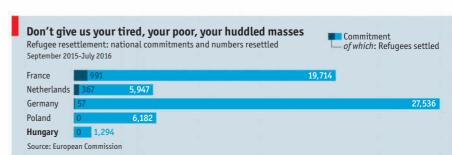
A refugee referendum is mostly about showing Brussels who is boss

UNGARY will hold a referendum on Ctober 2nd. (Such things have become a fad in Europe.) The question is: "Do you want the European Union to be entitled to prescribe the mandatory resettlement of non-Hungarian citizens in Hungary without the consent of parliament?" (Note the neutral wording.) At issue is the EU's Emergency Response Mechanism, adopted in September 2015, under which 160,000 of the migrants who began surging into Europe last year are to be shared out between member states according to quotas. The decision passed the European Council by majority vote, but four countries voted against it: the Czech Republic, Slovakia, Romania and Hungary. Hungary and Slovakia have challenged the system in the European Court of Justice. It is "unlawful, unworkable and dangerous", says Zoltan Kovacs, a government spokesman.

The referendum is largely a popularity ploy by Viktor Orban (pictured, right), Hungary's populist prime minister, and will have no legal effect. It is also a challenge to the authority of Brussels and the leadership of Germany's Angela Merkel, who champions the relocation scheme. Mrs Merkel sees accepting refugees as a European commitment whose burdens must be shared. Mr Orban, who has clashed with the EU over his government's illiberal media and economic policies, wants to stop the EU from issuing shared

rules on asylum and much else. He wants the union to be a trading bloc of sovereign countries that keeps out of matters like migration and human rights. With sympathetic governments in the Czech Republic, Slovakia and Poland, Mr Orban thinks his vision for the future of Europe will prevail.

The government is leaving nothing to chance. It has plastered posters calling for a "no" vote across the country. "Did you know that Brussels is planning to relocate a town's worth of illegal immigrants in Hungary?" asks one. (In fact, asylum applicants are not illegal immigrants, and Hungary's quota is a mere 1,294.) A leaflet sent to millions of homes claims that immigration has created "hundreds" of "no-go zones" in London, Brussels and Berlin. Britain, Belgium and Germany issued protests. Tension is rising. On September 24th a bomb exploded in downtown Budapest, injuring two police officers.



• of law with the rule of fear," says John Dalhuisen, Amnesty's Director for Europe. It is almost impossible for asylum-seekers to assert their legal rights, says Gabor Gyulai of the Hungarian Helsinki Committee, a watchdog. The government has "intentionally destroyed" the asylum system for political reasons.

Officials dismiss these claims as "sheer lies". Hungary is simply protecting its border as required under Europe's Schengen agreement, says Mr Kovacs. Legitimate claims for asylum, he insists, will be processed. Yet since the start of 2015 Hungary has received 203,898 asylum applications, and granted only 880 people any form of protection, according to the government.

It is not clear how anti-migrant the public is. A poll in September by Publicus Research found that just 37% thought Hungary should accept as many refugees as it could, but 64% felt that "it is our duty to help refugees." In any case, the referendum campaign faces little organised opposition. The Socialists and some smaller parties have called for voters to abstain. And it seems to be helping Fidesz, whose support climbed in a recent poll to 37%, while the ultranationalist Jobbik party fell to 12%.

The most spirited resistance has come from a fringe group called the Two-Tailed Dog Party. Together with a number of NGOs, including the Hungarian Helsinki Committee, the party is calling for voters to spoil their ballots. It has crowd-funded advertising posters satirising the government's "Did you know?" campaign. "Did you know a tree may fall on your head?" asks one. Falling trees or no, if the opposition's biggest achievement is to keep voters away from the polls, it is not clear whether anyone will hear it.

Turkey's armed forces

Chains of command

ISTANBUL

Since the coup, the army is on a short leash

LIEUTENANT Mehmet Ali Celebi has not sat in a gunship cockpit for years, but will jump back in at a moment's notice if the Turkish army comes calling. A promising helicopter pilot, Mr Celebi was sentenced to 16 years in jail in 2013, framed by policemen who uploaded numbers belonging to Islamist radicals onto his phone. He was released a year later, along with hundreds of other secularist officers who had been locked away on trumped-up charges by prosecutors close to the Gulen community, a secretive Islamic movement.

Since July's thwarted coup, staged by an army faction believed to be led by Gule-



Treading lightly

nists, the tables have turned. Today, it is Gulen followers in the bureaucracy who are being indiscriminately purged by their one-time patrons, the ruling Justice and Development (AK) party. Some 70,000 civil servants, including judges, prosecutors and teachers, have been sacked or suspended, sometimes on the thinnest of evidence. At least 32,000 people, including more than 100 journalists, are in prison.

The crackdown has left the second-biggest army in NATO in turmoil—this at a time when it is supposed to be fighting in Syria, alongside Syrian rebels, to push back both Islamic State (IS) and Kurdish militias.

About 5,000 soldiers, including almost half of all admirals and generals, have been sacked or detained. The air force has lost at least 265 pilots, leaving it with fewer pilots than fighter jets. Experts say replacing them may take ten years; the defence ministry says it can do so in three.

Thanks to President Recep Tayyip Erdogan's insistence that the coup was the work of a small cabal, the army's reputation has only been lightly tarnished, despite a night of chaotic violence that left some 270 dead. A survey in August found that 66% of Turks still trust the armed forces, down from 78% at the start of the year. Indeed, soldiers who saw the Gulenists rise through the ranks, often replacing secularist officers arrested like Mr Celebi, hope the purges will make the army more transparent, says Hasan Selim Ozertem, an Ankara-based analyst. "But there's also fear," he adds.

Many of the sacked generals have already been replaced. The air force, unless confronted with a full-scale war, should be able to cope. A handful of pilots imprisoned with Mr Celebi in the early 2010s

have been reinstated. The successful operation in Syria has restored confidence in the army, and Mr Erdogan suggests it may push farther south to take the fight to is.

A bigger challenge is an emergency decree authorising the president and prime minister to issue orders to commanders. Military schools have been closed to make way for a government-run national defence university. Two ministries, defence and interior, now control separate branches of the armed forces. Cabinet ministers will outnumber generals in the council responsible for military appointments. These may be the most profound changes to the army's structure since Turkey's foundation, says Doruk Ergun of EDAM, an Istanbul think-tank.

They may also be long overdue. For decades, the military enjoyed what Mr Ergun calls an "extrajudicial right" to overthrow governments, and did so on four occasions. Civilian control, which Ak has sought since coming to power in 2002, should stop it from doing so again. "The military is finally shedding the Prussian school from its make-up," says Soli Ozel, a professor at Kadir Has University.

What worries former soldiers is that the new measures could let the government bypass the chain of command, confusing decision-making. "This will erode fighting capacity," says Oktay Bingol, a retired brigadier general. Browbeaten generals may refer key matters to Mr Erdogan and his ministers, says Mr Ergun. Yet for many Turks, a timid army beats a disloyal one.

Russia and MH17

Brought to BUK

MOSCOW

Dutch investigators strike a blow against Russia's fact-free politics

THERE was never much doubt about what brought down Malaysia Airlines Flight 17 over eastern Ukraine on July 17th 2014, killing all 298 people on board: a Russian missile, fired from territory controlled by Russian-backed separatists. Still, it was important to see the facts confirmed. On September 28th the Dutch-led Joint Investigation Team (JIT) laid out its case, backed by an array of photo, video and forensic evidence, satellite and radar data, interviews with eyewitnesses and intercepted phone calls. The investigators called the findings "irrefutable".

The JIT's preliminary report is the beginning of what is sure to be a long and trying path to justice for the victims. Many had boarded the flight from Amsterdam to Kuala Lumpur with suitcases stuffed with bathing suits, bound for beach holidays in >>

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South-East Asia. They were cut short, the JIT found, by a Russian-made BUK 9M38 surface-to-air missile, which had left Russia that morning. The launcher, and three unused missiles, returned there the day after. The launch site was a field near the town of Pervomaiskiy, under the control of pro-Russian fighters. Investigators say they have some 100 potential suspects, but identifying the perpetrators will be "a matter for the long haul".

Russia continues to dispute the findings. Vladimir Putin's press secretary dismissed the JIT report as based on "speculation, unqualified and unprofessional information". Earlier in the week, Russia's defence ministry released radar data that it said proved the missile was launched from Ukrainian-held territory, the latest in a string of flimsy theories meant to muddy the waters. The Russians seem to have forgotten their earlier claim that a Ukrainian fighter-jet shot мн17 down. Russian media have suggested at various times that Ukrainian forces were trying to shoot down Mr Putin's plane, or that the CIA, hoping to undermine Russia, had filled the plane with bodies and crashed it intentionally.

The JIT, which also includes representatives from Australia, Belgium, Malaysia, and Ukraine, collected evidence of a standard intended for future use in court. It went beyond last year's Dutch Safety Board report, which showed the plane was brought down by a BUK but did not assign blame. The JIT trail begins with photographs and video of the missile launcher near the town of Snizhne in eastern Ukraine on the day of the crash. It also includes intercepted phone calls of separatist fighters asking for a BUK to defend their forces against intense Ukrainian air strikes. The fact that the missile-launcher came from Russia and returned there after the crash seems to imply official involvement.

Forensic clues also left little doubt about what happened. Satellite and radar data helped identify the launch site and determine that no other aircraft were flying in the vicinity of MH17. Inside the body of one of the pilots, investigators found butterfly-shaped shrapnel that comes from specific BUK warheads which the Russian army uses, but Ukraine's does not. The shrapnel also carried traces of glass used for Boeing cockpit windows, making it highly difficult to fake.

Delivering justice may prove even tougher than gathering the evidence. Russia has vetoed attempts at the UN to set up an international tribunal. If a case is brought in national courts, it is unlikely to extradite its citizens for trial. Still, at a time when Mr Putin and other demagogues are practicing a politics of outrageous lies, it is salutary to watch a team of meticulous investigators establish the cold, hard truth. The question now becomes: what will the world do about it?

AIDS in Russia

Immune to reason

ST PETERSBURG

Russia's contempt for effective drug and HIV policies is killing its citizens

THE front line in the fight against Europe's fastest-growing HIV epidemic runs through a dark blue bus parked on the outskirts of St Petersburg. Two friends enter late one September evening to collect clean needles and condoms, and duck into a side cabin for an HIV test with a nurse from Humanitarian Actions, a local NGO. "You barely feel it, don't be afraid," one says. Several minutes pass with bated breath. Then the results appear: all clear.

In most of the world the threat of HIV/ AIDS has receded. The exceptions are eastern Europe and Central Asia. In Russia, which accounts for more than 80% of new infections in the region, 51,000 people were diagnosed in the first five months of this year. In January registered HIV cases there topped one million. Vadim Pokrovsky of Russia's Federal AIDS Centre reckons the true figure may be 1.4m-1.5m, about 1% of the population; he warns there could be 3m by 2020. In some African countries prevalence can reach 19%, but the epidemic is slowing. In Russia, the infection rate is "getting worse, and at a very fast pace", says Vinay Saldanha, UNAIDS' director for eastern Europe and Central Asia.

The Soviet Union began reporting HIV in 1987, and the virus took off in Russia in the early 2000s, mostly among intravenous (IV) drug users. Dirty needles remain the primary means of infection. But with more new transmissions through heterosexual sex, doctors warn that HIV may threaten the general population. Bad policies and neglect have fed the epidemic.

Russia has eschewed the kind of sex-education and drug policies that have been shown to work elsewhere. Vladimir Putin's government keeps getting more prudish. "Russia is always taking its own path," says Sergei Dugin, director of Humanitarian Actions. "I would be happy about that, but it's going in the wrong direction."

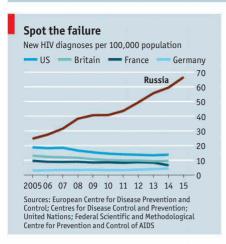
Harsh anti-drug laws keep users in the shadows. Methadone and other forms of non-injected opioid substitution therapy (OST) are illegal; in other post-Soviet states, such as Ukraine, they are legal. (After Russia annexed Crimea in 2014, 800 patients found themselves cut off. The UN believes some 10% have died, "mostly of overdose or suicide".) The World Health Organisation calls methadone "the most promising method of reducing drug dependence", and HIV-positive addicts who receive OST are 54% more likely to get the antiretroviral (ARV) drugs they need to stay healthy, according to studies.

Russia's foreign minister has derided OST as a "narcoliberal" idea. The country's chief narcologist compares methadone to "treating a vodka-drinking alcoholic with cognac". (Three activists have challenged the methadone ban in the European Court of Human Rights.) Harm-reduction programmes such as needle exchanges, while not illegal, receive little government support. As for sex education, Russia's former children's rights ombudsman declared that the best lessons lie in classic Russian literature. (Presumably he did not mean for disappointed lovers to throw themselves



The HIV rate is shooting up

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• under trains.) The new ombudsman, the wife of an Orthodox priest, belongs to a social-media group called "HIV/AIDS is the Biggest Hoax of the 20th Century".

Skimpy funding has left gaps in treatment. Fewer than 25% of Russia's HIV-positive patients receive ARV drugs, well below the global average of 46%. Costs are high, in part because drug procurement has been left to the 85 individual regions: the cheapest ARV treatments in Russia cost several times more than in Brazil or India. Patients who do not get medication are more likely to die of AIDS—and more likely to spread the virus. (ARV drugs suppress viral load and make patients less infectious.)

Stigmatisation compounds the challenge. When Alexander, an HIV-positive drug user in Moscow, received his diagnosis, he says he "didn't leave the house for a month and a half". His mother gave him a separate cup and washed the shower after he used it, unaware of how HIV actually spreads. Drug users fear criminal repercussions if they seek help. And Russia's "antigay propaganda" laws make it harder for gay-friendly charities to operate.

Virulent prejudice

Independent NGOS, many staffed by HIV-positive people, play a crucial role in reaching vulnerable groups. But Russia's "foreign agents" legislation, which places bureaucratic restrictions around groups that accept foreign money, has made funding difficult. Several HIV and drug-policy advocacy groups have been labelled foreign agents this year, including the Andrey Ryklov Foundation, the only group offering free needle exchanges in Moscow.

As the number of HIV cases grows, the government has been forced to address the problem. In October 2015 the prime minister, Dmitry Medvedev, held a meeting on AIDs. Russia's health minister, Veronika Skvortsova, promised an extra 20 billion roubles (\$315m) in AIDs funding in 2016. A new federal HIV strategy is expected within weeks. The government plans to centralise ARV procurement beginning in 2017, which ought to reduce costs.

Danish culture

Cocoa by candlelight

COPENHAGEN

Why do so many foreigners want to copy Denmark?

How big is the world's appetite for things Danish? Foreign audiences have already binge-watched the country's noir TV series (such as "The Killing" and "The Bridge") and raved over the new Nordic cuisine of Noma, Copenhagen's trend-setting restaurant. This autumn, publishers are testing the limits of the world's Danomania. Before the Christmas season, at least nine Englishlanguage books will come out devoted to explaining the elusive quality of hygge.

Hygge is difficult to pronounce. (Try "hew-geh".) It is also tricky to describe. Writers have tried "the art of creating intimacy", "cosiness of the soul" and "cocoa by candlelight". It is an attitude rather than a recipe, evoking relaxation with close friends or family. Many see it as a quintessential element of Denmark's national character. There is some evidence for this: the Danes are Europe's biggest consumers of candles, burning through about 6 kilogrammes (13 pounds) per person every year. Runner-up Austria manages just half that. Denmark often leads (highly subjective) rankings of the happiest countries, and hygge is being marketed as a way for foreigners to imitate the Danes' balanced, relaxed, egalitarian lifestyle.

But not all Danes agree. Jeppe Trolle Linnet, an anthropologist at the University of Southern Denmark, argues that hugge is not the great social leveller it appears. Danes dislike acknowledging class differences, but his research finds that the habits of hygge vary by income and social status. For some, hugge is a bottle of burgundy with soft jazz on the hi-fi; for others it is a can of beer while watching football on telly. Worse, different groups are uncomfortable with others' interpretations of hugge. Mr Linnet calls it a "vehicle of social control", involving "a negative stereotyping of social groups who are perceived as unable to

create hygge".

In this, hygge resembles the German quality of gemütlichkeit, which also implies a sense of cosiness, peace of mind and—crucially—social acceptance. And although the desire for communality does encourage social solidarity, it can also mean excluding strangers. Getting to hygge with a local is not always easy: in Denmark even crowded buses can be eerily silent. Danes have a reputation for aloofness.

A recent report on the quality of life for expatriates in 67 countries, compiled by an organisation called InterNations, bears this out. Denmark's own natives may rank it top for happiness, but the immigrants in the survey ranked it 60th in terms of friendliness, 64th for being made to feel welcome, and 67th for the ease of finding friends. Finishing just ahead of Denmark on the finding-friends measure was Norway, the country from which the Danes imported the word hugge. If cultures are obsessed with the joys of relaxing with old friends, perhaps it is because they find it stressful to make new ones.



Topping the cosiness index

Some regions have made progress through co-operation between doctors, patients and activists. In St Petersburg, where the number of new cases is slowing, the city's chief AIDS doctor, Denis Gusev, has worked with activists and opened a "prophylactic point" in the city's AIDS Centre offering needle exchanges. An advertising campaign encouraging testing has brought more traffic to the AIDS Centre's hotline and website. But without action at a higher political level, there will only be "islands of good practice, but never a good national

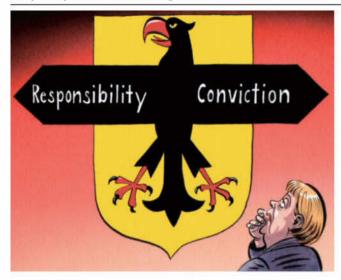
response", says Anne Aslett, director of the Elton John AIDS Foundation.

Russia's economic crisis has slashed health-care budgets, and more money for AIDS seems unlikely. Even this year's promised extra federal funds have yet to materialise, says Mr Pokrovsky. Officials, he adds, must abandon the old saying that "what's good for the German is death for the Russian." Germany's population is a bit over half the size of Russia's, and it has one 25th the number of new HIV cases. "Narcoliberal" ideas save lives.

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Charlemagne | A tale of two ethics

Why many Germans think impractical idealism is immoral



THE phrases "ethic of conviction" and "ethic of responsibility" mean little to most English-speakers. In Germany the equivalent terms—Gesinnungsethik and Verantwortungsethik—are household words. Pundits drop them casually during television talk shows. Hosts use them as conversation-starters at dinner parties. The concepts draw on the opposition between idealism and pragmatism that runs through politics everywhere. But they also capture a specific moral tension that is "very German", says Manfred Güllner, a sociologist and pollster. Anyone interested in understanding German politics, on anything from the euro to refugees, would do well to get a handle on them.

The terms come from the sociologist Max Weber, who used them in a speech he gave in January 1919 to a group of leftist students at a Munich bookstore. Germany had just lost the first world war. The Kaiser had abdicated, the country was in the throes of revolution and Munich was about to become the capital of a short-lived "Bavarian Soviet Republic". Armed with only eight index cards, Weber gave a talk that would become a classic of political science. ("Politics as a Vocation" was published in English only after the second world war.) The lecture ranged broadly through history, but its main purpose was to curb the Utopian romanticism then gripping the ideologues fighting over the direction of the new Germany, including those sitting in front of him.

Weber described an "abysmal opposition" between two types of ethics. Those following their convictions wish to preserve their own moral purity, no matter what consequences their policies may have in the real world. "If an action of good intent leads to bad results, then, in the actor's eyes, not he but the world, or the stupidity of other men, or God's will who made them thus, is responsible for the evil." By contrast, someone guided by responsibility "takes account of precisely the average deficiencies of people...(H)e does not even have the right to presuppose their goodness and perfection." This sort of politician will answer for all the consequences of his actions, even unintended ones. Weber left no doubt about his sympathies. Ethicists of conviction, he said, were "in nine out of ten cases windbags".

The prevailing view today, like Weber's in 1919, is that "Germany has a surfeit of Gesinnungsethik," says Wolfgang Nowak, who served as an adviser to Gerhard Schröder when he was

chancellor. The postwar yearning of Germans to atone for their nation's Nazi past through extravagant moral posing exacerbates the tendency. In general, the ethic of conviction is most prevalent among leftists and Protestants, and slightly less so among conservatives and Catholics, says Mr Güllner.

Thus the Social Democrats, who view themselves as crusaders for social justice, often give the impression that they are not only "unable but unwilling" to govern, lest they bear actual responsibility, Mr Güllner thinks. That may explain why there has been a Social Democratic chancellor for only 20 years since 1949, compared with 47 years under the Christian Democrats. Many of Germany's most strident pacifists, meanwhile, are Lutherans. Margot Käßmann, the church's former leader, dreams of Germany having no army at all. She disavows force even to prevent or stop a genocide.

But an ethic of conviction also runs through the centre-right, which since the 1950s has approached the European project as an end in itself, a way for Germany to become post-national and dissolve its guilt along with its sovereignty. In the process, Germans deliberately overlooked the fact that most other Europeans never shared this goal. Once the euro crisis erupted, many conservatives opposed bail-outs out of an ethic of conviction, argues Thilo Sarrazin, a controversial pundit. They wanted to decry rule-breaking by crisis countries as inherently bad—even at the cost of letting the currency zone unravel.

The ethic of responsibility holds that such stances are not merely impractical but wrong, and that what will not work cannot be moral. Those governing Germany have mostly been of this camp. In the 1980s millions of Germans marched against the modernisation of NATO's nuclear arsenal, but Chancellor Helmut Schmidt let the missiles deploy, accepting the grim logic of deterrence. (His reward from his fellow Social Democrats was largely disdain.) In the euro crisis, Angela Merkel reluctantly agreed to bail-outs in order to hold the currency zone together.

Transports of joy

That is what makes Mrs Merkel's historic opening of Germany's borders to refugees on September 4th, 2015 so remarkable. "She galloped away with an ethic of conviction," says Konrad Ott, a professor of philosophy and author of a book on migration and morality. At the time this aligned her with a euphoric "welcome culture", as ordinary Germans volunteered to help refugees and the press celebrated the country's humanitarian example. Mrs Merkel refused to put a numerical limit on accepting human beings in dire need, a position she still maintains.

But as predicted by ethicists of responsibility (in whose ranks Mrs Merkel is usually found), the mood soon turned. Other Europeans accused Germany of "moral imperialism", the flip side of Gesinnungsethik. And many Germans felt that too much was being asked of their society. Some, in a development that would not have surprised Weber, turned xenophobic.

The history of the past year can thus be seen as Mrs Merkel's attempt to return to an ethic of responsibility without betraying her convictions. This includes biting her tongue as she deals with an increasingly authoritarian Turkey, whose cooperation she needs to reduce the migrant flows, and other moral compromises. Max Weber would have found her dilemma compelling. Even someone with an ethic of responsibility, he said, sometimes "reaches the point where he says: 'Here I stand; I can do no other.' That is something genuinely human and moving."

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The Labour Party conference

You say you want a revolution

LIVERPOOL

They all want to change the world. But with the far-left Jeremy Corbyn entrenched as their leader, Labour's half-million members will end up frustrated

THE key moment of this year's Labour L conference came before it began, when Jeremy Corbyn was re-elected as leader against his challenger, Owen Smith, with the support of 62% of party members, an even bigger majority than he took last year. Young Corbynites were duly energised; backers of Momentum, a grass roots pro-Corbyn group, were positively sunny at their alternative festival up the road from the main conference. But the mood of many Labour MPS was as dark as the skies over Liverpool.

The reason is that, so long as Mr Corbyn remains leader, Labour seems sure to go on trailing the Tories. That ought to be surprising, given that David Cameron's government blew up after losing its Brexit referendum in June, to be replaced by one led by Theresa May, who seems to have no coherent plan for how to leave the EU. Yet Mr Corbyn is too ineffectual a leader to benefit from this. Indeed, he often seems more interested in protest than in power.

His unsuitability for the job of leader of the opposition was starkly revealed by two speeches to the conference. The first was by Sadiq Khan, the Labour mayor of London. He repeatedly noted that Labour could achieve nothing unless it was in office-and that meant in Westminster, not just in control of a few cities or councils. The second came from Tom Watson, Labour's deputy leader. Although no Blairite. he went out of his way to praise the Labour governments led by Tony Blair and Gordon Brown from 1997 to 2010. Delegates gave Mr Watson a standing ovation while his leader looked on in stony silence.

Mr Corbyn's own speech on September 28th was more forceful and better delivered than last year's. But he was stronger in attacking the Tories for looking after the privileged few than he was in setting out what a Labour government would do instead. His ten pledges focused mainly on

You tell me it's the institution Labour Party leadership contest, 2016 Result by date of joining party*, Jeremy Corbyn Owen Smith Before 2015 general During 2015 election Past year leadership contest Britain, political party membership, '000 0 100 200 300 400 500 600 Conservative Scottish National Liberal Democrat Green UKIP Plaid Cymru *From poll of Source: House of Commons: YouGov 1 019 members

the twin themes of motherhood and apple pie. He said almost nothing about Scotland, where Labour has to regain many lost seats if it is to have any chance of power. And, although he called for an end to trench warfare and pleaded for a restoration of party unity, he offered little to lure back moderate MPS who had resigned from his shadow cabinet.

As Mr Corbyn proudly noted, Labour's membership has ballooned so that it is now one of the biggest parties in western Europe, with more members than all other British parties put together (see chart). Next week he will rejig his shadow cabinet, probably bringing back some of those who quit in June. His team tried this week to assuage moderates' fears that constituencyboundary changes might facilitate their deselection in favour of Corbynites. He also lost control of the party's National Executive Committee after a change to include Scottish and Welsh members. Yet he is more firmly in charge than ever.

Mr Corbyn also wants policies made from the bottom up, with a bigger role for the party conference (evidently not agreeing with Arthur Balfour's dictum that he would prefer to take advice from his valet than from a Tory conference). This need not always produce barmy far-left results. He and John McDonnell, the shadow chancellor, made many extravagant spending promises, including to build 1m new homes (half state-owned), to renationalise the railways, to establish a "National Education Service" and to set up a £500 billion (\$650 billion) national investment bank. Yet Mr Corbyn has not managed to overturn Labour's commitment to renewing the Trident nuclear weapons system. Indeed, the Corbyn agenda is often less loony-left and inward-looking than was Michael Foot's in the early 1980s. The difference is that Foot was a former minis- >> ter who had the support of most Labour MPs. He still lost heavily.

Although fringe meetings on Brexit were ram-packed, the conference chose not to debate the issue. Mr Corbyn said precious little beyond noting that Labour had campaigned to stay in the EU. Indeed, his insistence on the unfettered right to offer state aid to troubled industries like steel implies a desire to leave the single market. On immigration, he commendably refused to propose any new limits on numbers, suggesting instead a revival of the migrant impact fund, a mechanism to send extra cash to areas with high immigration which was scrapped in 2010. Many pro-European MPS, spooked because more than one-third of Labour supporters voted for Brexit and perhaps two-thirds of Labour-held seats returned Brexit majorities, believe free movement from the EU must be stopped even if that means losing membership of the single market.

What can the moderates do now? Mr Corbyn won fewer votes than Mr Smith among members who joined the party before 2015. But unless tens of thousands more like-minded members can be recruited, there seems little point in another leadership challenge next year. The moderates lack a strong candidate: Mr Smith lost partly because he seemed little more than Corbyn-lite. Chuka Umunna, a former shadow business secretary, would be a better choice; he may mull a challenge in 2018. A few moderates will slink back into the shadow cabinet. Others are running in mayoral elections or hope to chair parliamentary committees (Hilary Benn, a former shadow foreign secretary, could chair the crucial Brexit committee). None now talks of splitting away to form a new party.

Most are instead resigned to losing the next election, whenever it happens. But the real concern is that even then Mr Corbyn might cling on or be replaced by another far-left figure like Mr McDonnell. Corbynites are sure to blame defeat on dissenting Labour MPs who have created party disunity. Yet as other European countries have discovered, in today's fluid political climate no party can be sure of its survival. Britain needs a centre-left opposition party. That need not always be Labour. ■

ban as "ridiculous" and explaining various loopholes in the rules to reporters who were pretending to represent an Asian investment company, with whom he discussed a £400,000 (\$520,000) fee.

Team Sky, the British-run cycling outfit in whose colours Sir Bradley won the Tour de France in 2012, has also portraved itself as a pillar of probity. It has a "zero tolerance" policy on employing past cheats and has promised to clean up cycling, a sport long associated with doping. Sir Dave Brailsford, who runs the team, was also until 2014 in charge of British Cycling, which has notched up 22 Olympic gold medals in the past decade, nearly one-third of Team GB's total. He has explained that Team Sky and Sir Bradley acted within the rules to gain permission from the UCI, cycling's international administrative body, to treat his asthma with injections of triamcinolone acetonide between 2011 and 2013.

That steroid does indeed alleviate asthma; it also has a history of abuse in cycling, since it burns fat and reduces pain, according to Ross Tucker, a sports scientist at the University of the Free State in South Africa. Lance Armstrong, a disgraced American former champion, tested positive for it in 1999, before covering his tracks with a backdated permission for a saddle-sore cream containing the substance. There is no suggestion that Sir Bradley or his team have broken the rules. But his use of the drug appears to contradict the claim made in his autobiography in 2012 that, vaccinations aside, "I've never had an injection".

The affair threatens to tarnish Britain's glittering Olympic success. As for the England football team, it is more than ever a "laughing stock", in the words of Alan Shearer, a former captain. Its squad of millionaires was recently beaten by Iceland, a country whose entire population could fit inside four stadiums. Mr Allardyce can at least claim an unbeaten record: his career in charge lasted for only one game.

Sporting scandal

Own goals

England's football manager is sent off, as cyclists face questions about drug use

If THE summer of 2016 was one of British sporting triumph, the autumn is becoming one of scandal and suspicion. Britons barely had time to celebrate Team GB's performance in Rio de Janeiro, where it finished second in the medal table in both the Olympic and Paralympic games, before receiving embarrassing news.

On September 27th "Big Sam" Allardyce, the new manager of the mediocre but beloved England football team, offered his resignation to the Football Association (FA) just 67 days into the job, after the Daily Telegraph newspaper published footage of him explaining how to circumvent FA rules to undercover reporters. Meanwhile Sir Bradley Wiggins, a cyclist who has won more Olympic medals than any other Briton, was defending himself against allegations of doping. Drug-testing records leaked by hackers on September 15th showed that Sir Bradley had in the past received medical exemptions to treat asthma with steroids that are normally banned.

Both cases are tinged with hubris. The FA has long presented English football as a model of integrity. It was critical of FIFA, the sport's international governing body, in the years before evidence of fraud committed by FIFA officials emerged in 2015.

Earlier this week an FA-funded body criticised FIFA's decision to drop an anti-racism task force. The FA was six years ahead of FIFA in outlawing third-party ownership of footballers' rights, under which businesses could buy a player's economic rights and sell his labour to a team. Mr Allardyce was recorded describing the FA's



Three lions in the dirt

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Bagehot | Jeremy Corbyn, dodgy dealer

Light on substance and heavy on salesmanship, Corbynism is a political pyramid scheme



ALL big suits and swagger, Vehbi Alimucaj was a symbol of Albania's post-Soviet embrace of capitalism. The fall of communism had blown open the economy, people had money to invest and Mr Alimucaj—a businessman known as "the Pharaoh"—knew, or claimed to know, where to put it to work. Savers piled in, attracted by interest rates that looked too good to be true. They were: Mr Alimucaj was a fraudster and used the deposits of each new wave of investors to pay the dividends promised to previous waves. When his pyramid scheme and others like it brought down the Albanian economy in 1997 he was arrested and found guilty of stealing \$325m from his fellow citizens. How had he done it? Albania's then-unsophisticated financial culture had played a role. But so too had an eternal truth: it can be remarkably easy to sell an imaginary product if it sounds good enough.

Bagehot recalled this tale as he watched Jeremy Corbyn's big speech at the Labour Party conference on September 28th. Thousands of idealistic lefties had flooded into Labour to re-elect him as party leader. But why? Starchy and monotone, Mr Corbyn's public speaking has improved in recent months, but only from terrible to mediocre. And for a man who had spent the past few days swanning about the conference telling everyone he was putting Labour on an election footing, he had a flimsy prospectus.

On Brexit, Britain's most pressing priority, he had nothing substantive to say. Likewise on the budget deficit, the root cause of Labour's electoral defeat only last year. In his speech he wafted about a long shopping list—more research spending, infrastructure investment and cash for areas with high immigration rates—without saying where he would find the dosh. His wishlist of ten policies including "action to secure our environment" and "security of work" read as if he were the first person to think of the notions. The man proposing himself as Britain's next prime minister offered only, to quote Kerry McCarthy, a former shadow cabinet minister, "things you could fit on a T-shirt".

Mr Corbyn was equally unconvincing about how he might one day reach Downing Street. Though his triumphant re-election subdued the party's deep rifts during the conference, they remain live. From the podium Len McCluskey, the loyalist boss of Labour's largest affiliated union, called for Mr Corbyn's enemies to quit. Meanwhile Mr Corbyn himself betrayed next to no real

curiosity in the electorate. He had nothing to say about the causes of Labour's defeat last year, or why the party is on its lowest poll score in opposition for three decades. Nor was he any more willing to engage with a mass media he has, to date, treated as a walking insult. Instead of conducting the usual breakfast interview with the BBC on the morning of his speech, he recorded one in advance, his aides reportedly explaining that the would-be prime minister "is not a morning person".

Yet this potpourri of unfunded policies, nice words and electoral complacency has attracted legions to his party. Its membership has more than doubled since Mr Corbyn became leader; 15,500 joined after his re-election on September 24th. His rallies over the summer typically attracted thousands. This energy was palpable at The World Transformed, an alternative conference hosted by Momentum (Mr Corbyn's unofficial cheerleading brigade) a short walk from Labour's official gathering. In a cavernous former church stallholders representing anti-poverty and anti-racism campaigns vied with Corbynista platform speakers. One stand offered copies of the "Corbyn Colouring Book" and even a collection of poems praising the man: "Gee, Jeremy Corbyn, we're sorry to say / That compromise and stalling have led us astray." To thunderous applause Mr Corbyn told the conference: "Our hugely increased membership is part of a movement that can take Labour's message into every community."

Like Mr Alimucaj he has made a virtue of having little of substance to offer those investing in him. He makes up for his lack of details about how he will win power in a sceptical country and realise socialism in a competitive world by hailing the almost mystical capacities of his movement. In Liverpool its growth was widely heralded as proof that ordinary Britons can be won over. In his punchy speech on September 27th Tom Watson, Mr Corbyn's moderate deputy, praised the new mayor of London, Sadiq Khan, for winning elections. "Just like Jeremy Corbyn does," heckled an old duffer in the crowd, revealingly eliding the Labour leader's appeal to the half-million Britons involved in the party with the 45m-strong electorate at large.

Mr Corbyn's genius is that all this is self-reinforcing. The more vague and sweeping the promises and ideals he ascribes to the movement, the more people join it. The more who do so, the more formidable the movement seems. Labour's leader is using the deposits of hope placed by one group to pay the dividends expected by the previous one. Overall the process gives the impression of success and motion that far outstrips any basic asset, including any kind of plan to win power and wield it effectively.

The movement, c'est moi

All pyramid schemes collapse eventually. It is not clear when that will happen to Corbynism. Most commentators and Labour moderates expect him to lose the next general election, probably badly. But there is no guarantee that this will end the cycle; that it will not just be seen as proof the movement is not yet big enough to take on interests—media, business, defence—that have supposedly conspired against Mr Corbyn. This vicious circle helps explain why Labour's reality-based politicians, including Mr Watson and Mr Khan, seem stuck in a cul-de-sac. None wants to split Labour: the party is too tribal for that and most doubt a new moderate party could survive under Britain's majoritarian electoral system. Yet recruiting enough centre-left types to take on Mr Corbyn's uncannily pyramidical movement looks like a long shot. There are no good options.



Transport as a service

It starts with a single app

HELSINKI

Combining old and new ways of getting around will transform transport—and cities, too

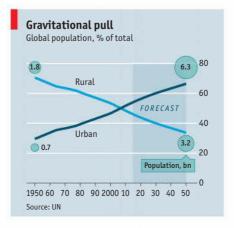
MONG Helsinki's contributions to in-Anovation in transport is a tram kitted out as a fully functioning pub, which trundles through its centre in the summer. But Finland's capital will soon host schemes that appeal to more than beer-swilling sightseers. Residents will be able to travel quickly door-to-door within the city by using an app that mixes and matches a variety of public and private means of transport. Several such schemes are due to start this year. If they succeed they could do for personal mobility what Airbnb and Spotify have done for accommodation and music: turn it into a service, accessed and paid for on demand.

MaaS Global (short for Mobility as a Service) is the startup behind the most ambitious of Finland's schemes. At a tap of a smartphone screen its app, Whim, will show the best way to get from A to B by combining public transport and a variety of options from participating private firms. Whim is currently being tested; it is due to go live in Helsinki this autumn and in two other Finnish cities late in the year.

If there is no obvious route, a scheme like these might suggest a bicycle from the city's bike-share scheme (if one is close to your front door), followed by a train and then a taxi; an on-demand bus ("hail" it on the app and it will come and pick you up); or a one-way car-share to a tram and a rented "e-bike" with a small electric motor to

alleviate the strain of pedalling for the final leg. Once a route has been chosen it will make any bookings needed, as well as ensuring that hire vehicles are available and public-transport sections are running on time. Costs will be displayed for every option, making clear the trade-offs between speed, comfort and price. Customers will be able to buy one-off journeys or "bundles" modelled on mobile-phone contracts, allowing a certain amount of travel each month.

Commuters around the world are already accustomed to making journeys that combine public transport with walking, taxis or shared bikes. And preparing to take a trip has been transformed since the days



of printed maps and timetables. Many countries have websites that give information on how to reach a destination by bus or train, both within cities and between them; in some places Google's online maps have transport information built in. Buying tickets online is now common; Trainline, an online booking system for rail tickets, is rolling out across Europe.

But planning a journey is one thing; making it another. After getting advice on their routes travellers have always had to find their own way to a bus stop or train station, or call a cab. Payment and booking systems have generally been separate for each leg of a journey, and the "last mile" between mass transit and final destination has not been covered at all. Services such as Whim aim to change all this: removing the guesswork, combining the various options in the most efficient and cost-effective ways, and getting the traveller seamlessly from door to door.

Without such new thinking, cities will grind towards gridlock. In 2007 half the world's population lived in cities; by 2050 it is expected that two-thirds will (see chart). According to Arthur D. Little, a consultancy, urban journeys already account for nearly two-thirds of all kilometres travelled by people. On current trends urban distance travelled each year will have trebled by 2050, and the average time urban drivers spend languishing in traffic jams is set to double to 106 hours a year.

The traditional policy responses to congestion—build more roads and expand public transport—are too expensive for these cash-strapped times. Hence the appeal to urban planners of the idea of travellers combining existing mass-transit schemes with a growing variety of private services. It offers a way to attract private capital into "public" transport. By enabling >>>

a closer link between supply and demand it will make mass transport more efficient. Congestion at peak hours will fall as travellers are diverted from crowded routes to less-packed ones; varying prices by time of day could help here, too.

Public-health experts are also keen on the new approach. The apps through which the various options are accessed could be tweaked to encourage healthier choices, such as walking or cycling, if desired. Emissions of pollutants should also fall, because fewer vehicles would be idling in jams and there would be fewer cars on the street. Helsinki thinks it can make its centre free of cars by 2025—not by banning them, but by building a transport system that renders them redundant.

As well as commuters' lives, cities will be transformed, too. With fewer cars and parking spaces needed, they can be redesigned to be more pedestrian-friendly and to have more green spaces. Quicker journeys will increase the catchment area for job-seekers prepared to travel to work.

Won't the arrival of self-driving cars render such thinking unnecessary? Not quickly, and even then, not really. Affordable driverless cars that can handle both city driving and motorways safely are a long way off. And even after they arrive, mass transit systems will often remain the best way to move large numbers of people swiftly. If all of the 1.3m daily commuters into central London switched to autonomous vehicles, it would become a giant carpark. The better integrated a city's transport system, the less demand there will be for driverless cars, and the easier those cars will be to combine with the other options.

The new approach to transport as a service relies on two interconnected trends. The first is the spread of smartphones, which both generate the data required to manage a system that combines a wide variety of public and private transport options, and allow firms to offer the information via an app. They have already made navigating a city by public transport much easier. "Intelligent" journey planners, which use live information about congestion, disruption from accidents and the like to suggest the best route, are proliferating. Around 70% of Londoners regularly use an app such as Transport for London's journey planner. Live travel information shows whether trains and buses are running on time.

The second is the rise of the "sharing economy", with businesses such as Airbnb making it possible to rent fixed assets such as apartments when they are not being used. Young urbanites, who have become accustomed to usership instead of ownership, find the notion of transport as a service both natural and appealing. Meanwhile the cost of running a car in a city goes ever upwards. Parking gets harder. Many city-dwellers are questioning



whether the convenience is worth it. Between 1983 and 2014 the share of Americans aged 20-24 with a driving licence fell from 92% to 77%.

Ride-hailing services are the most obvious response to these two trends. Since Uber turned the ignition switch in 2008 it has expanded to operate in 500 cities around the world. Competitors such as Lyft, which also uses an app to match riders with drivers and to handle payments, are growing rapidly, too. Didi Chuxing, China's biggest e-taxi service, has 300m users in 400 cities and towns.

Uber and Lyft essentially provide a new way of calling a cab. But both firms also offer ride-share services that promise to make journeys cheaper and only slightly less convenient. UberPool, Lyft Line and specialist ride-share companies such as Via, which operates in Chicago, New York and Washington, DC, put passengers going in the same direction together in shared cars and lets them split the bill.

Passengers are being pooled in larger vehicles, too. Firms such as Bridj are using the wealth of data they collect from users' smartphones to model travel patterns, and thus to run on-demand minibuses in several American cities, including Boston, Kansas City and Washington, DC. Book a ride and the app will show pick-up and dropoff points close to your origin and destination, any walking required and the fare. "It's the bus that catches you," says the firm's founder, Matthew George. At \$2-6 a trip it is not much pricier than a regular bus, but a comfortable seat is guaranteed.

Ford is testing an on-demand shuttle bus around its vast plant at Dearborn, near Detroit. Several universities around the world run similar services for students around campuses. Plenty of firms now have pools of shared company vehicles available on demand, instead of giving one to every eligible employee.

Self-driving is not out of the picture entirely. Car-sharing schemes, which offer most of the benefits of owning a car, but at much lower cost, are revving up. Some allow cars to be rented by the hour or even

minute. Vehicles may have to be returned to the point of hire; or schemes may allow one-way trips between designated parking spots. Boston Consulting Group reckons that the 5.8m people now signed up to carsharing schemes worldwide could grow to 35m in the next five years.

These firms expand the traditional carrental business by allowing shorter rental periods and more convenient pick-up and drop-off. Peer-to-peer schemes such as Getaround and Turo in America, and Car-Unity in Germany, take car-sharing one stage further. These enable owners to rent out their cars for short periods, thus sweating assets that would otherwise sit at the kerb for as much as 95% of the time. Services that fill empty seats in cars and split the cost of petrol by connecting drivers with prospective passengers are also growing fast. The biggest by some way is BlaBla-Car, a French firm with operations in more than 20 countries. It mainly connects big cities rather than operating within them, taking a fee for matching passengers and drivers going the same way.

Baby, you can drive my car

Other niche services are springing up. In America Carpool Kids and Voom are among a band of new services that let parents connect and share rides. Zum, in San Francisco, is aiming to co-ordinate transport for children and child care such as babysitting in a single, on-demand system.

The various permutations of car-sharing, car-pooling and ride-hailing pose a big threat to vehicle manufacturers' sales. Some are rattled enough to get in on the act. The global car market is worth \$2.3 trillion a year, of which Ford gets 6%, says Mark Fields, the firm's boss. The market for transport services is \$5.4 trillion a year, he estimates, of which it gets near to nothing.

That is starting to change. Many carmakers already manufacture small electric vehicles that would suit a sharing scheme as they are easy to maintain and can be charged when they are parked, saving users the need to stop and pay for fuel. Some are planning powered scooters and elec->>>

tric micro-cars, which could also be used as shared vehicles for short urban trips. And most are busily reinventing themselves as mobility providers. In January GM announced it was investing \$500m in Lyft to help it understand new transport models. In May Volkswagen put \$300m into Gett, an Israeli rival to Uber; Toyota invested an undisclosed sum in Uber around the same time.

Some carmakers have launched services of their own. Daimler has started a car-sharing service, car2go, which offers point-to-point rentals charged by the minute, hour or day. Users arrange, via an app, to pick a car up where a previous customer left it. Ford's GoDrive, which operates in parts of London, also offers rental by the minute, as does DriveNow, a competitor, which is owned by BMW and Sixt, a car-hire firm.

Get on the bus

The next step is to combine these disparate experiments. Helsinki is not the only place seeking to integrate public and private transport, and do better at getting passengers from A to B. Switzerland's national rail company has teamed up with car- and bike-sharing firms. Several Canadian cities have a scheme incorporating public transport, bike-sharing, taxis and Communauto, a car-sharing service; Brussels runs a similar scheme. But these only provide discounts for combined subscriptions and some limited integration of booking, though not payments.

In Hanover, Germany's 13th-largest city, Hannovermobil goes a bit further by charging users for their month's travel in a single monthly bill. Moovel, owned by Daimler, operates a countrywide service in Germany that also knits different transport together—but booking and ticketing are still handled separately. Joint Venture in Silicon Valley is experimenting with integrating shuttle buses with other mobility

apps that whisk users from door to door. After a successful pilot in Gothenburg, UbiGo will launch in Sweden this year, combining public and private transport.

But truly turning transport into a service, as Helsinki is aiming to do, is a Herculean task. It not only means integrating the booking, payment and operating systems of dozens of transport providers. It also means persuading private firms to take part in the first place. Public-transport operators can be forced to do so by national or municipal authorities. But private operators may balk at sharing data and real-time information on customers with a third party, even if they are promised confidentiality. And why would a ride-sharing or taxi firm want to sign up to a scheme that may direct customers to its rivals?

In Helsinki Sampo Hietanen, the boss of MaaS Global, has two answers. First, as the use of private cars declines many more people will use the firm's app (and its competitors'), so taking part will mean getting access to an ever-growing pool of customers. Second, any firm that does not join will be left behind. And though the contractual negotiations are proving tricky, to some amazement nearly all Helsinki's transport operators—even taxi-drivers—seem willing to give it a go.

Finland's sense of shared national endeavour probably helps. More important is the determination of the municipal and national governments. Indeed, without city authorities' active encouragement mobility as a service will not take off, says Catherine Kargas of Marcon, a Canadian consulting firm.

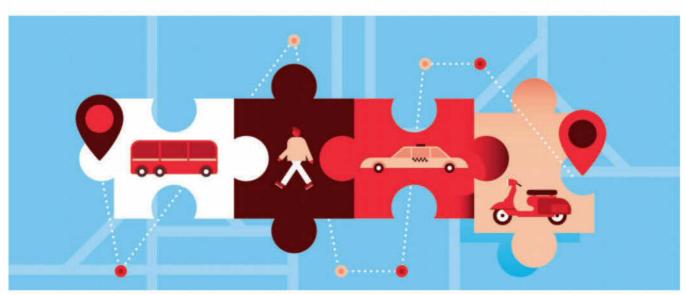
Finland's national government is doing its bit by rewriting legislation to bring the various laws covering different modes of transport into harmony. The transport minister, Anne Berner, cites regulations that treat hire vehicles with fewer than seven seats as taxis, whereas minibuses are covered by the same laws as full-sized bus-

es. Entirely separate laws cover vehicles that shift parcels and vehicles that shift people. That places an unnecessary obstacle in the way of any firm that might like to do both.

Putting an independent tech firm like MaaS Global rather than an existing transport operator in charge of the app has some big advantages. A tech firm may be more innovative and more willing to take risks than a big incumbent. The likes of Deutsche Bahn, which already has a system to integrate trains and car-sharing, might still be slow to let innovators break in, reckons Mr Hietanen. Independent operators would be happy to offer a large ready-made market of travellers to any firm able to extend its range of offerings, and might be more willing to support small firms with new ideas.

Mr Hietanen certainly has big plans. The Whim app includes pay-as-you-go "multi-modal" packages that bundle monthly travel requirements at a single price. For perhaps €95 (\$106) a month it might offer free city-wide public transport, 100km of local taxi use, 500km of car rental and 1,500km on national public transport. He thinks that aiming mobility services at city-dwellers is too limited, and wants to integrate regional and national trains—as well as rural services, where on-demand buses and ride-sharing could prove handier than scheduled buses, which often travel half-empty.

Other mobility evangelists go further. Some are eyeing big cities in the developing world, even though these rarely have good public-transport networks. Could the 50,000 minibuses and 150,000 taxis in Mexico City, for example, be better deployed as part of a system that encouraged ride-sharing and on-demand re-routing? Others talk of interoperability across borders; a few even suggest roping in airlines. Who knows: one day a wily entrepreneur may add an on-demand mobile pub.





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Nintendo

Jump-start

A giant of the console industry has lost a generation of gamers to smartphones. Can it reclaim them?

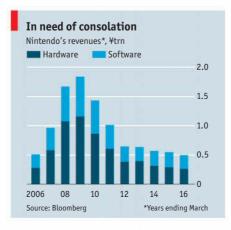
THE trajectory of Nintendo's stock price in the past year has been worthy of the vaults and free-falls of a particularly exhilarating round of "Super Mario Bros". The Japanese video-gaming firm's hit title helped start the era of living-room gaming over three decades ago, when it introduced Mario, the pudgy Italian plumber, to millions. But recently Nintendo has failed to keep pace with the rise of smartphone gaming.

Many investors hoped that when the firm announced its first-ever game designed for smartphones in autumn 2015, Super Mario would be the one to make its long-awaited mobile debut. The company's share price tumbled by 10% on the news that it was only Miitomo, a new chatting app. Then came "Pokémon Go", a location-based game in which players catch virtual creatures on their screens while roaming the real world. Nintendo's stock price more than doubled to over ¥32,000 (\$318) within a few weeks of its release in July. Its market value briefly overtook that of Sonv.

Then down again. Nintendo's shares plummeted by the most since 1990 when the firm made it clear that it had less of a stake in "Pokémon Go", which was primarily developed by Niantic, a Google spin-off, than investors had believed. And up. In September, at Apple's launch event for the iPhone 7, Nintendo's Shigeru Miyamoto (pictured), guru of the gaming world, stole the show with the promise of "Super Mario Run", the firm's first ever Mario game for smartphones. It is being developed with DeNA, a Japanese mobile-gaming firm, for Apple's ios operating system, and will make its debut in December.

Nintendo's shares are up by 15% since that announcement and by 38% since the start of the year. The game is likely to be available on Android, Google's mobile platform, next year. Serkan Toto, a games consultant in Tokyo, expects as many as 1.5 billion downloads across both systems.

The advent of "Super Mario Run" repre-



sents a huge change for the company. Five vears ago Satoru Iwata, Nintendo's late boss, warned that "Nintendo would cease to be Nintendo" if it went mobile. Until now it has clung to its "walled garden" model whereby its Mario games could be played only on Nintendo hardware, enticing players to buy its new consoles as well as the latest hit game.

The problem is that these days, not even Mario, Zelda or Donkey Kong can shift enough of Nintendo's underwhelming consoles. Sales of hardware, which have accounted for 50-60% of its revenue each year since 2005, are slumping. Nintendo's first Wii, aimed at casual gamers, was the best-selling console of its generation. But its successor, the Wii u-pricey and poorly marketed when it was launched in 2012—was a flop. A big reason is that families and youngsters, its target market, were playing games on their parents' tablets and smartphones instead. In contrast, Sony and Microsoft, which make the PS4 and the Xbox, respectively, target hard-core gamers. Nintendo reported annual losses in 2011-2013.

Free-to-play smartphone games always seemed to Nintendo like junk food, says Mr Toto, next to the gourmet fare—its \$200 consoles and \$60 games. The standard "freemium" revenue model for mobile games relies on in-app purchases of virtual goods that enhance the game. This is unpalatable to Nintendo as a games firm selling to families because it could be seen as taking direct advantage of the addictive qualities of its products. It also worried that allowing third-party games developers to use its characters willy-nilly in simple mobile games early on would cheapen them. When some repeatedly suggested going mobile, Mr Miyamoto declined. He >> was the only one at the company that Mr Iwata could not overrule, says a Nintendowatcher at a bank in Tokyo.

The firm has belatedly realised that its hesitation in embracing smartphones has already lost it a whole generation of potential gamers, says Mr Toto—and lots of revenue to boot. Nintendo owns only a third of The Pokémon Company, which licenses the Pokémon franchise, and of Niantic, but it could earn ¥7 billion-14 billion a year from "Pokémon Go", says Haruka Mori of J.P. Morgan, an investment bank. It is already played in 100 countries.

Underlining the potential of Nintendo's intellectual property (IP) on platforms other than its own, it was only when Niantic overlaid Pikachus, Jigglypuffs and Digletts onto a niche augmented-reality game called "Ingress" that it took off. In two months "Pokémon Go" racked up a staggering 500m downloads. Jefferies, an investment bank, calls Nintendo's IP an "unmatched treasure". That it is now putting its most precious character on mobiles and tablets suggests that other creations will soon follow suit.

But Nintendo is not jettisoning its conservative approach. The message at head-quarters in Kyoto, says a local investor, is not to get "carried away" by the success of "Pokémon Go" or by Mario's leap onto the iPhone. Its mindset is in some respects still that of an old hand in an oldish tech sector. Only last year Mr Iwata clarified that its mobile foray in no way suggested that it had lost any of its passion for consoles.

Indeed, Nintendo says it is making the shift in the hope that mobile users—who may be encountering its games for the first time-will be enticed to buy its consoles and help perk up hardware sales. "Super Mario Run" will be free to download, but players will pay a flat fee after a few sample levels (the amount is as yet unknown, but probably ranging between \$5 and \$20). Company staffers are preoccupied with a new console to be launched in March. code-named the NX. It is said to be a hybrid between a console and a handheld device, to be played on the go or docked at home. The focus on the NX is partly because the firm badly needs a big technological splash. If the console is another dud, it could even be forced to think about shutting its consumer-hardware business.

Its continued focus on hardware is of a piece with a firm that still sees itself primarily as a craftsman of boxed goods, says Mr Toto. At its headquarters (which he describes as a mix between a "Kafkaesque castle and Willy Wonka") games designers sport dark-blue engineering jackets like those worn by Japanese factory workers, with pens in their breast pockets. Seth Fischer, an Israeli activist investor in the firm, says the building is "like a mausoleum". For many observers the success of "Pokémon Go" shows the gulf between Nin-

tendo's offerings and what customers want: hobbled, perhaps, by *monozukuri*, a tendency for Japanese consumer-electronics firms to over-engineer products to best others on weight or size, say.

Yet the firm has clearly shifted direction. For Nintendo to approve a partnership with a tiny foreign company like Niantic is an about-turn, as is its decision to put its mustachioed mascot on hardware made by Apple. Even two years ago, says Hideki Yasuda, an analyst at ACE Research Institute in Tokyo, Nintendo would not have agreed to Mario's appearance at the closing ceremony of this summer's Olympic games in Brazil. To the glee of many, Shinzo Abe, Japan's prime minister, took up the baton for Tokyo 2020 dressed in Mario's signature dungarees and red cap. In 2014 Nintendo launched wildly popular "Amiibo" figurines of its video characters that connect with its games.

Continued success will of course depend on more than just endless recycling of IP. Nintendo will have to create new, compelling characters and stay on top of consumer hardware, which still accounts

for a lot of its revenues. And the move into mobile carries risk. One is the clout that Apple and Google have in smartphonegaming. Nintendo will have to hand over to Apple 30% of the revenues that "Super Mario Run" earns via its app store, for example. Its partnerships with DeNA and Niantic mean that it is relinquishing at least some control over game development, too, which could dilute quality. And it is unclear that casual gamers paying small amounts on their phones will fork out the money for a pricey Nintendo device.

That said, Nintendo certainly has the skills on the software side: the firm is simply a fantastically good maker of games. Of the world's 25 all-time, best-selling video games, it owns 17. It also has impressive staying-power in the business of fun. The firm began in 1889 with the production of handmade hanafuda playing cards decorated with flowers, and was one of the first to move into arcade games in the 1970s. It also likes to remind people that it invented the whole business of hand-held games played on the go. Seen that way, Mario is just returning to his roots.

Business in China

Mixed messages

SHANGHAI

A missed opportunity to improve the environment for foreign companies in China

LI KEQIANG, China's prime minister, made a big promise to the world's leading businessmen at the World Economic Forum's annual gathering in Davos in January 2015. It was that China would introduce a new legal regime for foreign investment that would "treat Chinese and foreign companies as equals". Its government has duly unveiled a set of revisions to its foreign-investment laws that come into force on October 1st. The standing committee of the National People's Congress

adopted the laws earlier this month and bureaucrats have drafted detailed rules.

The revisions, and the extent to which they fulfil Mr Li's grand pledge, are an important indicator of how serious the government is about pursuing other initiatives to liberalise rules on foreign investment. China is currently negotiating a bilateral investment treaty (BIT) with the United States. American businesses hope it will lead to greater market access. A BIT with Europe is scheduled to follow.



How, then, do the changes measure up? On the face of it, they involve a welcome shift away from the current regime, which obliges foreign firms to win numerous approvals and is both burdensome and often influenced by domestic politics. The new framework pursues efficiency. Instead of demanding approvals, it seeks to usher in a simpler, registration-based system. Whereas the current approach is based on a long list of strategic industries in which foreign investment is either restricted or off-limits. the overhaul promises to replace it with a relatively short "negative list" of forbidden investments in areas such as defence and media. According to some, such as Hogan Lovells, a law firm, the reforms herald a sea-change in China's foreign direct investment (FDI) regime.

Yet the revisions leave intact much that is wrong. China has kept a complex set of rules restricting inflows for decades. As well as the long-standing practice of deeming many industries strategic, the government still requires foreign firms to form joint ventures with Chinese companies and to hand over intellectual property via technology transfers. Repatriation of profits is tightly controlled. And because the approvals-based approach is likely to persist, despite official promises, every foreign investment is subject to the vagaries and corruption that comes with a one-party, highly bureaucratic state.

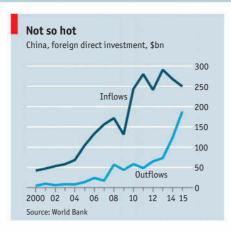
Most glaringly, there is nothing in the new changes that genuinely places foreign firms on an equal legal footing with local ones. The EU Chamber of Commerce in China dismissed the new reforms as "not bold enough". It issued a thinly veiled warning that the EU may make it harder for Chinese to invest in Europe.

Another big omission is the government's failure to tackle the problem of offshore legal structures known as variable interest entities (VIES). Foreign investment is banned in Chinese internet companies, but by getting foreigners to put money into VIES to which the Chinese firm promises to pay dividends, many firms have got around this ban. A proper reform would have ended the ambiguity surrounding these vehicles. It was not forthcoming.

The tape is red

There are already signs of bureaucratic resistance even to the government's modest revisions. It is questionable, for example, whether officials will accept the shift from an approvals-based scheme to a registration system. Bureaucrats at the top economic planning agency, the National Development and Reform Commission, are said to reject the idea that the approvals-based system is coming to an end. They say the new rules are just a modification of the existing approach to foreign investment.

Meanwhile, multinationals are no longer clamouring to put money into China's



slowing economy. FDI has been flooding into the Middle Kingdom for two decades. Inbound direct investment reached a peak of nearly \$300 billion in 2013 but has cooled off since. Foreign inflows are slowing just as Chinese outward investments are skyrocketing (see chart). It seems exactly the right moment to roll out the welcome mat, but the changes going into effect fall well short of what multinationals had hoped for. As Jake Parker of the US China Business Council, a lobby group for big American firms, points out, Chinese leaders have talked about lots of reforms but "the lack of implementation has created uncertainty about the policy direction and undermined confidence."

Ink wars

Blot on the landscape

A row over printer cartridges

TOOK a while to join the dots. On the morning of September 13th owners of several types of HP OfficeJet, a printer designed for the home and for smaller offices that is manufactured by HP Inc, an American seller of printers and computers, switched on their machines and found them not quite the same. The night before they had been able to print with any sort of ink cartridge. Since that day only machines containing original HP cartridges have churned out copies. The cause, enraged customers came to realise, was the deployment by HP of a firmware update that blocks rival ink.

HP had reason to act as it did. Though its printers business remains profitable, revenues fell by 14% in the year to July. Morepaperless offices take most of the blame: printer shipments have tumbled by a fifth since 2007. But rivals in the market for ink squeeze margins. Non-original cartridges now make up about 26% of the trade in Eu-

rope, the Middle East and Africa, and 16% in North America.

Dirt-cheap "clone" cartridges, mostly from China, have spread over the past decade. HP's move obstructs fakes, which do break copyright law (and the odd printer). Also affected are lawful businesses, points out Tim Parsons of Promax Imaging, a small British firm which refills the ink in "original" branded printer cartridges (a cartridge "remanufacturer", in the jargon). It is also quite legal for so-called "private label" companies to pull HP ink cartridges apart and create new versions that are compatible with HP printers. Their quality easily matches that of original cartridges and they can cost a quarter as much.

Big manufacturers such as HP, for whom printer cartridges are highly profitable products, have long attempted to wipe out these bargain-basement rivals. From the early 2000s they have used smart chips in their cartridges to make them harder to copy or refill. In 2002 Lexmark, an American printer-maker, sued Static Control, a company that had found a way to befuddle those chips. But Lexmark lost. The court defended the right of Static Control to make parts that "interoperate" with the goods of another manufacturer. Small firms that provide private-label spare parts for a whole range of industries, such as car manufacturing, cheered.

Firmware updates are another common way to repel rivals. But HP's update stands out, says Cory Doctorow of the Electronic Frontier Foundation, for being a particularly extreme rewiring of its OfficeJet printers in the homes of customers.

Can we even be said to own property, he asks, if digital-rights management grants the manufacturer control of one part of a product in perpetuity? Mr Doctorow frets that, as printer manufacturers load ever more chips with similar software, courts may be swayed to extend the reach of copyright to parts and refills businesses across many industries. General Motors, a car manufacturer, now claims to own parts of a vehicle after it has been driven off the forecourt.

For the time being, HP's rivals seem likely to carry on finding ways to sell their cheap cartridges. A Dutch private-label company, 123inkt, says it will be able to keep supplying the HP printers despite the firmware update. Chips from Static Control, which function in the cartridges of several private-label firms and remanufacturers, were not blocked by HP. But the recent purchase by HP of Samsung's printer business, for \$1.1 billion, does blot their prospects. According to Laura Heywood of Kleen Strike, a remanufacturer, cartridge makers may find it much harder to interfere with the printer chips made by Samsung, which are renowned for being "more complicated than Germany's Enigma code machine."

Business The Economist October 1st 2016

Digital advertising

Doesn't ad up

NEW YORK

The advertising industry's trust problem

ADVERTISING WEEK, an annual stretch of industry meetings that began on September 26th in New York, is usually defined by schmoozing and self-congratulation. This year's event has been marred by suspicion. In the week leading up to it, Dentsu Aegis, a big agency, admitted overbilling by its digital-ad division in Japan; and Facebook, a tech giant, said it had inflated the average time people spent watching video ads.

Such revelations have reinforced existing concerns among advertisers that they are having the wool pulled over their eyes when it comes to online advertisements. At an Advertising Week panel on "trust" on September 28th, Bob Liodice, the chief executive of the Association of National Advertisers (ANA), spoke of broad doubts among his members.

It was not meant to be like this. Half of an advertiser's budget is wasted, says the industry's favourite truism, but no one knows which half. Digital ads were supposed to help. Cookies and other tags would direct the right advertisements to the right people, based on their activity online. Digital tools would track which ads inspire consumers to buy products. Indeed, on September 21st Facebook announced new methods to do just that.

But as advertisers have gained greater control in some respects, they have lost it in others. One fear is practical: that they are paying for online ads that consumers don't see, either because they are shown to robots, or tucked in obscure slots. Two underlying concerns are harder to address.

The first is that Facebook and Google

have simply become too dominant. Last year the pair accounted for more than 75% of online-ad growth in America, according to Mary Meeker of Kleiner Perkins Caufield & Byers, a venture-capital firm. "Google and Facebook have added a lot of value to our marketplace," says Mr Liodice. "They also raise concerns." Marketers are particularly worried by a lack of transparency. Facebook's inflated numbers did not lead to overbilling, but may have prompted companies to advertise more on it. Google and Facebook have started to allow third parties to verify some data, but many metrics remain proprietary.

The second concern is that ad agencies are not acting in their clients' interests. In Japan, "clients are sort of at the mercy of the ad agency," says Jason Karlin, who studies the industry at the University of Tokyo. In America an investigation backed by the ANA found that agencies were buying ad space and reselling it to clients at markups of up to 90%. Some agencies were also collecting undisclosed rebates from media firms for buying ad space. The agencies' trade group, the 4AS, blasted the report as "one-sided".

There are glimmers of change. The ANA has devised a model contract to protect its members' interests. The recent outcry may prompt Facebook and Google to be more open. Facebook says it will let third parties measure how long a viewer sees a display ad, though the company has yet to set a date. Some are even prepared to vote with their feet: one agency executive has two multinational clients that have already cut their spending on Facebook.

Yet marketers will not abandon Facebook or Google; they are too big. Nor will firms give up on agencies. In Japan Dentsu's grip on media and advertising is too tight; everywhere, marketers depend on agencies to navigate advertising's complexity. So mistrust will persist. "You're either a cynic," says Brian Wieser of Pivotal Research Group, which analyses the industry, "or you're not paying attention."



They drink but you still can't trust them

Europe's outposts

Not always in clusters

TUAI

The allure of manufacturing out in the sticks

RELAND'S Atlantic coast is sheep-rearing and pilgrim country. The drive to Tuam, a modest town of 9,550 residents, reveals mostly lush fields, low hills, stone walls and mist. Yet this unlikely spot has a hitech industrial side. Off Tuam's main road a bunch of warehouses contains some 400 software engineers, researchers and artificial-intelligence experts, drawn from 35 countries. Next door is a manufacturing plant employing 650 people churning out circuit boards, cameras and sensors for driverless cars.

The set-up in Tuam is operated by Valeo, a French car-parts firm with a market value of €12 billion (\$13.4 billion), which brought in €500m in sales last year from producing 100m such products globally. Tuam is "our biggest R&D centre for surround cameras, with huge production capacity", says Jacques Aschenbroich, the firm's CEO. Tuam has also become Valeo's global mother plant, overseeing its sensor factories in Hungary, Mexico and China.

What possessed the French firm to keep such operations in a spot so far from customers such as BMW, Range Rover and Google, away from big pools of labour, and a lengthy drive from Dublin? History is one answer: in 2007 Valeo bought Connaught, a successful local firm making cameras for cars, and preferred to expand there rather than move. Fergus Moyles, who runs things in Tuam (and managed the old firm), says that attracting talent is not hard. Nearby Galway University offers useful ties. Property prices are low, which appeals to foreign engineers, for example from India, who intend to save while in Ireland. Land prices help when building new facilities.

Setting up shop in a remote location like Tuam runs counter to conventional thinking about the gains from industrial clusters. But Valeo is not the only firm to see benefits from sticking operations in remote spots. Turbomeca, the helicopter-engine unit of Safran, a big French defence firm, is based in the Pyrenees on the French-Spanish border. That location, Bordes, with just 2,700 residents, makes Tuam look like a metropolis. Again, history explains the initial choice of location: Turbomeca was founded pre-war, then moved to a remote spot to avoid invading Germans. Being in the boonies means sympathetic local officials and staff who are extremely loyal.

For high-end manufacturing firms that rely on highly skilled workers, a location with an appealing climate, good housing >>

and other compelling virtues, like schools for young families, is a big draw. Another example is Medtech, a startup that makes surgical robots for spine and brain operations. Its "Rosa" products are widely used in American and European hospitals. The firm's founder, Bertin Nahum, started and built the firm on the outskirts of Montpellier, a picturesque town on the Mediterranean coast.

Wouldn't Mr Nahum really be better off joining a cluster of other medical technology companies, for example in Grenoble, or around Paris? "I would much rather be here," he says, talking warmly of support from the local mayor and of how attracting talent is no trouble at all. His robots can be flown to hospitals easily from Marseille airport. For some, the periphery appeals more than the centre.

Voice computing

Prick up your ears

Wireless headphones and smart speakers herald a new class of devices

WHEN Apple in early September introduced a new iPhone without a jack for headphones, together with pricey wireless earbuds that you speak into, it did not take long for mocking videos to appear online. In one, an enterprising soul reveals a "secret hack" to get back the jack: he drills a hole into a new iPhone. In another video, a fake commercial, the AirPods, as the untethered headphones are called, keep popping out of users' ears and are eaten by a dog (pictured).

Whatever one thinks of Apple's Air-Pods, which cost \$159 a pair and are expected to go on sale in late October, they stand not just for one, but two emerging markets in personal technology. One is called "hearables"—meaning "smart" ear devices. The other is "smart speakers", like Amazon's popular Echo product, which sits in people's homes and can respond to voice commands. Both gadgets herald a world in which people communicate with machines by speaking, much like in the movie "2001: A Space Odyssey", in which the crew talked to HAL, a chillingly sentient computer.

Untethered headphones have been around for some time, although they are often a disappointment because the wireless connection with a smartphone is not stable enough. Hearables not only solve this problem, says George Jijiashvili of CCS Insight, a market-research outfit, but come with all manner of other components: processors, microphones and sensors, including accelerometers, a heart-rate monitor and a GPS receiver.

The added intelligence enables all kinds of features. Smart earbuds can store music. They can monitor the user's physical activity, for instance counting the number of push-ups he is supposed to perform. They can read his gestures, such as nodding. And they can, much like noise-cancelling headsets, suppress distracting background babble—or amplify sounds users



The dog heard my homework

want to hear, a bit like hearing aids.

Apple's AirPods will do well in the category of smart earbuds, but the market will be small-ccs Insight expects around 9m pairs to be sold each year by 2020-and it isn't the pioneer in the field. Nikolaj Hviid, the boss of Bragi, a German firm, says that since its headphones went on sale six months ago, more than 100,000 have sold. Doppler Labs is on a similar path. If Microsoft put a computer on every desk and Apple one into every pocket, Doppler wants to put one "into everyone's ears", says Noah Kraft, the firm's boss. One feature is "layered listening", the audio equivalent of augmented reality. The firm's new smart buds, due out in November, will be able to filter out specific sounds, such as a baby's cry, and insert others, such as a footballmatch commentary.

Such ambitions point to what is perhaps the most intriguing feature of smart buds: they are a convenient conduit to intelligent digital assistants, such as Apple's Siri and Microsoft's Cortana. Currently, these services, which can process natural speech and are powered by artificial intelligence in the computing clouds, reach users mostly through smartphones, where they help them search the internet or send texts without having to type or tap.

People will not just talk to such digital assistants via hearables but also through the other new category of devices: smart speakers such as Amazon's Echo. When the e-commerce conglomerate introduced it, many thought it was just another, possibly unnecessary gadget. For \$180 a pop, owners of the cylinder-shaped device can use voice commands to play music, call a taxi and, of course, order stuff from Amazon. But the Echo has been surprisingly successful, with more than 3m units expected to be sold this year and 10m in 2017.

One reason for the rapid adoption is that Amazon has turned Alexa, its digital assistant, into a "platform": a set of services that other developers can combine to build a "skill", the equivalent of an app on a smartphone. More than 3,000 such skills—some created by Amazon, many more by a growing number of third parties—are already available, ranging from simple tasks such as setting an alarm to more complicated ones such as managing a share portfolio. Lots of children have come to treat Alexa, in combination with Echo, as a sort of family member at home, market researchers say.

Competitors are trying to catch up. When Google introduces a number of new products on October 4th, it is expected to unveil Google Home, which will probably offer much the same features as the Echo. Rumours have it that Apple, too, is working on a device in time for next year. Other firms, including China's Baidu and South Korea's Samsung, are expected to come out with smart speakers. Qualcomm, a big American chip designer, has already developed a circuit board that makes it easy to build such devices. As the hardware becomes a commodity, firms that offer the best voice service will win, predicts Martin Garner, also of CCs Insight. And quality, he argues, will mostly depend on access to data. Since Google, for instance, knows what people search for, it also knows how they ask questions, which will help make its digital assistant (creatively called "Assistant") work well in different languages.

"As accuracy of speech recognition goes from 95% to 99%, all of us...will go from barely using it to using it all the time," said Andrew Ng, Baidu's chief scientist, recently. But hearables and smart speakers have a drawback. When they get hacked, either by criminals or by intelligence services, they could become a bit like George Orwell's "telescreens". "Any sound that Winston made, above the level of a very low whisper," Orwell wrote in his novel "Nineteen Eighty-Four", would be picked up.

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Schumpeter | Don't limit the revolution

For all its virtues, limited liability continues to provoke criticism



THE limited-liability company is one of man's greatest inventions. The company encourages co-operation by allowing people to join together under the same organisational roof, regardless of race, creed or nationality. Limited liability encourages investment by limiting people's downside risk—they can lose only the cash they put in the corporation. Put the two things together and you have an institution that allocates spare money to productive purposes and minimises fear and friction by freeing investors from the threat of personal ruin.

Economic historians have noted that limited liability sat at the heart of the Industrial Revolution. Before the 19th century you could obtain it in many countries only if you won special permission from the government. But as capital-hungry technologies such as the railroads arrived, followers of President Andrew Jackson (a prominent fan of limited liability) in America and free-market liberals in Europe threw the privilege open to all comers.

That the revolution has gathered pace in recent years has not been as well noted. Limited liability has gone truly global. China's New Company Law statute of 2005 introduced elaborate rules governing its operation. The structure has also spread from very large to tiny businesses. Limited-liability partnerships (LLPs) allow partnerships to dispense with unlimited liability, which was traditionally the rule for groups of lawyers, accountants and so on. Limited-liability companies (LLCs) allow smaller outfits with a handful of owners (or even just one owner) to enjoy the benefits of the structure. Since 1993 America has created over 2.2m LLCs compared with 1.9m corporations.

Yet limited liability has always had a big weakness. Because shareholders don't put their personal assets at risk, they stand to make huge gains if things go well but can lose their original stake only if they go badly. Even in the 19th century champions of unfettered free markets worried that this asymmetry—a sort of implicit subsidy—was unfair to society at large. A particular concern was that victims of corporate wrongdoing would get less money than they would have done under unlimited liability. The recent spread of limited liability to new regions of the world and to smaller firms has reignited the controversy.

Lawyers have developed an answer to the problem. Judges can pierce the corporate veil and expose shareholders to personal liability if they decide that the corporate form is being used to pursue dubious purposes. Piercing has always been one of the most well-applied doctrines in corporate law. But it is particularly popular with lawyers in countries such as China and Brazil, where many of the principles of business law are still heavily contested, and in many geographies for cases involving LLCs and LLPs, where the doctrine of limited liability is fairly new. American trial lawyers are particularly keen on pursuing veil-piercing in the case of smaller companies.

Critics of corporate "excesses" have developed an even more fundamental corrective: "concession theory". Ronald Green of Dartmouth College says that society has a right to demand socially responsible behaviour in return for the privilege of limited liability and the right to impose externalities on society. Will Hutton, a British journalist with a certain following, calls for a new law for firms that would grant them the privileges of incorporation only if they pursue some "noble, moral business purpose".

In their new book, "Limited Liability", Stephen Bainbridge of the University of California, Los Angeles and Todd Henderson of the University of Chicago give both arguments short shrift. Veil-piercing is hard to enforce because, in a world where the average holding period for shares is 22 seconds, it is impossible to determine who is liable for what. But even if you can enforce it there is no evidence that veil-piercing produces more responsible behaviour by firms. One reason is judges are unpredictable in when they choose to pierce the corporate veil. There are better ways of disciplining wayward companies, such as prosecuting managers.

The problem with concession theory is that if it were applied, everyone would be worse off. The idea of demanding social responsibility in return for limited liability would make sense only if the latter involved the transfer of resources from one defined segment of society to another. In fact, limited liability makes society as a whole richer by increasing the amount of money available for productive investment. This rationale is particularly strong in the case of smaller firms. They have in the past created a disproportionate share of new jobs, but many are now struggling to expand in part because of government regulation.

Another veil that needs to stay in place

When it comes to finance, critics of limited liability have better arguments. Victorian liberals were more reluctant to let banks adopt limited liability. The reasons were that bank failures pose such a big risk to the economy and that unlimited liability reinforces the most important virtue of a banker—prudence. In Britain most banks did not adopt limited liability until the failure of the City of Glasgow Bank in 1878. Goldman Sachs remained a partnership right up until the late 20th century. Banks have better access to capital as a result, but take more risk.

Many early banks tried to create mixed regimes combining the benefits of limited liability (more capital) with the discipline of unlimited liability. The British Companies Act of 1879 introduced the idea of "reserve" liability, under which a shareholder was liable to meet a failed bank's debt up to a fixed multiple of their equity investment. But such systems frequently produced the worst rather than the best of both worlds. Reserve liability was complicated to enforce and did not in practice prevent excess risk-taking. There are better solutions to the problems of financial leverage and risk-taking, for example forcing banks to fund themselves with a lot more equity, than fiddling with a mechanism that has been at the heart of the world's prosperity.



Trade deals

Hard bargain

Lacking clear American leadership, the global trade agenda is floundering

OBERTO AZEVEDO, the head of the \mathbf{K} World Trade Organisation (WTO), is not the architect of grand global trade deals that his title suggests. Sitting in his Geneva headquarters, he remembers only too well how the wto's Doha round collapsed under the weight of its own ambition. "Let's do the trade deals that are in reach," he says. Overambition is not the only problem. "Anti-trade rhetoric is catchy," sighs Mr Azevedo. So catchy that it has infected deals beyond the WTO. The world's most trumpeted regional trade deals are drifting out of grasp just when pep is most needed: on September 27th the WTO forecast that for the first time in 15 years, global trade growth this year, at just 1.7%, would not keep pace with global GDP.

The Trans-Pacific Partnership (TPP), a deal between America, Japan and ten other countries around the Pacific, was signed in February but is now faltering. On September 26th Hillary Clinton and Donald Trump, the Democratic and Republican nominees for the American presidency, fought to distance themselves from it in their first televised presidential debate. Mr Trump labelled the deal "almost as bad as NAFTA" (the North American Free Trade Agreement, which came into force in 1994 and which he sees as the worst thing ever to happen to American manufacturing).

The TPP is deeply controversial among the minority of Americans who have heard of it (a recent poll found that only 29% had, and most of them were unaware it excludes China). Nevertheless, Barack Obama wants to push it through in the "lame-duck" session of Congress at the end of this year. There he faces a mixture of poisonous partisan politics and genuine concerns over the deal. Many Republicans would relish thwarting an important part of Mr Obama's legacy. Winning the Democratic votes he needs would be a stretch.

The EU is also choking on its own processes when it comes to trade deals. After a recent bout of energetic protests against the Comprehensive Economic and Trade Agreement (CETA), a trade deal between the EU and Canada, an informal meeting of European trade ministers in Bratislava on September 23rd gave it the green light. But it could yet be undermined by any one EU member that refuses to ratify. The Austrians look particularly reluctant.

If CETA is fragile, the Transatlantic Trade and Investment Partnership (TTIP), a deal still being hammered out between the EU and America, is flailing. Negotiations have proceeded at a snail's pace. Britain's vote to leave weakens the EU's clout and makes the Americans even less amenable to meeting European concerns. Looming French and German elections have made protests against it harder to ignore. In Bratislava the ministers grudgingly agreed to continue talks. If the deal is not done by the

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time the next president is inaugurated, "there will be a natural pause," says Cecilia Malmstrom, the EU's trade commissioner. A revival would not be imminent.

A nasty brew of opportunistic politicking and sceptical (and often misinformed) electorates is largely to blame for this halting progress. But there are other reasons why trade liberalisation is getting harder. TPP reduces some bilateral tariffs and quotas, such as those covering America's imports of cars and Japan's of beef. But since the deal includes the other NAFTA members (Canada and Mexico) and four other countries with which America already has bilateral free-trade agreements, most of it focuses on "behind the border" non-tariff barriers: ie, on harmonising regulations, removing privileges for state-owned enterprises, protecting intellectual property and so on. Such issues raise even greater hackles than old-style tariff-reduction talks; they inevitably encroach on areas covered by domestic law.

The drugs don't work

Since tariffs are already on average below 3% between America and the EU, TTIP is even more focused on this sort of deep integration. But, to take just one example, persuading one drug-approval authority to update its regulations along with another is really hard; negotiators underestimated the difficulty of the task at hand.

In both TPP and TTIP, investor-state dispute settlement provisions have provoked particular controversy. These set up a system for foreign investors to sue national governments if they breach standards of fairness. Opponents see them as a way for corporate fat cats to sue elected governments for things they don't like. Christian Odendahl, an economist at the Centre for European Economic Reform, a think-tank, >> 8 Finance and economics The Economist October 1st 2016

says that including such a controversial provision in TTIP was probably a mistake; legal systems in America and Europe are developed enough for investors not to need the extra legal certainty.

The short-run trade impact of the collapse of TPP and TTIP would not be huge, because of their focus on rule-setting rather than tariff-scrapping. But it would mean an American retreat from its leadership role in global trade liberalisation. Mr Obama has advertised TPP as essential if America, not China, is to set the "rules of the road" for trade in the 21st century.

A trade agenda led by China would be less ambitious than the American-led one. Hopes for global rules covering trade unions, competition from state-owned enterprises and free movement of data would fade, in favour of tariff reduction. Attention would shift to the Regional Comprehen-

sive Economic Partnership (RCEP), a more traditional deal between the ten members of the Association of South-East Asian Nations and six other countries, including China, India and Japan.

RCEP would, however, harvest much more of global trade's low-hanging fruit. Its member countries cover 36% of global goods exports in 2015, compared with 28% for the TPP. Tariff walls protecting emerging markets are much higher than those around developed countries—China still has on average 10% tariffs, compared with 5% in Europe and under 4% in America—so the immediate boost to the economy from lowering them would be higher.

As for the WTO, it will for now push "plurilateral" deals of its own, which embrace enough WTO members to be significant but which avoid the quagmire of having to secure the agreement of all its 164

members. It already boasts some successes: in September, for example, China started cutting tariffs on technology goods as part of the plurilateral Information Technology Agreement.

Indeed, the failure of TPP and TTIP could provide an opportunity for the WTO to re-emerge as the main forum for the trade-liberalisation agenda. A return to the ambitious visions of the past, however, is unlikely. Mr Azevedo can imagine the WTO brokering another global trade deal, but only when expectations have been managed down from Doha. Above all, the politics needs to be fixed. Few political leaders around the world have done much to squash the anti-trade bug. To them Mr Azevedo says: "You have to speak up for trade." But Mr Trump is speaking up for protectionism; and Mrs Clinton would rather change the subject.

The Mexican peso

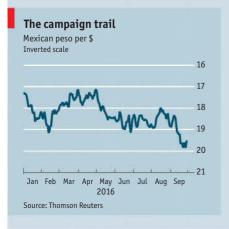
Slip slidin' away

Fear of a Trump presidency plays havoc with Mexico's currency

INVESTORS in Mexico were among those cheered by Hillary Clinton's strong performance in the American presidential debate on September 26th. The country's ailing peso has lost 12% of its value against the dollar this year. But either side of Mrs Clinton's first joust with Donald Trump it climbed by 2%.

The link between the peso and Mr Trump's chances of becoming president seems clear enough. The Republican has talked loudly about withdrawing from the North American Free Trade Agreement, raising tariffs on Mexican imports and taxing remittances. How realistic any of this is, and what effect it would have on the Mexican economy, is unclear. But his hawkish trade policy gives investors plenty to worry about.

The peso is a highly liquid currency frequently used to hedge against exposure to global risk. It fell sharply after



Britons voted in June to leave the EU, even though Mexico and Britain do little trade. It is now being used as a hedge against the possible turmoil of a Trump presidency. "The peso is seen as the purest proxy for the American election," says Andrés Jaime of Barclays Capital.

The peso's descent bothers the Mexican government because it draws unwanted attention to the country. "Investors are wondering if there is something wrong with Mexico that they're not seeing," says Luis Arcentales of Morgan Stanley. The central bank, which was meeting as The Economist went to press, may try to support the currency by raising interest rates, currently at 4.25%, for the third time this year. A widening current-account deficit and increasing debt argue for tightening; a second-quarter contraction of GDP and a desire to wait until after the American election might argue against.

Even a rate rise would be unlikely to stem the peso's slide should Mr Trump go on to win. The exchange rate, currently 19.6 pesos to the dollar, could well lurch towards 22. Yet although Mexicans need little excuse to excoriate Mr Trump, they cannot pin all their currency's ills on him. Over 18% of government revenues come from oil. That share is shrinking but low oil prices and declining production have still hit the government budget. A contraction in American industrial production and weak economies in Latin America are also muting external demand. A Trump defeat will solve only one of the peso's problems.

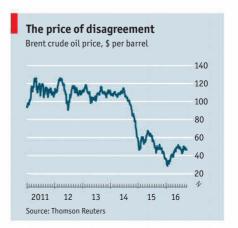
Oil

The little cartel that could

OPEC agrees its first production cut since 2008

DOES OPEC matter? Those who dismiss the significance of the Organisation of Petroleum Exporting Countries, a producers' cartel, cite at least three reasons to think not. Its 14 members cannot agree among themselves, not least because they include bitter regional rivals like Iran and Saudi Arabia. Even if the cartel could agree, its pacts would not work, because so much crude oil is now produced outside the club, in the hinterlands of Siberia or the fracking fields of America. And if OPEC's agreements will not work, its members will have no reason to stick to them.

Those who think OPEC still matters can now make one powerful counterargument: Algiers 2016. On September 28th OPEC members gathered there for an informal meeting and agreed to cut output for the first time since 2008. The agreed cut >>>



was modest, limiting production to 32.5m-33m barrels per day, which is between 0.7% and 2.2% below current output. Saudi Arabia's production was likely to fall anyway as the winter approaches. The agreement was also vague. Members will wait until their formal meeting in November to settle how the overall cut will be distributed among them. Nonetheless, within hours of the report, the price of oil rose by over 5% (before easing somewhat). To the question does OPEC still matter, the market had given its own emphatic answer.

Even OPEC-doubters will take note of what the agreement says about Saudi Arabia. The kingdom had insisted that it would cut output only if other producers followed suit. This insistence that OPEC cut as one or not at all brought it into direct conflict with other members like Iran. After EU sanctions were lifted earlier this year, Iran has been set on ramping its oil production as fast as possible. The Algiers agreement became possible only because Iran seems to have won this argument. It would be allowed to produce "at maximum levels that make sense", said Saudi Arabia's energy minister-a softer Saudi attitude that may reflect harder constraints at home. Low oil prices left the kingdom with

a budget deficit of 15% of GDP last year.

But will the agreement work? It has already moved the oil price. But then, one might argue, what doesn't? The oil markets have been unusually volatile this year, as they struggle to find their bearings in a new landscape, marked by slower global growth, resilient shale producers and the return of Iran. Amid great uncertainty about these changed fundamentals, commodity traders can lapse into secondguessing each other. Even if every trader suspects that OPEC in fact no longer does matter, OPEC will remain powerful until everyone knows everyone else agrees.

Buttonwood | Taking it to 11

How central banks are distorting the corporate-bond and equity markets

N THE spoof "rockumentary", "This is ■ Spinal Tap", Nigel Tufnel, the band's guitarist, displays his amplifiers with pride. The dials range not from one to ten, but up to 11. On a normal amp, he explains, when you reach ten, there is nowhere to go, but "these go to 11."

Three of the world's most important central banks—the Bank of England, Bank of Japan (Boj) and the European Central Bank (ECB)—have dialled monetary policy up to 11, expanding their asset purchases from government bonds to embrace corporate debt and even equities. With government bonds and short-term interest rates already at historically low (and in some instances, negative) levels, such asset purchases were seen as the next logical step.

The expanded policy has several justifications. It is not clear that driving government-bond yields or short-term interest rates any lower will do a lot to help the economy; negative rates may dent bank profits, for example, making them more reluctant to lend. And if the aim is to get companies to borrow more, then buying their bonds will reduce the cost of that borrowing via lower yields.

But there are many more types of private-sector assets than there are government bonds. (The ECB's government bond-purchase programme is linked to the size of each euro-zone economy, so it cannot be accused of favouring one nation over another.) Central banks simply cannot buy all corporate bonds or equities in equal measure.

Naturally, they choose the most liquid and the least risky. But the bonds and equities they buy are likely to perform better than others. Since the ECB announced its bond-buying programme on March 10th, the spread (or excess interest rate over government bonds) on corporate bonds that



it deems eligible has fallen by over half, from 100 basis points (one-hundredths of a percentage point) to 44 basis points, reckons Citigroup. The spread on ineligible bonds has also fallen but by only a third, from 154 to 104 basis points.

When companies seek to issue new bonds, the prices and yields of their existing bonds are an important benchmark. To the extent that central-bank actions lower the cost of capital of businesses within the programme, it must give them a competitive advantage over their rivals. The Bank of England, for example, is buying bonds issued by Walmart (which owns the Asda chain in Britain) but not bonds issued by Tesco or Morrisons, two rival supermarkets. The effect may be small, but it is still a questionable thing for a central bank to do.

Moreover, the British corporate-bond market is not as deep as the American equivalent so the Bank of England is limited in the bonds it can buy. This leads to some odd-looking inclusions. Will the purchase of sterling bonds issued by Apple, Daimler or PepsiCo really lower the cost of capital for British finance?

Investors will adjust their behaviour to

allow for the actions of central banks. "It almost feels as if our role shifts from analysing the bonds' fundamentals to advising clients on the eligibility criteria," says Matt King, a bond strategist at Citigroup.

The BOJ has already been forced to adjust its equity-buying programme after it seemed to distort the market. The bank might have thought it was playing safe by purchasing an equity index. But a lot of its money was going into the Nikkei-225 average, a benchmark weighted by share price rather than market value (see chart). So its investments were having a disproportionate effect on the share prices of some small companies. In the case of Fast Retailing, the BoJ already owns half of the free float (the shares available to outside investors). Future purchases will be weighted to the more sensibly constructed Topix index.

Another issue is how the central banks will eventually dispose of their holdings. Although, when they started in 2009, government-bond purchase schemes were seen as short-term measures, central banks have yet to reduce their bond piles. The Federal Reserve is slowly tightening monetary policy by pushing up shortterm interest rates, not by selling bonds.

Corporate bonds are less liquid than government bonds, particularly since post-crisis rules have made banks less willing to hold inventories. A likely consequence of this is that central banks will be big owners of private-sector assets for a while, with all the distortions that implies. They will not want to risk a big shock by selling billions of bonds into an illiquid market. If that day comes, traders might be quoting Mr Tufnel again: "How much more black could this be? And the answer is none. None more black."

Economist.com/blogs/buttonwood

Finance and economics The Economist October 1st 2016

Share trading in America

Warping the loom

NEW YORK

The markets for trading financial products are themselves churning

THE controversies that beset America's financial markets extend to even the most basic activities, such as trading a security. What was once the preserve of a stockmarket duopoly of the New York Stock Exchange and NASDAQ, and a handful of narrow commodity markets, is now a bewilderingly complex tapestry. It is also subject to incessant reweaving: take this week's announcement that BATS Global Markets, an operator of four stock exchanges, will be sold to the CBOE, an options exchange, for \$3.2 billion.

BATS was founded in 2005 in Kansas by a man whose background was in trading shares from his bedroom. In 2012 it famously botched its first attempt to list its own shares, completing the job only this year. The price it now commands reflects its success in expanding to become America's second-largest equity market, with a growing presence in options. It brings to the relatively long-established CBOE, founded in 1973, what is seen to be better, low-cost technology. The CBOE said that BATS will also play a role in developing new "tradable products and services".

This is a crowded field. More than a dozen exchanges deal in equities alone, to say nothing of scores of "dark pools" of liquidity for private trading and countless trading firms that fit into neither category. Then there are the markets that offer options or futures linked to shares. Exchanges now rely less on straightforward commission income—eg, from trading a company's shares—and more on designing products that encompass a variety of financial in-

struments. BATS, for example, is popular for trading exchange-traded funds (ETFS), often themselves tied to options or futures. Among the CBOE's most valuable products is an option contract tied to the S&P 500 index that tracks the American market.

Trading volumes may have grown and innovations proliferated, but there are concerns about how much companies and long-term investors have benefited. The Securities and Exchange Commission (SEC) this week trumpeted a \$12.5m settlement with Bank of America Merrill Lynch for "ineffective trading controls" that enabled "erroneous orders" to provoke a series of "mini flash-crashes" between 2012 and mid-2014, and, said the SEC, dented faith in the financial markets.

Worse than such highly visible glitches are ones that steadily call into question the efficiency of the market. Such concerns have contributed to a drop in the number of companies willing to publicly list their shares. Charles Royce, who has specialised in small-company investments for decades and manages about \$17 billion in various mutual funds, says it has become harder to buy and sell. Even though prices are displayed, the volume of shares available and demand for them is becoming more opaque. That is widely blamed on high-speed traders who put out a vast number of tiny buy or sell orders to gauge interest and then get in ahead of slower investors on larger trades. Mr Royce says it is hard to say whether these traders provide liquidity (as they claim) or rather make profits at the expense of long-term investors.

In an effort to improve trading to help small companies, Congress inserted into a 2012 law known as the JOBS act a requirement that the SEC should consider tinkering with its rules about how bids and offers are denominated. Currently all offers are priced in pennies. It has taken the SEC four years to come up with a plan (despite the law's 90-day stipulation). From October 3rd the shares of 1,200 companies with

market capitalisations below \$3 billion will be traded with quotes priced in five-cent gaps, in a two-year experimental period—a so-called "tick pilot".

It seems odd to expect higher spreads to lower the price of transactions. But the idea is that the large gaps create risk for high-speed traders. They will no longer be able to lay down a minefield of small orders without risking large losses. Mr Royce, and several other fund managers, are curious about the possible benefits from the study, though their expectations are limited. Two years in trading is a lifetime. Even if the plan works, by the time it is over the entire tapestry may once again have been unwoven and transformed.

Psychometrics

Tests of character

How personality testing could help financial inclusion

HOW would you feel if you were invited to the moon? If you found a gold coin, would you save it, give it to charity or splurge on a holiday? Personality quizzes of this kind—"psychometrics", in the jargon—are already the bane of many a job-seeker. Now, it is being applied to the oldest problem in finance: will a borrower repay?

In rich countries, lenders use credit scores to weigh risk. But just 7% of Africans and 13% of South Asians are covered by private credit bureaus. Bailey Klinger of the Entrepreneurial Finance Lab (EFL), which explores new kinds of credit data, argues that psychometrics could scoop many more people into the financial system. Everyone has a personality, after all.

Judging character is not new. Psychometrics attempts to make it a science. EFL began life as a research initiative at Harvard. The model used by Creditinfo, a rival firm, was developed with help from Cambridge. Their online quizzes are road-tested and tweaked for different cultures. Sifting the data reveals telling patterns: for instance, EFL found that young optimists are risky, but old ones are a safe bet.

Clever design cuts cheating. There are no obvious "right" answers; responses are cross-checked for consistency. The software monitors mouse movements for signs of indecision or distraction. And when the unscrupulous lie to get a loan, they often do so in predictable ways. In the Creditinfo test, people are shown pictures of five drinks and asked which one they would be. Choosing water over something fizzier may be a sign of cheating, says Clare McCaffery, its managing director in Britain. (Still or sparkling, you might ask.)



Closed outcry



Lie-detection the old-fashioned way

This all sounds fanciful, but there is evidence that it works, EFL has honed its model through trials on three continents. In one Indonesian bank, combining psychometrics with existing customer data cut default rates for small businesses by 45%. A study by the World Bank and Inter-American Development Bank found that EFL's model boosted lending to those without a credit history (a bad record betokened problems whatever the psychometrics said).

Some lenders are convinced. Grupo Monge, a retailer, uses psychometrics to sell household goods on credit to low-income Peruvians. "Most of the time we are the first company to give them credit," says Gabriel Trelles, its boss in Peru. The biggest market for psychometrics is for such consumer loans. But microlenders and banks are catching on, EFL's software has been used in 690,000 loan decisions in 27 countries. Creditinfo will use its psychometrics unit, recently acquired from a marketing firm, to expand in emerging markets.

Psychometrics has so far been merged into existing loan processes. Richer data could change that. Jared Miller, CEO of EFL, describes a future in which lending is almost entirely digitised, combining psychometrics with social media and mobilephone records. Startups are rushing to make use of these "alternative data". One example is First Access, in Tanzania, which uses data such as mobile records to gauge the strength of borrowers' networks, and thus how likely they are to repay.

The technique is still in its infancy and will not replace credit bureaus, says Miriam Bruhn of the World Bank. The best way to tell if somebody will repay a loan in future is to see if they have repaid one in the past. But bureaus improve more slowly than technology. Lenders, looking for an edge, will find ever more ways to peer into their customers' souls.

Chinese IPOs in Hong Kong

Cornering the market

One way to sell shares is to lock in your friends

N ARCHITECTURE, a cornerstone is laid where two walls meet, serving as a single point from which the building takes its shape. No one constructs an entire building out of these weighty slabs. So it is meant to be in finance. To perk up interest in initial public offerings (IPOs), companies sometimes invite in "cornerstone investors": a small number of big investors who promise to buy a stake and hold it for a while, a vote of confidence from which the IPO takes shape. Odd, then, to see a trend in Hong Kong of IPOs constructed almost entirely out of these weighty pledges.

The latest is the Postal Savings Bank of China, a lender with 500m retail customers. Its shares started trading on September 28th, capping a \$7.4 billion IPO, the world's biggest in two years. A share sale of that size would normally dominate headlines in the financial press. But this one passed quietly, and for good reason. Just a small portion of its shares were actually sold to the public. Nearly 80% went to cornerstone investors, just shy of a record.

Cornerstones, still rare in other markets, have long been a staple in Hong Kong, accounting for about 13% of total IPO values in the first decade of this century. They used to serve as a stamp of approval. Hong Kong's best-known tycoons, such as Li Kashing, regularly appeared on the list of cornerstones for Chinese companies that were not vet household names.

Recently, though, they have gone from being a part of the foundation for Hong Kong deals to becoming the brickwork. This year, they have accounted for threefifths of total IPO values (see chart). Firms that have sold more than half their offered shares to cornerstone investors in 2016 in-



clude a leasing arm of China Development Bank, a big state lender; Bank of Tianjin, a smaller bank; and Everbright Securities, a

Companies are using cornerstones to evade market forces. Instead of bringing in savvy investors who might persuade others to hop aboard, state-owned firms are cramming in other friendly state-backed investors to ensure that their IPOs are successful. The Postal Savings Bank had six cornerstones. All were affiliated with stateowned enterprises such as China Shipbuilding Industry Corporation and Shanghai International Port Group. These are not exactly known for their Warren Buffettlike stockpicking acumen.

Cornerstone-heavy IPOs cause many distortions. Share prices are artificially high. Chinese banks already listed in Hong Kong trade at roughly a 20% discount to the book value of their assets: investors think their loan losses are higher than officially reported. But the Chinese government has a rule that state companies must sell shares at no less than their book value. Thanks to cornerstones, Postal Savings Bank was able to set a price for its IPO that just crossed the threshold, yet left its shares about 20% more expensive than its peers'. No wonder that few ordinary punters were interested. It hired 26 other banks, a record, to underwrite its IPO.

Because prices are too high, liquidity is weak after shares start trading. Cornerstone investors are contractually obliged to hold them for months (six for the Postal Savings Bank). When the time comes to sell, there are worries about a sudden flood of shares on the market-a further disincentive for other investors.

The cornerstones are a classic case of China Inc in action. The state is shifting money from pocket to pocket-from a shipbuilder to a bank in the Postal Savings case. With limited participation from outside investors, China brings little fresh capital into its listed companies. If no one is being fooled, what is the point of the charade?

An adviser who has worked on several deals says that Chinese officials see share listings less as a way for firms to raise capital than as a way to subject them to greater discipline. Whoever owns its shares, the Postal Savings Bank will need to file regular financial reports that global investors can scrutinise. The IPO's walls are built from cornerstones, but the market at least has a window onto its inner workings.

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Food for refugees

Fat help

ΔΜΜΔΝ

Increasingly, hungry refugees receive aid not as food, but as cash

BACK in Syria food was cheap, remembers Maya, as she sits cross-legged in the small flat she shares with her husband, their five children and another couple in Amman, Jordan's capital. When she first arrived here, she had to cut back. But now, with her husband working and 20 dinars (\$28) a month from the World Food Programme (WFP), a UN agency, she can buy the children a treat like fish or chicken.

Scattered across Turkey, Lebanon and Jordan are 4.4m registered Syrian refugees, 90% of whom, like Maya, live outside formal refugee camps. This makes it a logistical nightmare to get the traditional food aid to them—sacks of rice and pulses. The WFP, the world's largest food-aid provider, has adapted: a decade ago, it doled out aid only in kind. Now just over a quarter of its aid globally is cash-based. Every month Maya gets a text message alerting her that her special debit card, which she can use only to buy food, has been topped up. The WFP reaches around 1.1m refugees like this in Jordan, Lebanon and Turkey.

This week saw the launch in neighbouring Turkey of the largest-ever humanitarian-aid project financed by the EU: a whopping €348m (\$390m) for the WFP, in partnership with the Turkish Red Crescent, to be transferred to electronic cards held by up to 1m refugees. Unlike Maya's, their cards will be unrestricted; they can withdraw cash from ATMs. In effect, the WFP is shifting from aid in kind to electronic distribution—first of food and now of cash—giving refugees more choice over what to buy.

The vast majority of the WFP's aid is

still food in kind or in e-cards limited to food. Donors want to know that their money is being well spent ("food" is in WFP's name, after all). In Mafraq, a city in Jordan where Syrians number 50% of the population, Nour Sahawneh directs volunteers handing out old-fashioned bags of rice and tea. He admits that some refugees sell them, perhaps to pay the rent. But at least he knows they are not overcharged.

Delivering food as aid, even indirectly, by vouchers or e-cards, inevitably distorts markets. A shop sure of aid-financed customers may be tempted to raise prices. But money-based help at least takes procurement decisions away from well-meaning but misguided aid workers and pumps money directly into the local community. Also, studies have shown that recipients of cash-based aid consume a more varied diet (though, in fact, fewer calories).

Your flexible friend

The WFP has learnt that some forms of cash-based aid are better than others, however. The food vouchers it once used turned out to be a good way of transforming photocopiers into aid-printing machines. They also irritated users, who had to queue for the vouchers and spend them all at once. Maya prefers her e-card, though she still has to queue at the supermarket. Sometimes fights break out in the rush to the shops when the cards are topped up.

The queues might be shorter if Maya could use her card at any shop. At first she had to spend 10 dinars just on the taxi to her closest WFP-approved supermarket.

Saleh Dhnie, a 59-year-old Syrian refugee and a former civil servant, gets 20 dinars a month from the WFP in Jordan, but is convinced the chosen supermarkets raise their prices when cards are topped up. The street market, he grumbles, is much cheaper.

Contracted shops certainly seem to be doing a brisk trade. In Lebanon the e-card programme doubled revenues at those taking part. Rami Al Shdeafat, who manages a supermarket in Amman, says he bought four extra card-readers to cope with the surge in custom. He insists his prices are competitive, boasting of the promotions on offer and pointing proudly to a bag of milk formula that normally sells for 11 dinars and that is on sale for 9.52 dinars. Besides, the Syrian customers are much more price-sensitive than Jordanians.

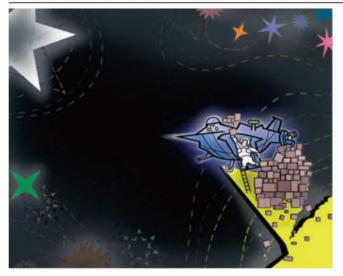
The WFP doesn't take his word for it: every 20 days it sends price-checkers. Some shopkeepers are deterred by this. Amer Shbeilaat runs a smaller food shop with, he claims, the lowest prices in Mafraq but doesn't accept the WFP's card. He heard some shops lost their contracts for raising prices. He can do without the bother. Letting competition drive down prices is more effective than intrusive checkers. In Lebanon, after WFP officials spotted that prices were lower in shops facing more competition, they enlisted more shops to accept their cards—up from 250 in 2014 to around 460 today. This has helped keep prices low.

For now, in Lebanon and Jordan, unlike in Turkey, WFP officials are sticking to cashbased but restricted schemes-and hence to the agency's mandate, as a single-purpose food-aid provider. Officials worry that to move to unrestricted schemes, as in Turkey, might in effect hand the cash to landlords in the form of higher rents. They also worry about funding. "You can't get people used to cash one day and then go back the other day," says Dominik Heinrich, head of the Lebanese branch of the WFP. And free-floating cash is harder to monitor. The WFP in Lebanon is busy analysing masses of transaction-level data from contracted shops. They hope these will serve to reassure donors that their funds are being well-spent, and could even be used to work out how much aid they should be giving.

But aid-workers must have realised that, rather than spend hours checking up on grasping shopkeepers, it would be easier simply to hand out cash. It also would give refugees more freedom. An experiment with unrestricted cash handouts in Lebanon suggests that people do indeed like the chance to spend the money as they please. As a spokesman for the European Commission said, in justifying the EU's intervention in Turkey: "Cash empowers the beneficiaries... They are the best placed to know what their basic needs are." And few could begrudge them that little scrap of control over their tempest-tossed lives.

Free exchange | Down to earth

Brexiteers need to respect gravity models of international trade



S BRITAIN contemplates its post-Brexit identity, government Aministers are racking up the air miles. Theresa May, the prime minister, thinks Britain "should become the global leader in free trade." Officials are discussing trade deals with a range of Asian and Middle Eastern countries. Daniel Hannan, a prominent Leave campaigner, even suggested in the Sun newspaper that he wanted Britain to join NAFTA, an intra-American trade agreement. The Brexiteers have spent less time wooing the EU, to which Britain sends roughly half its exports. Indeed, given promises made during the campaign to restrict the free movement of EU labour, reaching a post-Brexit trade deal may prove difficult.

The focus on achieving trade agreements outside Europe may seem a smart move. The EU's economy is weak: its demand for British exports has been depressed for years. Britain's membership of the customs union prevents it from making trade deals with fast-growing economies such as India and China, where Savile Row suits and Scotch whisky find ready markets. Brexiteers say that if Britain quit the EU it could forge new deals wherever it liked, boosting trade even without a new agreement with the EU.

That may sound reasonable, but mainstream economists argue that turning away from the EU, far from boosting Britain's trade, would restrict it. The so-called "gravity model", concocted in the 1960s by Jan Tinbergen, a Dutch Nobel-prize winner, makes two simple points about the geography of international trade. First, the bigger the GDP of the countries involved in a bilateral trading relationship, the more they trade with each other. Larger economies have more demand for goods and services and offer more products, supplying a broader range of consumers.

Second, the farther away two countries are from each other, the smaller the volume of trade. That is partly related to transport costs: sending a parcel from Britain to France costs half as much as sending one to India. Cultural and linguistic differences also come into it. Exporters have a better feel for nearby markets and can meet suppliers more easily. According to official data only about 2% of Britain's exports go to India (population 1.3 billion), much less than is sold to tiny Belgium (population 11m).

The implications of the "gravity" model for a post-Brexit Britain seem to be clear. The EU is a trading bloc roughly the size of America and it happens to be on Britain's doorstep. That explains why Britain has always traded heavily with the continent. It also suggests that trade deals with far-flung places may not compensate Britain for restricted access to such a market.

However, that is not the end of the story. Brexiteers have studied gravity models and insist that they have been "long discredited". Their critique rests on two points. First, says Patrick Minford of Cardiff University, gravity models are simple "associations" rather than causal relationships. Indeed it is even possible that the statistical relationship between GDP and trade volumes suffers from the problem of "endogeneity". Large trade volumes may cause large GDP, rather than the other way around.

This critique appears misplaced. A paper from Shang-Jin Wei, then of Harvard University, looked for a clean variable-one that runs from GDP to trade, but not the other way round. Mr Wei used data on population (since it is unlikely that lots of trade causes a large population). After correcting for the endogeneity problem, the gravity effect still held. Furthermore, according to Swati Dhingra of the London School of Economics, gravity models do a good job of predicting actual trading relationships today.

The second Brexiteer criticism of gravity models is that geography may not matter as much as it once did. As emerging-market economies continue to outgrow the rich world, their increased pulling power may override distance. It will only be a few years before China's GDP (as measured in dollars) exceeds the EU's.

As those economies grow, British trade with emerging markets will certainly increase. However, size alone does not make a faraway country an enormously attractive trading partner. Britain exports far less to America than it does to the EU. Moreover, for the foreseeable future, GDP per person in places like India and China will be lower than the EU's, points out John Springford of the Centre for European Reform, a think-tank. It will be many years before these countries' citizens are rich enough to demand the same sorts of goods and services from Britain as the EU does.

In one other way, however, geography may matter less than economists assume. The logic of gravity models may be sound when applied to trade in goods, which cost a lot to move around, but its applicability to trade in intangible services is surely a little more suspect. After all, a website-designer or a financial adviser in London can deliver her services to a Chinese client costlessly and instantly over the internet. Britain is one of the world's most service-intensive economies and is becoming ever more so.

With a bump

The gravity effect does indeed appear to be smaller for services. But it is still strong, according to a report on Brexit by the IMF. The reasons for this link are less explored in the literature, though shared time-zones and languages are likely to be important. A paper on Brexit from the National Institute of Economic and Social Research, another think-tank, also notes that much services trade is a by-product of goods trade. If Britain's exports and imports of goods declined, Britain's services exporters would also suffer.

In the long term, better communications and cultural homogenisation may mean that international trade is less and less at the mercy of proximity. But for now, the central premise of Tinbergen's model still holds for a post-Brexit Britain. Exploring trade deals with Asia and the Middle East is all well and good. But if Britain really wants to be a global leader in free trade, it needs to work with its closest, biggest neighbour.



Interplanetary settlement

The world is not enough

Elon Musk envisages a human colony on Mars. He will have his work cut out

"D LIKE to die on Mars. Just not on impact." Elon Musk has never been shy about his reasons for founding Spacex, a rocketry firm that has become the flag-carrier for a buccaneering "New Space" industry. Although two recent rocket explosions have dented its halo, its launch prices are among the lowest in the world. It has pioneered the technology of returning expended rocket stages to Earth for later reuse, landing them back on special pads or on ocean-going barges, which should cut costs still further. As a result, it has a thick book of orders from private firms and the American government to fly satellites into orbit and cargo-and, eventually, astronauts—to the International Space Station.

But building better rockets has never been the real point. Mr Musk, who grew up on a diet of science fiction and video games, sees the various companies he has founded as ways to help solve some of the world's biggest problems. Tesla, an electric-car maker, and Solar City, a solar-power firm, were set up to encourage a switch to cleaner forms of energy. Spacex's goal is loftier. Mr Musk has repeatedly said that he believes that human beings must learn how to live on places other than Earth, as an insurance policy against a planetwrecking disaster. A series of trips to Mars, paving the way for a permanent colony, has been the firm's long-term goal ever since its beginning in 2002.

On September 27th, in a speech to the International Astronautical Congress in Mexico that veered between hard technical specifics and wild speculation, Mr Musk outlined details of his grand vision. The idea was "to make Mars seem possible-like something we can do in our lifetimes. Is there a way that anyone could go, if they wanted to?" His goal, he said, was, in the coming decades, to allow people to buy tickets to Mars for something in the region of \$200,000-about the median cost of an American house today.

It sounds fantastical. The Apollo flights that took 12 astronauts to the surface of the Moon-around a six-hundredth of the distance to Mars-consumed at their peak around 4.4% of America's federal budget. Since then human space flight has been stuck in Earth orbit. America's Space Shuttle, which made its last flight in 2011, was an expensive fiasco; the International Space Station, which cost roughly \$150 billion to construct, is one of the most expensive human artefacts ever built and hosts a crew of at most six people. Attempts by private firms such as Virgin Galactic to fly people into the lowest reaches of space have, so far, come to nothing.

Yet the mood among the space fraternity is that Mr Musk has earned the right to a hearing. When Spacex was founded the idea of a startup successfully launching a rocket-let alone making big inroads into the business-seemed ludicrous to many. Mr Musk has proved his doubters wrong. A permanent colony on Mars is undeniably a grand ambition, but his ideas about how to begin, and how to build the necessary infrastructure to get people there, are worth pondering.

Mars is a harsh mistress

Mr Musk is far from the first person to advocate going to Mars. Wernher von Braun, who built Germany's v2 missiles and America's Saturn V moon rockets, published plans for such a trip in 1953. After Apollo's success he lobbied for America to execute it as a follow-up. That did not happen, but the idea never went away. A mission to Mars, sometime in the 2030s, is the notional end point of Barack Obama's space strategy. China has talked, in vaguer terms, of doing something similar by midcentury. Science-fiction authors and rocket scientists have made detailed technical studies, and the topic is a perennial favourite at space-flight conferences.

Besides the sense of prestige and derring-do, the reason Mars makes an attractive target is that it is, Earth aside, the friendliest world in the neighbourhood. Not that friendly, admittedly. Its average surface temperature is around -60°C, its atmosphere is unbreathably thin and made mostly of carbon dioxide, and its soil (technically, "regolith") is rich in perchlorates, an unpleasant family of chemicals that terThe Economist October 1st 2016 Science and technology 75

restrial life does not like. Nevertheless, compared with the other six planets in the solar system it is a paradise. The outer four—Jupiter, Saturn, Uranus and Neptune—are gas giants, lacking a solid surface on which to land. Mercury is an airless world similar to the Moon and Venus suffers from the opposite problem, a crushingly thick (and oxygen-free) atmosphere.

Mars, though, sits on the edge of the sun's "habitable zone", the band of space at the right distance away from a star to let liquid water exist on a planet's surfaceand despite Mars's subfreezing average temperature, parts of its surface are occasionally warm enough to permit just that. An optimist might reckon it only a bit less friendly than Antarctica, a place that does play host to a permanent human presence. Antarctica, though, is within a few hours' flight of civilisation and more hospitable climes. Depending on their relative positions in their orbits, Mars can be anything from 75m km to 375m km from Earth-so far away that even light (and therefore radio messages) take many minutes to cross the distance. To get there will mean building a spaceship that can keep its occupants alive for a journey that will last for months, and a rocket that can send it on its way. It was on this subject that Mr Musk spent most of his talk.

The "Interplanetary Transport System" (ITS) comes in two parts. The spaceship itself would be 49.5 metres long, with room for around 100 passengers. It would be lofted into orbit by a gigantic, reusable carbon-fibre launch vehicle (referred to internally at Spacex as the "BFR", for "Big Fucking Rocket") that would be, by some distance, the most powerful ever built (see chart). Once the spaceship had been placed into orbit, the rocket would fly itself back to its landing pad, using the technology that allows Spacex's present series of Falcon rockets to pull off the same trick. Further flights of the BFR would carry fuel, passengers and cargo to the orbiting spaceship. Once fully provisioned, that ship would set off for Mars.

The journey would take around six months. This is a long time, but as Mr Musk pointed out, not unprecedented: passengers on sailing vessels once endured similarly long journeys. Upon arrival the ship would enter the Martian atmosphere in the same sort of way that the Apollo command module did when returning to Earth, using the planet's atmosphere to shed speed. Unlike Apollo, though, Mr Musk's vehicle would make a rocket-powered landing on the surface.

One of these ships, landed permanently on Mars, could conceivably serve as the first Martian habitat. But the long-term goal is to send the spaceship home. Solar-powered machinery placed on the surface by an earlier mission would combine carbon dioxide in the planet's atmosphere

with water (which, as ice, appears to be fairly common beneath the regolith) to form methane and oxygen—an idea advanced by Robert Zubrin, an American engineer, in the 1990s. This fuel would be loaded into the spaceship's tanks for the return journey to Earth. (The low gravity of Mars, which is around a third as strong as Earth's, means the spaceship could take off without the need for a booster.)

Every part of the ITS has been designed to be cheap. Compared with the Apollo missions, said Mr Musk, he would need to cut costs per person 50,000-fold to hit his \$200,000 ticket price. Part of that would be done, as described, by making fuel from Martian resources, rather than lugging it all the way from Earth. But the bulk of the savings come from making every part of the system as reusable as possible, an approach that has been emphasised by Spacex and its New Space rivals, particularly Blue Origin, a rocket firm founded by Jeff Bezos, the owner of Amazon.

One reason rockets are so expensive is that they are, conventionally, single-use machines. Once they have done their job, they are either abandoned in space or left to crash back into the ocean. Rocket fuel is cheap. It is the rockets themselves that are costly. A reusable rocket would permit those construction costs to be spread across several flights. A BFR, reckoned Mr Musk, might be good for 1,000 flights before it needed replacing. The spaceships themselves might make a dozen trips to Mars each, limited by the travel time and the finite number of viable "launch windows" during which they could be sent.

Theorising is the easy part. For now Spacex is spending only "a few tens of millions" of dollars on designing the BFR and the spacecraft. But there has been progress: the snazzy videos that punctuated Mr Musk's speech were generated, he said, from real design blueprints. He showed a video of a test-firing of Spacex's new meth-

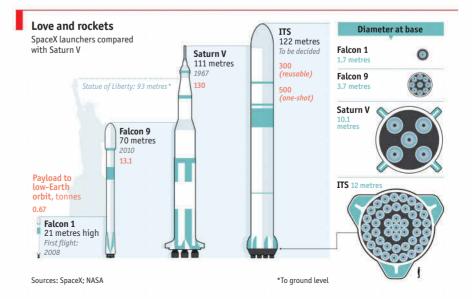
ane-burning "Raptor" engine, 42 of which would power the BFR. The firm has a lot on its plate at the moment, not least tracking down the cause of an explosion that destroyed a Falcon 9 (and the satellite it was carrying) on September 1st and preparing for its first manned flight. Once those are done, and the firm's next commercial rocket—an upgraded version of the Falcon 9 called the Falcon Heavy—is ready, he plans to devote more time and money to the ITS.

Timescales could be only rough guesses, he said. But the first flight of the BFR should take place around 2020, with the first spaceship sent for orbital testing a year or two later. In the meantime Spacex is planning to launch a smaller, uncrewed spacecraft—one of its existing Dragons, as depicted on the previous page—to Mars in 2018, and at the congress Mr Musk promised that he would follow up with a steady stream of further missions every two years, when the positions of Earth and Mars make the latter most reachable.

Ticket to ride

If you wanted to come up with a way of transporting large numbers of people to Mars, then the ITS—or something like it—seems a good place to start. But the bigger question is why you might want to do that in the first place.

For decades human space flight has been an activity in search of a justification. In the 1960s the justification was that it was war by other means. The Apollo missions to the Moon, and the failed Soviet attempt to do likewise, were exercises in cold war propaganda, designed to prove that capitalism was better than communism, or vice versa. After America won the space race interest and funding dwindled, and advocates of human space flight were reduced to homilies about inspiring people to take up careers as scientists. Mr Musk instead makes an existential argument—spaceflight, he says, should be seen as an >>>



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insurance policy. Only by becoming a multi-planet species, he argued, can humanity make itself safe from the sorts of disasters that might wreck Earth: asteroid strikes, say; or malevolent robots; or the gamma radiation from a nearby supernova. That means planting colonies on other planets, and nurturing them until they can survive without resupply from Earth. Various other luminaries, such as Stephen Hawking, a revered British physicist, have expressed similar worries.

This argument sometimes turns quasimystical. Life seems to have begun on Earth shortly after the planet formed, which suggests that its emergence is easy and it should therefore be common elsewhere. But that does not seem to apply to intelligent life. Even at relatively slow speeds, an intelligent spacefaring species ought to be able to colonise a galaxy in a few hundred million years. The fact that there is no sign of this having happened in mankind's own galaxy, the Milky Way, is sometimes taken as evidence that intelligence is either vanishingly rare, or else tends to blow itself up before it can leave its home planet. Either way, the mystics suggest, mankind has a duty as an intelligent species to look after itself.

In the very long run, the doom-mongers are right: human beings may indeed have to migrate, assuming any are still around. Around a billion years from now the sun, which has been brightening slowly ever since its formation, will be shining fiercely enough to make Earth uninhabitable. If human beings want to survive, they will have to leave. (At the same time, the brighter sun would make Mars much more salubrious.)

Critics argue that the shorter-run threats are either unlikely (malevolent robots); or would destroy a Martian colony too (gamma-ray bursts); or could be avoided by any species capable of planning to colonise other planets (killer asteroids can be deflected). But even if an interplanetary insurance policy were a prudent idea, could it be taken out?

It was here in Mr Musk's presentation that the technical details ran out and the speculation began in earnest. Living on Mars would be difficult: harder, probably, than getting there in the first place. Colonists would have to spend all their time in pressurised buildings. Communication with Earth would be doable but tedious. It might be possible to modify terrestrial plants to grow in a high-pressure version of the Martian atmosphere, but no one has tried. A closed, miniature ecosystem would have to be devised to recycle nutrients and waste products. A series of Earthbound experiments, called Biosphere 2, which tried that out in the 1990s were abandoned after plants died, food became scarce and oxygen levels started dropping.

When asked what such a habitat might

look like, Mr Musk said that was not for him to say. "We see ourselves as being like the Union Pacific railroad," he said, referring to the railway that opened up the American West in the 1860s. His focus was on building an affordable transport system. What the settlers did when they arrived would be up to them. He had given it some thought—he opined that you might need a million people to maintain the sort of industrial base necessary for true independence from Earth. But specifics were in short supply.

One such specific was how much, in the end, such a scheme might cost. Working with Mr Musk's own numbers, sending 1m people to Mars would cost in the order of \$200 billion. That is too much for even his deep pockets. There are other rich men also keen on space flight, who might be persuaded to cough up. But he was candid that, for the scheme to work, governments would also have to open their chequebooks. That seems unlikely at the moment.

Home away from home?

One final question is why anyone would want to go to Mars, even if a ticket could be had by selling your house. Appeals to the future of the species are unlikely to motivate many individual members of that species to give up everything and move. Space advocates point to humans' history of migration, saying that colonising Mars would be like the Polynesian conquest of the Pacific, say, or the European migrations to the New World. But historical migrations have happened either because those involved had no choice, or because there were big rewards from doing so. The founders of Virginia were seeking profit. The Pilgrim Fathers were fleeing religious persecution. And the lands they arrived at were not intrinsically hostile to human survival.

It is hard to see how a life spent in an airtight chamber on the surface of Mars could

be an improvement on one spent on Earth. Mr Musk agreed, and said that the few people who did want to go would likely be motivated by a sense of adventure or some notion of the manifest destiny of humanity. Perhaps there are some who would venture there on that basis. But finding a million such is a big ask.

Mr Musk's vision, then, is a grand one. Judging by the reaction of his audience, it is an inspiring one, too. But it is also unlikely to come to pass for the foreseeable future, at least on the scale that he hopes. That does not mean it is worthless. Even if the fleets of colonists never materialise, the smaller missions-such as the uncrewed landing planned for 2018—will be valuable in their own right, and will prove that interplanetary space flight is now within the means of an (admittedly unusual) private individual. Such a mission could convey two or three tonnes of cargo to the Martian surface. It is not hard to imagine universities and space agencies paying for their experiments to hitch a ride.

And even if a colony might be a step too far, it seems likely that humans will one day arrive on Mars. Here, the comparison with Antarctica may be instructive. Though they are in no sense a colony, a small population of scientists does live there all year round, doing research that cannot be done anywhere else. A system like Mr Musk's might one day make a Martian equivalent possible, although the price would still be eye-watering.

Mr Musk admitted as much himself. He was thinking, he said, of calling the first Mars vessel Heart of Gold, after a ship in "The Hitchhiker's Guide to the Galaxy", a comic science-fiction story written by Douglas Adams. The fictional ship is powered by something called an "infinite improbability drive". That, he mused, was perhaps the most appropriate way of thinking about the entire project.



Property 77





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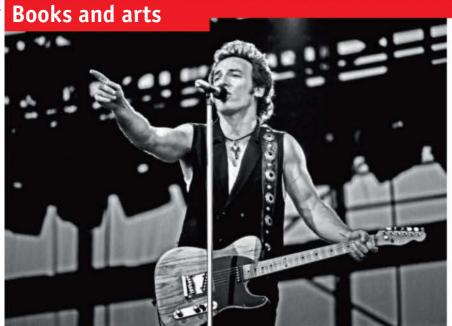
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Bruce Springsteen

A whole damn city crying

The timely autobiography of an American mythologist

Like much great art, Bruce Springsteen's finest songs transmute the particular into the eternal. The more tightly local their focus—those boys from the casino dancing with their shirts open in "Sandy", that Tilt-a-Whirl down on the south beach drag—the more universal they magically become. As he puts it in "Born to Run", his new autobiography, he sings about "the joy and heartbreak of everyday life", of humdrum defeat and defiance, the pull of home and the road's allure, familiar dichotomies somehow elevated, in his ballads, into a new American mythology.

As "Born to Run" recounts, those songs feel authentic because they are. At the heart of his oeuvre, and of his book, is his painful relationship with his father, a sometime pool shark whom, as a child, Mr Springsteen fetched from bars in Freehold, New Jersey, for his long-suffering mother. He records their wars over his lengthening hair, which culminate in Springsteen senior calling in a barber when his son is incapacitated by a motorbike accident; the simmering silences and boozing; but also his unexpected, curt relief when Bruce fails his army medical ("That's good"), and the old man's crumpled awe when his son produces the Oscar he won for "Philadelphia" ("I'll never tell anybody what to do ever again"). Mr Springsteen explains how he tried to dodge his inheritance of selfdestruction and depression, treating the latter with counselling, pills and the self**Born to Run.** By Bruce Springsteen. Simon & Schuster; 528 pages; \$32.50 and £20

administered therapy of music. "I'm a repairman," he says of his craft.

His mother rented his first guitar after, aged seven, he saw Elvis, "a Saturday night jukebox Dionysus", on "The Ed Sullivan Show". Theirs was a house without hot water or a phone, in a neighbourhood of other Irish-Italian families where "I never saw a man leave...in a jacket and tie unless it was Sunday or he was in trouble." The Springsteens scavenged radios for his grandfather to repair and sell to migrant labourers. He hitchhiked with "every sort of rube, redneck, responsible citizen and hell-raiser the Jersey Shore had to offer". A grandmother smothered him with "horrible unforgettable boundary-less love"; Catholicism imbued a spirit of rebellion and the ghost of faith.

In the end, for all the young men busting out of town in his lyrics, it was his parents who left him, moving to California in 1969 when he was 19. His younger sister Virginia also stayed in Jersey. Soon, though, he too rode out of Freehold, perched in the dark on an old couch on the bed of a truck.

In these passages the formula of his success begins to crystallise: a dark alchemy of indulgence and neglect, "the Fifties bluecollar world and Sixties social experience",

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freedom and hardship. He slept in a surfboard factory and sometimes on the beach. This was the Vietnam era: an early drummer was killed by mortar fire, a manager mutilated a toe to avoid the draft. All those tensions, plus a staggering work ethic. His bands played "firemen's fairs, carnivals, drive-ins, supermarket openings and hole-in-the-walls", and countless bars where fistfights and police raids were common. He understood his limits ("My voice was never going to win any prizes"), but knew and honed his talents, namely songwriting and live performance.

He laid down the law to wayward band members and predatory managers. "The buck would stop here," he decided, "if I could make one." After a long apprenticeship, an American picaresque that encompassed a flop in California, he was signed by Columbia Records. The album "Born to Run" made him a star. "Born in the USA" launched him into the stratosphere.

The origin of poetry, thought William Wordsworth, was emotion recollected in tranquillity. That motto describes both Mr Springsteen's memoir and the appeal of his songs, many of which look back on youthful traumas from a mature perspective and for older audiences. These days many in their ranks are as mature as Mr Springsteen himself, who at 67 still crowdsurfs his way through three-hour shows. "The exitin a blaze of glory", he says of other rockers' early combustions, "is bullshit."

The stories his songs tell, though, have not aged: on the contrary. His great theme is "the distance between the American dream and American reality". He is the bard of deindustrialisation, of dreams murdered, escapes thwarted and accomplished, fates mastered and predetermined, and factories closed, such as the rug mill where his father once worked in Freehold, a place, in his memory, defined >>>

by the stink of its furnaces. "Lately there ain't been much work," he sings timelessly in "The River", an ode to his sister's struggles, "on account of the economy."

The race and class fissures that today seem so urgent rend his characters' lives along with this slow-motion economic blight. The landscape of his youth, and of his music, has the peculiar worldliness that American parochialism can grittily contain: in the cults and tribes of the Jersey shore, the college-bound "rah-rahs" who spat at him at a beachside gig, the leatherclad "greasers", all those toughs and crooks, the ethnic tensions and race riots. In his book, as occasionally in his lyrics, he writes frankly about race, though his deepest statements on it were made in the make-up of his band, his partnership with Clarence Clemons, his longtime black saxophonist-relations with his bandmates are chronicled like Platonic romances—and above all in his sound, which blends R&B and soul with folk, country and rock.

People come to rock concerts, Mr Springsteen writes, "to be reminded of something they already know and feel." That the problems America faces are old ones is among the consoling reminders of his albums and his book. More than that, though, they model an alternative response—one in which blue-collar woes are recognised and honoured by the whitecollar fans Mr Springsteen has always attracted, the millions who chant "Thunder Road" despite never having encountered the skeleton frame of a burned-out Chevrolet. That transformation of the particular into the universal, experience into art, is also a spell that turns difference into compassion. It is a lesson in empathy for artists of all kinds, and not only artists.

Violence in England

Killing fields

A Fiery & Furious People: A History of Violence in England. By James Sharpe. Random House; 751 pages; £30

If ONE wants proof that the past is, indeed, a different country, it is instructive to look at the rate of baby-killing. In late-Victorian England, a fifth of all known murder victims were under a year old. Infanticide had been a common method to part with an unwanted child for centuries before abortion. Neglect was prevalent and in the most heinous cases, money provided the motive.

Some parents insured the lives of their children in order to cash in on their deaths. Some Victorians were paid to adoptillegitimate children, but soon sold them on as



cheap labour; many of those children died from neglect. Not all people regarded the lives of newborn babes as sacrosanct. One commentator declared he had no such "superstitious reverence".

Infanticide is the subject of one grim chapter of James Sharpe's new book, "A Fiery & Furious People", which examines a history of English violence from riots to highwaymen, and from executioners to serial killers. Mr Sharpe is a crime historian of many years and his book's strength lies in its scope, which allows the reader to survey the changes and customs of English society.

Most obvious, research suggests, is the decline in violence. Average annual homicide rates in 13th-century rural England were 20 per 100,000 of population. Oxford was particularly prone to student riots: one estimate puts the murder rate in the 1340s at as high as 120 per 100,000. Assaults from strangers were more common than today; modern killers are mostly close relations of the victim.

Punishments differed in the Middle Ages, with an emphasis on public shaming. Women could be ducked in the village pond, many simply for scolding husbands or neighbours. Girls with too loose a tongue could be required to wear a bridle, an iron helmet with a bar inserted into the mouth to prevent them from speaking. Punishments in ecclesiastical courts may have involved just giving penance.

Stocks and pillories were common, but their use diminished after 1660 as society grew more secular. Public whipping declined too. It took a little longer for public executions to die out; the last outdoor hanging took place in 1868. At the same time the rate of murders and assaults dropped. Knives and swords were carried less often by Georgians. Rules appeared to

develop around duels and even fist fights, such that combatants were not beaten to a bloody pulp. This may have something to do with a growing concern for civility, thinks Mr Sharpe.

Later an avowedly respectable Victorian middle class started to see violence as something done by other people; the violent were a lower class, they thought, operating in a separate moral universe. Murder fell by 70% between 1851 and 1911, even as capital punishment was less routinely relied upon. A more professionalised police force played its role in this.

It may be too early to denigrate a past, blood-spattered age. England in the late 1800s, despite the killings of Jack the Ripper, had similar murder rates to today: 0.9 per 100,000 people. The London of Charles Dickens's "Tale of Two Cities" was more peaceful than modern London, with 1.1 homicides against 1.7 per 100,000.

Sexual-violence statistics are as high as ever, in part because of higher reporting rates. Riots still happen. And the English still succumb to newspaper-led moral panics, just as their forebears did. Crime rates have fallen, but experience suggests they do not always move in one direction; there were 10.8% more murders in America in 2015 compared with the previous year, according to recent FBI data. In Britain violence has sunk and risen in the past century. The decline of the English murder may prove to be an unfinished story.

Culture in Britain

Civilised and civilising

Kenneth Clark: Life, Art and "Civilisation".By James Stourton. *William Collins; 478*pages; £30. To be published in America by
Knopf in November

LORD CLARK OF SALTWOOD, who was ennobled by Harold Wilson in 1969 after the triumph of his epic television series "Civilisation", became known more familiarly as Lord Clark of Civilisation. To one unsympathetic academic critic in the art world, he was Lord Clark of Trivialisation. Friends and colleagues called him simply "K".

Neil MacGregor, formerly director of the National Gallery and the British Museum, argues that K "was the most brilliant cultural populist of the 20th century". "Nobody can talk about pictures on the radio or on the television without knowing that Clark did it first and Clark did it better." Clark's hero was John Ruskin, who believed that beauty was everyone's birthright; and his achievement was to make this sound like common sense. But his rep-

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• utation was not sustained. After his death, he was probably better known as the father of Alan Clark, a flamboyant politician, seducer and diarist.

In his working life, K had more pies than fingers to put them in: director of the National Gallery when it symbolised the cultural contribution to the war effort, with famous recitals by Myra Hess and the removal of the collection to the security of a Welsh quarry; chairman of the Arts Council and the authority that established commercial television in Britain; deeply involved in the revival of the Royal Opera House and the creation of the National Theatre; author of studies on Leonardo da Vinci and the nude in art.

These positions made him a quintessential figure of the British establishment, admired and feared, though behind the façade he was prone to shafts of self-doubt. He was the only son of a family that founded mills making fine cotton thread in Paisley, and he inherited immense wealth, but he always insisted that he was a socialist. King George V was so anxious to have Clark as Surveyor of the King's Pictures that he ignored protocol and visited him personally in the National Gallery to persuade him to take the job, which he did. Clark understood that the life he liked depended on close co-operation with the governing classes, but he could also despise them.

James Stourton's delightfully readable and authoritative biography is absorbing on the rise and rise of a gilded, lucky young man in a hurry. After Winchester (a school he did not like) and Oxford, he began work in Florence as a researcher for Bernard Berenson, a great student of the Renaissance. He was nearly 28 when he was offered the chance to become keeper of fine art at the Ashmolean Museum in Oxford, 30 when he was appointed director of the National Gallery. He already had a reputation for automaton-like, and often terrifying, efficiency, and he could be offhand and impatient. But he was very good at running things.

There was, however, more to his life. Mr Stourton, a former chairman of Sotheby's in Britain, describes Lord Clark as a man who loved being in love. These affairs and dalliances must have stirred his vanity, but one result was that his wife, Jane, drank heavily. K remained a loyal social partner, but he did once confess: "All the ladies I loved took to the bottle."

His story could be read as a morality tale. For after Jane's death, Lord Clark married Nolwen Rice, a woman he scarcely knew. She fought for possession with Janet Stone, the great love of the second half of his life. It was an ugly battle for succession in which Clark, all vanity spent, played no part. For a career that was propelled by a relentless pursuit of elegance, it was an inelegant finale.

Poetry and the poet

A display of digging

BELLAGHY

Bringing alive Seamus Heaney's spirit

SEAMUS HEANEY moved seamlessly through time, space and cultural worlds, or at least he made it appear that way. When, in 2013, the Irish poet was buried near his childhood home in the mid-Ulster village of Bellaghy, mourners ranged from senior Irish Republicans to British grandees, from rock stars and world-famous academics to local folk who were part of or knew his farming family. His poetry, too, was at once recondite and scholarly and deeply embedded in his home soil. Although he made bold new readings of Greek and Anglo-Saxon classics, his bestloved works speak of more immediate, tangible things like flax rotting in a dam or his father's spade slicing the Derry mud.

Visitors will gain new insights into the poet's personal and family roots with the opening on September 30th of the Seamus Heaney HomePlace, a spanking new arts and literary centre in still-sleepy Bellaghy. Mementoes of his early life will form an interactive display along with reminiscences from local friends, and film of the writer in local settings. Over the next year it will host cultural performances with the ambitious goal of fusing the local and international dimensions of the poet's world. The launch was due to include a concert by nine traditional musicians from across the globe and, a few days later, a dawn reading in nearby Church Island, a numinous ancient site dear to the writer's heart, of a Heaney poem dealing with ancient Mycenae and hinting at the 1994 Northern Irish ceasefire.

With his gentle humour, Heaney might have found that event slightly pretentious. But its staging reflects his keen sense of the multilayered riddles that can be contained in pieces of ground which have bound people together, and also divided them, over different eras. As the discerning visitor to HomePlace may sense, the poet emerged from a slow but conflict-ridden world: a place where Catholic and Protestant farmers could deal amicably over cattle or ploughing without ever forgetting that they were, ultimately, on opposite sides of an intercommunal divide which had drawn blood and might draw more.

Heaney knew which side of that divide he came from: it was the Catholic, Irishnationalist community, and he politely objected whenever he was carelessly described as British. But it was precisely that sense of security which steered him away from name-calling Anglophobia or from joining the militant end of Irish Republicanism. He had a keen sense of the pain of the Northern Irish conflict, including the sectarian murder of a young cousin, but showed no desire to become a foot-soldier.

Perhaps abhorrence of bloodshed was one reason why the poet, who famously declared that he dug with his pen, felt moved to delve so very deep into the past, of his own country and others. He was seeking ways to transcend the feuds of the present, or at least to put them in better perspective. He had a particular affinity with Greece, another country where the landscape contains both traces of ancient mysteries and the detritus of sordid modern arguments. And in a line quoted at the time of the ceasefire, he never abandoned his belief in the advent of a day when, against all expectations, conflict would be overcome so that "hope and history rhyme".



Hats off to Heaney

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The Federal Reserve

Man in the dock

Was Alan Greenspan to blame for the financial crisis?

THE former chairman of the Federal Reserve was once a hero. Now he is being called a villain. Yet it is too soon to be sure what history will say about him. In a superb new book, the product of more than five years' research, Sebastian Mallaby helps history make up its mind about Alan Greenspan, the man hailed in 2000 by Phil Gramm, a former senator, as "the best central banker we have ever had", but now blamed for the financial crisis of 2007-08. Even today, Mr Greenspan, who famously once told Congress that "If I seem unduly clear to you, you must have misunderstood what I said", remains a paradoxical figure.

Mr Greenspan was a partisan Republican, who worked more closely with the Democrats under Bill Clinton than with either of the Bush administrations. He was a disciple of Ayn Rand's libertarian ideology, but his forte was the mastering of data. He was a believer in the gold standard, but became the foremost exponent of discretionary monetary policy.

The former central banker condemned the creation of the Fed as a disaster, but he became its most dominant chairman. He was a believer in free markets, but participated enthusiastically in bail-outs of failed institutions and crisis-hit countries. He knew the dangers of moral hazard, yet offered the support for markets labelled the "Greenspan put".

Mr Mallaby, formerly a journalist at *The* Economist and now a senior fellow at the Council on Foreign Relations in New York,

The Man Who Knew: The Life and Times of Alan Greenspan. By Sebastian Mallaby. Penguin Press; 781 pages; \$40. Bloomsbury; £25

takes readers on a long journey from Mr Greenspan's childhood as the adored and awkward son of a single Jewish mother in New York, through his period as a "sideman" in a jazz band, his professional life as a data-obsessed forecaster, his engagement in Republican politics, his 18 years as chairman of the Federal Reserve and, finally, the post-crisis collapse of his reputation. Through the lens of this stellar career, the book also throws a sharp light on American policy and policymaking over four decades.

Of his time as Fed chairman, Mr Mallaby argues convincingly that: "The tragedy of Greenspan's tenure is that he did not pursue his fear of finance far enough: he decided that targeting inflation was seductively easy, whereas targeting asset prices was hard; he did not like to confront the climate of opinion, which was willing to grant that central banks had a duty to fight inflation, but not that they should vaporise citizens' savings by forcing down asset prices. It was a tragedy that grew out of the mix of qualities that had defined Greenspan throughout his public life-intellectual honesty on the one hand, a reluctance to act forcefully on the other."

Many will contrast Mr Greenspan's malleability with the obduracy of his pre-

decessor, Paul Volcker, who crushed inflation in the 1980s. Mr Greenspan lacked Mr Volcker's moral courage. Yet one of the reasons why Mr Greenspan became Fed chairman was that the Reagan administration wanted to get rid of Mr Volcker, who "continued to believe that the alleged advantages of financial modernisation paled next to the risks of financial hubris."

Mr Volcker was right. But Mr Greenspan survived so long because he knew which battles he could not win. Without this flexibility, he would not have kept his position. The independence of central bankers is always qualified. Nevertheless, Mr Greenspan had the intellectual and moral authority to do more. He admitted to Congress in 2008 that: "I made a mistake in presuming that the self-interests of organisations, specifically banks and others, were such that they were best capable of protecting their own shareholders and their equity in the firms." This "flaw" in his reasoning had long been evident. He knew the government and the Fed had put a safety net under the financial system. He could not assume financiers would be prudent.

Yet Mr Greenspan also held a fear and a hope. His fear was that participants in the financial game would always be too far ahead of the government's referees and that the regulators would always fail. His hope was that "when risk management did fail, the Fed would clean up afterwards." Unfortunately, after the big crisis, in 2007-08, this no longer proved true.

If Mr Mallaby faults Mr Greenspan for inertia on regulation, he is no less critical of the inflation-targeting that Mr Greenspan ultimately adopted, albeit without proclaiming this objective at all clearly. The advantage of inflation-targeting was that it provided an anchor for monetary policy, which had been lost with the collapse of the dollar's link to gold in 1971 followed by that of monetary targeting. Yet experience has since shown that monetary policy is as likely to lead to instability with such an anchor as without one. Stable inflation does not guarantee economic stability and, quite possibly, the opposite.

Perhaps the biggest lesson of Mr Greenspan's slide from being the "maestro" of the 1990s to the scapegoat of today is that the forces generating monetary and financial instability are immensely powerful. That is partly because we do not really know how to control them. It is also because we do not really want to control them. Readers of this book will surely conclude that it is only a matter of time before similar mistakes occur.

MARTIN WOLF*

*Our policy is to identify the reviewer of any book by or about someone closely connected with *The Economist*. Sebastian Mallaby is married to Zanny Minton Beddoes, our editor-in-chief. This review, by Martin Wolf, chief economics commentator of the *Financial Times*, has been edited for length only



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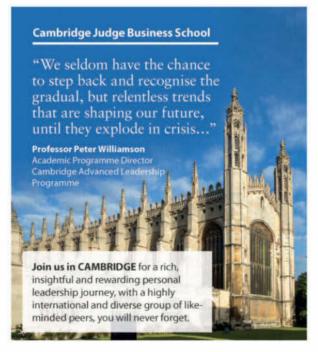
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Economic and financial indicators

Economic data

% change on ye	-			Industrial			Current-account balance		Budget balance	Interest rates, %			
	Gross dom latest	n estic p qtr*	roduct 2016 [†]	production latest	Consume latest	r prices 2016†	Unemployment rate, %	latest 12 months, \$bn	% of GDP 2016†	% of GDP 2016†	10-year gov't bonds, latest	Sep 28th	units, per \$ year ago
Jnited States	+1.2 Q2	+1.1	+1.5	-1.1 Aug	+1.1 Aug	+1.3	4.9 Aug	-488.2 Q2	-2.6	-3.2	1.56	-	_
China	+6.7 Q2	+7.4	+6.6	+6.3 Aug	+1.3 Aug	+2.0	4.1 Q2§	+256.1 Q2	+2.7	-3.8	2.56§§	6.67	6.37
lapan	+0.8 02	+0.7	+0.5	-4.2 Jul	-0.5 Jul	-0.1	3.0 Jul	+167.6 Jul	+3.4	-5.0	-0.08	101	120
Britain	+2.2 Q2	+2.4	+1.6	+2.1 Jul	+0.6 Aug	+0.7	4.9 Jun ^{††}	-161.9 Q1	-5.4	-3.9	0.78	0.77	0.66
Canada	+0.9 Q2	-1.6	+1.2	-1.3 Jun	+1.1 Aug	+1.7	7.0 Aug	-51.1 Q2	-3.2	-2.6	0.98	1.33	1.34
uro area	+1.6 Q2	+1.2	+1.5	-0.5 Jul	+0.2 Aug	+0.3	10.1 Jul	+384.5 Jul	+3.2	-1.9	-0.13	0.89	0.89
Austria	+1.2 Q2	-0.9	+1.3	-0.3 Jul	+0.6 Aug	+1.0	6.0 Jul	+10.5 Q1	+2.8	-1.4	0.08	0.89	0.89
Belgium	+1.4 Q2	+2.2	+1.3	+5.3 Jul	+2.2 Aug	+1.8	8.3 Jul	+6.5 Mar	+1.2	-2.8	0.14	0.89	0.89
rance	+1.3 Q2	-0.4	+1.3	-0.1 Jul	+0.2 Aug	+0.3	10.3 Jul	-22.0 Jul‡	-0.5	-3.3	0.17	0.89	0.89
Germany	+1.7 Q2	+1.7	+1.6	-1.2 Jul	+0.4 Aug	+0.4	6.1 Aug	+300.2 Jul	+8.4	+0.4	-0.13	0.89	0.89
Greece	-0.4 Q2	+0.7	-0.6	+4.1 Jul	-0.9 Aug	nil	23.4 Jun	+0.3 Jul	-1.1	-4.5	8.30	0.89	0.89
taly	+0.8 Q2	+0.1	+0.8	-0.3 Jul	-0.1 Aug	nil	11.4 Jul	+54.5 Jul	+2.3	-2.6	1.18	0.89	0.89
Netherlands	+2.3 Q2	+2.6	+1.5	+2.4 Jul	+0.2 Aug	+0.3	7.2 Aug	+59.7 Q2	+9.8	-1.2	-0.03	0.89	0.89
Spain	+3.2 Q2	+3.4	+2.9	-5.2 Jul	-0.1 Aug	-0.4	19.6 Jul	+22.7 Jun	+1.3	-4.3	0.98	0.89	0.89
zech Republic	+3.6 Q2	+3.7	+2.4	-14.0 Jul	+0.6 Aug	+0.7	5.3 Aug§	+3.7 Q2	+1.2	-0.5	0.25	24.1	24.3
Denmark	+1.0 Q2	+1.8	+1.1	+2.2 Jul	+0.2 Aug	+0.8	4.2 Jul	+18.1 Jul	+6.8	-2.5	-0.02	6.66	6.66
lorway	+2.5 Q2	+0.1	+1.0	-1.4 Jul	+4.0 Aug	+3.5	5.0 Jul##	+23.6 Q2	+5.3	+3.0	1.18	8.10	8.55
Poland	+3.0 Q2	+3.6	+3.1	+7.4 Aug	-0.8 Aug	-0.8	8.5 Aug§	-1.3 Jul	-0.8	-2.9	2.87	3.84	3.78
Russia	-0.6 Q2	na	-0.5	+0.7 Aug	+6.8 Aug	+7.1	5.2 Aug§	+38.4 Q2	+3.3	-3.7	8.22	63.9	65.7
Sweden	+3.4 Q2	+2.0	+3.3	+4.2 Jul	+1.1 Aug	+1.0	6.6 Aug§	+25.4 Q2	+5.6	-0.4	0.14	8.61	8.46
Switzerland	+2.0 Q2	+2.5	+1.1	-1.2 Q2	-0.1 Aug	-0.5	3.4 Aug	+66.1 Q2	+9.7	+0.2	-0.51	0.97	0.98
Turkey	+3.1 Q2	na	+3.2	-8.4 Jul	+8.0 Aug	+7.7	10.2 Jun§	-28.9 Jul	-4.7	-2.0	9.63	2.99	3.05
Australia	+3.3 Q2	+2.1	+2.8	+3.7 Q2	+1.0 Q2	+1.3	5.6 Aug	-52.8 Q2	-4.4	-2.1	1.95	1.31	1.43
long Kong	+1.7 Q2	+6.5	+1.5	-0.6 Q2	+4.3 Aug	+2.5	3.4 Aug ^{‡‡}	+13.6 Q2	+2.7	nil	0.98	7.75	7.75
India	+7.1 Q2	+5.5	+7.6	-2.4 Jul	+5.0 Aug	+5.2	5.0 2015	-16.2 Q2	-1.2	-3.8	6.92	66.5	66.0
indonesia	+5.2 Q2	na	+5.0	+7.1 Jul	+2.8 Aug	+3.8	5.5 Q1§	-18.7 Q2	-2.2	-2.4	6.90	12,948	14,698
Malaysia	+4.0 Q2	na	+4.3	+4.1 Jul	+1.5 Aug	+1.9	3.5 Jul§	+5.3 Q2	+1.2	-3.4	3.56	4.14	4.42
Pakistan	+5.7 2016**	na	+5.7	+2.7 Jul	+3.6 Aug	+3.9	5.9 2015	-3.3 Q2	-0.7	-4.6	8.03†††	105	104
Philippines	+7.0 Q2	+7.4	+6.3	+10.1 Jul	+1.8 Aug	+1.7	5.4 Q3§	+3.2 Jun	+2.5	-1.3	3.63	48.3	46.8
Singapore	+2.1 02	+0.3	+1.8	+0.1 Aug	-0.3 Aug	-0.7	2.1 Q2	+58.4 Q2	+19.4	+0.7	1.80	1.36	1.43
South Korea	+3.2 Q2	+3.2	+2.6	+1.6 Jul	+0.4 Aug	+1.0	3.6 Aug [§]	+104.4 Jul	+7.4	-1.3	1.47	1,097	1,195
aiwan	+0.7 Q2	+0.2	+0.6	+7.7 Aug	+0.6 Aug	+1.3	4.0 Aug	+75.7 Q2	+13.5	-0.6	0.73	31.4	33.0
Thailand	+3.5 Q2	+3.2	+3.0	-5.1 Jul	+0.3 Aug	+0.3	1.0 Jul§	+42.4 Q2	+8.0	-2.5	2.16	34.6	36.3
Argentina	-3.4 Q2	-8.0	-1.2	-2.5 Oct	- ***		9.3 Q2§	-15.4 Q2	-2.3	-5.1	na	15.3	9.41
Brazil	-3.8 Q2	-2.3	-3.3	-6.6 Jul	+9.0 Aug	+8.2	11.6 Jul§	-25.8 Aug	-1.0	-6.4	11.49	3.25	4.03
hile	+1.5 Q2	-1.4	+1.7	-1.8 Jul	+3.4 Aug	+3.9	7.1 Jul ^{§‡‡}	-5.1 Q2	-1.9	-2.5	4.21	663	704
olombia	+2.0 Q2	+0.8	+2.0	-6.2 Jul	+8.1 Aug	+7.7	9.8 Jul§	-15.7 Q2	-5.4	-3.7	7.03	2,915	3,078
Mexico	+2.5 Q2	-0.7	+2.1	-1.0 Jul	+2.7 Aug	+2.9	3.7 Aug	-30.9 Q2	-3.0	-3.0	6.06	19.5	17.0
/enezuela	-8.8 Q4~	-6.2	-14.8	na	na	+532	7.3 Apr§	-17.8 Q3~	-2.8	-24.2	10.58	9.99	6.30
gypt	+6.7 Q1	na	+3.0	-8.6 Jul	+15.4 Aug	+11.6	12.5 Q2§	-18.7 Q2	-6.8	-11.4	na	8.88	7.82
srael	+2.7 Q2	+4.0	+3.0	+1.7 Jul	-0.7 Aug	-0.4	4.6 Aug	+12.1 Q2	+3.3	-2.4	1.67	3.76	3.94
Saudi Arabia	+3.5 2015	na	+1.1	na	+3.3 Aug	+4.2	5.6 2015	-59.5 Q1	-6.5	-12.0	na	3.75	3.75
South Africa	+0.6 Q2	+3.3	+0.3	+2.5 Jul	+5.9 Aug	+6.0	26.6 Q2§	-12.9 Q2	-4.3	-3.4	8.65	13.7	14.0

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. #13-month moving average. \$5-year yield. ***Official number not yet proved to be reliable; The State Street PriceStats Inflation Index, June 36.96%; year ago 26.70% ††Dollar-denominated bonds.



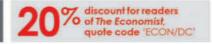
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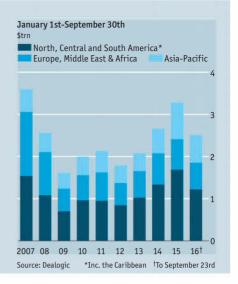
% change on

Markets

		% change on		
		Dec 31st 2015		
	Index Sep 28th	one week	in local currency	in \$ terms
United States (DJIA)	18,339.2	+0.2	+5.2	+5.2
China (SSEA)	3,127.6	-1.3	-15.6	-17.8
Japan (Nikkei 225)	16,465.4	-2.0	-13.5	+3.3
Britain (FTSE 100)	6,849.4	+0.2	+9.7	-3.3
Canada (S&P TSX)	14,731.4	+0.1	+13.2	+18.6
Euro area (FTSE Euro 100		+0.3	-6.4	-3.6
Euro area (EURO STOXX 5	0) 2,991.1	+0.3	-8.5	-5.7
Austria (ATX)	2,386.2	+1.0	-0.4	+2.6
Belgium (Bel 20)	3,571.0	+0.1	-3.5	-0.6
France (CAC 40)	4,432.5	+0.5	-4.4	-1.5
Germany (DAX)*	10,438.3	nil	-2.8	+0.1
Greece (Athex Comp)	563.2	+0.2	-10.8	-8.1
Italy (FTSE/MIB)	16,222.2	-0.8	-24.3	-22.0
Netherlands (AEX)	450.3	+0.6	+1.9	+5.0
Spain (Madrid SE)	880.6	-0.2	-8.8	-6.0
Czech Republic (PX)	866.3	+0.2	-9.4	-6.7
Denmark (OMXCB)	825.6	-2.5	-8.9	-6.1
Hungary (BUX)	27,476.4	-2.8	+14.9	+21.3
Norway (OSEAX)	666.6	-0.3	+2.7	+12.3
Poland (WIG)	47,317.7	-0.6	+1.8	+4.8
Russia (RTS, \$ terms) Sweden (OMXS30)	975.3	-0.4 +0.2	+12.7	+28.8
Switzerland (SMI)	1,425.2 8,220.1	-0.1	-6.8	-4.1
Turkey (BIST)	77,677.8	-0.1	+8.3	+5.9
Australia (All Ord.)	5,500.2	+1.3	+2.9	+8.7
Hong Kong (Hang Seng)	23,619.7	-0.2	+7.8	+7.7
India (BSE)	28,292.8	-0.8	+8.3	+7.8
Indonesia (JSX)	5,425.3	+1.5	+18.1	+25.8
Malaysia (KLSE)	1,665.0	+0.4	-1.6	+2.1
Pakistan (KSE)	40,355.0	+1.5	+23.0	+23.1
Singapore (STI)	2,858.0	+0.3	-0.9	+3.3
South Korea (KOSPI)	2,053.1	+0.8	+4.7	+11.9
Taiwan (TWI)	9,194.5	-0.4	+10.3	+15.2
Thailand (SET)	1,479.6	-0.5	+14.9	+19.4
Argentina (MÉRV)	16,755.2	+2.8	+43.5	+21.4
Brazil (BVSP)	59,355.8	+1.6	+36.9	+66.7
Chile (IGPA)	20,260.6	-0.1	+11.6	+19.3
Colombia (IGBC)	9,939.7	+0.6	+16.3	+26.6
Mexico (IPC)	48,046.6	+2.4	+11.8	-1.1
Venezuela (IBC)	12,784.7	+6.1	-12.4	na
Egypt (Case 30)	7,907.9	-0.4	+12.9	-0.5
Israel (TA-100)	1,270.1	+0.6	-3.4	nil
Saudi Arabia (Tadawul)	5,534.4	-7.0	-19.9	-19.9
South Africa (JSE AS)	51,773.5	+2.0	+2.1	+15.8

Global mergers and acquisitions

Mergers and acquisitions (M&A) announced in the first nine months of this year were worth \$2.5 trillion, 24% less than in the same period of 2015—the first fall in three years. Britain's vote to leave the European Union, uncertainty over the American presidential election and a fall in equity-capital raising may have discouraged would-be acquirers. The \$66.3 billion bid by Bayer, a German chemicals firm, for Monsanto is the only acquisition over \$50 billion announced so far this year. Cross-border M&A is down by 11% year on year and \$753 billion-worth of deals have been withdrawn, the most since 2007. Goldman Sachs leads the way on advisory fees, accumulating \$1.8 billion, 11% of the total, so far this year.



Other markets

		% change on			
			Dec 31st 2015		
	Index Sep 28th	one week	in loca currenc	+	
United States (S&P 500)	2,171.4	+0.4	+6.2	+6.2	
United States (NAScomp)	5,318.6	+0.4	+6.2	+6.2	
China (SSEB, \$ terms)	350.7	-0.8	-15.5	-17.8	
Japan (Topix)	1,330.8	-1.6	-14.0	+2.7	
Europe (FTSEurofirst 300)	1,348.3	+0.1	-6.2	-3.4	
World, dev'd (MSCI)	1,725.6	+0.2	+3.8	+3.8	
Emerging markets (MSCI)	912.2	+0.7	+14.9	+14.9	
World, all (MSCI)	418.9	+0.3	+4.9	+4.9	
World bonds (Citigroup)	968.3	+1.0	+11.3	+11.3	
EMBI+ (JPMorgan)	814.7	+0.4	+15.7	+15.7	
Hedge funds (HFRX)	1,187.1§	+0.2	+1.1	+1.1	
Volatility, US (VIX)	12.4	+13.3	+18.2	(levels)	
CDSs, Eur (iTRAXX)†	73.3	nil	-5.0	-2.1	
CDSs, N Am (CDX)†	75.3	-5.6	-14.7	-14.7	
Carbon trading (EU ETS) €	4.5	+0.5	-46.3	-44.7	

†Credit-default-swap spreads, basis points. §Sept 27th.

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The Economist commodity-price index 2005=100

2003-100			% change on		
	Sep 20th	Sep 27th*	one month	one year	
Dollar Index					
All Items	137.5	138.5	+3.7	+6.9	
Food	158.5	158.3	+4.0	+5.2	
Industrials					
All	115.8	117.9	+3.2	+9.5	
Nfa†	126.7	126.5	+3.2	+17.3	
Metals	111.1	114.2	+3.2	+6.1	
Sterling Inde	K				
All items	193.1	194.0	+4.6	+24.6	
Euro Index					
All items	153.1	153.8	+3.2	+7.1	
Gold					
\$ per oz	1,315.3	1,327.2	+0.7	+17.3	
West Texas In	termediate				
\$ per barrel	43.4	44.7	-3.6	-1.3	
Sources: Bloom	berg; CME Group	; Cotlook; Darm	enn & Curl;	FT; ICCO;	

ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Thomson Reuters; Urner Barry; WSJ. *Provisional †Non-food agriculturals.

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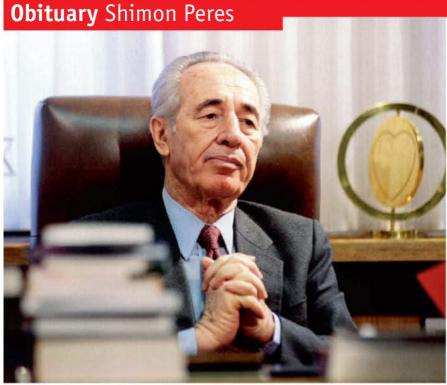






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Intriguing for peace

Shimon Peres, an Israeli statesman, died on September 28th, aged 93

HE OUTLIVED all his country's other founding fathers, but failed in what he most yearned for: to lead it into a lasting peace. Missed opportunities dogged Shimon Peres's career. He gained the highest offices—prime minister, twice, and president—but the political arithmetic invariably went against him. His forte was foreign policy, but his political nemesis, Menachem Begin, signed the peace treaty with Egypt in 1979, and his arch-rival, Yitzhak Rabin, got most of the plaudits for Israel's deal in 1993 with the Palestinian leader, Yasser Arafat.

Mr Peres's imprint was lasting, nonetheless. As a precocious young civil servant, he brokered arms deals which helped his uniformed counterparts to get the weapons they needed. He circumvented arms embargoes with creative ruses, such as buying warplanes as, purportedly, film props, and cannily found leaky frigates and rusty tanks in places where they were no longer needed. He bargained hard, shaming rich countries for charging full price to tiny, beleaguered Israel, and cajoling rich sympathisers. It meant breaking a lot of rules. Jimmy Hoffa, boss of America's Teamsters union, became a friend, and Israel's rapprochement with West Germany was cemented with marathon drinking sessions with the arch-conservative Bavarian, Franz-Josef Strauss.

Perhaps his greatest achievement in this sphere was a secret deal with France which laid the foundations for Israel's neveravowed nuclear arsenal. Only this year did Mr Peres obliquely acknowledge it, saying that it made the Arabs realise that the Jewish state couldn't be obliterated, thus laying the foundations for at least a partial peace. "There are two things that cannot be made without closing your eyes," he told the New York Times in 2013: "love and peace. If you try to make them with open eyes, you won't get anywhere."

Unpolished politician

He switched from the civil service to electoral politics, but found it hard to make his mark in the Labour party—a cause he had served since his teens. A better backroom operator than campaigning politician, he slyly egged on the Jewish settler movement in the West Bank after 1967, at a time when it was still on the fringes of Israeli politics; the settlements have stymied peace efforts ever since. Rabin called him, aptly, "the tireless intriguer". Though politics obsessed him from childhood, driving out (some said) all other interests, he was wooden on television and was perhaps too fond of aphorisms ("You can turn eggs into omelettes, but it is very difficult to turn omelettes into eggs.") Personal political relationships were difficult. His closest ally was Moshe Dayan, but the adoration he bestowed on the dashing former general was not reciprocated. David Ben-Gurion, Israel's first prime minister, appreciated his talents, but would not confide in him.

The problem lay deep. He was never part of the bronzed sabra culture of Israel, having arrived as an immigrant from Poland at the age of 11. His Hebrew had a Polish twang, and his attempt to find a resonant Hebrew name to replace "Persky", which he was born with, ended only in "Peres", a sort of bird. In a country which reveres military valour, he was a man in a suit. Unlike many Jews of his generation, he did not fight the Nazis or put on uniform in Israel's war of independence in 1948. Throughout his career he was ribbed for his vanity, including plastic surgery and, more recently, a diet consisting largely of low-fat cheese, salad and green tea.

When at last he reached the top, as Labour leader in 1977, it cruelly coincided with a shift in the political climate. Religious and ultranationalist parties were on the rise; voters rejected a Labour elite they saw as weak and aloof. He led the party in five elections, but never won outright.

Having helped to build Israel's war machine, he became a dove; Israel was now strong, he argued, and could achieve true security through compromise. But this essentially optimistic message often fell flat. He opposed the bombing of Iraq's nuclear reactor at Osiraq in 1981, which most Israelis thought a masterstroke.

His best election result was a stalemate in 1984, which led to a two-year rotation of the top job with Yitzhak Shamir, the Likud leader. Labour did win in 1992, but under Rabin. Two years later he shared the Nobel peace prize with Rabin and Arafat: respected abroad, still unpopular at home. He returned to office on a wave of emotion after the assassination of Rabin in 1995. But his chance to achieve peace with the Palestinians was blown away by a spate of Islamist suicide-bombings and by Israel's war in Lebanon. He was narrowly defeated by Binyamin Netanyahu in 1996.

A new generation of Labour leaders tried, unsuccessfully, to force him to retire. Instead, on his second attempt and at 83, he became Israel's largely ceremonial president. As head of state he was muzzled, forced in public to back Mr Netanyahu and defend his policies abroad; yet he conspired with the intelligence services to block the plans to attack Iran's nuclear installations. Once more, the intriguer tirelessly intrigued. His doings seemed remarkably public, immediately posted on Facebook, Twitter and Instagram by his almost entirely female staff (males, he had found, betrayed him). Undoubtedly, other exploits will remain untold for years.

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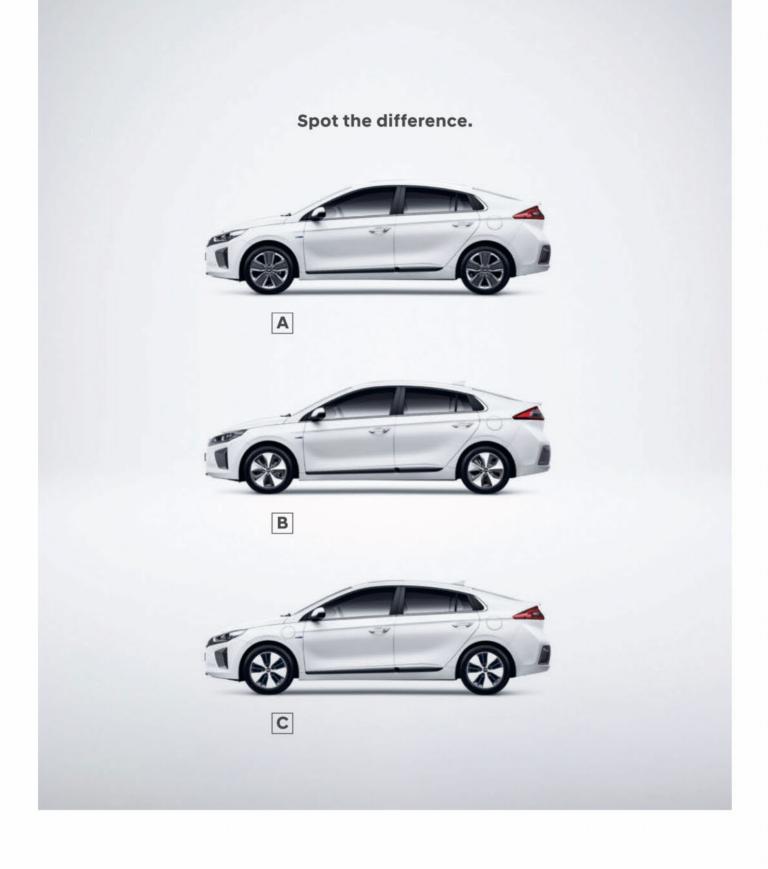


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