The Economist

What to make of Trump's picks

Paying the climate bill

Inside Ukraine's occupied territories

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NOVEMBER 16TH–22ND 2024

WHAT'S ABOUT TO HIT THE WORLD ECONOMY?

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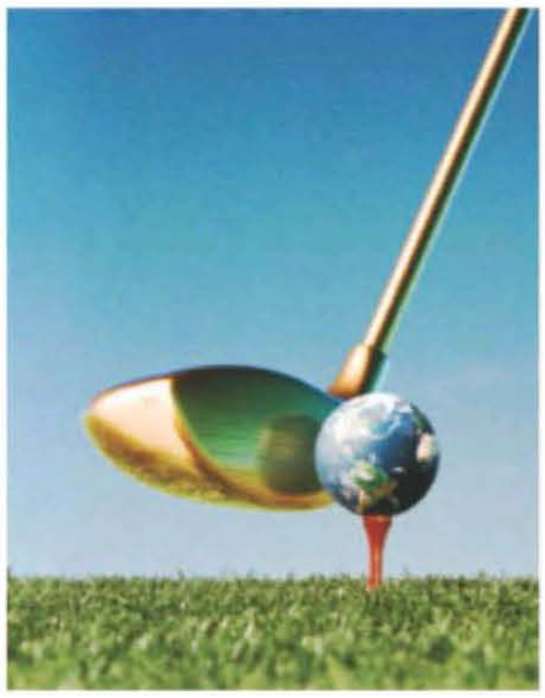

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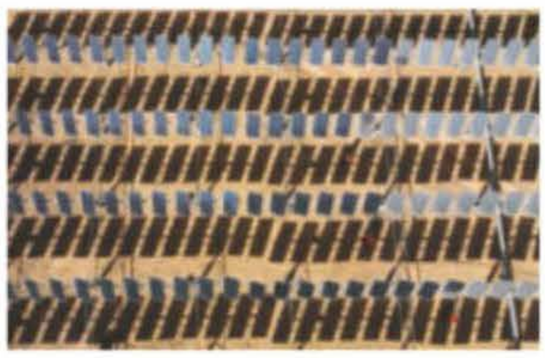

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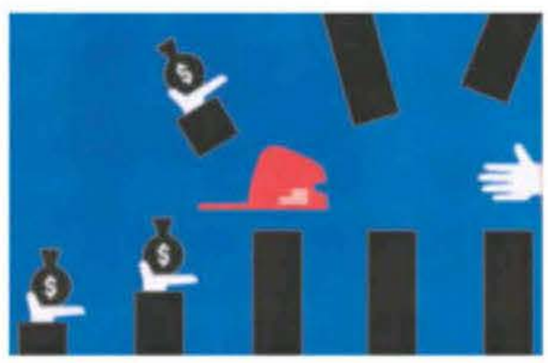

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Volume 453 Number 9423
Published since September 1843
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The world this week Politics

Donald Trump started to nominate people for positions in his government, which will take office in January. In **foreign and security policy** Marco Rubio, a senator from Florida and hawk on China and Iran, will be secretary of state. Pete Hegseth will be defence secretary. An unconventional pick, Mr Hegseth is a presenter on Fox News. He served in the National Guard but has never held a government job. John Ratcliffe, a director of national intelligence in the previous Trump administration, was tapped to head the CIA. Mike Waltz, a congressman from Florida and colonel in the National Guard, is to be the national security adviser.

On the **domestic front** Mr Trump's choice of Matt Gaetz for attorney-general stunned Washington. Mr Gaetz is a fiery congressman known for his partisan showmanship. Thomas Homan, who ran the immigration-enforcement service for 18 months in the first Trump administration, will oversee the border and a crackdown on illegal immigration. Kristi Noem, the governor of South Dakota, will head the Department of Homeland Security. Susie Wiles will be White House chief of staff, the first woman to hold the White House job. Elon Musk and Vivek Ramaswamy, a former presidential candidate, are to run a new Department of Government Efficiency.

Senators sing a new Thune

Senate Republicans elected John Thune, who hails from the establishment wing of the party, to be their majority leader when the new Congress convenes in January. The Republicans will probably hold a 53-47 majority in the new Senate and will retain a slim majority in the House.

A long-running crisis in **Haiti** intensified after Garry Conille, the acting prime minister, was fired by the committee that had appointed him just 166 days earlier. Haiti has not had an elected president since July 2021, when Jovenel Moïse was assassinated. Every seat in its parliament has been empty since January 2023. A UN-authorised security mission has failed to restore order. Deaths due to gang violence increased after 400 Kenyan policemen arrived in June. The UN said recently it had recorded signs of famine in the country for the first time since 2022.

At least 25 people were killed by a suicide-bomb at a railway station in Quetta, the capital of **Pakistan's** Balochistan province. The bomber targeted soldiers returning from a training course. The Balochistan Liberation Army claimed responsibility. Baloch separatists have stepped up their campaign of violence this year.

Japan's parliament voted for Ishiba Shigeru to continue as prime minister. Mr Ishiba's Liberal Democrats lost their majority at a recent snap election and he now heads a fragile minority government.

A 62-year-old man ploughed his car into a crowd of people who were exercising at a stadium in the **Chinese** city of Zhuhai, killing at least 35. The man was said to be unhappy with his divorce settlement.

Qatar suspended its role as a mediator between Israel and **Hamas**. Reports that under pressure from America Qatar was about to evict Hamas, which has its political headquarters in the Gulf state, were "inaccurate", said officials.

A 30-day deadline set by America for **Israel** to increase access for humanitarian aid into **Gaza** expired. America said that Israel had not broken American laws on blocking aid supplies and will therefore not cut military support. The UN remarked that the amount of aid getting into Gaza was at its lowest point in a year.

Muhammad bin Salman, the crown prince of **Saudi Arabia** and its de facto ruler, described Israel's actions in Gaza as "genocide". The prince also condemned Israel's attacks on Iran and Lebanon. His remarks are the harshest criticism of Israel from the kingdom since the war began.

America imposed sanctions against a commander in **Sudan's** Rapid Support Forces, accusing him of overseeing human-rights abuses in West Darfur. It said the RSF, which fights the Sudanese army in the country's civil war, was responsible for violence against civilians. The UN called for a compliance mechanism to force the two parties to honour their obligations to protect civilians.

Mauritius became the latest country to chase an incumbent party from office. The opposition alliance won 60 of 62 directly elected seats in parliament in an election, as the ruling party had its seat count reduced from 42 to two. Navin Ramgoolam, the 77-year-old leader of the opposition, has been appointed prime minister.

Following the collapse of his coalition **Germany's** chancellor, Olaf Scholz, will seek a vote of confidence before Christmas, rather than on January 15th as previously planned. He is all but certain to lose the vote, paving the way for an election on February 23rd. The conservative Christian Democrats are currently far ahead in the polls.

The Dutch prime minister, Dick Schoof, described a spate of violence against Israelis and Jews in **Amsterdam** as "anti-semitic" and "shocking and reprehensible". Police arrested dozens of young men who fanned out across the city on scooters to assault Israelis and Jews, reportedly first asking to see their passports. Before the attacks Israeli football hooligans, who were in Amsterdam for a match, had stirred up trouble by pulling down Palestinian flags and shouting anti-Arab slurs. Mr Schoof said he was aware of the hooligans' behaviour, but that was "no excuse whatsoever" for the co-ordinated attack on Jews.

A wolf among the flock

The **Archbishop of Canterbury**, Justin Welby, resigned over his response to a child-abuse scandal. A recent report concluded that arguably "the most prolific serial abuser" to be associated with the Church of England escaped justice because of the church's failures. It said that the archbishop held "a personal and moral responsibility" to pursue the allegations further. In his resignation letter, Archbishop Welby acknowledged a "long-maintained conspiracy of silence".

The **COP29** UN climate conference got under way in Baku, the capital of Azerbaijan. The delegates were taken aback by the opening speech from Ilham Aliyev, Azerbaijan's authoritarian leader, who lambasted the "political hypocrisy" and "fake news" of the West. Fossil fuels are "a gift of the God", waxed Mr Aliyev, and countries like his should not be blamed for selling them on the market. Mr Aliyev's answer to greens who had threatened to boycott the conference was "Welcome to Azerbaijan."

The world this week Business

Markets continued to rally in response to Donald Trump's election victory. The S&P 500 hit another high (it has broken more than 50 records so far this year) and the Dow Jones Industrial Average closed above the 44,000 mark for the first time. The rise in Tesla's stock pushed the carmaker above a valuation of $1trn, which it last achieved in early 2022. The dollar continued to climb, hitting emerging-market currencies (over 40% of global trade is invoiced in dollars). Cryptocurrencies also made huge gains. Bitcoin surged by 30% in a week to trade above a record $90,000.

America's annual **inflation** rate rose for the first time since March. It stood at 2.6% in October, up from 2.4% in September. The core rate, which excludes volatile energy and food prices, held steady at 3.3%. Traders still expect the **Federal Reserve** to cut interest rates again next month. It recently shaved a quarter of a percentage point off its main rate, taking it to a range of between 4.5% and 4.75%. The Bank of England also reduced its rate by a quarter-point, to 4.75%.

Argentina's annual inflation rate fell to 193% in October, the first time it has dropped below 200% in almost a year. The month-on-month rate slowed to 2.7%, the lowest since November 2021. The government's ending of a freeze on meat prices has led to a fall in beef consumption in the meat-loving country.

China's latest stimulus package disappointed investors by not going far enough to boost household spending. The 10trn yuan ($1.4trn) package is aimed at supporting the country's distressed local authorities, allowing them to restructure debt through new bond issues.

Robotic vision

Helped by a strong performance from its Vision Funds, **SoftBank** reported a quarterly net profit of ¥1.2trn ($7.8bn). Expanding its push into artificial intelligence, SoftBank is building Japan's most powerful supercomputer in collaboration with Nvidia, using the first chips from Nvidia's Blackwell design. At a launch event Masayoshi Son, the Japanese conglomerate's boss, said he wanted to develop AI robotics so that a "robot can have passions as a friend".

An appeals court in the Netherlands overturned a lower court's landmark decision in 2021 that ordered **Shell** to cut emissions by 45% by 2030, including those that stem from the use of its products, based on 2019 levels. The original case had been brought by climate activists. The appeals court found that although companies have a duty of care to reduce emissions, under EU law they "are free to choose their own approach...as long as it is consistent with the Paris agreement's climate targets".

Siemens Energy reported a 12-month net profit of €1.3bn ($1.4bn), bouncing back from a €4.6bn loss in the previous year. The supplier of wind turbines has faced a gale of problems in recent years related to technical problems with its machinery. Its share price has rebounded over the past year, rising by 360%. The company has warned, however, that a second Trump presidency makes the outlook for renewable energy uncertain.

Volkswagen raised its investment in **Rivian** from $5bn to $5.8bn, as the carmakers officially began their joint venture to develop electric-vehicle technology and software. Rivian is a loss-making American startup and the investment lifeline allows it to launch its R2 model, a smaller, cheaper SUV, next year. The first VW cars to include Rivian's technology are expected to be on the road in 2027.

Just Eat Takeaway, a food-delivery company, decided to sell Grubhub for $650m. Just Eat paid $7.3bn for its smaller rival in 2021, a price bloated by the excess appetite for food apps during the pandemic. It soon regretted its purchase and wrote down Grubhub's value.

A rush to fortify homes and businesses ahead of Hurricanes Helene and Milton was a factor behind **Home Depot's** rising quarterly sales.

The release of the long-delayed "Dungeon & Fighter Mobile" game in China helped boost **Tencent's** quarterly profit, which rose by 47%, year on year, to 53.2bn yuan ($7.4bn).

The ad breaks

Two years after it started offering a cheaper subscription package that includes ads, **Netflix** said that 50% of new subscribers were now signing up for the deal, and that 70m monthly active users have the ad-supported bundle. That is up from 40m six months ago and 15m 12 months ago. Netflix has 283m members in total. It has already sold its ad slots for the two National Football League games it will stream live on Christmas Day. Viewers who escaped to Netflix to avoid TV's incessant advertising might wonder if all this will eventually sound the death knell for ad-free streaming.

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The Economist

Trumponomics tees off

What's about to hit the world economy?

CRITICS ACCUSE Donald Trump of being too chaotic to get much done. The speed of his first appointments should disabuse them. The next administration means business.

Stock and corporate-bond markets are broadly delighted with the prospect of deregulation and tax cuts in a second Trump term. *The Economist*, by contrast, has warned of a risk that mass deportation and a global trade war would do real harm. The appointments themselves attest to Mr Trump's desire for disruption, a hard line on China and absolute loyalty (see leader). With such a concatenation of signals, you may wonder what is about to hit the world economy.

The answer comes in three instalments, beginning with Mr Trump's intentions. His commitment to deregulation may be good for growth. Elon Musk, the world's richest man, and Vivek Ramaswamy, an entrepreneur-politician, have been named heads of a new outfit grandly named the Department of Government Efficiency, or DOGE. A pledge to cut $2trn from the government's annual budget is patently absurd, but judicious liberalisation could be benign. On day one the new administration could speed up legislation on permitting that is already in Congress. Mr Trump has also promised to free up artificial intelligence. The technology is immensely power-hungry. Just imagine if easier planning rules helped unleash a revolution.

Unfortunately, Mr Trump also wants to deport millions of irregular migrants and impose tariffs of up to 60% on China and 10-20% on the rest of the world. All of these would be bad for growth. For example, the costs of mass deportation could, by one estimate, run to hundreds of billions of dollars. That does not include the economic burden of labour shortages and spiralling consumer prices. Roughly half of the workers on America's farms have no legal status.

A second part of the answer is that the tensions in Mr Trump's agenda will be resolved by necessity, as the hyperbole of stump speeches comes into contact with the messy reality of governing. Policies take so much effort to enact that his administration will simply be unable to do everything all at once.

Imposing universal tariffs will take time, because they would need approval from Congress or the use of untested presidential powers. But free-trade Republican lawmakers could recoil at tariffs on America's close allies. And the use of existing law to impose a universal tariff on national-security grounds would probably be challenged in the courts. Likewise, apprehending, detaining and processing millions of people will be a logistical nightmare. Federal agencies would need to turn to state authorities for help, many of which will refuse.

The third part of the answer is that, mixed in with the intentions and priorities is the mercurial temperament of Mr Trump himself. He has a fondness for picking favourites and then dumping them. He is also beholden to nobody. In spite of his appointment to the White House of Stephen Miller, a longtime loyalist and a hardliner on immigration, Mr Trump may put growth first by making a furious noise about deportation, but limiting its real-world effect. It is the same with Mr Musk, whom markets sense may receive special favours. But will the bromance last? The only discipline on a president who has succeeded so spectacularly by defying the experts around him will be those same markets. Mr Trump has an old-fashioned regard for share prices as a barometer of success.

The conclusion markets seem to be drawing is that things will work out just fine. Although they are alive to risks of inflation and cronyism, investors are betting that tariffs and deportations will do little damage. Instead, the tax cuts will produce a sugar rush that boosts corporate profits and deregulation will bring about lasting growth.

Even if that prediction proves correct about America—a fairly big if—it is too rosy for the rest of the world. As America borrows, raises tariffs and grows, the dollar will strengthen. That will dampen trade. It will also lead to higher interest rates and greater dollar-debt burden in developing countries.

Some governments will be in the line of fire, especially if the threat to extend tariffs beyond the universal rate becomes a Trumpian negotiating tool. Most vulnerable is Mexico, which will be a target both of Mr Trump's immigration policy, because many illegal migrants cross its border with the United States, and of his trade policy, because Mexico is home to factories that send their exports north under the United States-Mexico-Canada Agreement.

Mr Trump appears to have a special animus against the snooty leaders of the European Union. Many Republicans allege that, by footing the bill for American troops in Europe as part of NATO, America is in effect paying for European welfare. For Mr Trump, the EU's huge trade surplus with America rubs salt in the wound. Europe can expect to pay.

The main target of a hostile economic policy will be China. Marco Rubio, at the State Department, and Mike Waltz, as national security adviser, both want the rivalry between the world's two biggest economies to be at the heart of American policy. As firms move supply chains out of China, a few countries may benefit. Others may strike up a friendship with Mr Trump. As a rule, though, the separation of the American and Chinese economies would be highly disruptive.

Fore!

Countries would do well to prepare for what is coming. The EU has said that it will steer tens of billions of euros' worth of spending to defence. But it has fallen badly behind in AI and has put off strengthening its own internal market for too long. China is in a better position, but it has foolishly delayed the stimulation of domestic demand (see leader).

If Mr Trump unleashes a salvo of tariffs, retaliation will exert a seductive pull, not least as a show of strength. It would, however, be an act of self-harm. Few countries are more insulated against trade shocks than America, with its large domestic market. Better to take the positive side of Trumponomics, and deregulate. If Mr Trump wants to tilt the playing-field, the best way to cope will be to become more competitive. ■

Trump's appointments

The loyalty test

The next president will go to extremes to dominate the machinery of government

ONE LESSON Donald Trump took from his first term is that personnel are everything. That could explain the blistering pace of nominations to his administration in the week since he won re-election. Unfortunately, that same insight could also explain Mr Trump's choices to become his most important lieutenants, including the nomination for attorney-general of Matt Gaetz, a cartoonishly divisive Florida congressman, who is despised even by many in his own party. Too many of them seem to have been selected mainly because their personal loyalty to Mr Trump will be unbound by any scruple.

As this was published, Mr Trump had made around 20 nominations and appointments (see United States section). Some of his picks are amply qualified—Susie Wiles, his no-nonsense chief of staff, say; or Mike Waltz, a former Green Beret, who will become his national security adviser. You do not have to share Marco Rubio's hawkishness to recognise that the senator from Florida could make a good secretary of state. Others, such as Elon Musk, are unorthodox and risky—and fraught with potential conflicts of interest—but, who knows, could turn out to be inspired.

However, other nominations are an ill omen for Mr Trump's second term. If he has his way, the Pentagon will be run by Pete Hegseth, a National Guard veteran and host on Fox News, who has made a career decrying "woke" officers. The director of national intelligence will be Tulsi Gabbard, who has taken an apocalyptic and faintly conspiratorial view of America's mission of spreading democracy.

And then there is Mr Gaetz. Attorneys-general owe their first loyalty to the law, but Mr Gaetz has been the subject of endless Congressional ethics inquiries. He was investigated, though never prosecuted, over allegations of sex-trafficking a minor by the FBI, an agency he would oversee. Given Mr Trump's campaign talk of retribution, the independence of the Department of Justice is more important than ever. Yet after Jeff Sessions, as attorney-general, recused himself in an investigation into Mr Trump's alleged links with Russia, Mr Gaetz accused him of having Stockholm syndrome.

There is a pattern here. When Mr Trump has the whip hand—over the State Department, say—he appoints conventional candidates. When he suspects that the bureaucracy will resist him, he favours people who will fight the institutions they are supposed to be running.

You might say that Mr Trump was elected to take on Washington. But he has no mandate to wreck departments with the power to make war and prosecute citizens. On the day Mr Hegseth was nominated to the Pentagon, Republicans close to Mr Trump were reported to have a hit list of officers linked to General Mark Milley, a former top soldier who condemned Mr Trump as unfit to be president. America should not pick its generals using political loyalty tests.

The Senate, which has the power to approve or reject Mr Trump's nominees, made its own appointment this week, when Republican senators picked John Thune, from South Dakota, to become majority leader. Mr Trump had intimated that he preferred Rick Scott, a MAGA loyalist.

Mr Trump's choices amount to another loyalty test, this time for the Senate, where moderate Republicans must now set limits on the next president. Mr Thune should start as he means to go on, by ensuring that the Senate exercises its right to vet appointments—and that a clear majority rejects those who, like Ms Gabbard, Mr Hegseth and especially Mr Gaetz, are manifestly unsuitable. ■

Climate change

The long haul

Everything about climate change may seem grim. It isn't

IF THE FIELD of global warming seems to offer little that is new, there is good reason. Very little in climate change is actually changing. Not every year is warmer than the previous one, as this year is; not every year sets a global temperature record, as this one will. But the trend is inexorable.

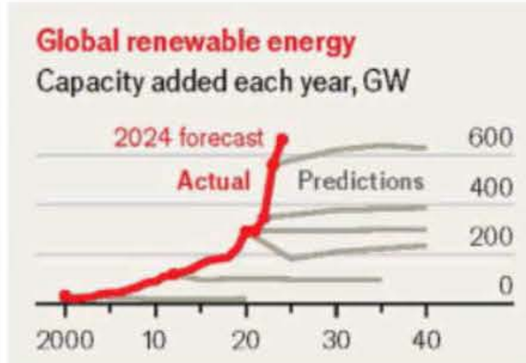
With each of these years come familiar disasters, terrible for those affected, frightening—and sometimes guiltily fascinating—to those looking on. This year it was flooding in Brazil, Nepal, Spain and elsewhere; heatwaves first in Asia and the Sahel, and then America and Mexico. Autumn brings the annual rounds of diplomacy at the UN General Assembly and the inevitable diplomatic-roadshow-cum-trade-fair for the climate: COP, held this year in Baku, Azerbaijan's capital.

True, there are novelties. The climate establishment throws up its arms at the re-election of Donald Trump (see United States section), and it has its reasons: his second term is unlikely to be good for Americans afflicted by climate-related disasters, or climate scientists seeking funds. American emissions may rise, diplomatic engagement will fall. But graphs of global temperature and global emissions do not respond to shifts in administration in single countries. All remains as it is.

One final fixed feature, though, inspires hope rather than dread or resignation. Every year renewables get cheaper—especially solar panels; every year the installed base grows. Last year China added more solar capacity at home than the whole world could boast in 2015, when the Paris agreement was ▸▸

signed. As roll-outs get bigger, prices drop lower and larger roll-outs become feasible. This is the change that you can rely on. It provides reason to believe that the world is not as stuck as it seems. Emissions can and will fall.

Technology has always been a vital part of the fight to regain control over the climate. At the moment it is close to the whole story. Economic modelling has routinely underestimated the rate at which solar panels, batteries and wind turbines can get cheaper. That is one of the reasons why, as our Briefing reports, estimates of the cost of decarbonising the energy system are routinely too high. The difference between the annual investment needed to meet new energy demand with clean technology and without it appears to be under 1% of all countries' GDP.



Acknowledging the centrality of technology does not mean simply leaving it to get on with the job. The history of energy shows that new technologies do not sweep old ones away. They tend to be additions, not replacements, and often provide new ways of using old fuels (see Culture section). To get a more thorough displacement this time means rearranging the world so that renewables make even more sense.

Grids need to be expanded to the sites where these new sources of energy are best exploited. They need to be re-engineered, through storage and demand management, to deal better with renewables' intermittency. Grids must also be ready to take on new sources of constant power. Ambitious schemes to achieve these goals, like those of Ed Miliband, Britain's minister for climate change, are welcome (see Britain section). But they are not enough.

A disproportionate share of the necessary technology comes from China. A huge internal market, a lack of domestic oil and gas, world-class manufacturing networks and lavish subsidies have seen it grow into the dominant force in solar panels, batteries, electric vehicles and more (see China section). If the transition to a clean-energy world is to be cheap, these goods need to be able to find all the markets they can. A global trade war would do terrible damage.

Poor countries in which capital is costly need help. Renewables have higher capital costs and lower operating costs than technologies which have to buy fuel, and that hurts people without ready access to finance. Rich countries have moral and pragmatic reasons to provide financial help to the global south. They could, for example, guarantee loans so as to lower their cost. There is also a case for programmes to help countries ditch coal, the dirtiest fuel. Alas, the "Just Energy Transition Partnerships" meant to bring this about have not lived up to their promise (see International section).

One cause of inertia is that abandoning coal does grave harm to local populations and to vested interests; penny-pinching by donors does not help either. Now that alternatives to coal are available, emissions pricing should be a useful additional tool. But there is an urgent need for other measures, too.

Getting these things right will hasten the day when emissions at last start to fall; it should also speed up the rate at which that fall occurs. This will not happen fast enough to meet the 1.5°C limit envisioned in the Paris agreement; but it might yet keep the world below 2°C. This is not ideal. There is a big difference between the two temperatures in terms of risk, damage and suffering, and if the bill for mitigation is often exaggerated, that for adaptation is ignored. The world needs to face those further challenges head on. And the fatalistic sense that nothing can change must itself be changed. ■

China

Not too early to say

China should not wait to stimulate its economy

JOURNALISTS LOVE a telling quote—so much so that they will sometimes seize hold of a telling misquote. Zhou Enlai, who was China's first Communist prime minister, was once asked what he thought of the French revolution. "Too early to say," he replied. His priceless answer was based on a misunderstanding: he was referring to the student unrest in Paris in 1968, only four years earlier. But his words helped cement the reputation of China's leaders for farsightedness.

This long-termism may be to blame for China's unhurried response to its urgent economic woes. Its property market, which peaked in 2021, is still fragile. Consumer confidence, shattered by the covid-19 lockdowns in 2022, has never recovered. The consequences include lacklustre spending, dwindling fiscal revenues and deflationary pressure. Figures released on November 9th showed factory-gate prices falling, year-on-year, for the 25th month in a row.

In September China's leaders acknowledged these "new" problems and promised a more forceful response. Hopes rose for a bold fiscal stimulus that would provide handouts to consumers and mobilise more public money to revive interest in property. But a flurry of subsequent press conferences—from the planning agency, the finance ministry and the housing ministry—have offered little of substance.

In a final disappointment, a meeting of senior legislators between November 4th and 8th also failed to spell out a new stimulus package (see China section). What will China do to respond to inadequate demand, an ailing property market and persistent deflation? It is, apparently, too early to say.

The legislators did unveil a plan to refinance the implicit debts of local governments. The debt swap will alleviate financial risks and reduce borrowing costs. But the money expected to be saved in the next five years will amount to less than 0.1% of GDP over that period. That is far too little to get the economy back on track.

China's leaders may believe there is already enough other stimulus working its way through the economy to help GDP meet the official growth target for this year of "around" 5%. In July, for example, they expanded a scheme to encourage consumers to trade in old cars and appliances for new ones. Property sales also picked up in recent weeks in China's big cities, ▸▸

after regulators cut mortgage costs and reduced down-payment ratios for second homes. Nomura, a bank, this week raised its growth forecast for 2024 to 4.8%.

China's leaders may also be biding their time. In keeping with their reputation for farsightedness, they may be keeping their powder dry until they know how much damage Donald Trump's second presidential term will inflict on their country's economy. The 47th president has threatened to slap tariffs of 60% on Chinese goods as an opening move—and to raise them higher if he chooses.

But this watchful waiting would be a mistake for China. Greater fiscal stimulus today does not preclude even more stimulus later if necessary. The country's sovereign-bond yields are historically low, suggesting ample demand for the government's paper. An onslaught from America would be likely to push them lower still. Whatever fiscal limits apply in China, they are still nowhere near biting.

China would also be in a stronger position to withstand American tariffs next year if the government successfully reflated the economy first. A higher rate of inflation would, for example, give China's central bank more room to respond to further setbacks by lowering real interest rates.

By the same token, China will be in a weaker position to navigate a second trade war if it allows deflation to become further entrenched before the shooting starts. Falling prices would increase the country's real burden of existing debts. They may also lead to a round of wage cuts by firms, which would only compound the problem.

Aux armes!

China may be keen to husband its fiscal ammunition. But China's true resources are the labour and capital at its disposal. Every month they remain underemployed is a wasted month—time the economy will never get back. China is heading into a trade war. Leaders do not prepare for war by counting their money, but by mobilising their manpower. ■

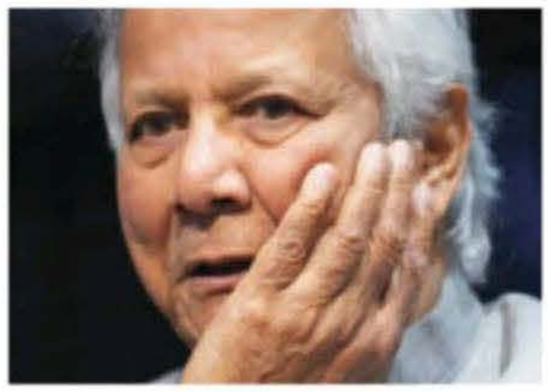
Post-revolutionary Bangladesh

Caretaker, take care

Muhammad Yunus, Bangladesh's interim leader, needs to set a timetable for elections

REVOLUTIONS OFTEN end badly. Bangladesh's autocratic leader, Sheikh Hasina, was overthrown by student-led protests in August. Muhammad Yunus, a microfinance pioneer and Nobel peace laureate who now leads a caretaker government, has restored order. The police are mostly back in their posts, having abandoned them when Sheikh Hasina, who had ordered them to shoot and kill protesters, fled to India. The economy is no longer in free-fall. Remittances, worth 5% of GDP, have stabilised. Yet huge challenges loom (see Asia section). How Bangladesh deals with them will affect not only the lives of its 173m people, but also its neighbours and the rivalry between India, China and the West.

Awkwardly, Mr Yunus leads a government that has no legal basis. Sheikh Hasina scrapped a constitutional provision that allowed for interim governments in 2011. So his legitimacy rests on his moral authority and popularity—a rickety foundation, unsupported by any vote. Public goodwill could cool. Despite the stabilisation of the economy, food inflation was nearly 13% year-on-year in October. Adani Group, an Indian firm which provides around 10% of Bangladesh's electricity, has started to curb supplies, citing payment arrears. Flooding has hurt rice production.



Mr Yunus is wonkish. He has no experience of governing, and is squeezed between two forces. The student protesters who propelled him into power are making increasingly extreme demands. These include banning the Awami League (AL), Sheikh Hasina's party, and trying to have her extradited from India to face charges for what they allege are crimes against humanity. The other force is the Bangladesh Nationalist Party (BNP), the main rival to the AL. It wants Mr Yunus to call elections soon, perhaps as early as June, and may stage mass protests until he does so.

Some alarming scenarios are possible. The student protesters, frustrated by Mr Yunus's fairly tolerant approach to the AL, could take to the streets again, this time threatening violence. In a country with a history of political killings, this is a grave worry. Hindus, who make up 8% of the population and include many AL supporters, have already been attacked by members of the Muslim majority.

Another concern is that Mr Yunus may capitulate to the demands of the BNP before he has had time to enact the reforms needed to fix a rotten judicial system and to ensure that an election can be free and fair. If the BNP were to win a flawed, premature poll, it might herald a return to Bangladesh's bad old pattern of power alternating between thuggish oligarchies.

What can be done? As the world prepares for a second Trump presidency, Bangladesh is hardly the first priority for any government. Still, other countries can help by ensuring that Bangladesh avoids a financial crisis while it is enduring a political one. The country already has a $1.2bn package of aid from America and a $4.7bn bail-out from the IMF, but it could need more. America's government is helping Bangladesh's central bank retrieve some of the $17bn it says was siphoned abroad under Sheikh Hasina. If Western lenders and India do not keep the country afloat, it may become indebted to China instead, which has dangled the promise of an additional $5bn in grants and loans.

The most important tasks are for Mr Yunus. After three months in charge, he must now establish a timetable for elections, perhaps in a year or so. He must then do more to explain why a delay is needed to push through legal and electoral reforms that will allow democracy to thrive in the long run. Many people cheered when Mr Yunus became the nation's caretaker. But he needs to spell out a clear plan for how he will govern, and how he will hand over power. If he leaves it too late, Bangladesh's revolution could yet turn dark. ■

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Letters

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In support of Mr Trump

The Economist's take on Donald Trump in its endorsement of Kamala Harris was a hatchet job ("What could possibly go wrong?", November 2nd). You recounted several noteworthy achievements of Mr Trump's first presidency, including his management of the economy, awakening the free world to the dangers of China and funding a covid-19 vaccine. Any issues you raised were matters of differences in policy, and not, in fact, the risk that you say Mr Trump represents.

For example, it is fatuous to suggest that Mr Trump presents an exceptional risk of getting America and its allies into a war. There was relative peace during Mr Trump's first term. It was Joe Biden who so mismanaged foreign policy that he made a shambles of getting out of Afghanistan, which probably emboldened Vladimir Putin to invade Ukraine, Iran to encourage Hamas and China to engage in psychological warfare against Taiwan and other countries in Asia.

You then described Mr Trump's proposals on the economy as inflationary and fiscally unsound, when in fairness, most experts point out that the few solid proposals put forward by Ms Harris were also inflationary and fiscally unsound. How could you make such a distinction when both suffered from the same risks? The thumb was clearly on the scale here.

Finally, you seem to view Mr Trump's rantings as if they are policy objectives, when we should take them for what they are: hyperbole.

JACK FORNACIARI
Washington, DC

You referred to Ms Harris as an "underwhelming machine politician". What was the basis for such a slur? America has seen many machine politicians, some honourable (Harry Truman), some not so much ("Boss" Tweed), and some somewhere in between (Richard J. Daley). Ms Harris largely made her own way from prosecutor to California's attorney-general, the Senate, the vice-presidency and eventual nominee for the presidency. What is "underwhelming" about that?

C. EARL EDMONDSON
Davidson, North Carolina

Although you endorsed Ms Harris you put Mr Trump's picture on the cover. Probably more people saw that cover on newsstands than read the endorsement. *The Economist*'s logo coupled with Mr Trump's glistening smile suggests to many that you had endorsed him and not her. Were you hedging your bets?

ED FERRELL
Rehoboth Beach, Delaware

Tackling obesity

"The everything drugs" (October 26th) painted an almost utopian vision of new GLP-1 receptor agonists. Medications like Ozempic are making waves in the treatment of obesity, diabetes and other conditions, but in medicine there's rarely a magic bullet. Obesity is not just about shedding pounds. Diet, genetics, environment, behaviour and mental health all play roles and these drugs don't address these long-term root causes. And lifestyle changes are important. We've seen this with conditions like hypertension and type-2 diabetes. Patients start to rely on medication while diet, exercise and other changes take a back seat.

Sticking to a treatment plan, especially one with side-effects like nausea or pancreatitis, is challenging. I've had patients who start GLP-1 drugs with high hopes, only to stop because of the side-effects or the high cost; $500 a month for some. For these drugs to make a real impact, people need to stay on them long term, but that's not always realistic. The conversation about sustainability is missing.

And even the most promising medications can come with unforeseen risks, as with fen-phen in the 1990s. Doctors initially hailed fen-phen as a miracle weight-loss drug, but severe, life-threatening side-effects, including heart valve damage and pulmonary hypertension, were soon apparent. Despite its initial promise, the drug was pulled from the market after numerous deaths and adverse events. Today's GLP-1 drugs are not comparable to fen-phen in mechanism, but this history reminds us that no drug is without risk. Over-relying on medication can lead to dangerous consequences.

DR STEWART LONKY
Los Angeles

Ethiopia's peace deal

You described the peace agreement signed by Ethiopia's government and the Tigrayan People's Liberation Front in 2022 as "The not-quite-peace deal" (November 2nd). Your claim that Abiy Ahmed, the prime minister, initiated a military campaign to overthrow the TPLF is a misrepresentation of the character of the conflict in the Tigray region. The Pretoria Agreement helped end the conflict in Tigray, but there have been difficulties with its implementation. The conflict within the TPLF leadership has been a significant obstacle to its effective execution.

The government of Ethiopia is fully committed to adhering to the letter and spirit of the peace deal. Since the deal was signed the Ethiopian government has been actively working to ensure accountability and provide victims with redress through national mechanisms. Among these are the adoption of a transitional justice policy and the creation of a National Dialogue Commission.

Addressing the historical injustice that denied Ethiopia access to the sea is another aspect of this broader endeavour. Ethiopia, a large landlocked country, cannot sustain its economic growth and maintain durable peace without dependable sea access, which has an impact on the stability of the whole region. Ethiopia wants to collaborate closely with its neighbours to establish a win-win approach to achieve this goal and establish an environment of encouragement for growth and a better future for the generations to come.

All misunderstandings do not necessarily lead to war, and predicting regional conflicts based on this presumption is not only erroneous but also insidious.

BIRUK MEKONNEN DEMISSIE
Ambassador of Ethiopia
London

Helping to cope with a death

Regarding what to read about grief and bereavement (The Economist reads, October 19th), I find great comfort in creating obituaries and biographies in memorials for my deceased relatives on the website findagrave.com. I can write about what their lives were like and what was important to them. I put my great-great-grandfather's civil-war diary into his entry. Each person can be linked to parents and siblings and generations before.

KAREN NILSEN
Warminster, Pennsylvania

International opinion

Congratulations on the launch of your Telegram column on world affairs (November 2nd). The inaugural column was excellent and perceptive, but it omitted one important difference between the cold war and today's geopolitical rivalries. In the old days the West had politicians, diplomats and military leaders of the calibre of Winston Churchill, Harry Truman, George Marshall and Dwight Eisenhower to turn George Kennan's analysis of containment into actual policies. In today's more complex world, such people are sadly missing.

AVINASH DIXIT
Princeton, New Jersey

I expect Telegram will be rich and insightful. To ensure this is so, I remind you of the advice that Marshall gave to Kennan in 1947, when he asked him to organise and head the State Department's new policy-planning staff: "Avoid trivia."

ROBERT HAFFA
Naples, Florida

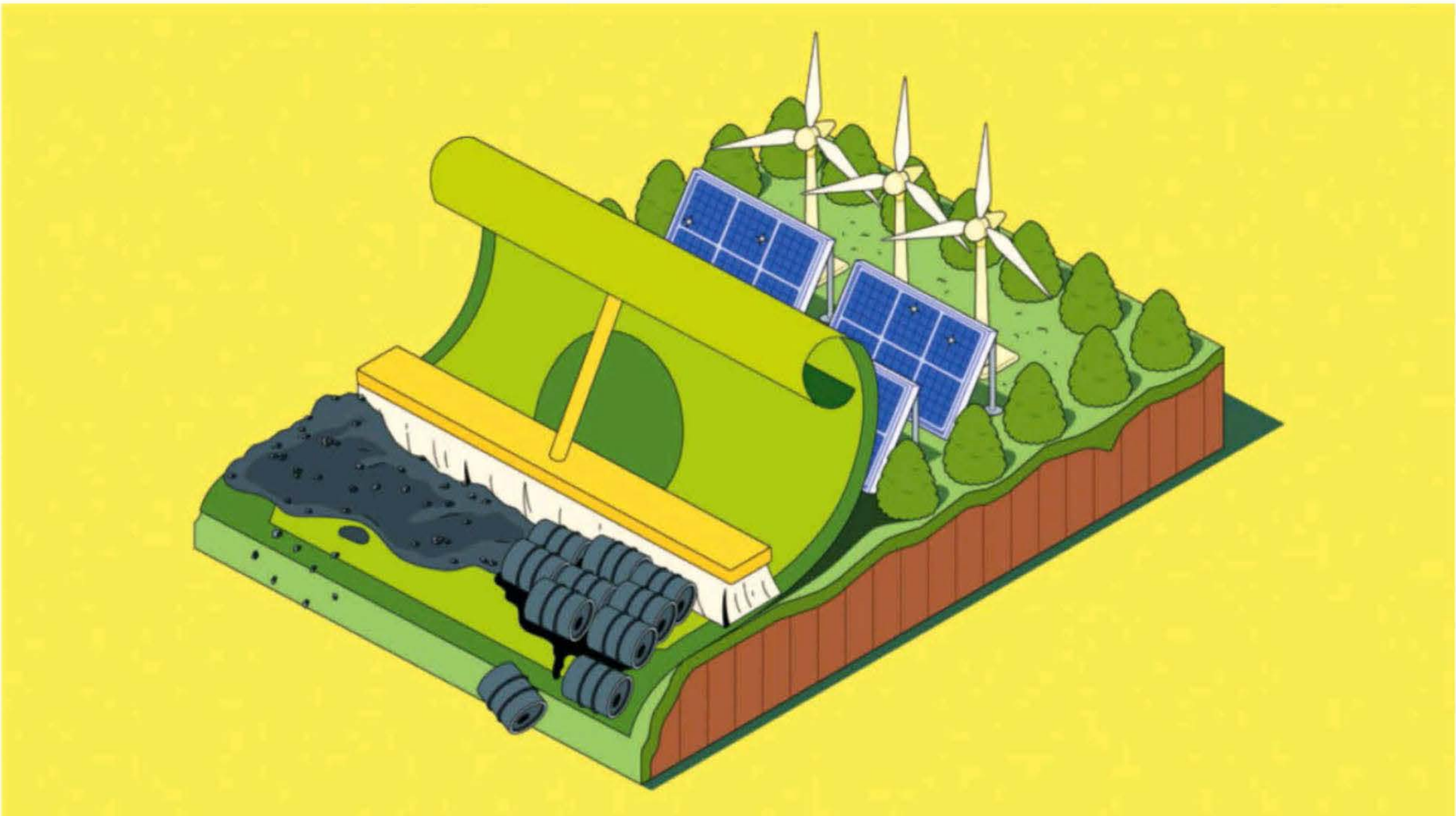
‘Bel Can-do’

In November 2022 we introduced the Bel Canto. Instantly making haute horology accessible. This subtly chiming timepiece caused a cacophony. And enormous demand. (The first 600 sold out in 8 hours.) Asked could we produce 5,000 annually, our Swiss CEO Jorg Bader Snr replied: “No. But we’ll find a way.” Because that is our way. Today, our supply chain is as fit for purpose as the gear chain of the new Bel Canto Classic. Which features a dressed-up dial. A dialled-down handset. And a gorgeous guilloché finish, with a precision only achievable (and affordable) using a femto laser. Outward displays, we like to think, of inward grace.

(Bel Can-)Do your research

Christopher Ward

christopherward.com



Carbon bargain

The energy transition will be much cheaper than you think

PAYING THE CLIMATE BILL

PEOPLE WHO want to do more to fight climate change and those who want to do less tend to have one thing in common. Both sides agree that decarbonising the world economy will be dauntingly expensive. At this week's annual UN climate summit, in Baku, Azerbaijan, the numbers being bandied around are in the tens of trillions of dollars.

Many see such spending as a colossal waste. Donald Trump, America's president-elect, denounced the Paris agreement to cut global emissions, reached at the 2015 climate summit, as something that "hurts Americans, and cost a fortune". He withdrew America from it in his first presidency. Because America has since rejoined, he is likely to do so again (see United States section). Climate activists, for the most part, do not dispute the hair-raising price tag; they simply consider the expense worthwhile when weighed against the catastrophic damage unchecked climate change is likely to inflict.

Yet this one point of agreement between climate activists and carbon addicts is, in fact, wrong. Greening the world economy will be much cheaper than the two groups imagine. *The Economist* has looked at estimates of the global cost of an "energy transition" to a zero-emissions world from a range of economists, consultants and other researchers—the sort of estimates that routinely form the basis for policymaking. They range from around $3trn a year to almost $12trn a year, which is indeed a lot. But these figures are overblown in four important ways.

Bakuky assumptions

First, the scenarios being costed tend to involve absurdly speedy (and therefore expensive) emissions cuts. Second, they assume that the population and economy of the world, and especially of developing countries, will grow implausibly rapidly, spurring pell-mell energy consumption. Third, such models also have a record of severely underestimating how quickly the cost of crucial low-carbon technologies such as solar power will fall. Fourth and finally, the estimates disgorged by such modelling tend not to account for the fact that, no matter what, the world will need to invest heavily to expand energy production, be it clean or sooty. Thus the capital expenditure needed to meet the main goal set by the Paris agreement—to keep global warming "well below" 2°C—should not be considered in isolation, but compared with alternative scenarios in which rising demand for energy is met by dirtier fuels.

The incremental bill to cut emissions is likely to be less than $1trn a year, which is to say less than one percent of global GDP—not peanuts, but not an unaffordable pipe dream, either. That may sound optimistic, but it is probably still an overestimate, since it corrects only for the fourth flaw in most estimates: the failure to account for the cost of business as usual. Slower economic growth, cheaper technology and more modest targets for when the ▸▸

world reaches net zero could reduce the price tag even further.

According to the International Energy Agency (IEA), a think-tank for rich countries, roughly $3trn, or 3% of global GDP, has been invested in energy in 2024. That is a record, fuelled partly by cyclical investment in oil and gas and partly by rising investment in clean power generation, which was level in the 2010s, but has been growing since. Roughly three-quarters came from private sources and a quarter from governments, in line with the recent trend.

The recipients of that investment, though, have changed profoundly since the Paris agreement. In 2015 less was being invested in clean technology than in fossil fuels. Today clean technology receives almost twice as much. This year solar power should account for $500bn, more than every other source of generation combined.

These numbers flatter clean energy somewhat, since they include investments in electric vehicles (EVs), heat pumps and improvements to electric grids, which do not in themselves lower emissions that much. Instead, they pave the way for big emissions cuts, provided that the electricity used comes from low-carbon sources. The spread of EVs in China, for instance, reduces global oil demand but makes only a small contribution to reducing emissions since the vehicles' batteries are charged from China's coal-heavy grid.

Nonetheless, the outlook for the climate is improving. In 2015 the "Emissions Gap Report" the UN Environment Programme (UNEP) produces before every climate summit projected that, on the basis of policies then in force around the world, global average temperatures would be almost 5°C higher than in pre-industrial times by the end of the century. This year's report puts that number at just over 3°C. Other forecasters are even more optimistic: the IEA reckons current policies will yield around 2.4°C of warming. Bloomberg New Energy Finance (BNEF), a research outfit, thinks existing policies and the falling prices of green technologies will lead to 2.6°C of warming by 2050. Wood Mackenzie, a consultancy, is forecasting 2.5°C by 2100 as its base case.

None of these projections, however, imagine that the world will keep warming below 2°C, as the Paris agreement stipulates, let alone below 1.5°C, the supplementary target that signatories said they would try to meet. There is a wide range of views about how much investment is needed to meet these goals. Naturally, though, staying below 1.5°C is costlier than staying below 2°C. It is the cost of the 1.5°C target that typically gets the most attention.

To estimate costs, economists combine a model of the economy and a scenario that represents the achievement of a given goal. This could be a temperature target, such as the "pathways" to 1.5°C or 2°C laid out by the Intergovernmental Panel on Climate Change (IPCC), a UN body. Or it could be a target for the global volume of emissions at a given time. The IEA's net-zero scenario assumes that, by the middle of the century, all greenhouse gases pumped into the atmosphere will be offset by equivalent removals. There is a tendency to see net zero by 2050 as being roughly equivalent to meeting the 1.5°C goal, although modellers normally allow a brief overshoot in temperature, which falls back as the removal of carbon from the atmosphere gathers pace.

The IEA's modelling finds that reaching net zero by 2050 will require $5trn a year of investment in clean energy by 2030. That is more than twice the $2trn a year it reckons is currently going into clean energy and two-thirds more than its estimate of total current investment in energy. A similar scenario from BNEF involves $5.4trn a year this decade. McKinsey Global Institute, a research outfit, puts the annual cost of net zero by 2050 at $9.2trn; Wood Mackenzie at just under $3trn. UNEP estimates that a range of $7trn to $12trn per year will be needed by 2035 to limit warming to 1.5°C.

What money cannot Dubai

This wide divergence stems from different modelling methodologies. Whatever your approach, though, applying any model to near-impossible scenarios yields suspect results. And limiting warming to 1.5°C is, broadly speaking, impossible. The Global Carbon Budget, a consortium of scientists, estimates that temperatures will permanently reach that level in six years at the current rate of emissions. Preventing any further climate change would entail ending all greenhouse-gas emissions within that time—a prohibitively expensive, if not impossible, task.

Keeping global warming below 2°C is much more plausible, happily. The Global Carbon Budget estimates that it will take 27 years for the world to hit that increase in temperatures at the current rate of emissions. The big expansion of breathing room, in turn, allows for a slower and therefore cheaper transition.

Yet much analysis remains focused on more stringent goals. That is natural. The inclusion of an aspiration of 1.5°C in the Paris agreement was considered a great victory by the most vulnerable countries and by climate activists. Three years later the IPCC produced a vast report showing that even 1.5°C of warming would be very damaging, and that 2°C would be catastrophic for many countries and ecosystems. The extent and severity of the harm rises inexorably with the temperature. But when trying to decide what to do, it is of little help to demonstrate that achieving the impossible is impossibly expensive.

Another problem with the models is their assumptions about economic growth. Matt Burgess of the University of Wyoming and colleagues note that the IPCC's projections have tended to overestimate economic growth in both the rich and poor worlds. They suggest that the worst case for economic growth among the "Shared Socioeconomic Pathways" (SSPs) the IPCC uses in its modelling is in all likelihood more of a best-case scenario. They forecast GDP per person based on the historical relationship between its absolute level and its rate of growth. That yields much lower projections than SSP2, supposedly a "middle of the road" scenario (see chart 1).

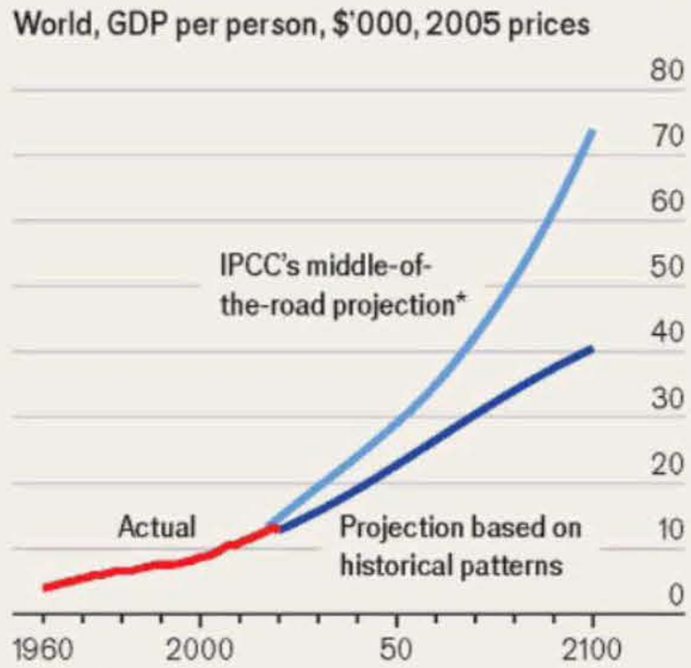
Even the IEA's assumption of 2.7% annual average global growth until 2050, although in line with recent experience, may in the end prove optimistic. It is based on projections of population growth from the UN that have consistently failed to foresee drops in birth rates in the developing world. Fewer people means lower economic growth, all other things being equal. And an older planet, with even fewer people of working age, is likely to grow more slowly.

Just as relaxing the temperature target leads to big cost reductions, so does lowering the demand for energy as a result of slower economic growth. And just as with missing the 1.5°C target, this is not really a good thing. A world with lower growth is a bad one in many ways, for the poor in particular. If higher growth could somehow be arranged, especially in the poorest countries, that would be a boon for the world, even if it meant that more money would have to be spent on decarbonisation. But basing estimates of the cost of decarbonisation on wishful thinking about growth rates makes them unduly expensive. To get an accurate picture, better to be realistic.

Economic modellers also have a poor record of predicting technological advances. They overestimate the take-up of some technologies (such as carbon capture and ▸▸

Another big mark-up 1

World, GDP per person, $'000, 2005 prices



Source: "Multidecadal dynamics project slow 21st-century economic growth and income convergence", by M. Burgess et al., 2023 *SSP2

storage, whereby carbon dioxide is sucked out of the smokestacks of power stations and factories and stashed away safely underground) and severely underestimate the falling costs of others, most notably solar panels and lithium batteries. Rupert Way of the University of Cambridge and others have modelled an energy system in which the cost of solar power, wind power, lithium batteries and hydrogen electrolysers falls according to "Wright's law". This holds that every doubling of production sees unit costs fall by a fixed percentage, with that percentage derived from past experience. In this scenario emissions fall so rapidly that even the 1.5°C target can be met at minimal cost.

In practice bottlenecks always form in fast-growing industries, impeding the spread of new technologies despite falling costs. As cheap as solar power has become, for instance, securing grid connections for it remains a slow process in many countries. By the same token, there are fewer than two dozen ships outside China capable of installing an offshore wind farm. All of them, unsurprisingly, are booked up for years in advance. Modellers try to reflect these obstacles by placing arbitrary limits on how quickly the cost of new technologies can fall. But they have tended to apply these brakes too heavily, especially for renewable power. The IEA's predictions of renewable generation capacity have repeatedly fallen wildly short over the past decade (see chart 2).

Another factor that exaggerates the cost of decarbonisation is the failure to consider the counterfactual in which decarbonisation does not take place. Wood Mackenzie has devised a "delayed transition" scenario, in which trade tensions and geopolitical strife lead countries to hold back on their transition to a zero-carbon energy system. This leads to 3°C of warming. But it still entails $52trn of investment in the energy system by 2050. The same consultancy's estimate for the cost of getting to 2°C is $65trn.

In other words, the cost in terms of energy investment of doing almost nothing about global warming is not that much lower than the cost of limiting global warming to 2°C. The additional $13trn that Wood Mackenzie thinks would be required over 25 years translates to roughly 0.5% of current global GDP a year—and less as the world economy grows. This is in broad agreement with a paper that David McCollum, a climate scientist, and others published in 2018. That put the incremental cost of decarbonising the energy system to meet a 2°C goal at $320bn a year, which is equivalent to $400bn today. Even UNEP's estimate of a $7trn-12trn annual cost to meet a 1.5°C target is reduced to between $900bn and $2.1trn once investment that would happen anyway is excluded. It would fall even further if less expansive assumptions were used about future economic growth.

There is a catch: the timing of the necessary investments is not the same in a low-carbon world as in a grimy one. Business-as-usual scenarios tend to assume that investment will be spread out roughly evenly across the period under consideration. The strictures on cumulative emissions that a 2°C carbon budget involves mean that more investment in clean energy is needed earlier in the forecast period. The Energy Transitions Commission, an industry initiative, reckons that total clean-energy investment must quadruple from around $1trn in 2020 to $4trn in 2040 before falling back again. Investment in fossil fuels will decline on a similar trajectory, reducing the net cost and, eventually, leading to operational savings from the much lower demand for fossil fuels.

Sharm reduction

But even assuming the costs are front-loaded, the tab for reaching 2°C need not be overwhelming. And though 1.5°C is not achievable, the models also suggest that spending more now might put Earth on a path to 1.8°C of warming or less. Reducing overall warming by a few tenths of a degree might in fact pay for itself, insofar as the world would suffer less damage in total from global warming.

Three problems could yet blight this rosy outlook. The first is that, although decarbonising power generation and transport is the most important element in mitigating climate change, it is not the only one. There is also agriculture, which is a big source of greenhouse gases other than carbon dioxide, such as methane and nitrous oxide. The technologies that might help reduce these emissions are much less established. It is therefore much harder to make any confident predictions about the future cost of curbing these emissions.

Mismatched incentives are another problem. The people who will suffer the most harm from global warming are not the people in the best position to pay to curb it. Poorer countries need more investment but cannot afford it.

This is made worse by the cost of capital. Most climate scenarios have historically assumed a single cost of capital for the whole global economy. But the poorer countries where most is at risk face a higher cost of capital than richer ones (see Finance & economics section). The Climate Policy Initiative, a think-tank, calculates that investors in a solar farm in Germany need a return of 7% on the capital invested to break even, given typical borrowing costs. In Zambia prohibitive lending rates for business raise the necessary return to 38%. Unless financing costs in the developing world can be reduced, the price tag for decarbonisation will rise.

The final caveat is that models, almost by their nature, tend towards the rational. Policy is less reliable in this respect. Things which should be affordable are often in practice exorbitant because of incompetent delivery, constraints imposed by other political goals and graft.

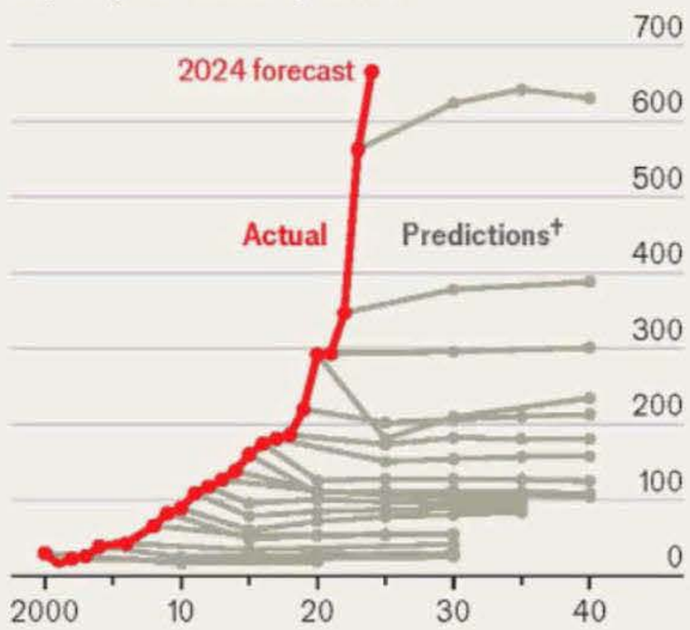
Most models assume that society will try to complete the energy transition as cheaply as possible. Yet that definitely will not happen. Many governments feel the need to rule out some useful techniques to lower the cost, such as carbon taxes, and adopt unnecessarily expensive methods instead, such as subsidising the manufacture of emissions-cutting technology to help boost their industrial base. There is often a political imperative to assuage mining lobbies or fossil-fuel-rich regions, or to protect manufacturers unable to compete with cheaper foreign producers of batteries, electric vehicles or solar panels.

Sometimes there is a tussle over how to spend whatever money politicians set aside for climate, in which preparing for climate change competes with curbing it. This is a genuinely hard trade-off, akin to a prisoners' dilemma. The less the world as a whole spends on decarbonisation, the more rational it is in any given country to spend a bigger proportion of the climate budget on adaptation, not mitigation.

As important as these notes of caution are, however, they do not alter the fact that the cost of a transition away from fossil fuels is consistently exaggerated. This is no coincidence: climate sceptics and climate activists both have reason to talk up the expense. The sceptics can use alarming numbers as a reason not to bother; the activists can deploy them to demand more spending. In fact, climate change is neither the end of the world nor an expensive hoax. It is a real and difficult problem, but one that can be curbed affordably. ■

Unshakable pessimism 2

Global renewable energy*, capacity added each year, GW



*Includes solar, wind, hydropower, bioenergy, geothermal and marine †Existing-policies scenario, lower-end estimates
Source: IEA

United States

The transition

They're hired

WASHINGTON, DC

What Donald Trump's team suggests about how his presidency will go

AFTER DONALD TRUMP won the presidential election in 2016—when he was a former television star rather than a former president—he managed the White House transition as if he was staging his reality show, "The Apprentice". Aspiring cabinet members arrived at the tower that bears his name in New York and walked past TV cameras. That series was drawn-out, with celebrity appearances, including by Kanye West. This time Mr Trump is directing a tighter show: deliberating at his estate at Mar-a-Lago away from cameras and issuing his hiring verdicts over social media at a much faster pace. Unfortunately, the outcomes are hardly saner.

The most alarming choices came in a 24-hour period. On November 12th Mr Trump announced that Pete Hegseth, a Fox News personality who served in the National Guard, would be defence secretary (see story in this section). Mr Hegseth is one of the few who defended Mr Trump's statement that there were "fine people on both sides" of protests against a white-supremacist rally in Charlottesville, Virginia, in 2017. He is preoccupied by the scourge of wokeness in the army but has no experience in government.

Mr Trump also announced that Tulsi Gabbard, a conspiracy-minded Democrat-turned-Republican who is so free-spirited that she met Bashar al-Assad, Syria's murderous dictator, and declared him "not the enemy of the United States", would be director of national intelligence. Worse, he decided that Matt Gaetz, a flamboyant Florida congressman, would be his attorney-general. The FBI, over which the attorney-general has supervisory control, had probed allegations that Mr Gaetz sex-trafficked a minor. It brought no charges, but Mr Gaetz later faced an investigation by the House Ethics Committee. (He denies any wrongdoing.) He is an ultra-loyalist, who last year pledged that if the FBI and other agencies "do not come to heel" they should be abolished or defunded.

All of these are sensitive positions in which Mr Trump felt that he had been previously betrayed. His past attorneys-general acted with too much independence and too little like his consigliere; top intelligence officials attracted his ire for probing his links to Russia; his past defence secretaries and senior generals kiboshed his ideas. With these selections, Mr Trump indicates that he does not plan to tolerate such dissent this time. Those suspected of disloyalty (or disguised neoconservatism) are not welcome. Choices this bizarre may face difficulty being confirmed by the Senate, even one with a Republican majority. Perhaps that's the point. Four defecting Republican senators would be sufficient to reject them, but blocking all three picks would be uncharacteristically defiant.

Mr Trump's other appointments—at departments that he perhaps does not feel personally wronged by—are more conventional. Marco Rubio, a Florida senator, is his selection to be secretary of state. This would be an encouraging pick for Ameri- ▸▸

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ca's allies: Mr Rubio co-sponsored a bill to make it harder for the president to pull America out of NATO. As the Republican Party has moved in a different direction he has too, embracing Trumpism while keeping some of his old instincts. He has made supportive statements about Ukraine (yet voted against the most recent bill to arm it, citing the need to prioritise border security). Mr Rubio, the child of Cuban émigrés, has a hereditary anti-communism that has been redirected at China.

Other foreign-policy appointments have similar views and credentials. Mike Waltz, a former Florida congressman, is to be national security adviser (see story in this section). Like Mr Rubio, he sides with the "prioritisers" in MAGA-land such as J.D. Vance, the incoming vice-president, who argue that taking the Chinese threat seriously requires reducing commitments to European security and to Ukraine. Elise Stefanik, the choice to be UN ambassador (the sixth woman in a row to hold this position), is a congresswoman from New York who has distinguished herself as one of Mr Trump's most enthusiastic fans in the House. She is best-known for obliterating college presidents in hearings on campus antisemitism. This seems a solid résumé for someone to represent an administration which mistrusts multilateralism in the world's highest-profile multilateral forum.

And then there are the weirder appointments—for departments that do not yet exist. Mr Trump announced that he would tap Elon Musk, the world's richest man, to run a new commission with Vivek Ramaswamy, an entrepreneur and former Republican-primary opponent, to reduce government waste and cut red tape. This is a worthy aim, but, as often with Mr Musk, it is hard to know whether to take him literally. He is calling it the Department of Governmental Efficiency (DOGE), named after his preferred cryptocurrency, which itself started as a joke. Yet his aims are grandiose: Mr Musk has called for $2trn of cuts to federal spending (nearly a third of the budget), which is impossible to reconcile with Mr Trump's campaign promise not to touch Social Security or Medicare or raise the retirement age.

Even before Congress applies its checks, it is clear that this cabinet will differ starkly from Mr Trump's previous one. In Trump One, Mike Pence, the former vice-president, helped fill the first cabinet with Reaganite Republicans. They vied for influence with MAGA acolytes, who scoffed at conservative pieties about small government, robust internationalism and free trade. The lines of this fight often blurred, and each side claimed some victories. One former Trump adviser said the president-elect was a moderate in his own MAGA movement. This time the true believers have the whip hand. ■

The Senate

Thune's tune

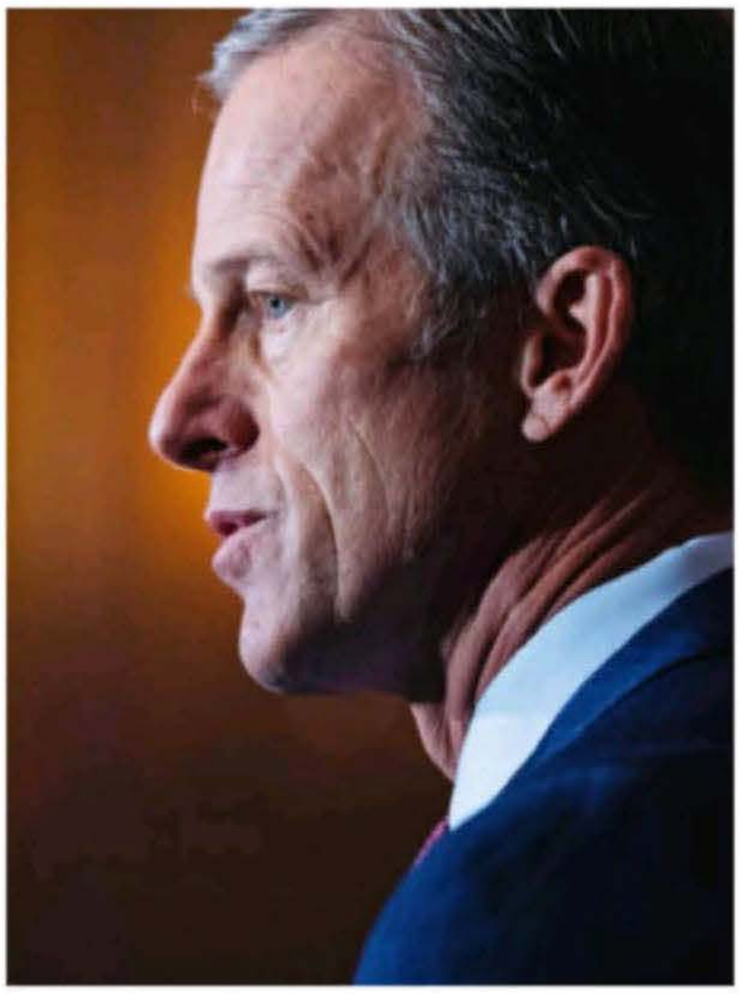
WASHINGTON, DC

Donald Trump leaves a leadership race alone, but conflicts will soon come

MIKE JOHNSON, the speaker of the House of Representatives, became all but guaranteed to keep his job for another two years after receiving Donald Trump's backing on November 13th. Yet Mr Trump conspicuously withheld an endorsement in another congressional leadership contest the same day, and Senate Republicans elected John Thune as their next majority leader. The South Dakotan now has the unenviable task of managing a busy legislative schedule while also trying to reconcile the demands of his own caucus, an unruly lower chamber and an emboldened and mercurial president.

Mr Thune won the three-way contest against Rick Scott, a Floridian favoured by the party's MAGA wing, and John Cornyn, a Texan who preceded Mr Thune as deputy to Mitch McConnell, the Republicans' outgoing Senate leader. Elon Musk and other Trump-aligned influencers publicly pressed senators to support Mr Scott, who argued that he was more loyal to Mr Trump, but he was still eliminated in the first round after winning only 13 votes. "They clearly don't enjoy being lobbied by people like Elon Musk," says Laura Blessing, a fellow at Georgetown University.

Even if Mr Trump did privately prefer the more sycophantic Mr Scott, he risked looking weak if his endorsement proved unable to sway the election. It also helped that Mr Thune had spent months patching things up with Mr Trump following years of tension after his 2020 loss. That is evidence of a kind of political acumen developed after nearly 30 years in Washington.



Mitch's heir

Mr Thune, 63, arrived on Capitol Hill in 1997 to serve as South Dakota's only House member. He came to prominence in 2004 by narrowly defeating Tom Daschle, then-leader of the Senate Democrats. Mr Thune steadily climbed the ranks of leadership under Mr McConnell. That close association with the longest-serving party leader in the Senate's history—who himself made no secret of his contempt for Mr Trump—made the party's right wing sceptical. But as a prolific fundraiser and campaigner for his fellow senators, Mr Thune developed the relationships needed to overcome outside concerns.

Mr Thune represents a soft transition out of the McConnell era, but that doesn't mean he is not conservative. During Mr Trump's first term, the new leader voted with the president 91% of the time. Expect a continuation of Mr McConnell's hardball tactics on nominating and approving conservatives to America's judiciary. Asked after his victory whether he would keep the filibuster for legislation—which requires 60 votes to pass major bills in the 100-seat chamber—Mr Thune simply replied "yes". Even with that constraint, Congress still has a robust legislative agenda.

Mr Trump would like to pass an extension and modification of the 2017 tax cuts during his first 100 days in office. The next Congress will also have to pass a government-funding bill and grapple with how much to increase defence spending. With an expected 53 senators in the 100-seat body, Republicans have some room to manoeuvre; but a slim majority in the House of Representatives instantly complicates lawmaking, even with Mr Trump's presence imposing some discipline.

All three candidates vowed at least modest changes to the legislative process. But allowing more votes on amendments and returning power to the rank-and-file is easier said than done. The first order of business will be approving Mr Trump's cabinet. The president-elect pre-emptively declared that he wanted Republicans to embrace "recess appointments", which temporarily allow nominees to take their positions without the Senate's consent. Mr Thune has committed to quickly approving Mr Trump's nominees in general terms. Given the procedural difficulties—allowing for recess appointments would mean shutting down other legislative progress—it would be easier to simply get 50 senators to vote for a nominee. That seems like a longshot for a nominee such as Matt Gaetz as attorney-general. Whether Mr Thune stands up against Mr Trump and for the Senate could have consequences that echo far beyond the next four years. ■

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The Department of Defence

Crusader in the Pentagon

Pete Hegseth, a Fox News host, takes aim at "woke shit"

FOUR YEARS ago Pete Hegseth, a telegenic Fox News host and major in the Minnesota national guard, was told that he would be deployed to guard Washington, DC, during the inauguration of Joe Biden. The order was revoked, he recalls, when superiors pointed to his prominent tattoos: a Jerusalem cross on his chest and the words "Deus Vult" on his arm, both symbols of the Crusades but now associated with neo-Nazis. "I joined the army to fight extremists in 2001," he recalled on an episode of Shawn Ryan's podcast, published on November 7th. "Twenty years later that same army labelled me one."

Mr Hegseth now has a chance to turn the tables. On November 12th Donald Trump nominated him to be his secretary of defence. If confirmed—he will meet considerable resistance in the Senate—he would be the second-youngest person to hold that office and the least experienced. He would also be the most radical. "First of all," he told Mr Ryan, "you gotta fire the chairman of the joint chiefs" and any general or admiral involved in "DEI [diversity, equity and inclusion] woke shit."

In the "The War on Warriors", a book published this summer, Mr Hegseth compared America's left to a "Jody", military slang for someone who sleeps with the spouse of a serviceman abroad. "The Left didn't fight the wars," he writes. "They stayed home and wrecked our house. America-wreckers, all of them." The Pentagon, he believes, was then consumed by "woke" ideology after the killing of George Floyd in 2020 and the protests and riots that followed. The prevailing view, he argues, is: "We will not stop until trans-lesbian black females run everything."

"Troops are walking on eggshells," he said on the podcast. "They're afraid of one misstep on...one gender thing or one racial thing or one trans thing." The removal of vaccine sceptics was "a purge of people of conscience". The introduction of women into combat roles was a mistake. "There aren't enough lesbians in San Francisco to man the 82nd Airborne," he argued, "and in trying to cater to that they lost the boys from Tennessee and Kentucky and Oklahoma, the traditional dudes who did it because they loved their country."

All this has also detracted from a focus on combat, argues Mr Hegseth. Nor is he squeamish about how it ought to be waged. He has defended American troops accused of war crimes, arguing that rules of engagement are too constricting. The laws of war were "written by dudes in cloakrooms in Europe after world war one because they thought they could fight polite wars in the future amongst European nations," he noted. "Then we wonder why the war never ends...we've written rules that are...written for us to lose."

Mr Hegseth does not explicitly confirm he would be willing to deploy America's armed forces to quell domestic unrest, an issue that pitted Mr Trump against the Pentagon in his first term. But he warns that Antifa, Black Lives Matters, Hamas supporters "and other progressive storm troopers" are creating "little Samarras"—referring to a hotbed of Iraqi insurgency—"in the centre of cities" in America.

When it comes to using America's forces abroad, Mr Hegseth describes himself a "recovering neocon" who now recognises that America's war on terror "burned two decades of money, our best and brightest, goodwill [and] military capabilities". He warns that the country is now "tempted to do it again in Ukraine", distracting from the larger task of confronting China.

American aid to Ukraine is weakening its armed forces elsewhere, he argues, citing a supposed lack of shells for American forces in South Korea. It also risks dragging America into a larger war: "The last thing I want is my son deploying to the Donbas to defend eastern Ukraine." In any case, he argues, Vladimir Putin's ambitions are unlikely to extend beyond Ukraine. "I don't want American intervention driving deep into Europe." NATO, like the World Bank, he says, has been "totally corrupted".

For Mr Hegseth, the Pentagon stands at an "existential" juncture that he describes in scatologically vivid terms: "a shit-or-get-off-the-pot moment". The generals know what is heading their way. ■

National security

Advice wanted

Mike Waltz, as national security adviser, wants to focus on the threat from China

"DAMMIT, DAMN, damn, damn!" A young Afghan girl lay dead and Mike Waltz seethed in frustration. An Afghan police unit working with Green Berets under Mr Waltz's command had killed the child with indiscriminate gunfire unleashed in response to a Taliban attack. The shooting was justifiable but the police had ignored their training, Mr Waltz writes in "Warrior Diplomat", a memoir published a decade ago about his combat service and tours as a Washington policymaker. The book doubles as a primer on the causes of America's military failure in Afghanistan and an intellectual autobiography of the man Donald Trump has selected to be his national security adviser.

Mr Waltz is amply qualified for his new role, which involves managing and co-ordinating inter-agency processes. But he models a distinctly Trumpian version of a job often given to Ivy League-educated strategists. Mr Waltz's credentials are long on the school of life and short on erudite studies of Machiavelli and Sun Tzu. He retired from the army as a lieutenant colonel after earning four Bronze Stars, two for valour. After winning election to the House of Representatives in 2018, Mr Waltz evolved into an ardent acolyte of Mr Trump while serving on the three big national-security committees in the lower chamber: armed services, foreign affairs and intelligence.

Mr Waltz is an outspoken China hawk but also thinks America made wrong turns in Afghanistan and Iraq, and should learn its lessons in hubris, as well as in equipping its strategy with the right resources. As a Fox News regular during the election campaign, he relentlessly attacked the foreign-policy record of Kamala Harris and the Biden administration. He was able to endow Mr Trump's America First, Beijing-bashing rhetoric with more coherence than the candidate himself could often manage. On the eve of the vote, in an essay written for *The Economist* with Matthew Kroenig, a Georgetown professor, Mr Waltz argued that, if elected, a second Trump administration should quickly wind up the conflicts in Ukraine and the Middle East, to free up military assets to confront and deter China.

The premise of this agenda is questionable: if winding up Middle Eastern wars were easy, there wouldn't be so many of them. On Ukraine, Mr Waltz started out as a hawk but evolved to align with Mr ▸▸

Powering plastics circularity

Karen S. Carter is president of packaging and specialty plastics at Dow, where she oversees solutions that can enable a circular economy at a lower carbon impact.

As one of the world's largest plastics producers, what is Dow doing to promote circularity across the value chain and rethink waste?

The need for action to address global plastic pollution has reached a tipping point. Our customers, communities and employees are not just asking for more sustainable and circular products, they're demanding them. Strong collaboration across the plastics value chain is necessary to reduce plastic pollution—and to unlock new value in waste to help scale circularity. At Dow, we are committed to bold action. We've set an ambitious target to commercialise 3m metric tonnes of circular and renewable plastics annually by 2030. We've also outlined a clear path to decarbonise our manufacturing footprint, including a US$6.5bn expansion project in Canada to develop the world's first cracker complex with net-zero scope 1 and 2 emissions. From using bio-based and circular materials to make plastics, and decarbonising our own manufacturing, we're approaching sustainability from all angles.

Why is collaboration across industries and regions so important?

No one company or stakeholder can scale plastics circularity alone—it takes close partnership. To take just one example, in the consumer packaged goods (CPG) industry, collaboration happens at the earliest stages of design. Using plastics sustainably requires making them with circularity in mind from day one. We work with brand owners to design high-performance packaging that uses fewer raw materials, while ensuring durability and recyclability. Collaboration is also critical from a policy standpoint across regions. We need countries to encourage sustainable design standards and set recycled content requirements so that plastic waste can be more easily recycled for circularity.

What are the biggest barriers to accelerating circularity? Where is investment needed?

Scaling a circular economy is a complicated challenge with many barriers, including increasing access to waste materials, incentivising investment, forming cross-industry partnerships and implementing forward-thinking policies. One key area where investment is needed is in recycling infrastructure and technology that scales up access to plastic-waste supply. For example, global CPG brands and other customers have commitments for reducing reliance on virgin plastic or shifting plastic packaging to be fully reusable, recyclable or compostable, so they are driving market demand for recycled waste streams. To deliver on the market demand, we must enable transforming high-quality plastic waste at scale through both mechanical and advanced recycling technologies.

> **"No one company or stakeholder can scale plastics circularity alone—it takes close partnership."**
>
> Karen S. Carter, president of packaging and specialty plastics at Dow

On top of this, we must remain committed to approaches that deliver on decarbonisation targets, knowing that circularity can also help with reducing carbon emissions.

What innovations or partnerships are you most excited about?

With recycling, the economics are often challenging, so one way we've addressed that is to bring recycling in-house. We recently acquired Circulus, a leading recycler of plastic waste into post-consumer resin. This includes two US facilities with a total capacity of 50,000 metric tonnes per year. This acquisition represents Dow's commitment to transforming its business model. In essence, a plastics producer is now becoming a plastics recycler. Additionally, in South-east Asia, where plastic pollution is a major issue, we signed a memorandum of understanding (MOU) with SCG Chemicals to announce a first-of-its kind circularity partnership to transform 200,000 metric tonnes a year of plastic waste into circular products by 2030. The partnership will accelerate technology development for both mechanical and advanced recycling, enabling more plastic waste to find new life in high-end applications.

Learn more about accelerating plastics circularity at
www.transforming-plastic-waste.com

Produced by EI Studios for Dow

Trump's scepticism about American involvement. In his essay he dismissed providing aid to Ukraine indefinitely as a "recipe for failure". Yet if Mr Putin refuses to talk, he noted, America can "provide more weapons to Ukraine with fewer restrictions" than the Biden administration imposed on Kyiv. Such an escalation would "probably" bring Mr Putin to the bargaining table. He does not say what he would recommend if it doesn't.

Mr Waltz has not advocated leaving NATO, but European readers of "Warrior Diplomat" may be unsettled by his bracing criticisms of the alliance's performance in Afghanistan. "Most of the NATO militaries, even the supposedly elite units, had seriously atrophied after years of paltry defence spending," Mr Waltz writes. "The lack of equipment coupled with the lack of sophisticated intelligence operations and the unwritten caveats [limiting combat operations]...meant that NATO units often did more harm than good."

His criticism contains some hard truths, but Mr Waltz's experiences are dated. The expeditionary war in Afghanistan initiated in support of America more than two decades ago is a poor basis for evaluating how to strengthen European self-defence against Russia today. If Mr Waltz allows his Afghan experiences to distort his views on NATO, he could enable Mr Trump's worst (and often uninformed) instincts about the alliance at a time of peril.

On China, Mr Waltz sometimes echoes the existential rhetoric of the early cold war: "I for one will fight to the end to ensure the United States and the free world do not one day bow to the Chinese Communist Party," he wrote on Twitter in 2021. If Mr Trump carries out his campaign promises to slap 60% tariffs on China, expect Mr Waltz to press the public case for confrontation. Yet he is a thoughtful, fair-minded ideologue who is comfortable with complications, his memoir makes clear.

His temperament may help him referee and manage debates in the Situation Room—deliberations marked by an extraordinary amount of yelling and digression during Mr Trump's first term, according to memoirs by participants. As a retired colonel, Mr Waltz may have to assert himself with Pentagon generals and admirals who measure colleagues by the number of stars on their shoulders.

He will bring to his new job one clear lesson from his experience of Washington: interagency decision-making on national-security matters almost always suffers from "unrealistic timelines or no timeline at all", he writes. One timeline Mr Waltz may not wish to dwell on is his own. During Mr Trump's first term, often frustrated by the advice he received from headstrong aides, the president ran through four national security advisers in four years. ■

Environmentalism

The brown revolution

BAKU

There are obstacles to Donald Trump's attempts to reverse progress

PAYING THE CLIMATE BILL

"IT IS CLEAR the next administration will try to do a U-turn and reverse much of this progress," declared John Podesta, America's climate tsar, at a UN climate summit held this week in Azerbaijan. His statement to the gathered greens and diplomats acknowledged a shared anxiety. Donald Trump has vowed to yank America out of the UN's Paris climate agreement for a second time. Meanwhile conservative energy wonks around Mr Trump want him to make a push in three areas.

They want to kill international co-operation and impose hefty tariffs on green imports. They aim to slash environmental protections so as to boost carbon-intensive industries. The are especially keen to gut Joe Biden's signature Inflation Reduction Act (IRA). Yet despite the fact that Mr Trump will enjoy a trifecta from January, the brown revolution faces some obstacles.

America's exit from the Paris agreement seems certain, but Robert Stavins of Harvard University argues this will not derail global climate action. Britain has already offered to lead diplomacy in America's absence. Domestically, the first withdrawal galvanised a coalition of states, cities and corporations organised in part by Bloomberg Philanthropies, a charity. This is happening again. The "America is All In" coalition has its own pavilion in Baku.

Red-state moneyspinner

Green protectionism may falter too. Manufacturing lobbies will resist supply-chain cost rises, and reports suggest that the transactional Mr Trump might drop tariffs on European goods in exchange for increased purchases of American liquefied natural gas (LNG). Chinese imports will face higher tariffs, but for the climate-concerned there is a silver lining. Carlos Pascual, of S&P Global, a research firm, argues that China will redirect exports of affordable clean-energy kit to developing countries instead. It does not matter to the planet where emissions cuts are made.

On deregulation, Mr Trump is on firmer ground. Douglas Holtz-Eakin, president of the American Action Forum, a think-tank, argues that the team "has experience and personnel this time and will get started faster". They will seek to ease rules on exhaust emissions from cars, to weaken support for electric vehicles and loosen rules on carbon from power plants. The reversal of a controversial Biden pause on approvals of new projects to export LNG seems certain, too. However, Wood Mackenzie, an energy consultancy, insists all this is unlikely to spur additional growth in hydrocarbon production soon. Oil and gas production already shot up to record levels under Mr Biden, and market forces are far more influential than the White House on energy-investment decisions.

The IRA, which Mr Trump has denigrated as the "green new scam", is in the crosshairs. Republicans will be looking for money to pay for the extension of the Trump tax cuts, and could use the budget reconciliation process to raid the IRA's funding. In theory, this could gut it. The expensive and clunky credits for electric vehicles, for example, are on the chopping block. A fee on methane emissions from hydrocarbon production, which raises revenue, is also facing extinction.

Interest groups will probably save most of the IRA, though. It has resulted in about $130bn in investment, with perhaps four-fifths going into Republican districts. Oil and gas companies and power utilities support its subsidies for hydrogen and carbon capture, and some conservatives like its funding of nuclear power, energy storage and sustainable aviation fuels. Lee Zeldin, a Republican former congressman, will head the Environmental Protection Agency. His voting record and membership of the bipartisan Climate Solutions Caucus suggest a degree of pragmatism.

America will be oilier in the years ahead than those gathered in Baku would like. Even so, the momentum behind domestic clean energy and global climate action is resilient enough to withstand four more years of Mr Trump. ■

Psephology

Give him your tired, your poor

Immigrant voters may have won the election for the nativist candidate

FOR DEMOCRATS, the worst thing about Kamala Harris's loss is that Donald Trump will return to power. The second-worst thing, however, may be their inability to explain away his victory. In 2016 the left attributed his triumph to racism and the electoral college. This time, he won the popular vote—thanks not to "deplorables" but, the exit polls implied, to surging support from the non-white working class.

Did Mr Trump really win Latino men by 12 percentage points, as exit polls showed? Such surveys tend to overestimate how many voters belong to Democratic-leaning groups, and thus underestimate the share of voters within each group who back Democrats. This bias can be extreme. In 2016 the exit poll found that Mr Trump had won white college graduates by three percentage points. More accurate post-election surveys had him losing them by 15.

The best way to verify the exit polls' findings is to test them against election results. In theory, if Mr Trump made larger gains among Hispanic voters than among white ones, he should also show the biggest improvements in heavily Hispanic areas. And returns from the 3,000 counties that have counted at least 90% of votes show that "racial depolarisation" was both greater than many Democrats thought possible, and insufficient to account for the magnitude of America's red shift.

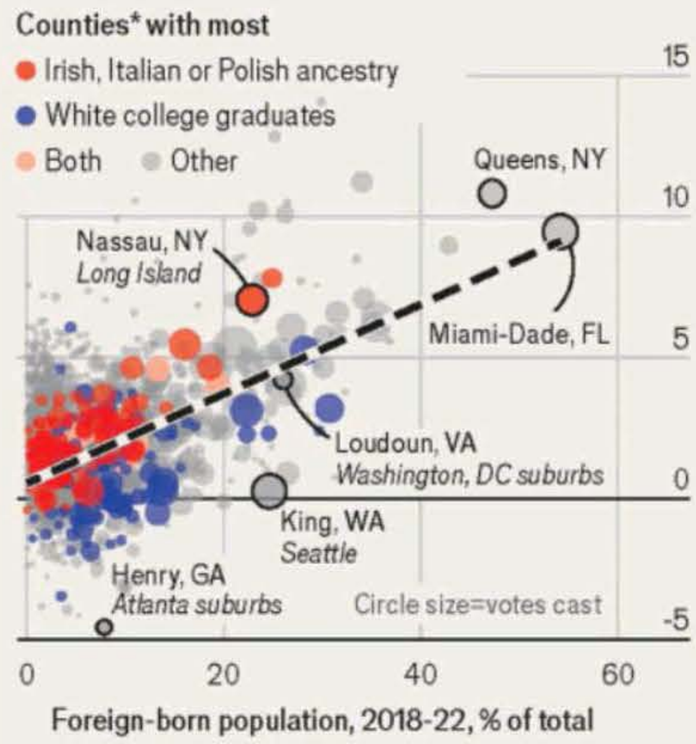
The most striking aspect of Mr Trump's gains is their uniformity. Around 90% of American voters live in counties where his vote share increased from 2020. Half live in those where it rose by at least 1.9 percentage points. But some counties swung more than others, and these differences confirm that the shift was concentrated among Latinos. Among the 10% of voters living in the most Hispanic counties, the president-elect's vote share rose by 5.1 points. For the 10% in counties with the fewest Latinos, the swing was just 1.6 points.

However, this predictor leaves big regional patterns unexplained. In Florida and especially the New York City area, the swing was greater than the Latino population implies. Elsewhere, it was smaller.

A more comprehensive variable eliminates such discrepancies. The foreign-born share of a county's population explains half of geographic variation in the electoral swing from 2020 to 2024, making it an even stronger predictor than the white-working-class share was of shifts from 2012 to 2016. Places like New Mexico, with lots of Hispanics but relatively few immigrants, swung in line with the national average. Meanwhile, areas with many foreign-born residents and modest Latino populations, like Loudoun County in Virginia, lurched right. Crucially, what aligns with voting patterns is the size of the immigrant population, not the growth rate. This implies that the people changing their minds were immigrants themselves, rather than their native-born neighbours.

A catholic coalition

US presidential-election results, %-point change in Republican vote share, 2020-24



*Counties with at least 90% of votes counted
Sources: US Census Bureau; Decision Desk HQ

Naturalised Republicans

Pre-election surveys did not foresee a big shift among immigrants. In polls by YouGov since August Mr Trump gained more ground (relative to how respondents said they voted in 2020) among native-born likely voters than among foreign-born ones. And since January 2023, the share of YouGov's respondents whose top issue was "jobs and the economy" or "inflation/prices"—subjects on which Mr Trump had a big lead—was the same for immigrants and native-born participants. Where foreign-born voters did stand out was their emphasis on public services like health care, education and public safety. They may have judged Democratic-run local governments poorly on these issues.

Exceptions to the overall trend of immigrant-rich regions shifting the farthest right offer further clues about the nature of Mr Trump's increased appeal. He did unusually well in counties where lots of people trace their ancestry to three Catholic European countries—Ireland, Italy and Poland. The Democrats' unceremonious jettisoning of Joe Biden, a proud, practising Irish Catholic, may have hurt them in such areas. Meanwhile, Mr Trump's gains were relatively muted in counties with lots of college-educated whites or same-sex couples. In culturally liberal pockets, no amount of nostalgia for the pre-pandemic price of eggs could overcome cosmopolitan voters' revulsion for Mr Trump.

Regional economic conditions and foreign policy also appeared to shape voters' choices. The red shift was greater than other data implied in places with high poverty rates (like Native American reservations or eastern Kentucky), and where housing is expensive. Discontent over the conflict in Gaza appears to have hurt Ms Harris in counties with lots of Arab-Americans. And Mr Trump, who often praises Vladimir Putin, did unusually well in counties with a high prevalence of Russian ancestry, and relatively poorly in those where Ukrainian ancestry is most common.

Ms Harris has faced harsh criticism since her loss. But the data tentatively suggest that the vanquished vice-president's campaign was better not only than Mr Biden's, but also than Mr Trump's.

Democratic Senate candidates did outperform Ms Harris, enabling the party to hold seats in four states carried by Mr Trump. But such ticket-splitting is no indictment of Ms Harris: it was roughly what was expected given Democratic nominees' advantages in incumbency, fundraising and experience. Moreover, Ms Harris appears to have eliminated Mr Trump's edge in the electoral college. In 2020 Mr Biden's margin of victory was four percentage points greater in the national popular vote than in Wisconsin, the decisive state. This year, Mr Trump is likely to win nationwide by 1.5 points and in Pennsylvania, the "tipping point", by 1.9—a trivially small gap.

Ms Harris cannot take full credit for such outperformance: the Rust Belt swing states should have shifted less than other places, since they have relatively few immigrants and Latinos. But on average, Ms Harris's vote share in the seven battleground states was a full percentage point higher than their demography suggests. The number of ads seen in each county accounts for some but not all of this effect; the rest is probably attributable to superior events or get-out-the-vote operations.

A superior politician would presumably have fared even better. But outside the battlegrounds, Mr Trump gained an average of 3.3 points of vote share, which by modern standards counts as a tidal wave. The hole that Mr Biden dug was probably too deep for any successor to escape. ■

LEXINGTON

On his majesty's civil service

Donald Trump wants more freedom to fire bureaucrats. He should weigh the long-term consequences

DONALD TRUMP'S politics are so elastic that it is impossible to be certain what he means when he promises, as he did on election night, to "govern by a simple motto: promises made, promises kept". Will he judge himself a failure if he does not end the war in Ukraine before he takes office?

Of course not. Mr Trump broke plenty of promises in his first term, from bringing back coal to devising cheaper, better national health insurance. No one expects him to check off all or even most of the to-do list he unspooled across the campaign. But nor do they know which promises he might keep. That is why the news media are having to resort to fevered speculation over what a man who has already served a term as president, and campaigned as the Republican nominee three times, might actually do.

What Mr Trump's supporters believe is not that he will satisfy discrete commitments but that he will fulfil an overarching one, to act in their interests. What Mr Trump's opponents believe is that he will act in his own interests, from getting richer to persecuting his enemies. Regardless of which belief is correct, or whether to some degree they both are, they point to the same correct short-term expectation: Mr Trump will act decisively to remove constraints on his decision-making. That was the hallmark of his endlessly improvised career in business, at the firm his own executives referred to as the Trump Disorganisation because of ever-changing orders from the boss. But in his first term, lacking experience in government and trusted contacts who were expert in public policy, Mr Trump could not create a cohesive, obedient cabinet, much less subject the whole government to his orders.

This time, Mr Trump is moving faster than in his first transition and choosing officials he can count on to share his views and follow his orders. He is publicly demanding that Republican leaders in the Senate commit to helping him shortcut the confirmation process through so-called recess appointments. And he has, so far, refused to sign agreements that help secure the transition between administrations, reportedly as his lawyers negotiate over ethics and disclosure requirements.

This pattern means that one promise Mr Trump will certainly try to keep is to strip many civil servants of protections against being summarily fired. Presidential aggravation with what Mr Trump calls the deep state is not unusual. One top aide to two recent Democratic presidents liked to call the federal bureaucracy "the enemy". Past presidents have also, like Mr Trump, threatened to cut whole departments. Many have convened experts on efficiency. There is nothing new in any of that, though Mr Trump's choice to put Elon Musk and Vivek Ramaswamy in charge of finding cuts portends more drama than usual.

What is new is Mr Trump's desire to vaporise protections meant not to frustrate presidents from enacting their policies but to block them from degrading departments and agencies by using them for corrupt purposes: rewarding supporters with jobs, contracts or preferential treatment, or manipulating government data. Mr Trump may want only to make the government more responsive to his policy priorities. But changes he has in mind would open doors to such abuses, whether by a president or officials further down the ranks. "What he's fundamentally doing is trying to blow up traditional government to remove the guardrails that ensure power is being used for the public good," says Max Stier, president of the Partnership for Public Service, a non-profit that analyses government and assists administrations with their transitions. "That is what is truly different. You have to go back to the spoils system in the 19th century to see anything like it."

Mr Trump says he will revive an executive order he signed near the end of his first term to reclassify certain federal workers in a new "Schedule F" category that would make them at-will employees. President Joe Biden rescinded the order, but Mr Trump made reissuing it the "day-one" promise of his plan to "shatter the deep state". Estimates based on work done under Mr Trump suggest Schedule F could apply to at least 50,000 workers, and maybe hundreds of thousands. The federal rule-making process may slow implementation but only by months.

Like many predecessors Mr Trump struggled in his first term to fill the roughly 4,000 political positions presidents are already allocated. It is doubtful he could replace hundreds of thousands of civil servants with MAGA faithful even if he wanted to. And though federal workers are easy to demonise, they may be less redundant than Mr Trump suspects: the federal workforce is about the size it was in the late 1960s, though the government spends far more per capita. Drastic action that prevents patents or Social Security cheques being issued on time would invite blowback. "Turns out people like those things," says David Lewis, a political scientist at Vanderbilt University. Yet firing even a few workers for perceived disloyalty could have a distorting effect across government, inclining workers not to issue disappointing employment figures or to conduct an honest audit of a president's campaign donor.

Civil disservice

Mr Trump has a point: the civil service needs renovating. Too few people get fired. More than 40% of federal workers surveyed in 2023 said poor performers stay on the job and keep doing it badly. From left, right and centre, people serious about good government have pushed for reform for many years.

But just as Mr Trump was once dismayed to discover that health care was "so complicated", he will find, if he wants to fix the bureaucracy, that simply eliminating civil-service protections would make it worse. And he should recognise, as have past presidents who wanted America to remain great after they were gone, that even if he has good intentions, some successor might not. ■

The Americas

Canada's defence spending

Falling short

Canada has been shamed into a defence-spending promise it seems unlikely to keep

PUBLIC SHAME or ridicule can often persuade people to do things they don't want to. That was the plight of Canada's prime minister, Justin Trudeau, at the NATO summit in Washington in July. For over a decade Canada has been under mounting pressure from its NATO allies, particularly the United States, to increase its defence expenditure so as to hit the alliance's target of at least 2% of GDP. In 2019 Donald Trump described Canada as "slightly delinquent". Biden administration officials tut-tut about Canadian spending in private, and label Canada a "bad child". In his second term, Mr Trump is likely to use stronger language, and find new ways to put pressure on Canada.

Out of 32 NATO members at the summit, Canada was one of eight not hitting the 2% target. The current defence budget of C$34bn ($24bn) is worth about 1.34% of GDP. Canada thus joins Italy, Spain, Slovenia, Belgium and Luxembourg in spending less than 1.5% of GDP on defence. Mr Trudeau felt the pressure. With the summit soon to close, and having earlier said that his government would hit 1.76% of GDP by 2030, he suddenly announced that he expected to reach 2% by 2032. "NATO peer pressure, once consensus has been reached, is very powerful," says Karl Dewey of the International Institute for Strategic Studies, a think-tank based in London.

Yet it is reasonable to doubt the strength of Mr Trudeau's commitment. Having previously said that Canada would "never" reach the 2% target, he offered no clues as to how that would now happen, and labelled it "a crass mathematical calculation". With elections due in October 2025, and Mr Trudeau increasingly unpopular (even within his own Liberal Party) the chances that he will be around to fulfil his pledge are slim.

The clearest articulation of Canada's plans came in April, when the Trudeau government published a long-awaited 46-page "renewed vision for Canada's defence". The document makes an eloquent case for the country's special mission to bolster both North American and NATO security in the Arctic region. Climate change is opening sea lanes there, while both Russia and China are sniffing around for economic and military opportunities.

Canada's aspiration to manage the region with other Arctic powers is out of date, the defence plan suggests. Russia and China are working collaboratively to expand their presence. Russia is building a fleet of combat icebreakers. The Canadian document notes that by 2050 the Arctic Ocean could become the most efficient shipping route between Europe and East Asia. At the NATO summit Canada, the United States and Finland inked an agreement, dubbed the ICE Pact, to work together to build and operate a new fleet of up to 90 icebreakers.

"The document is high in values and ▸▸

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high in ambition but it falls short in transparency as far as how we actually do the things it talks about," says Youri Cormier of the CDA Institute, an Ottawa-based defence think-tank. Much of the spending is deferred. Of the C$73bn the plan proposes over the next 20 years, just C$8bn will come between now and 2029.

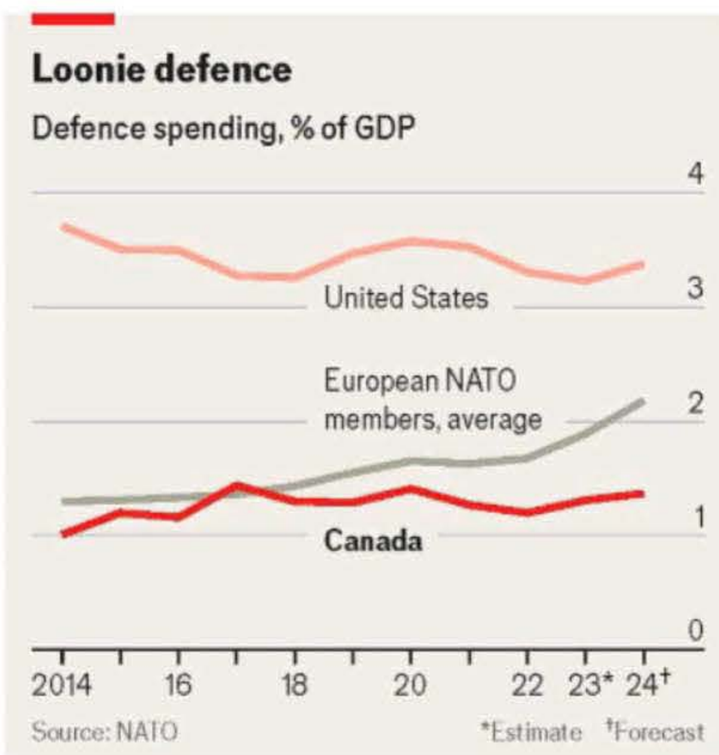
Most of the big-ticket purchases had already been announced. They include 88 F-35 fighter jets that will cost C$74bn; C$40bn for the modernisation of NORAD, the air-defence system that Canada operates with the United States; and the building of 15 warships at a cost of C$85bn, "the largest shipbuilding project in Canada since the second world war".

The idea is that if these programmes proceed in a timely fashion over the next few years, Canada will reach its goal of spending 1.76% of GDP by 2030. But that is a rather large if. Mr Cormier warns that although programme spending has been planned, funding is not yet in place to deliver it. Moreover, Canada's non-partisan Parliamentary Budget Officer (PBO) has declared that the 1.76% goal is based on "erroneous economic projections" and that 1.58% of GDP by 2030 is a more likely outcome. To reach 2% of GDP the PBO says annual defence spending would have to double to nearly C$82bn by 2032-33.

Funding for what should be Canada's biggest and most urgent programme—the acquisition of 12 new conventionally powered submarines to replace four elderly Victoria-class boats due to be taken out of service in the mid-2030s—is even more doubtful. Despite the fact that the defence minister, Bill Blair, confirmed the project at the NATO summit in Washington, the government is still only "exploring options". It has very conservatively estimated a price tag of C$60bn. No money is provided for it in the defence department's existing capital budget. Unless decisions are taken quickly, including to buy a good enough "off-the-peg" solution, the 2035 deadline for the first boat to enter service will probably slip. In September the government asked potential vendors from around the world to present it with options for the new vessels. David Perry, who runs the Calgary-based Canadian Global Affairs Institute, a think-tank, reckons that the total cost would be closer to C$120bn.

Find the money, then spend it

There is doubt about whether Canada's sclerotic, politicised and understaffed military procurement process is up to the job. Mr Cormier wonders if it can fulfil even the current level of announced spending. "You won't reach the budgeted level without fixing procurement," he says. Convoluted oversight mechanisms for big defence programmes are a culprit; two different ministries are directly involved in contracting; another five have a say in setting terms. They often pull in opposite directions.



Acquiring new hardware is not the only problem. Cancellations and delays mean that much of Canada's existing military equipment is "rusting out", says Mr Cormier, and almost half of it is unserviceable. He adds that readiness "is still being cut". With a recruiting shortfall of about 16,000 in its armed forces, Canada is struggling to find the troops to honour its commitment, made in 2023, to bolster NATO's eastern flank with a brigade-sized battle group of 2,200 based in Latvia.

Canada's allies should not expect a dramatic change if the Conservative opposition forms the next government. The last Conservative administration slashed the defence budget to just 1% of GDP in 2013 in the wake of the global financial crisis. Pierre Poilievre, the Conservative leader, has refused to back Mr Trudeau's 2% commitment, though he does support the submarine programme. He says he can bolster defence spending by cutting waste and by diverting money from overseas aid. But like Mr Trudeau he has shown little appetite for cutting domestic social programmes.

Mr Cormier reckons that little will change without bolder political leadership. "It is very hard to convince Canadians of the urgent need to raise defence spending," he laments. "Thanks to our geography, we have felt safe from external threats, and politicians are not keen on making voters feel uncomfortable."

Mr Trump's return to the White House could well disrupt that balance. He wants to renegotiate the trade agreement between the United States, Canada and Mexico when it comes up for review in 2026. Nearly 80% of Canada's exports go to its southern neighbour, worth some 20% of Canadian GDP. No country bar Mexico is more vulnerable to an American president who sees tariffs as the answer to every problem. Senior Republicans accused Canada this year of riding on America's "coat tails". The pressure on Canada to meet its military obligations will only intensify. ■

Crime in Brazil

The political criminal

SÃO PAULO

Brazil's gangsters have been getting into politics

AT LAST, JUSTICE came. On October 31st two former policemen were sentenced to a combined 138 years in prison for murdering Marielle Franco, a councillor they killed in Rio de Janeiro in 2018. A gay black woman from a *favela*, Ms Franco was an icon of Brazil's left. She had made it her mission to expose links between local politicians and militias in Rio. The assassination shocked a nation inured to violence. She may have been killed for denouncing attempts by militia members to seize public land illegally and build on it.

Founded by former policemen, Rio's militias gained prominence in the 1990s by hunting down drug traffickers, winning the support of terrified residents and forging links with local politicians. Yet today they extract a security tax in areas they control and charge residents for access to gas, internet, transport services and electricity. More recently, they have started trafficking the drugs themselves. Brazil's criminal groups are walking the militias' path in reverse. Gangs are increasingly funding politicians, paying off local prosecutors and bureaucrats, and laundering their assets through the legal economy.

Take São Paulo, the country's financial heartland. Unlike Rio, where the homicide rate runs at about 21 per 100,000, mainly because of turf wars between gangs and militias, São Paulo has long been relatively peaceful. That is because it is controlled by a single gang, the First Capital Command (PCC). Founded by inmates as a mutual-defence organisation after a prison massacre in 1992, the PCC expanded as Brazil's incarceration rate ballooned in the 2000s. Today it is South America's largest gang, counting 40,000 members and 60,000 affiliates. It is increasingly involved in politics and white-collar crime. "Brazil is experiencing what Italy experienced in the 1990s," says ▸▸

Lincoln Gakiya, the lead prosecutor against the PCC in São Paulo, as his 24-hour bodyguards stand nearby.

In April the city government took over two private bus operators, which carry more than 16m passengers a month, after an investigation led by Mr Gakiya found that the companies were being used to launder money for the PCC. The gang is also suspected of controlling petrol stations across the country and of getting involved in public health-care services, property, illegal gold-mining and rubbish collection. In 2004, when Mr Gakiya began investigating, he reckoned it was making less than $2m a year. By 2020, it was thought to be netting $1bn annually. Most of that comes from outside Brazil, as the gang's drug-trafficking operations have expanded around the world.

On August 6th, in the run-up to local elections, São Paulo's police arrested 20 people and carried out 60 search-and-seizure operations as part of an investigation into the PCC's illegal campaign financing. Attacks against election officials were 29% higher between July and September than during the same period before local elections in 2022. Gangs are thought to have been behind the surge. "The PCC doesn't want to run a political party or overthrow the state," says Mr Gakiya. "They want to obtain benefits by financing politicians." This may include swaying public procurement bids for transport services or obtaining tax concessions for PCC businesses.

All of this has frightened President Luiz Inácio Lula da Silva. Brazilians rank crime and drug trafficking as their top concern, along with corruption. More than a third expect a rise in gang-related murders in the next six months, according to a recent poll. On October 31st Lula, as the president is known, presented regional governors with a plan for tackling the problem. "Soon organised crime will be taking part in public tenders, appointing judges, appointing prosecutors, appointing politicians and candidates," he warned.

The government says it will integrate intelligence systems between investigative agencies to cross-refer data on crimes. It will grant the federal highway police powers to inspect railways and rivers, and will change the constitution to allocate money permanently to a national-security fund.

Some governors have pushed back, suggesting that the federal government is taking away states' rights to run security policy. Yet the lack of national integration is just what may be letting gangs infiltrate politics at lower levels. "What we are seeing is more penetration of local legislatures, mayoralties and local public-procurement offices," says Robert Muggah of the Igarapé Institute, a think-tank in Rio. If Brazil wants to kick out the gangsters, it must first unite the governors. ■

Security in Haiti

The Haitian knot

Insecurity and a shaky government are still wrecking the country

GARRY CONILLE lasted 166 days as prime minister. It was a miserable term. In June, a month after he took office, a UN-authorised security force of some 400 Kenyan police arrived. For a moment some Haitians may have hoped that years of violence, impunity and suspended democracy might be coming to an end. No such luck. The death rate from gang violence rose after the Kenyans arrived. The gangs that run Haiti are still in control.

On top of utter insecurity, 12m Haitians now find themselves thrust even deeper into a constitutional crisis. Haiti has not had a president since 2021, when Jovenel Moïse was assassinated. Subsequent appointed leaders have failed to hold elections, in large part because gang control makes fair ones impossible.

Mr Conille was fired after a vote on November 8th by Haiti's Transitional Presidential Council, a nine-person body appointed in April by Haiti's cabinet (none of them elected politicians) to carry out presidential duties. In normal times only Haiti's parliament could remove a prime minister, but every seat in it has been vacant since January 2023. Mr Conille's job—and the council's—was to make the country safe and prepare for elections in 2025.

The council reportedly sacked Mr Conille not for failing to fulfil this task (though that looked likely) but for failing to keep its members happy. Their relationship has been fractious since the council appointed Mr Conille in May. But the seeds of his dismissal were probably sown in October, when Haiti's anti-corruption body accused three members of the council of soliciting bribes. Mr Conille asked the council's president to dismiss the accused trio—Smith Augustin, Emmanuel Vertilaire and Louis Gérald Gilles, who all deny the charges. They remain on the council that fired the hapless Mr Conille.

Haiti continues to be governed by a string of unelected officials. The council appointed Alix Didier Fils-Aimé, a businessman, to replace Mr Conille. In an open letter Mr Conille said his ousting "weakens our country and seriously compromises our chances of overcoming the crisis".

The help from abroad is underfunded and outgunned. Kenya's President William Ruto has said he will send another 600 police to Haiti this month, bringing the force to two-fifths of the 2,500 that were originally promised. Of the other countries that pledged to send forces, only Jamaica, the Bahamas and Belize have sent any: 24, six and two, respectively. Haiti's gang members outnumber foreign security personnel by at least six to one.

Haitians continue to suffer. On November 8th the UN noted that 700,000 had been forced from their homes, about half of them children. It reported "pockets of famine-like conditions" in some of the encampments to which they have fled, the first time since 2022 that the UN has observed hunger that severe in Haiti. Half the country is experiencing "acute food insecurity", according to the UN.

A prime minister who is more palatable to the presidential council may be better able to improve security. Yet the chances look slim. People who hoped for better from Mr Conille should have recalled his first stint as prime minister, in 2012. That lasted just four months. ■

The UN's thin blue line through chaos

YOUR PERFECT İSTANBUL GETAWAY

With its millennia-spanning heritage and wide array of cultural offerings, culinary jewels and breathtaking vistas that straddle both Europe and Asia, İstanbul is a sublimely beautiful destination —one sure to inspire visitors from all walks of life. To experience the city like a true local during a long weekend there, be sure to enjoy a good many of the suggestions below.

FOR HISTORY BUFFS

The historic peninsula where İstanbul was born is a true treasure trove, offering a wealth of exceptional landmarks to be explored during a delightful day's stroll starting from Sultanahmet Square.

► Visit the recently renovated **İstanbul Archaeological Museums** to explore masterpieces of antiquity, including an impressive collection of sarcophagi depicting mythological scenes as well as the world's first known love poem carved on terracotta and dating back 4,000 years to the time of the Sumerians.

► **Topkapı Palace**, the former residence of the Ottoman sultans, gives visitors the chance to discover the splendor of the empire's court and the beautifully tiled *harem* –the private chambers where the sovereign lived with his family. The palace is a unique maze of courtyards, pavilions, kiosks and chambers now used as exhibition halls displaying iconic pieces from the renowned collection.

► Feel an enveloping peace under the cascading domes of the **Hagia Sophia, Süleymaniye** and **Blue (Sultanahmet) Mosques**. Visit the recently inaugurated **Hagia Sophia History and Experience Museum** to learn the unique story of this awe-inspiring monument.

► Discover the distinct aquatic heritage of the city, including the 6th-century **Basilica Cistern**, a subterranean marvel adorned with columns brought from ancient temples.

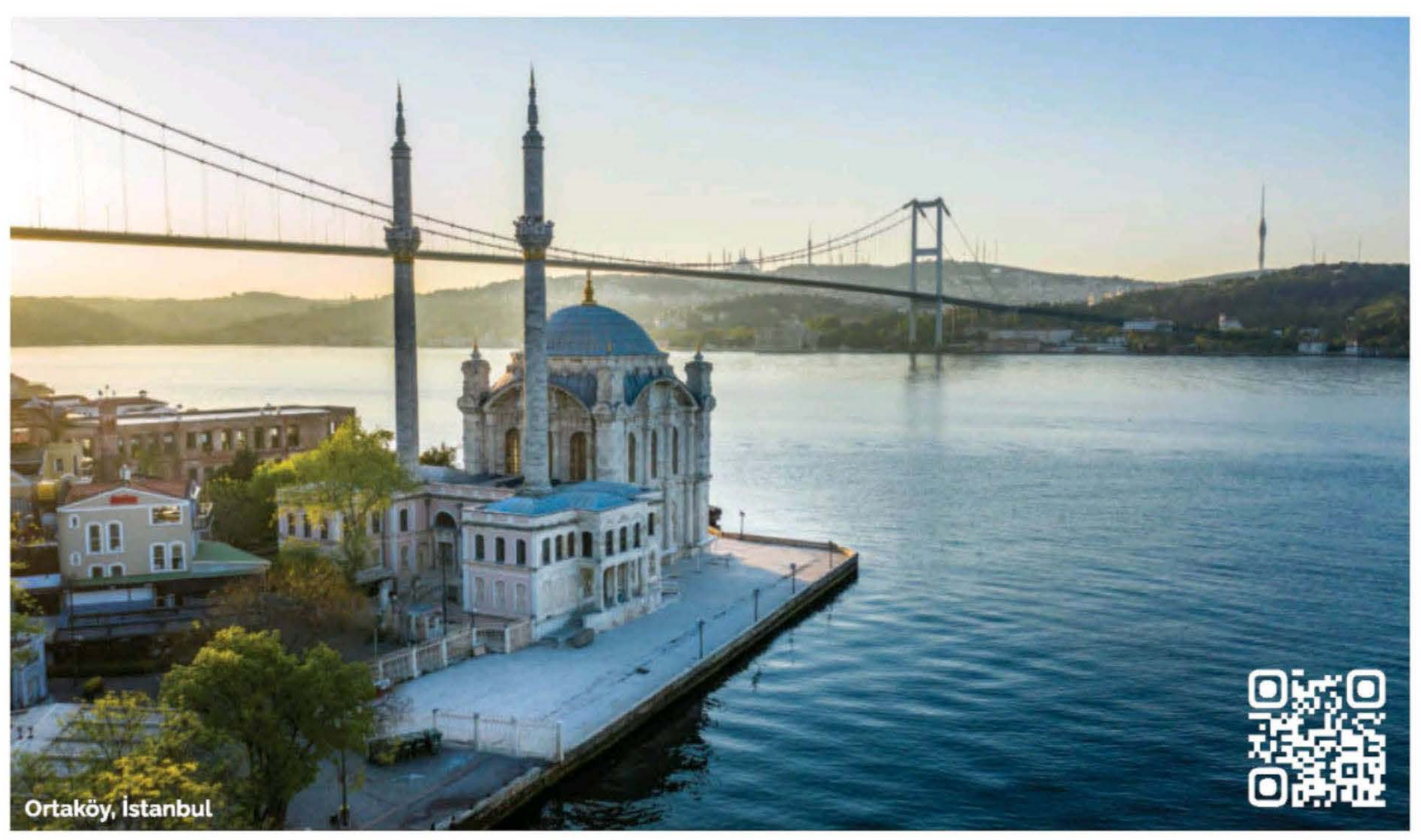
FOR CULTURE ENTHUSIASTS

To feel a part of the vibrant city culture, one should venture deeper into the neighborhoods of İstanbul, all inviting microcosms unto themselves. Here is a quick itinerary to follow, from the heart of Beyoğlu to the shores of Kadıköy.

► **İstiklal Street**, the city's famous 2-km pedestrian thoroughfare, has been the center of food, arts and entertainment for more than a century. Start your adventurous walk from **Taksim Square**. This celebrated urban nexus is the city's cultural heartbeat once again, thanks to the renovated **Atatürk Cultural Center** (Atatürk Kültür Merkezi), a vanguard palace for the performance arts.

► After making its way past several architectural jewels –the alluring 19th-century townhouses and imposing **St. Antuan Church** spring to mind– İstiklal Street makes its way to the Galata neighborhood. Here you'll quickly be swept into the city's buzzing contemporary life, with its wide array of fashion and design studios, art galleries, coffee houses, fine-dining restaurants and scenic terrace lounges all lining the cobbled streets that culminate in the 14th-century **Galata Tower**.

► Next, take a nostalgic ride on the 19th-century underground funicular line, the **Tünel**, connecting Galata to Karaköy. A short distance away,



Ortaköy, İstanbul

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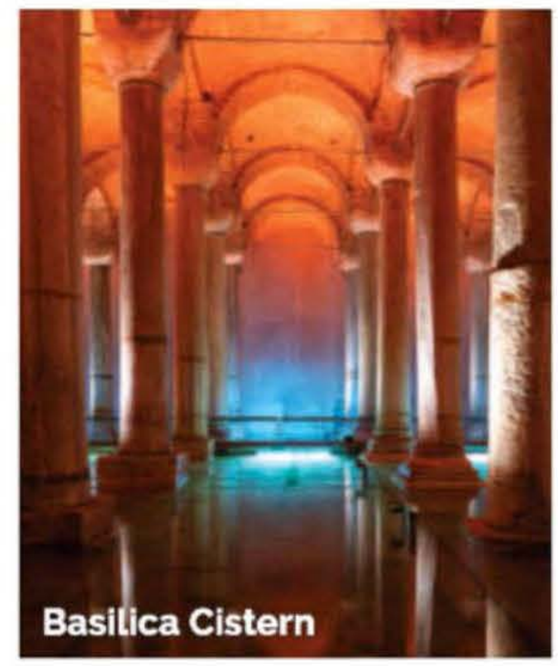
Grand Bazaar

Arnavutköy


Basilica Cistern

the **Tophane** neighborhood awaits those looking to immerse themselves in the city's contemporary art scene. After exploring **İstanbul Modern**, the city's newly reopened modern art destination, designed by Pritzker Prize-winning architect Renzo Piano, continue on to see the full expanse of **Galataport**. This unique 1.5-km waterfront complex boasting the world's first underground cruise ship terminal also offers exclusive fashion stores, art spaces and a fine selection of food and cocktail purveyors on the Bosphorus (İstanbul Strait).

► And here, hop on a ferry from **Karaköy** or **Beşiktaş** for a scenic ride to **Kadıköy** on the city's Asian side. Time permitting, enjoy the sunset over the historic peninsula or turn your attention to the shimmering lights of the recently renovated **Maiden's Tower** as you near the other continent. As a thriving art and cultural district, Kadıköy has an undeniably youthful vibe and lively street energy. Explore the **Kadıköy Market** as well as **Moda Street**, the latter of which will connect you to the wonderful coastal parks that are among the most popular weekend hangout spots for locals and newcomers alike.

FOR FOODIES

From Ottoman palace cuisine and fresh fish from the Bosphorus coast to unique gourmet experiences provided by restaurants making the lists of the world's best, there's so much to explore for dedicated gourmands in this city of never-ending flavors.

► Starting your day with **a classical Turkish breakfast** is a must when you are in İstanbul. Prepare for an expansive feast and its plethora of salty and sweet delectables, including the regional egg dish, *menemen*, cured meats, local cheese and olive varieties, jams, fruits and nuts, and local bread types (the sesame seed-crusted *simit* is a favorite), as well as a brimming pot of Turkish black tea, of course!

► **Street food** stalls and vendors are plentiful throughout the city. Delicious options include *simit*, *kestane kebap* (grilled chestnuts) and *közde mısır* (roasted corn), as well as sandwiches of fried fish or mussels, *midye dolma* (mussels stuffed with aromatic rice), *kokoreç* (grilled lamb intestines served in sandwich bread), *lahmacun* (paper thin flatbread with minced meat on top) and *döner kebap*.

► The Karaköy neighborhood has some of the city's best **baklava** shops, where you can explore a huge selection of flaky phyllo sheets that are filled with pistachios, walnuts or almonds before being soaked in syrup a perfect way to replenish your energy for the remainder of your day ahead.

► Have a feast in a traditional **meyhane**, where a rich selection of *mezes* (cold and hot appetizers) is accompanied by glasses of *raki* (the region's famed anise liqueur) —a terrific setting for long chats among friends and the occasional street musician.

► Indulge in the imaginative tasting menus of a new generation of **restaurants with MICHELIN Star**, celebrating and expounding on Anatolia's rich tradition of recipes and ingredients. These bites are well-paired with local wines, selected from Türkiye's burgeoning boutique vineyards.

FOR STYLE HUNTERS

Find just the right jewelry, fashion items and antiques to take back home with you.

► Visit **the Grand Bazaar** (Kapalı Çarşı) for classics like *hamam* accessories (olive oil soaps and pesthemals) and jewelry, as well as exquisite textiles and kilims. **Spice Bazaar** (Mısır Çarşısı), on the other hand, has been flourishing since its opening in 1664 with its iconic mounds of spices in a full spectrum of colors and traditional sweets, dried fruits and nuts, as well as freshly roasted Turkish coffee.

► The neighborhood of **Çukurcuma** is a hidden gem for antique lovers. This network of unassuming streets is nestled with cozy shops selling everything from vintage toys to coffee cups, Ottoman-style accessories and furniture.

► **Galataport** and the adjacent **Post Office Fashion Galleria** should be on your itinerary for seeking the best in local fashions and designs.

► With their charming boutiques and flagship stores of local and international brands, **Nişantaşı** and **Bağdat Street** await for a full day of shopping indulgence.

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77 recommended restaurants:

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► 6 One MICHELIN Star restaurants: **Arkestra, Sankai by Nagaya, Araka, Nicole, Mikla, Neolokal**

► 18 Bib Gourmand restaurants

► 52 selected restaurants

► 2 MICHELIN Green Star restaurants: **Circle by Vertical, Neolokal**

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Asia

Bangladesh

The revolution may yet devour its children

DHAKA

The interim government faces calls for elections and retribution for Sheikh Hasina

IT WAS A fleeting honeymoon. When Muhammad Yunus, the 84-year-old caretaker leader of Bangladesh, took office after the overthrow of Sheikh Hasina as prime minister on August 5th, many in the country celebrated, especially the students who had led the uprising. Most Bangladeshis welcomed the Nobel laureate's pledge to organise fair elections once he had completed enough structural reforms to curb the corruption and political violence that has long plagued the nation of 173m people. No matter that he set no timeline: he was building a "new Bangladesh".

His interim government has since done much to restore stability. Yet after three months in power, it faces mounting pressure to improve day-to-day governance, define its reform agenda and set a date for elections. That pressure spilled onto the streets of Dhaka, the capital, on November 8th when the Bangladesh Nationalist Party (BNP), the arch-rival of Sheikh Hasina's Awami League (AL), staged its first big rally since her ousting. "A country needs an elected government," says Riaz Islam, a BNP activist at the rally.

America's presidential election also presents new challenges. Donald Trump is a sceptic of overseas aid, which Bangladesh needs, and of climate change, which affects it severely. Moreover, Mr Trump is chummy with India's prime minister, Narendra Modi, who forged close ties with Sheikh Hasina and has sheltered her in India since she fled Dhaka. On October 31st Mr Trump echoed Indian concerns on X (formerly Twitter) by condemning "barbaric violence" against Bangladesh's Hindu minority, saying the mostly Muslim country was in chaos.

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37 Unrest in the South China Sea

38 Indian car culture

39 Banyan: Weathering Trump on trade

That is hyperbole. Security in Bangladesh is still precarious after the riots, which were sparked by an attempt to reserve many government jobs for AL loyalists. The police, accused of killing hundreds of student protesters, fear retribution. Some are in hiding. But most have returned to their posts. Basic security has improved. And though there have been attacks on Hindus and other minorities, independent observers say much of that violence was directed at AL supporters and has abated. Meanwhile the economy, though still fragile, has stabilised. Remittances from abroad have rebounded, bolstering foreign reserves (see chart on next page). Merchandise exports rose by 21% year-on-year in October, driven by ready-made garments, an engine of growth.

Step by step

Even so, the weeks ahead will be hazardous for a government that has no constitutional basis and depends on popular support. Mr Yunus set up ten commissions to recommend judicial, electoral, police and other reforms by the end of the year. Many of his supporters want him in power for another year, possibly two, to implement those reforms. Their fear is that he will be forced to hold elections much earlier, crushing hopes for structural change. A previous caretaker government tried similar reforms in vain between 2007 and 2008, after violence between the AL and BNP ▸▸

forced the army to intervene.

On day-to-day governance, there are no easy fixes. Food-price inflation, which was nearly 13% in October year-on-year, is a particular concern. So too is electricity, especially since India's Adani Group, which provides about 10% of Bangladesh's electricity, curbed supplies due to payment arrears (which the government says it is now dealing with). Severe flooding since August has damaged rice production.

The interim government also lacks bureaucratic experience. Sheikh Hasina's last cabinet had 36 members; the interim government has 24 "advisers", most with more than one portfolio. Mr Yunus has overseen defence, public administration, tourism, food and aviation for most of the past three months (he dropped the last three in a reshuffle on November 10th). His domestic-security chief handles agriculture too. Some also question the appointment of two student leaders to head the ministry of telecommunications and information technology and the ministry of labour and employment (one was moved to a lesser role in the reshuffle).

On the political front, many students want more radical action, such as replacing the president, a Sheikh Hasina loyalist, and banning the AL. The BNP, however, opposes both moves. Wary that it too could be banned (given its alleged abuses in power from 2001 to 2006), the BNP has stepped up demands for early elections. Mirza Fakhrul Islam Alamgir, its general secretary, thinks they should be held by June. Other party leaders have threatened regular protests if a timeline is not set by February. That may be posturing. Khaleda Zia, the BNP's 79-year-old chairwoman, is heading abroad shortly for treatment of liver cirrhosis. Tarique Rahman, her son (and the party's acting chairman), has lived in London since 2008 and has not said when he will return.

Still, the later the election, the longer other parties have to challenge the BNP. Jamaat-e-Islami, the biggest Islamist party (which was banned by Sheikh Hasina), appears more patient. Shafiqur Rahman, its leader, says elections should be held by the end of 2025. His party is fighting for "recovery of our might", he says at its newly refurbished headquarters, which reopened in August after 13 years.

So far, Mr Yunus has deflected calls to replace the president or schedule elections. And he has fudged the issue of the AL's future, banning its student wing and forbidding the party from holding rallies, while saying its future is up to Bangladesh's other parties. But managing such differences while building consensus for reforms gets harder by the day, says Iftekhar Zaman, who heads the Bangladesh chapter of Transparency International, a global anti-corruption organisation. He says Mr Yunus might have won a mandate for more time in power, had he outlined reform plans in August or September, when public unity was greater.

Stuck in the middle

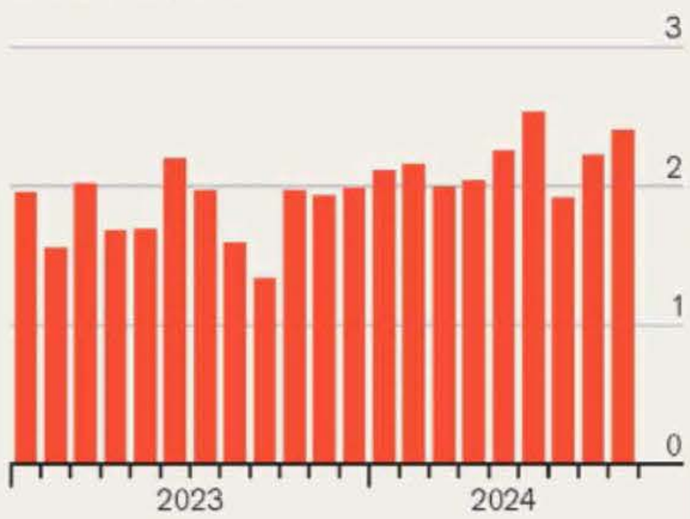
Mr Yunus's other big headache is diplomatic. India fears an Islamist resurgence and greater Chinese influence in Bangladesh. Mr Yunus has tried to reassure India. But to succeed, he needs to ensure Hindus' safety in Bangladesh. He should also avoid picking fights, despite public pressure to do so, over issues including the Adani power deal and cross-border water disputes. As for Sheikh Hasina's sanctuary in India, the interim government has pledged to seek her extradition. India is unlikely to comply. So a subtler approach may be needed. Touhid Hossain, Bangladesh's foreign adviser, says that he has yet to formally request extradition and her presence in India should not hinder bilateral ties, although it would be better "if she keeps quiet".

Mr Yunus now has to court Mr Trump, too. America pledged nearly $1.2bn in aid to Bangladesh between 2021 and 2026, less than half of which it has dispensed. Bangladesh is also in the middle of a $4.7bn bail-out from the IMF, of which Mr Trump is a sceptic. And American authorities are helping Bangladesh's central bank to retrieve some of the $17bn that it says was siphoned abroad from banks under Sheikh Hasina. Ahsan Mansur, governor of the central bank, thinks that could take up to five years. Although he expects to recover only a fraction of the money, he hopes the legal wrangles will deter others.

The future of such co-operation is uncertain. Still, with deft diplomacy, Bangladesh may be able to exploit the Trump administration's anticipated focus on China. The Chinese government has already pledged $2bn in loans and grants and is discussing $5bn more, says Mr Hossain, the foreign adviser. That has nothing to do with China-America tensions, he adds. Xi Jinping, China's leader, and Mr Trump might disagree. ■

Back on track

Bangladesh, wage earners' remittances from abroad, $bn



Source: Bangladesh Bank

South Australia

No dough

SYDNEY

Political donations may be banned

WHOLE COUNTRIES could run on the billions that donors splurged on America's election. Some families might struggle on the political finance raised in South Australia, an Australian state of 1.9m people. Its parties reported donations of around A$1m ($730,000 at the time) in the eight months before its most recent election in 2022. Still, the state's centre-left Labor government wants to take cash out of politics. On November 12th it introduced legislation to ban all political donations. The bill has wide support in the state's parliament.

"We are doing something that is contrary to our own political interests," says Peter Malinauskas, the state's premier (Australia's equivalent of a governor). But it is "in the spirit of serious democratic reform". Australians are far happier with their democracy than Britons or Americans, but their faith in the system is falling. A perception that money buys influence is one reason for that, Mr Malinauskas argues. Plus, he says, the law will free politicians from fundraising, allowing them to focus on policymaking.

Once passed, the bill will ban political parties and sitting MPs from receiving donations or gifts. Elections will be financed by public money, which will be capped, and allocated to parties in proportion to the number of votes they won at the last election. To allay fears that the ban would disadvantage minor parties, the bill carves out an exemption allowing new candidates to take multiple donations of up to A$5,000. It will also limit campaign spending by businesses and trade unions (of which Mr Malinauskas is a former head).

But it is likely to face challenges. Critics continue to worry that the law might still advantage the two big parties. Another question is whether banning political donations breaches the constitutional rights of Australians. In the past decade, unions fought two laws to curb donations and third-party campaigning in New South Wales. Australia's high court struck down the provisions. Mr Malinauskas says his government has drafted its bill with such concerns in mind. Aggrieved lobbyists may well test its work.

Tension in the South China Sea

A shot in the dark

SINGAPORE

Can the Philippines keep Donald Trump on its side?

IN APRIL the US Army showed up in the Philippines for annual exercises with a new weapon: medium-range ballistic missiles. China has thousands of them, but America has not fielded them in Asia since 1991. After the exercises ended, most of the American forces went home, but the missiles stayed. Philippine and American military officials say they hope the missiles will help to deter Chinese aggression around Taiwan or in the South China Sea.

Now, just days after Donald Trump's victory in America's presidential election, the Philippines' defence secretary has offered to buy the missile system from America. The secretary wants his offer to pay for the missiles "to be the first thing Trump hears about when the Philippines comes up", says Jeffrey Ordaniel of Pacific Forum, a think-tank in Hawaii. "What's in it for America? Trump likes it when there's a clear answer to that question, beyond just helping an ally."

The Philippines is one of many American allies around the world struggling to answer that question. And in Asia, the Philippines might be the least capable of doing so. Unlike Australia, South Korea, Japan and Taiwan—which also all rely on explicit or implicit American security guarantees—the Philippines' annual defence budget is just $4bn. Most of the American kit that it has bought to date has been subsidised by American taxpayers. Buying the ballistic-missile battery, known as Typhon, would blow a hole in the armed forces' budget.

What the Philippines is asking America to defend might also trigger Mr Trump and the isolationists in his orbit. Over the past two years, Philippine coastguard and navy vessels have skirmished with their Chinese counterparts over mostly uninhabited rocks and reefs in the Spratly Islands in the South China Sea. No shots have been fired in anger, but the situation is tense. Chinese coastguards have damaged Philippine vessels by blasting them with water cannons and ramming them in an attempt to force them to return to port. In May Ferdinand Marcos, the president, warned that if any Filipino citizen were killed, that would cross a red line. He added that he thought it would cross a red line for America, too.

Whether it would cross a red line for Mr Trump is uncertain. The president-elect's fans, including Jose Manuel Romualdez, the Philippines' ambassador to America, note that during Mr Trump's first term the Philippines did not struggle to get American assistance when it asked for it. Mr Trump's former secretary of state, Mike Pompeo, for example, took the unusual step of confirming that America's security guarantees extended to Philippine vessels in the South China Sea, in an attempt to deter Chinese aggression there.

But the Philippines asked for little during Mr Trump's first term because its own president at that time was Rodrigo Duterte, an anti-American hothead who sought to distance himself from America and at one point threatened to kick American troops out of the country. Under Mr Marcos, the Philippines has once again embraced America, but it also expects its ally to do more for it than before.

The problem is that Mr Trump tends to see alliances as protection rackets, a sentiment shared by his running-mate, J.D. Vance. In their view, allies should be prepared to pay their own way. The pair are likely to be sceptical, too, of the case for risking American blood and treasure to defend a collection of uninhabited atolls. But reports that Mr Trump will nominate Senator Marco Rubio to be his secretary of state have reassured Filipinos to some degree. Mr Rubio has argued that defending the Philippines in the South China Sea is in America's interests.

He's not the only one who is worried

Rocky waters

The Trump administration's position on the South China Sea will be shaped, too, by how it approaches the question of Taiwan. If America under Mr Trump decides to prioritise the defence of Taiwan, then the Philippines would become an asset rather than a liability. Last year President Joe Biden and Mr Marcos expanded a deal dating to 2014 to add four new sites concentrated in the north of the country, facing Taiwan. American access to the bases would be key to deterring a Chinese attempt to retake the self-governing island.

The Philippines will probably still have to trim its sails with Mr Trump back in power, however. In particular, it might need to curb its ambitious strategy to push back Chinese expansionism in its home waters. Since Mr Marcos moved into Malacañang Palace in Manila in June 2022, the Philippines has asserted its rights in the South China Sea more actively and more publicly than before. It has reinforced one outpost, a rusting ship run aground in 1999 at Second Thomas Shoal in the Spratlys, and sent ships to occupy other fishing grounds for the first time.

A tribunal in The Hague confirmed these rights in a ruling in 2016, but the Philippines' efforts to secure them and the resulting Chinese response have raised tensions. On November 8th, Mr Marcos signed into law a bill outlining the Philippines' maritime zones in keeping with the tribunal's ruling. China quickly responded by drawing its own lines around Scarborough Shoal, an especially strategically important disputed feature west of Manila Bay. It sent out air and maritime patrols to stake its claim.

If these legal moves escalate into renewed confrontations on water, the first that Mr Trump hears from the Philippines might not be its offer to buy new weapons, but a call for help. In that case, he is unlikely to respond favourably. ■

Indian car culture

Wheels and fortune

BANGALORE

How a nation of hatchbacks became SUV country

GETTING TO BANGALORE, India's start-up capital, is easy: arrive at the gorgeous new garden-themed terminal, collect your bags, and zip down the buttery smooth National Highway 44 into the city. Getting around Bangalore is another matter. It is the most heavily gridlocked city in India, with average speeds during rush hour of 18kph (11mph), according to TomTom, a navigation-technology firm.

That has not stopped the city's residents from buying ever more vehicles. The number of registered cars in Bangalore jumped from 2m in April 2020 to 2.4m by April this year. Last year it overtook Delhi, India's car-dependent capital, to become the city with the highest number of private cars in both absolute terms and relative to the population. Bangalore adds a new car to its streets roughly every four minutes.

All over India a growing middle class is rushing out to buy the ultimate expression of individualism. The number of cars on India's streets rose from 19m in 2012 to 49m in 2022. Car ownership per 1,000 people doubled from 17 to 34 in the same period. "The love affair with cars in India, at this moment, is at an all-time high," says Hormazd Sorabjee, who drives a Porsche 718 Cayman GTS and is editor of *Autocar India*, a magazine. But as car-ownership has become more common, what it means to own one has changed.

The first big shift is in what people are buying. Just five years ago, every second car sold in India was a hatchback. Today that is down to one in four, while more than 50% of new sales are SUVs, according to Hyundai Motor, a South Korean firm whose local arm last month raised $3.3bn in India's largest-ever IPO.

One reason SUV sales are booming is that most roads remain terrible. Even just outside the centre of a big city such as Bangalore, gaping potholes and barely surfaced roads remain common. And all over India overstretched road-traffic departments plonk down badly designed speed-breakers with little regard for vertebral or mechanical wellbeing. Ground clearance—or the height between the street and the bottom of a vehicle—is a crucial consideration for car-buyers in India.

At the same time, the SUV boom is also driven by vastly improved roads: in recent years India has added tens of thousands of kilometres of high-quality motorways. That has driven a surge in weekend and day-trips. India is "a country that loves travelling [and] the cheapest holiday in India today is the driving holiday," says Anand Mahindra of Mahindra and Mahindra, a carmaker that specialises in SUVs (his preferred ride is his company's Bolero, a mid-size SUV). "Plus the fact that you have very large families that need larger cars." The company's newest offering, a rugged off-roader, received 176,000 bookings within the first hour of going on sale.

A second change is what car-buyers want. Until recently, safety was rarely a consideration. But that changed with the Tata Nexon, a compact SUV produced by Tata Motors, a big Indian carmaker. It was the first to receive a five-star safety rating in international testing and the first to tout those credentials. Potential buyers were willing to overlook some shortcomings in favour of safety, says Vinay, a Bangalore-based telecoms engineer who drives a Ford Ikon, a saloon (sedan), and runs the r/CarsIndia forum on Reddit, which has 342,000 members. This, too, is partly down to the spread of highways on which high speeds (of up to 120kph) are actually possible. The Nexon was a big hit, becoming the best-selling SUV from 2021 to 2023. Car adverts now often cite safety ratings.

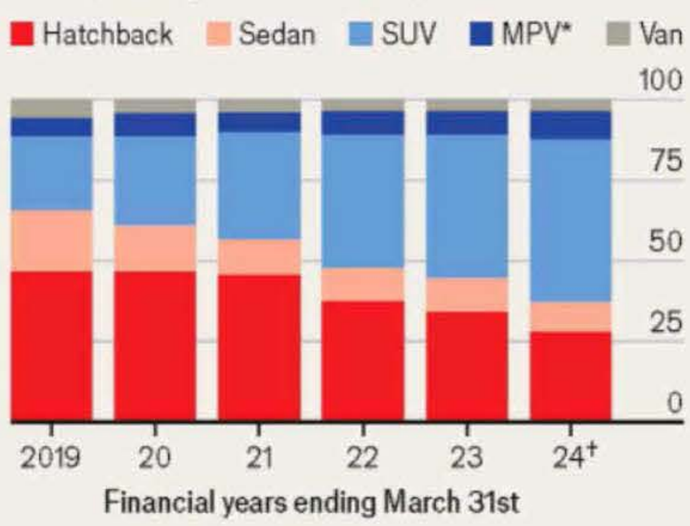
Third is the triumph of value over cost. "Earlier, buyers were more focused on mileage," says Arun Agarwal, who covers the automotive industry at Kotak Securities, a broker, and drives a Maruti Suzuki Ertiga, a people-carrier. No more. Indians are increasingly willing to spend more for a better experience. The average selling price of a car rose by a third in the half-decade to last year, from 491,000 rupees ($5,800) to 659,000 rupees, according to Hyundai. That is partly driven by rising prices—safer and bigger cars are more expensive than tin-can hatchbacks. But it is mostly because consumers want the best of the cars they are buying. Among some models, the top-end variant now accounts for two-thirds of sales, up from less than half before the pandemic, reckon analysts at Macquarie, a bank.

This reflects a trend visible in other consumer products. Cheap mobile phones, for example, are disappearing from the Indian market, even as top-end models like the iPhone are soaring. Easy and widely available financing has helped. It allows buyers to think in terms of a few extra thousand rupees a month rather than about the hefty upfront cost.

Moreover, India's deep penetration of cheap internet connectivity has accustomed consumers to always being online. Buyers of even the cheapest cars demand touchscreen consoles. The amount of time ▸▸

Automobiles for the people

India, passenger-vehicle sales, % of total



*Multi-Purpose Vehicle †To February
Source: Hyundai Motor India Limited

Indians spend in traffic plays a role in the prioritisation of entertainment over engineering. More and more "purchasing decisions are being done [based] on tech in cars," says Shailesh Chandra, the boss of Tata Motors' passenger-vehicles division, whose ride of choice is the electric version of his company's Curvv, a sleek SUV coupé.

Social cachet plays a role too. A decade ago, simply owning a car conferred status. That is no longer enough. Today it is the car's make and features that mark out its owner. Bafflingly, sunroofs have become one of those features, despite the heat, humidity, dust and pollution of most of India. "What is parked in your garage and how much it costs still determines where you are in the pecking order in your building," says Mr Mahindra.

The surge in car-ownership and in ever bigger cars is not without its downsides. Honking is pervasive. Rule-breaking is endemic and getting worse. Better enforcement and much higher fines would help tackle those problems.

More intractable is congestion. Like Bangalore, most Indian cities do not have road networks robust enough to support all the vehicles now competing for street space. Yet it is unlikely that a country that for decades dreamed of car-ownership will forgo those aspirations. A "car is like freedom to go anywhere any time," says Vinay, the Bangalore-based car nut. "But I would like to keep it in parking on all weekdays, and use it only for weekend drives." ■

BANYAN

Weathering the Trump trade typhoon

The complacent region of South-East Asia could use an outside jolt

IN 1833 EDMUND ROBERTS, President Andrew Jackson's envoy, signed with the Kingdom of Siam in Bangkok a treaty of "amity and commerce". It was America's first in Asia, promising "commercial intercourse...as long as Heaven and Earth shall endure". Nearly two centuries later, Thailand still feels the amity, and not just from America. "The Americans love us, the Chinese love us, we don't have to choose sides," boasted Pichai Naripthaphan, Thailand's commerce minister, on November 7th. Mr Pichai thinks the America-China trade war, likely to escalate under Donald Trump, will only heat up the love-in.

He is far from the only trade optimist in South-East Asia. During the last round of American tariffs on China, trade and investment gushed into the region as firms developed "China plus one" strategies, in which supply-chain nodes are added outside China. Many officials expect more of the same this time round. Even Mr Trump's most disastrous proposal, a 20% across-the-board tariff combined with 60% levies on Chinese imports, could still leave South-East Asia a net beneficiary. Such a large differential in tariff rates would create a powerful incentive for "tariff engineering": that is, rejigging supply chains for the sole purpose of qualifying for the lower, non-Chinese rate.

This view is too complacent. One reason is that America's fears over China are broadening. In September Joe Biden banned imports of internet-connected cars supplied by companies with a "sufficient nexus" to China—a standard that, if applied widely, could implicate all of Asia. Another is that it underestimates Mr Trump's willingness to inflict punitive trade policy. As Michael Beeman, who served as an American trade negotiator in Asia under the Trump and Biden administrations, writes in "Walking Out", a new book, Mr Trump was not afraid to undermine his own efforts to contain China by going after Asian countries accused of trade infractions. Mr Trump's approach to trade, argues Mr Beeman, presumes a "right to reassess" America's commitments if its trading partners let cheap Chinese goods reach America through the back door.

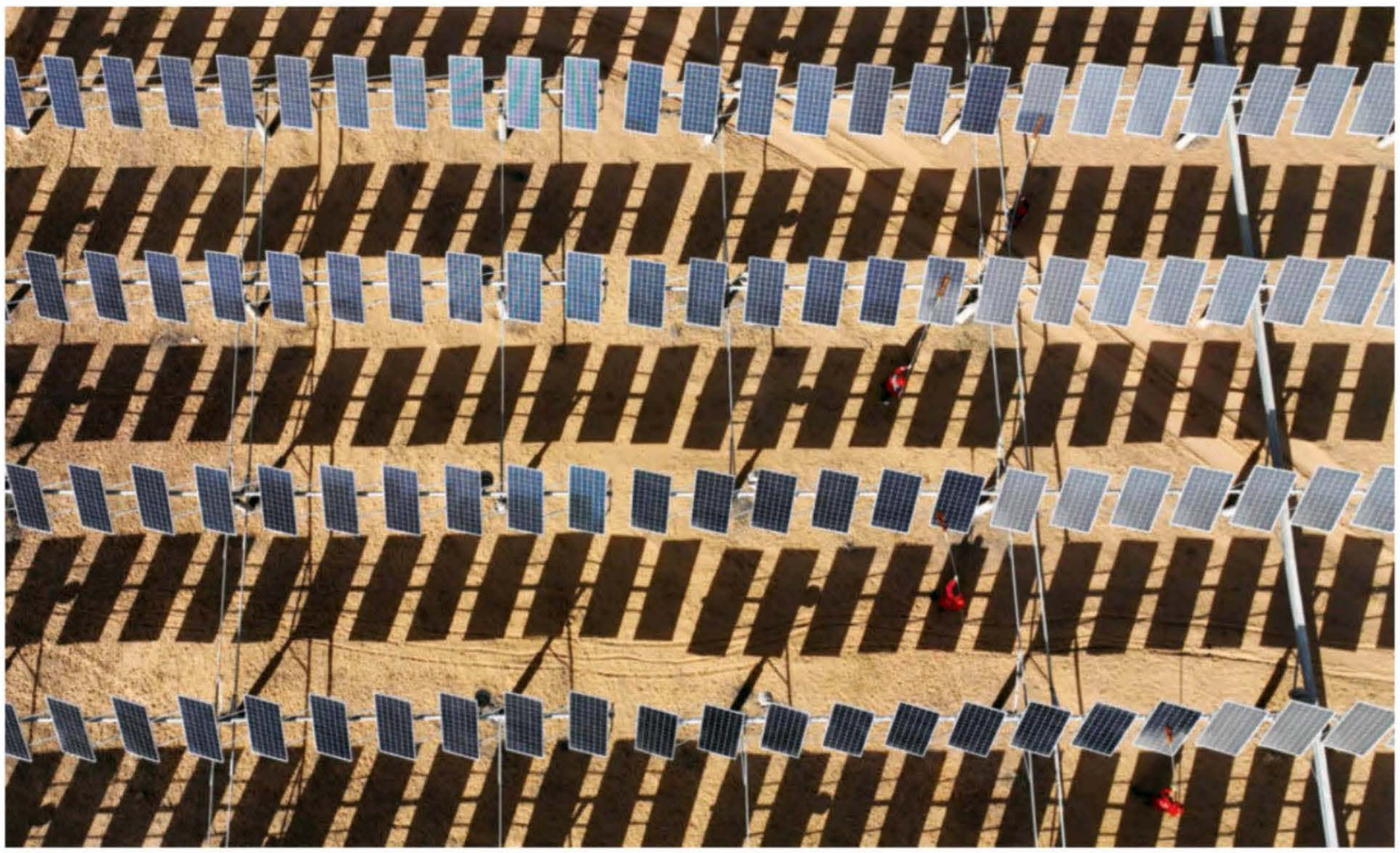
As much as South-East Asia craves non-alignment, in practice it could be forced into choices that anger either America or China. Already, early reports suggest higher American tariffs on largely Chinese-built solar panels from Thailand, Vietnam and Malaysia have led to scaled-back operations. What if America, keen to keep its chips away from Chinese AI firms, restricts exports to countries like Malaysia, slowing its data-centre boom? Bungled policies could upset both sides.

South-East Asia is not wholly at the mercy of warring great powers, though. It boasts a thick web of bilateral free-trade agreements. Still more promising are two major pieces of multilateral trading infrastructure that are independent of America. One is RCEP, a tariff-cutting agreement linking the Association of South-East Asian Nations (ASEAN) to East Asia. The other is the CPTPP, successor deal to the Trans-Pacific Partnership that America abandoned under Mr Trump's first administration; four ASEAN members have joined it. In theory these offer alternatives to creaky American-led trading institutions like the World Trade Organisation, and should raise intra-Asia trade, which is itself a hedge against American protectionism.

Yet their roll-outs have been sluggish. RCEP has not gone nearly far enough: a recent study finds that since 2021 only Japan, South Korea and China have enjoyed tariff reductions through it. Although ASEAN has lowered tariffs, little has been done about non-tariff trade barriers such as differing product standards. Meanwhile, the CPTPP, a more thorough deal, has no permanent secretariat. Its meetings are akin to an ad hoc get-together of department heads in a company with no C-suite, says Deborah Elms of the Hinrich Foundation, a trade think-tank in Singapore.

The strongest case for optimism is that Mr Trump's protectionism and distrust of multilateralism could rouse the region's ambitions. ASEAN's leaders know all too well how much their economies rely on trade. Yet boosting regional trade has not been an urgent priority. Many hoped, in vain, that America's return to free trade was just one election away. Those hopes are now dead. What remains is the weary work of further ASEAN integration: lowering barriers, harmonising standards and invigorating trade architecture. It has rarely seemed so pressing.

China



Climate change

Big spender

BEIJING

China is stumping up for the world's decarbonisation. Will it keep paying?

PAYING THE CLIMATE BILL

WHICH COUNTRIES should shell out more to save the planet? That is one of the big questions being asked at COP29, the UN's climate summit in Baku this month. A common answer is China, which Westerners accuse of contributing too little to efforts aimed at helping poor countries cope with climate change. For nearly two decades China, the world's second-largest economy, has been the biggest emitter of carbon dioxide.

Chinese officials push back, arguing that their country is still developing and that it is responsible for fewer historical emissions than America and Europe. But their strongest counter-argument is that China is already spending more than any other country on the green transition. It is driving global investment into clean-energy technologies, which, as a result, are being rolled out around the world at rates unimaginable just a decade ago.

Chinese money props up every stage of the clean-energy supply chain. Between 2018 and 2023 global investment in the refineries and factories that turn raw materials into wind turbines, electric vehicles (EVs) and other green technologies came to $378bn, according to BloombergNEF, a research firm. Nearly 90% of that came from China (see chart on next page).

Thanks to these investments, China produces far more clean-energy equipment than any other country. Its companies manufacture enough lithium-ion batteries (which are used to power EVs) to satisfy the whole of global demand. Eight in ten of the world's solar panels are made in China, according to the International Energy Agency, an intergovernmental body. By building whopping economies of scale and competing with each other fiercely, Chinese companies have slashed costs.

China is not only supplying these technologies, it is driving demand for them. More than half of its electricity is still generated by coal. But last year Chinese firms plugged some 300 gigawatts of wind- and solar-power capacity into the grid, nearly two-thirds of the amount installed globally. (For comparison, Britain's total power capacity is 100 gigawatts.) In June the world's biggest solar farm came online in western China. It covers an area twice the size of Manhattan. China is also building more nuclear-power plants than any other country. Last year global spending on the deployment of clean-energy technologies came to $1.8trn, according to BloombergNEF, of which 38% occurred in China.

When it comes to the size of such outlays, China has two big advantages over other countries. Thanks to a high savings rate, it has long relied on investment, rather than consumption, to drive economic growth. And its government is able to di- ▸▸

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rect much of that investment to sectors it favours. After the global financial crisis of 2007-09, officials pushed vast amounts of money towards property, roads and railways. Over the past decade the state has increasingly targeted clean energy.

Some of what China is doing to mobilise investment would be familiar elsewhere. Like Germany and Japan, it has incentivised the generation of renewable power by guaranteeing an above-market price for it (what is known as a feed-in tariff). China has also encouraged its companies to issue green bonds, financial instruments that channel funds towards environmentally friendly projects. China is the world's largest market for them.

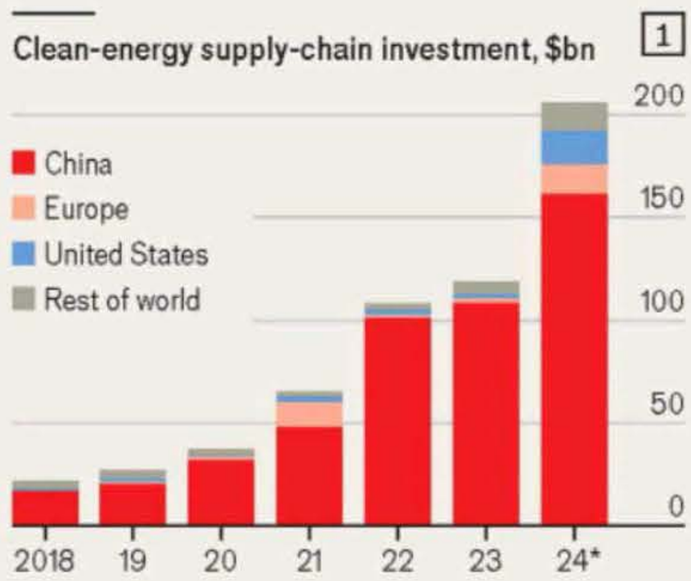
But it is in other forms of state support for the clean-energy sector that China stands most apart. So-called "government guidance funds" have taken stakes in private businesses to support research and development. State-run banks have handed out lots of cheap loans. And local governments have competed to offer firms generous subsidies in the form of inexpensive land and lower taxes. China's EV-makers, for example, received $231bn in subsidies between 2009 and 2023, reports the Centre for Strategic and International Studies (CSIS), a think-tank in Washington, DC.

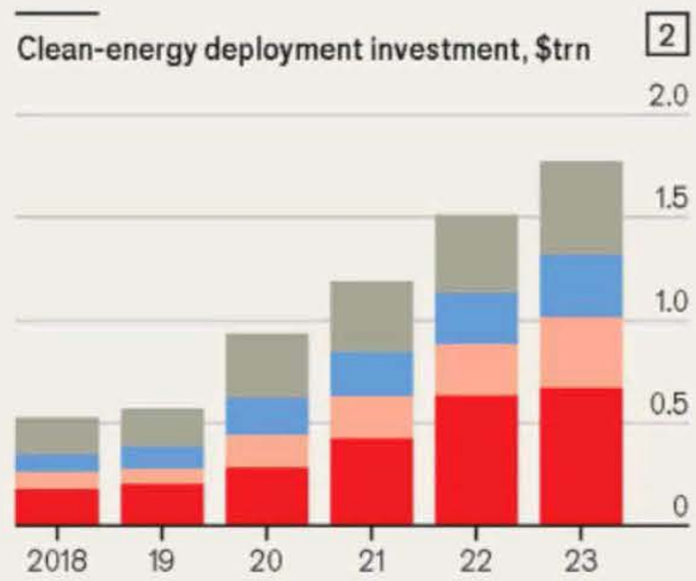
Waste is a big problem. Investments are often replicated, as different regions of China vie to create their own champions. By offering so many subsidies, local governments have added to their big debt loads. And because production has outpaced domestic demand, clean-energy industries are suffering from overcapacity. As a result, China's battery and solar manufacturers are undergoing a wave of painful consolidation.

Western governments point to these handouts when accusing China of unfair competition. But China's clean-energy success is down to a number of factors, says Lauri Myllyvirta of the Centre for Research on Energy and Clean Air (CREA), a think-tank in Finland. It has long been a manufacturing powerhouse and is full of engineering graduates. China's demand for power is still growing fast, creating a reliable market for new generating capacity. (Many Western countries, by contrast, saw power demand stagnate or fall in the 2010s.) And Chinese firms—such as CATL, the world's largest maker of lithium-ion batteries, and BYD, an EV giant—have proved to be agile and innovative.

Still, China's sending of green technologies abroad has provoked a backlash. America and the European Union have accused it of flooding international markets with artificially cheap goods, making it impossible for their own firms to compete. Both have imposed steep tariffs on things like Chinese EVs. America's next president, Donald Trump, is threatening a trade war.

The big red chequebook





Source: BloombergNEF *Forecast

In the face of all this, China's policies are evolving. As clean-energy industries have matured, the state has reduced its support. Feed-in tariffs for renewable power were rolled back in 2021, after solar and wind became cost-competitive with fossil fuels. Schemes to subsidise purchases of EVs are being wound down.

This does not foreshadow a collapse. China still needs lots of power and, even if it did not have a target of reaching net zero emissions by 2060, the fact that renewables are now cheap guarantees that a lot will be used. Chinese leaders, anxious about relying on imported oil and gas, like the increasing diversity of their energy mix. Last year investments in the field accounted for 40% of China's GDP growth, according to calculations by CREA.

China's ruler, Xi Jinping, has dubbed clean energy one of the "new productive forces", or cutting-edge technologies that he wants his country to dominate. This means the success of the clean-energy sector is now linked to Mr Xi himself, says Ilaria Mazzocco of CSIS. "These have become priority industries, no matter how tough the times get." Put another way: China will continue to make the world's transition to clean energy easier—if the world lets it. ■

Emergency response

Loss and control

A car-ramming attack tests the government's ability to shape the public mood

THE DETAILS provided by the police are horrific. Thirty-five people were killed and dozens injured when a man drove his vehicle into a crowd in the city of Zhuhai on November 11th. A suspect was arrested, though not before he tried to kill himself with a knife, causing wounds that left him in a coma. The man, 62, was reportedly angry with how assets had been divided in his divorce.

But there is another aspect of this tragedy that Chinese citizens find galling. Videos of the attack's aftermath quickly spread online, piquing the public's concern. Then the government stepped in, removing the content and suppressing reports for 24 hours. A BBC reporter at the scene was pushed around. This follows revisions to the law in June that tightened the government's control of media coverage during emergencies.

Several times this year drivers have ploughed their cars into pedestrians or other vehicles. Those incidents, along with a spate of stabbings, are sometimes referred to as "revenge on society" attacks. The term reflects growing worries about social tensions, with people frustrated by a property crisis and sluggish economy. In response to the attack in Zhuhai, China's ruler, Xi Jinping, called for "prevention and control of risks at the source". Some take that to mean he wants local Communist Party cadres to keep a more watchful eye on citizens.

On November 13th the party did at last splash news of the attack in Zhuhai on the front page of the *People's Daily*, its main mouthpiece. The message was clear: things are under control. But for some members of the public it was a reminder of how little they are allowed to know about such incidents. In recent days the authorities in Zhuhai have removed items left as tributes to the victims. It was already time to forget.

The economy

Hidden debts, crouching rulers

HONG KONG

China's stimulus falls short, as a showdown with Donald Trump looms

ECONOMISTS SOMETIMES say that China suffers from the three Ds: debt, deflation and poor demography. America's presidential election added a fourth: Donald Trump, who has threatened to slap high tariffs on Chinese exports when he returns to the White House. To counter these dangers, investors had hoped China would announce a decisive fiscal rescue package after a legislative meeting on November 8th. China's leaders, though, seem stuck in a cautious crouch. After the meeting, the finance ministry unveiled a new plan to tackle one of the Ds: debt. But it shared no new measures that would help it beat back deflation.

Lan Fo'an, China's finance minister, said that local governments would be allowed to issue extra bonds worth trillions of yuan to replace riskier "hidden" debts. These veiled liabilities typically belong to local-government financing vehicles (LGFVs), quasi-commercial infrastructure firms sponsored by city and provincial authorities. The debts of LGFVs totalled about 60trn yuan ($8.6trn) at the end of 2022, about one-fifth of it risky, according to Goldman Sachs, a bank. To refinance these debts, local governments will be able to issue bonds worth up to 10trn yuan over the next five years.

Hidden debts have been a nagging worry for China's rulers and investors for the past 15 years. Barred from issuing many bonds of their own, local governments raised money through LGFVs instead. Lou Jiwei, China's formidable finance minister from 2013 to 2016, tried to bring these debts under control during Xi Jinping's first term as president. His approach set the precedent for the latest initiative. Local governments were allowed to sell more bonds (an explicit obligation) in place of the implicit, off-balance-sheet debt raised by LGFVs. "Open the front door and close the back door," as Mr Lou put it.

Unfortunately, the back door kept popping open whenever ambitious local governments felt the need to gin up the economy. Their hidden debts have also become harder to sustain in recent years. China's slowdown has hurt tax revenues and the slump in the property market has undermined land sales, a significant source of money for local governments. In response officials have cut back public services, sold state assets and harassed businesses for back taxes and fees. The most notorious example was a 66,000-yuan fine imposed on a grocer in Shaanxi province for selling 2.5kg of substandard celery. China's cabinet has urged the most indebted provinces to "smash the pots and sell the iron", a poor man's version of selling the family silver.

China's central government resents the financial indiscipline of lower-level authorities. But it also fears the consequences of letting them fail. It has not permitted an explicit default on a local-government bond, including the bonds issued by LGFVs. Bail-outs, though, have been grudging and often indirect. Mr Lan referred to clearing "landmines" one by one. The plan announced on November 8th represents a pre-emptive effort to remove risks, rather than a hurried response to fiscal emergencies. It will, Mr Lan said, allow local officials to devote more time and attention to other things. And because the cost of financing "front-door" bonds is lower than that for risky, back-door debts, the plan will save local governments 600bn yuan in interest payments over five years.

That is welcome. But those interest savings amount to less than 0.1% of China's expected GDP over the next half-decade. Investors had hoped for more generous, and more direct, measures to boost spending and dispel deflation. The government is said to be considering handouts for poorer households and subsidies for childbirth. It could expand a trade-in programme that resembles America's "cash for clunkers" scheme, encouraging consumers to hand in their old cars, fridges, air-conditioners and other appliances for newer, greener ones. The finance ministry said on November 13th that it would cut taxes on some property transactions, extending a tax break previously reserved for smaller units to larger ones. More such measures may appear in the coming months. But China's leaders clearly see no urgency to announce them just yet.

Preparing for war

The country's rulers may be planning to save their fiscal ammunition for the bigger battle they will face if Mr Trump follows through on his threat to start a second, fiercer trade war. The next big economic events on China's political calendar are the party's economic-work conference in mid-December and the meeting of its rubber-stamp legislature in March, when the budget and growth target will be announced. By then Mr Trump's intentions may be clearer. But China's economic problems may also be deeper. ■

Chaguan, our China column, has been suspended. Our goal is to reinstate it when we have a new columnist resident in Beijing.

China's greatest dumpling run

It all started in June when four university friends in the city of Zhengzhou decided to cycle 50km to Kaifeng in order to eat that city's famous soup dumplings. Their social-media posts about the journey garnered attention. Soon a trend had developed. Hordes of students began making the night-time ride between Zhengzhou and Kaifeng. At first the government encouraged the activity. "A symbol of youthful energy and the joy of shared experiences", the official *People's Daily* called it. By earlier this month, though, the number of cyclists had grown into the tens of thousands. Big spontaneous gatherings of young people make officials nervous. So the local authorities shut things down, citing traffic disruptions and safety concerns. Some indefatigable former riders now say they will set out on foot.

Middle East & Africa

Investing in Africa

The Africa premium

LAGOS

A highly charged debate over whether capital markets unfairly penalise Africa

"THE CONCEPT of risk is completely invented to ensure that investment doesn't come to Africa," Gagan Gupta told an audience of investors and entrepreneurs earlier this year, to resounding applause. Mr Gupta, whose firm works on logistics and utilities across Africa, is optimistic about the continent and scathing about outsiders' ability to assess it. Philippe Valahu, the boss of PIDG, an infrastructure-finance group, echoes the sentiment: "I spend a huge amount of my time dispelling risk perceptions," he says. Aubrey Hruby, who advises investors on entering Africa, recalls that "one thing [Americans] always say is, what about corruption? I'm like, how many mayors in America are serving jail time right now for corruption?"

The view that African firms and governments pay a higher cost of capital than is neccessary to compensate investors in debt and equity for the risks they assume is widespread on the continent. Regional policymakers even plan to launch an Africa-based credit-rating agency in 2025 to counter the scores of global rating agencies, which they say are plagued by bias. "We are basically given a higher risk profile unfairly. One of the reasons that this is happening is because our balance sheets and economies are not valued correctly," Hakainde Hichilema, the president of Zambia, said earlier this year. Is he right?

How much the continent pays for capital is a matter of urgency. One reason is that governments' interest bills are soaring as countries labour under a massive pile of debt. Government debt across sub-Saharan Africa reached 60% of GDP in 2023, with two dozen countries' debt burdens widely considered unsustainable. Three—Zambia, Ghana and Ethiopia—have defaulted since 2020. The ratio of interest repayments to government revenue has doubled since 2010. Managing the debt load will require African countries to get their houses in order. But that would be easier if debt markets were deep and efficient.

The other reason for urgency is that debt (sovereign and private) and equity inflows have stagnated even as investment needs are huge. The UN Economic Commission for Africa reckons that each year the continent gets $100bn less infrastructure financing than it needs. Sub-Saharan African countries issued no offshore foreign-currency bonds in 2023, though some have since begun to return to the market.

Foreign direct investment inflows by multinationals are mediocre, at just under 3% of the global total and 2% of GDP in 2023. Investors undoubtedly face a range of risks, including sovereign default, currency devaluation, illiquidity and corporate mismanagement. Nonetheless, if there is a systematic mismatch between investors' perception of the basket of risks and the reality, closing it could yield large economic rewards.

At face value risk perceptions for African debt and equities appear elevated. The average credit rating is near an all-time low, according to Fitch, a rating agency. Only Namibia and South Africa have ever received an investment-grade rating for their bonds. In all, African countries must ▸▸

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borrow at consistently higher headline interest rates than other emerging markets, according to a recent study by the IMF. Equity valuations in stockmarkets are low, implying poor growth prospects or high risk: in aggregate, listed firms in sub-Saharan markets trade on 13 times profits, according to Bloomberg data. If you exclude South Africa that falls to six times.

Critics of the status quo argue these figures are not a fair reflection of actual risks in Africa. One kind of risk is of default on debt: Moody's, another rating agency, reckons that default rates on infrastructure projects in Africa are low at 5.5%, compared with 11.9% in Asia and 14.5% in Latin America. Another risk for equity holders is that bad managers destroy value. Yet the average return on equity among the 500 most valuable listed firms on the continent is a solid 15%, better than the stingy valuations imply. Mr Valahu of PIDG says his fund's losses from two decades of investing in African projects have been a small fraction of what would have been expected based on the implicit rating given to its $1.4bn portfolio by agencies.

So is there a mispricing of the opportunities and dangers of deploying money in Africa? No, says the IMF in a recent study of government bonds in 89 countries since 2003. It concludes sub-Saharan African states do face higher interest rates than other countries, even controlling for their risk rating at the point of issuance. However, it goes on to argue that this Africa premium is nonetheless explained by other "structural factors". These include the transparency of a country's budget process, the size of its informal sector, the sophistication of its financial sector and the quality of its regulatory institutions, which are strong determinants of risk perception.

At the heart of the debate over the Africa premium is bad or inadequate information. Most investors, reasonably, view this as a form of risk. Some of their critics worry it is a form of ignorance. For example, weighing structural factors is a subjective exercise. Many African countries have a history of unpredictable regulatory changes, and convincing outsiders that times have changed may be hard. And estimating risk and returns for private-sector investments, rather than the sovereign lending in the IMF study, is far trickier. The continent's capital markets are tiny and fragmented. Many projects are hidden inside the books of listed multinational firms or funds. "When an investor is looking at the market, they always focus on data," says Guillaume Arditti, founder of Belvedere, an Africa-focused advisory firm. "And those data do not exist in Africa with the level of granularity investors from the US or Europe are used to."

Addressing both "structural factors" and private-sector opacity requires ending this informational inefficiency. One idea is the African credit-rating agency floated by some governments. There is no harm in having another source of ratings, but a homegrown agency is unlikely to change outsiders' perceptions by much.

Instead, improving the quality and the availability of investment data is more promising. Governments should be upfront about the structure of their debts, including loans from sovereign lenders such as China, some of which are secret. A plan by the World Bank to create a database that makes it possible to estimate the rates of return on past infrastructure projects should be accelerated. And encouraging more firms to list on regional stockmarkets would reveal more about private-sector activity. The more data investors and firms have, the more probable it is that risk and returns will be priced accurately. ■

Somaliland

The world's next country?

HARGEISA

As the statelet votes, international recognition seems tantalisingly close

SINCE DECLARING independence from Somalia in 1991, the people of Somaliland have built a surprisingly stable democracy in a volatile region where autocracy is the norm. Yet no country has recognised the breakaway state's claim to sovereignty. Geopolitical developments in the past year and Donald Trump's victory have raised the hopes of Somalilanders that this may soon change. But their nerves have been jangling ahead of a presidential poll on November 13th, since internal ructions could kibosh their national dream.

A consequential vote

The election pits Muse Bihi Abdi, the current president, against Abdirahman Mohamed Abdullahi, better known as Irro, who leads the opposition Waddani party. With no reliable opinion polls, observers reckon the race will be close, raising a risk of violence after the result is declared.

Mr Bihi campaigned on the promise that he would secure recognition for his state, based on a memorandum of understanding (MOU) Somaliland and Ethiopia signed on January 1st. In return for recognition, Somaliland agreed to lease a strip of its coastline on which its landlocked neighbour could build a naval base. This incensed Somalia, which considers Somaliland part of its own territory, and raised tensions in the Horn of Africa. America, which under President Joe Biden expanded support for Somalia, is understood to have lobbied for the deal to be scrapped.

Mr Trump may take another line. He is said to view America's past support for Somalia as a bad deal. At the end of his first term he pulled nearly all American troops out of the country. Some Africa experts in his orbit say Somaliland would be a more dependable ally than an unstable Somalia. It could also offer America, which has a military base in nearby Djibouti, another one on the Red Sea. "If Ethiopia proceeds to execute the MOU, I think [recognition] is a matter of time," says J. Peter Pham, who served in Mr Trump's first administration and may be in contention for the second.

Yet Somaliland's internal cohesion has frayed under Mr Bihi. His critics say he has eroded the tradition of relative political tolerance that is credited with helping to keep the peace among its fractious clans. When local leaders in the eastern city of Las Anod rebelled last year against the government in Hargeisa, the capital, he cracked down when he might have compromised. The result was a brief civil war in which Somaliland's national army suffered a humiliating defeat. Swathes of territory around Las Anod remain under the control of SSC-Khaatumo, a rival militia-backed movement that has called for a separate statelet within a federal Somalia.

More violence would tarnish Somaliland's reputation for stability, the premise for its case for recognition. Both Mr Bihi and Irro say they will accept the election result. But not everyone takes the president's word at face value after the Las Anod conflict. And Irro's supporters are mostly drawn from a powerful clan that feels marginalised by Mr Bihi's group. Many will be spoiling for a fight, should the chance to rule be denied them. "People are trying hard to keep the peace," says Guleid Jama, a human-rights lawyer in Hargeisa. "If things go wrong, it could be the end of Somaliland." ■

Hamas

Quitting Qatar

DOHA AND JERUSALEM

Farewell to plush villas in Doha, hello Turkey

THE SPACIOUS beige villas in Doha's northern suburbs were once home to many of the senior leaders of Hamas, the Palestinian Islamists. But they have largely been empty in recent months. Since the last round of American- and Qatari-mediated talks with Israel collapsed in August, the Qataris, once welcoming, have cooled on Hamas. The group's remaining bosses have been spending more time in Turkey, where Recep Tayyip Erdogan's government has received them more warmly.

Qatari officials say recent reports that they are planning to evict Hamas are "inaccurate", but sources close to the group's leaders concede that with a new American president, they may not be able to keep their political headquarters there much longer. "We are just being prudent," says the son of a member of the group's politburo of their sojourns in Istanbul.

After the attacks of October 7th, Hamas looked triumphant. Today its base in Gaza has been destroyed, its leadership decapitated and it seems increasingly homeless. Even as the war grinds on, more Gazans are willing to speak out against the Islamists, blaming them for unleashing Israel's anger and its devastating war. Anti-Hamas protests were rare before the conflict; they have become a bit more common. Salman al-Dayah, a leading Islamic scholar in Gaza, recently published a coruscating *fatwa* accusing Hamas of "violating Islamic principles" when it endangered its own civilians by attacking Israel.

Over the past ten months Hamas has lost its three most prominent figures: its chief in Gaza, Yahya Sinwar, and its senior political leaders, Ismail Haniyeh and Saleh al-Arouri. The group is now led by a quartet of squabbling officials based outside Gaza, who are keeping a low profile for fear of assassination, and the remnants of the military wing's commanders in Gaza.

Its two main patrons now view it as a liability more than an asset. Iran sees Hamas as having dragged it and its proxy, Hizbullah, into an unending cycle of warfare with Israel. The Qataris still give the group a platform on Al Jazeera, a state-sponsored satellite channel. But they are coming under growing pressure from the Americans to show that they still wield influence over Hamas, or to kick it out (Qatar also hosts major American bases).

Throughout most of the war, a ceasefire in Gaza was seen as the key to bringing some kind of peace to the region. That has changed. American-brokered talks for a deal in Lebanon are now more advanced. Iran is also anxious to find a way to prevent more Israeli air strikes which jeopardise its economy and internal stability. If these aims can be achieved, Hamas could be left out in the cold.

Hamas maintains that it will agree to a ceasefire and release the remaining 101 Israeli hostages (half of whom are presumed dead) only when Israel commits to a full withdrawal from Gaza. This is looking increasingly unlikely. Israeli forces have expanded their hold on three widening strips of territory, and are pushing most of the population into a "humanitarian zone" in the south, where most will spend a second awful winter in tents. And Israel's leaders are unlikely to make any concessions until after Donald Trump's inauguration.

If Hamas refuses to show any flexibility in negotiations and is evicted from Qatar, it will be left with few alternatives. Decamping to Tehran would increase its dependence on Iran. Iraq, another majority-Shia country, might be an uncomfortable base for the Sunnis of Hamas. Damascus and Beirut are within easy reach of Israel's security services, which have vowed to hunt down those responsible for the October 7th massacres. Turkey may be the only option, but even Mr Erdogan, as the leader of a member of NATO, has to keep up appearances. "There won't be a brass plate on the door," says one Western official in Doha. Surveillance will be far more "robust".

Abandoned by its allies, resented by Gazans and still under attack from Israel, losing its comfortable outpost in Doha may be the least of Hamas's problems. ■

Bye bye bye

Iraq, Iran and Israel

The latest expansion

Iraq fears that Iran will use it as a base to attack Israel

NO SOONER HAD it unleashed the first of its drones at Israel on November 8th than the Iraqi militia published an image of missiles streaking through the sky. Israel said its aerial defences had thwarted the attack by al-Nujaba ("the Nobles"). "Big surprises in the coming hours," the group promised—in Hebrew as well as Arabic: "God willing, many events".

Most of the Middle East's rulers, including those of Iran's allies, would prefer God has other plans. Iraq has been doing rather well of late. It is at last using its oil revenues to fund infrastructure, not sectarian wars or foreign slush funds. Violence is at its lowest level since America's invasion. Its officials are desperate to sidestep Israel's conflict with Iran.

But their efforts are hamstrung by a lack of control over their own turf. Israel says Iran is funnelling fresh stocks of long-range missiles and explosive drones to its militias there. Iran is furious that America let Israel use Iraq's airspace to bomb it. Iraq could be the next country to be pulled into Israel's regional war.

For now, Iraq is relying on diplomacy to save it. On November 10th its national security adviser went to Iran for talks with the Quds Force, the foreign-operations arm of the Islamic Revolutionary Guard Corps (IRGC), Iran's praetorian guard. He urged its boss to leave Iraq out of any Iranian plans to attack Israel in retaliation for its air strikes on October 26th. That same ▸▸

day Iraq's prime minister, Muhammad al-Sudani, met the Saudi crown prince, Muhammad bin Salman, in Riyadh to discuss how to prevent the war from spreading. Meanwhile, the country's top cleric, Grand Ayatollah Ali al-Sistani, told the Iraqi state to take control of the militias' weapons.

But Iran fears that Israel's attacks on its air-defences and its proxies, long seen as its first line of defence, have left it exposed. Until recently, it demonstrated what it called "strategic patience" and absorbed Israel's blows. But Israel's strikes on Hizbullah, Iran's proxy in Lebanon, and its invasion of Lebanon have taught Iran that restraint looks weak and only invites further aggression. Mindful that Israel struck back after it fired two rocket salvos from Iran, Iranian officials hope that using Iraq would spare their country from an Israeli counter-attack. And because Iraq is closer to Israel, Israel's air-defences would have less time to intercept a strike.

Until recently, Israel looked to American forces on land and sea to deter Iran-backed militias in places such as Iraq and Yemen. But its routing of Hamas and Hizbullah, and its air strikes on Syria, have emboldened its leaders to target the rest of Iran's "axis of resistance". Israeli security men talk of a pre-emptive strike before Iraqi militias unleash their "big surprises".

Iran has two bands of allies in Shia-dominated Iraq. The first are the Shia factions that it began to build up after America toppled Iraq's dictator, Saddam Hussein, in 2003. In elections since then, they have captured the Iraqi state. With Iran's help in 2014 they formed the Popular Mobilisation Force (PMF), a group of Iraqi state-financed militias.

But as these blocs were increasingly driven by homegrown Iraqi interests, Iran sponsored new paramilitaries, like al-Nujaba, under its direct command. After Israel invaded Gaza, Iran helped create the Islamic Resistance in Iraq (IRI), another umbrella of militias which Iran pays and supplies. It has since lobbed dozens of rockets and drones at Israel and attacked American bases. Israel's killing of Hamas and Hizbullah commanders has left a vacuum in Arab leadership of the axis. Some Iraqi militiamen might be eager to fill it.

Iraqis have long sought to rid their country of foreign forces, both American and Iranian. They have failed to do either. So instead of separating from America or Iran, Iraq's factions prefer to stay out of the fight. The PMF's commanders have assured Mr Sudani that they will not use their weapons or fighters on the state payroll to attack Israel. Were Israel to limit its attacks to the IRI and avoid hitting population centres, the fallout in Iraq could be limited, though it might be harder to contain if Israel struck near Iraq's Shia shrine cities where the IRI has a presence, or if it hit the PMF. Privately, some Shias might even cheer a strike on the non-PMF militias. "These groups are just criminals and thieves," says a graduate of one of Mr Sistani's seminaries. "All Iraqis know they are just employees of Iran."

America also wants to peel Iraq away from Iran's influence. On November 11th American forces struck pro-Iranian militias in Syria, near the Iraqi border. Donald Trump, once he is president, might go further. During his last term he ordered the killings of the PMF's then commander, Abu Mahdi al-Muhandis, and Iran's top general, Qassem Suleimani, in Baghdad. No less worrying for Iraq, Mr Trump's advisers may be considering sanctions against it. Since 2003, Iraq has deposited its oil revenues in an escrow account in New York. Mr Trump, says an Iraq-watcher recently in Washington, might have that in his sights. ■

Lebanon and Syria

An unlikely haven

As war rages in the Middle East, Shias are fleeing to a deadly dictatorship

TO GRASP HOW bad things are in Lebanon, consider that Syria—where war and tyranny created the world's largest refugee crisis—now seems like a place of safety. Since September around 500,000 people have fled Israel's invasion for the war-torn and fragmented state next door.

More than two-thirds are returning Syrian refugees. The rest are almost all Lebanese Shias who hope Syria's leader, who himself belongs to a Shia splinter sect, the Alawites, will be more welcoming than Lebanon's rival ones. Their meagre savings, following the collapse of Lebanon's currency, go further in destitute Syria, too. Some 16.7m Syrians rely on aid, according to the United Nations. There is a lack of basic services, but UN agencies hand out food, and rents are very cheap. Such is the influx that house prices and rents are climbing for the first time in a decade.

Bashar al-Assad, Syria's dictator, has long relished the chance to replace the country's Sunni majority—who fled the country's cities in droves at the height of the civil war—with more pliant minorities. His Alawite base makes up just 10% or so of the population. Hundreds of thousands of Lebanese Shias are a welcome addition. Mr Assad is wooing those fleeing by waiving the $100 border fee for the Lebanese. Some are said to have received Syrian passports.

Given his dire economy, he might yet seek to monetise the refugees. EU policymakers, who had feared Israel's war would push more refugees their way, have struggled to conceal their relief at the unexpected flight of Syrians east rather than west. Last summer eight EU countries signed a paper proposing to support some reconstruction in Syria and ease sanctions if Mr Assad took back some of the 1m Syrians who managed to get into Europe.

But for many of the displaced, Mr Assad's broken realm is just a stopping point. Plenty of Sunni returnees fear his vengeful goons, and head straight for the Turkish and Kurdish enclaves to the north and east.

Nor are Lebanon's Shias overjoyed about going to Syria. Israel suspects some are members of Hizbullah, the Iran-backed Shia militia in Lebanon, and has sent its warplanes and drones in pursuit. Hizbullahis remember the crucial role they played in propping up Mr Assad's regime. "We saved your regime, don't let us now perish," pleads one. But Mr Assad's battered forces would struggle against Israel's and would rather keep out of the fray.

Local anger is also brewing. Some Syrians resent the competition for already limited rations. Others recall how Hizbullah fighters intervened in their civil war, devastating their towns and turning them into dens for making captagon, a drug which is now Syria's biggest export. Some fear the Lebanese influx could turn Syria into Israel's next theatre of war. "You can't defend yourselves, let alone us," says a woman in Homs, near the Lebanese border. "Please don't lead us into your conflict."

So tens of thousands of Lebanese are heading still farther east to richer Iraq. The better-connected have moved into empty flats that Iraqis say Hizbullah bought during the country's real-estate boom, when Lebanon's economy plummeted.

Iraq's Shia-dominated government is welcoming them. The prime minister has ordered that they should be issued with hard-to-get work permits and be given housing subsidies. Iraq's well-armed Shia militias, who underpin the state, offer better protection than Mr Assad does.

The flight of whole populations is nothing new to the Middle East. But these latest demographic changes are widening sectarian gulfs already reopened by the war. ■

Europe

Germany

Kanzlerdämmerung

BERLIN

The sun is beginning to set on Olaf Scholz's chancellorship

IN MOST DEMOCRACIES a "snap" election might be expected a few weeks hence. In Germany, it will take three and a half months. Party lists must be drawn up, ballot papers printed, municipalities and volunteers mobilised. Moving any quicker, the chief elections officer has warned, would present "incalculable risks". Yet measured against the usual tempo of change in Germany, political events have developed at a blistering pace.

On November 6th long-bubbling rows in Germany's three-party coalition finally boiled over, when Olaf Scholz, the Social Democrat (SPD) chancellor, fired Christian Lindner, his finance minister, leader of the liberal Free Democrats (FDP), in a spat over economic and fiscal policy. That evening, after eviscerating Mr Lindner as an "egotist", Mr Scholz proposed subjecting himself to a confidence vote in January, and bringing forward an election scheduled for next September to late March.

But Mr Scholz's plainly risible suggestion did not withstand intense pressure from the opposition centre-right Christian Democrats (CDU) and others; and after six days he bowed to the inevitable. The confidence vote, the first in two decades and only the sixth in post-war German history, will now take place on December 16th. As the head of what is now a minority government with the Greens, Mr Scholz will expect to lose it. That will set the stage for Germany's president to dissolve parliament and call elections, now planned for February 23rd. The CDU may help pass a handful of laws in the meantime, says Kai Whittaker, one of its MPs.

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Formally, the campaign will kick off in the new year. In reality it has already begun. A feisty exchange in the Bundestag on November 13th offered a preview of its contours. Defending his record, especially his delicate line on Ukraine (yes to "unwavering" support; no to the delivery of Taurus cruise missiles), Mr Scholz vowed to hold together a country he worried risked American-style polarisation. He also attacked those he claimed were setting aid for Ukraine against social spending—a jab at those politicians, Mr Lindner chief among them, who refuse to consider easing Germany's strict deficit rules to help fund Ukraine. In response Friedrich Merz, head of the CDU, accused his "lightweight" opponent of "liv[ing] in your own cosmos" and issuing "half-truths". He offered a menu of proposals designed to lift Germany from its economic funk, including reforms to labour-market rules, welfare payments and climate obligations. Mr Lindner, for his part, declared his dismissal a "liberation", before proceeding to lay into the government in which he had served until just a week earlier.

The CDU and the Christian Social Union (CSU), its Bavarian ally, are leading opinion polls with around 33%, a little over the combined score of the three parties of the late coalition. Depending on the election outcome, and in particular on whether the FDP secures the 5% needed to retain a presence in the Bundestag, the conserva- ▸▸

tives should have their pick of coalition partners. (Some in their ranks quietly wonder if an unprecedented outright majority is within reach.) Mr Merz himself has not won over German voters, but in head-to-head match-ups is well ahead of his deeply unpopular rival. Barring a huge surprise, he will ensure that Mr Scholz becomes one of the shortest-serving chancellors in Germany's democratic history (see chart).

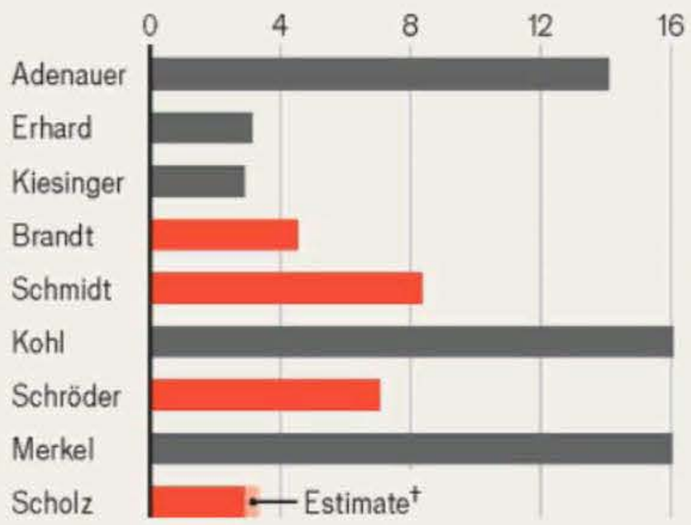
Yet Mr Scholz's team claim to relish the prospect of an electoral duel with Mr Merz, who despite his 69 years has never held executive office and is not immune to making gaffes under pressure. They remind those who doubt them that Mr Scholz came from behind to win the previous election, in 2021 (albeit barely). Expect a mildly populist SPD campaign that portrays Mr Merz as an out-of-touch millionaire who wants to decimate pensions and welfare, and whose recklessness risks escalating the Ukraine war.

Mr Scholz is likely to have his wish for a head-to-head granted, at least. In 2021 the Greens briefly looked like a credible party to lead a government. But their recent dismal polling will probably kill off any similar hopes for their candidate this year, Robert Habeck, despite his skills on the stump. Fringe parties, like the hard-right Alternative for Germany, will hope to exploit the moment of drama but could also struggle to be heard in what is shaping up to be a classic centre-left versus centre-right campaign dominated by economic questions. More than two-thirds of voters say the economy is going downhill. Each mainstream party is brimming with ideas, of varying quality, to effect a turnaround.

It was with exquisite timing, then, that moments after Mr Scholz took his seat in parliament Germany's Council of Economic Experts, a state-backed brains trust, slashed its growth forecast for 2025 and reminded the country that in real terms its economy had barely grown for five years.

Not a keeper

Germany, chancellors since 1949*, years in office



*West Germany until 1990 †Assuming that Mr Scholz loses the election scheduled for Feb 23rd 2025 and that formation of the next government takes around two months
Source: German Federal Government

As well as calling for an easing of bureaucracy and an acceleration of digitalisation, the council urged a reform of the constitutional debt brake, the rule to which Mr Lindner had held fast, to enable more and better public investment.

Earlier the same day, Mr Merz, whose party led the effort to create the debt brake 15 years ago, offered his clearest hint yet that he would be open to reforming it, so long as doing so enabled investment rather than extra social spending. That looked like a signal to the SPD and Greens, at least one of which is likely to rule in coalition with the CDU/CSU, of how to prepare for post-election governing negotiations. If so, it is to be welcomed.

Yet there are also reasons to doubt that the coming campaign will squarely counter the serious challenges confronting Germany. In parliament, neither Mr Scholz nor Mr Merz had much to say about the threat posed to German prosperity and foreign policy by the return of Donald Trump, beyond 2016-era waffle about ensuring that Europe does more for its own security. It was left to the Bundesbank to warn that Mr Trump's threatened tariffs could knock a full percentage point off German GDP. Is Germany ready for that? ■

Ukraine

Russian ruins

KYIV

Kremlin-occupied Ukraine is now a totalitarian hell

ON GOOGLE STREET VIEW it is possible to "drive" around parts of towns that have been occupied by Russia in Ukraine since its invasion in February 2022. To do so is to drive back in time. The images on the site were taken before the assault. Since then, many buildings have been destroyed, some of the streets have new names and the clocks have changed. The area runs on Moscow time, an hour ahead of the rest of Ukraine.

Donald Trump's incoming administration is likely to push for an armistice or peace deal between Russia and Ukraine. That, however, might leave as much as a fifth of Ukraine under Russian occupation, and the size of this area could easily expand in the coming months if the Kremlin intensifies its offensive, which has been gaining ground. To get a sense of Vladmir Putin's dark vision for any territory he permanently gains, it is worth looking at conditions in occupied Ukraine now.

"Kiril" (not his real name), a Ukrainian agent in occupied territory reached by phone, says that "this is a prison society" because the fear of being denounced forces everyone to keep their views to themselves. To be without a Russian passport these days is "like being a refugee in your own land". Important jobs are almost all held by Russians. Anyone with pro-Ukrainian views fears being sent "to the basement", an expression for Russia's network of detention and "filtration" camps.

All traces of Ukraine are being expunged. Schools have switched to the Russian curriculum, and Russian youth and paramilitary organisations work in the territories. Repression combined with Russification aims to transform the social and political fabric of the territories, says Nikolay Petrov, author of a new report for the German Institute for International and Security Affairs.

Russia now occupies around 18% of Ukraine. Crimea was annexed after the first invasion, in 2014, but those parts of Donetsk and Luhansk occupied at the same time were not formally incorporated into Russia until September 2022. During the intervening period they existed in lawless limbo, and saw an exodus of pro-Ukrainians and the seizure of their businesses and property. Since the full-scale invasion of 2022, Russia has been absorbing them thoroughly, as it has the new territories it subsequently won, including parts of Kherson and Zaporizhia provinces, as well as more of Donetsk and Luhansk.

In January 2022 the Ukrainian authori- ▸▸

Sources: Institute for the Study of War; AEI's Critical Threats Project

ties estimated that there were 6.4m people in the occupied regions, excluding Crimea. Now, according to Mr Petrov, there are about 3.5m. Even Russia's statistical service admits that people continue to flee, with up to 100,000 from the "new regions" doing so last year. Mr Petrov says there are also about 1.8m people in Crimea, including some who immigrated there after 2014.

Russia has compelled the remaining residents to take Russian citizenship. From January 1st 2025 anyone aged 14 or above who has not done so will be deemed a foreign citizen and thus at risk of deportation. Already it is impossible to live normally without it. It is needed to send children to school and to get medical treatment, pensions or social benefits. The Russian authorities have re-registered property and businesses; citizenship is also required for that. Some people who originally fled the occupation have even returned in an attempt to hold on to their property.

The exodus of so many people has led to acute labour shortages. To fill the gap 40,000-50,000 people from Russia and central Asia now work there, Mr Petrov reckons. Many are construction workers, but thousands of teachers, medics and administrators also come on well-paid short-term contracts. In an attempt to hide the true cost of annexation, twinning arrangements have been set up, whereby Russia's regions, major companies, universities and cultural institutions must subsidise occupied Ukrainian regions and comparable institutions from their own budgets. These expenses are secret. Investment is encouraged with hefty tax breaks.

There is at least some violent resistance. On October 27th partisans blew up a railway bridge in occupied Berdiansk, according to some reports. There are occasional examples of assassinations of collaborators by partisans. Ukraine's National Resistance Centre (NRC) is tasked with helping them. But, says "Ostap", an NRC spokesman, modern partisan activity is "not like in the films". Though it is possible for groups to kill a few Russians, he says, collecting intelligence on the location of their units and weapons is "of much more value to us" because that "will help us kill a hundred with one missile".

The identity of the occupied territories is changing, fast. Some residents have always been pro-Russian. Now oppression, brainwashing and an exodus means that the balance has shifted further. Some 5-30% of residents in the occupied Zaporizhia and Kherson regions are pro-Russian, 20-35% are pro-Ukrainian while the rest, possibly more than half, "have a wait-and-see" attitude, according to the NRC. "That is why," says Mr Petrov, "we should not believe in the idea that they are all suffering under occupation and waiting for liberators to come and free them." ■

Cyprus, Russia and Ukraine

The curse of division

NICOSIA

The war in Ukraine rattles all sides

DOWN AN ALLEYWAY off a busy street on the Turkish northern side of Cyprus's divided capital, Nicosia, stands a scruffy building. A propped-open door reveals messy wiring sprouting from the wall. Two white paper signs tattily embossed with coats of arms are plastered on either side, one in Cyrillic script, the other in Turkish. This, unimpressively enough, is the Russian consulate.

It is part of a new kind of Russian invasion. Accurate numbers are hard to come by, but Mete Hatay, a demographer in Nicosia, reckons a total of around 20,000 Russians and Ukrainians live in the divided island's Turkish bit. Some of the Russians moved there from the Republic of Cyprus, the internationally recognised Greek-dominated southern chunk, after an array of sanctions was imposed on Russia following its full-scale invasion of Ukraine in 2022. Others have travelled from Russia itself via Istanbul.

That has complicated matters on the island. Cyprus has been rent in twain since Turkey invaded the northernmost part in 1974. With a population of around 550,000, the self-styled Turkish Republic of North Cyprus (TRNC) is isolated diplomatically and recognised only by Turkey. More than a million people live in the south, on the other side of a UN-run buffer zone known as the Green Line. Attempts to reunify the island along federal lines have repeatedly failed, most recently in 2017.

The Crimea of the Med

Since his election in 2020, Ersin Tatar, the TRNC's president, has called for a two-state solution. He is dead against any sort of unification with the south, which is part of the EU. "The Turkish element will be very difficult to protect," he says. "Our identity will be at risk." Recent informal talks between the two sides brokered in New York by António Guterres, the UN secretary-general, were the first for several years. More are scheduled at the end of this month but hope of progress is faint.

Rich Russians have flocked to Cyprus's larger, internationally recognised Greek-dominated southern slice since the early 1990s, which became popular as an offshore tax haven. Limassol, its second-biggest city, was dubbed "Limassolgrad". A now defunct "golden passport" scheme, whereby investors could pay €2.2m ($2.3m) to get a Cypriot passport, which grants EU citizenship, cemented ties between the two countries. The love-in was mutual. Cyprus was at one stage technically the biggest foreign investor in Russia.

But the war in Ukraine has upset that cosy arrangement. As a country that has suffered an illegal invasion, Cyprus—and its banks—had no other choice but to comply with sanctions against Russia, says Theodoros Gotsis, deputy head of security policy at the foreign ministry in Nicosia.

Russians in the Turkish north outnumber Ukrainians there, perhaps reflecting their status as international pariahs. Ksenia Mukhortova, president of a Ukrainian-Cypriot friendship society, says Ukrainians tend not to go to the north, as it is like going to Crimea, grabbed by Russia in 2014. "Both support the occupation of other people's territories." A former IT worker who has lived in Limassol for ten years, she finds friendship with Russians hard since the invasion of 2022. "They don't want to talk about it," she says. "Now is not a good time. We're losing and we know it." From afar, the Kremlin has stirred rancour between the two communities.

Yet despite its loss of Russian tourists and business, the Cypriot economy has been lucky, says Fiona Mullen of Sapienta Economics, a Nicosia-based consultancy. "It has got a whole bunch of Lebanese and Israeli clients who want somewhere safe to do business," she says. Since October 7th a stream of Israelis has arrived. And chaos in Lebanon has prompted another influx to the southern part of the island.

Cyprus has long benefited from catastrophe at the eastern end of the Mediterranean as a haven for the rich to sit out conflict, says Hubert Faustmann of Nicosia University. But this time some Cypriot officials have been unnerved by predictions that another 10,000 Lebanese refugees could arrive at its shores. Can the luck of Cyprus last? ■

Italy's Five Star Movement

Fizzling

ROME

Italy's oddest party is splitting

IT IS A fair bet that any party that finds itself holding a "constituent assembly" more than 15 years after its foundation has problems. The Five Star Movement, which is to stage just such an event on November 23rd and 24th, is no exception. The assembly is being held against the background of a bitter split between the party's founder, Beppe Grillo, and its president, Giuseppe Conte. And in Italy's latest regional election, last month in Liguria in the northwest, the Five Stars mustered less than 5% of the vote.

Though often dismissed as a bit of a joke—Mr Grillo is, after all, a comedian—the Five Stars matters. It was in each of the past three governments, the first two of them led by Mr Conte. Back in 2018, when it was at its height, it won 33% of the vote. In steady decline since then, it still has a substantial representation in parliament (with 50 of the 400 deputies in the lower house and 26 of the 200 senators). Most importantly, however, it divides the opposition to Giorgia Meloni's government, ensuring that her right-wing coalition remains comfortably ensconced in office.

Paradoxically, last month's election in Liguria highlighted the Five Stars' importance. Reeling from a local corruption scandal, Ms Meloni's conservatives looked doomed to lose the region's governorship. Italy's main opposition group, the Democratic Party (PD), had a field day, taking 28% of the votes—almost double the share of Ms Meloni's Brothers of Italy party. But because the Five Stars fared so poorly, the opposition was unable to wrest control of the region from the right.

Part of the problem is the Five Stars' on-off romance with the PD. Sometimes the two parties join forces, as they did in Liguria. But in the previous regional election, in Piedmont, they fielded separate candidates. The Five Stars' hesitancy is in turn a product of its failure to decide where—if anywhere—it stands on the conventional political spectrum.

Mr Grillo and his political Svengali, the late Gianroberto Casaleggio, dreamed of a revolution. They envisaged their movement as a vehicle for the abolition of parliamentary democracy and its replacement with a new kind of direct democracy that exploited the possibilities of the internet. The Five Stars' early supporters, while united by a shared concern for the environment, fell on both sides of the political divide, and claimed to be neither of right nor left but pragmatists. Under Mr Conte, though, the party has adopted a more left-wing agenda and one that—awkwardly for the PD—opposes military aid to Ukraine.

Meanwhile—and to Mr Grillo's growing dismay—the Five Star Movement has become an increasingly conventional party, albeit one whose elected representatives and office-holders are obliged to step down after two terms, a measure intended to prevent them becoming career politicians. In a recent interview, Mr Conte accused the party's founder of carrying out "acts of sabotage" aimed at blocking its new course. Mr Grillo hit back, comparing Mr Conte to the fraudulent Wizard of Oz and accusing him of playing the "usual games of the old politics".

The assembly will define the movement's political stance and decide whether to scrap the two-term rule, which prevents it from cultivating experienced and publicly recognisable politicians to present as candidates. It has always been regarded as a fundamental tenet of a movement that aspired to give ordinary people a voice in politics. Even more controversially, the assembly will decide what to do about Mr Grillo. He remains the Five Stars' "guarantor", a job that at the moment lasts for an indefinite period and comes with a contract that gives him an annual salary of an eye-popping €300,000 ($316,000). Delegates to the constituent assembly are expected to vote on whether to impose a time limit on the guarantor's mandate, curb his powers—or perhaps even abolish the post and its salary altogether. For Mr Grillo, that would be no laughing matter. ■

French women and ageing

Sexy at 60

PARIS

French women want to show that you can be both

AT THE SAINT LAURENT fashion show in February models paraded in *le naked dress*: folds of transparent organza, tulle or chiffon, draped over bare breasts. At September's event the most arresting devotee of the look was not on the catwalk but in the front row. Aged 61, Philippine Leroy-Beaulieu, the French star of the Netflix hit "Emily in Paris", bared all through a translucent midnight-blue gown. It showed, said critics, that even in France you can be sexy at 60.

Older French women are casting off unforgiving codes about femininity and ageing. Two journalists approaching 60, Valérie Trierweiler, former partner of François Hollande, an ex-president, and Constance Vergara, have penned an ode to single women in their 50s. "I've got more wrinkles," says Ms Trierweiler, 59, "but one can still be attractive." Another book argues that women in their 60s, freed from the "weight" of the gaze of others, are at their most liberated age.

And she knows it

Women in France have long been squeezed between the injunctions of their country's post-war feminist theorists (defy the patriarchy) and the objectification served up by its film and fashion culture (conform to it). Wrinkles could once wreck a public career. Today many older French women are redefining the aesthetics of ageing. Elisabeth Borne, a 63-year-old ex-prime minister, and Christine Lagarde, the 68-year-old head of the European Central Bank, embody silver power. A recent poll said 24% of French 25-34-year-olds had undergone an aesthetic nip or jab; for 55-64-year-olds the figure was just 13%.

Perhaps the Netflix show, which the French pretend to loathe, has tapped into more than clichés about Paris. Ms Leroy-Beaulieu, who plays Sylvie, a marketing boss with caustic put-downs and swanky outfits, had thought casting agents would judge her too old. Instead she has shown France that you can age gracefully and still get the best lines.

CHARLEMAGNE

Elon is from Mars, Europe is from Venus

Elon Musk threatens to single-handedly deepen the rift between Europe and America

A PEACE OF convenience usually reigns between politicians and corporate chieftains. Politicos go easy on businessfolk from whom they hope to secure investments and campaign contributions, while the bosses hold their tongues in the hope of securing subsidies and permits that are in politicians' gift. How refreshing it is to see both sides go at each other once in a while. No brawl has been quite so public in recent times as that pitting Elon Musk against politicians in Europe, often unfolding on X (or Twitter, as the social network was known until he bought it two years ago). Just last week the purveyor of Tesla cars and SpaceX rockets called the German chancellor, Olaf Scholz, a "fool"; earlier this year he advised a European Union commissioner who had crossed him to "Take a big step back and literally, fuck your own face!" The other side can give nearly as good as it gets. Another EU commissioner last month painted the mercurial Mr Musk as a "promoter of evil", before the French foreign minister on November 9th mocked him for running X into the ground. *Zing!*

All this would make for just another day's banter on social media were it not for the fact that the world's richest man is now Donald Trump's right-hand tech bro as Mr Trump prepares for a second term as president. This poses a unique challenge for Europe. As much as the South African-born entrepreneur infuriates the continent's top brass, they already rely on his successful ventures for everything from their decarbonisation efforts (those Tesla electric cars) to fighting the war in Ukraine (where troops depend on Starlink) and launching vital satellites (because Europe often lacks the rockets to do so). If Mr Musk's influence in Washington holds—a big "if", given Mr Trump's track record of dismissing flunkeys—it may become politically unpalatable for Europe to lay its regulatory mitts on him. And then what? For decades the EU has had free rein to regulate businesses within its borders in ways that often went on to be adopted across the world, a phenomenon known as the "Brussels effect". Mr Musk has an interest in arguing that this policing superpower cherished in European circles stands in the way of Making America Great Again.

Of all the tech titans that might become Too Big to Regulate, Mr Musk is the most worrying for the EU. He has a dim view of the continent, suggesting to his 205m X followers that Europe "is dying", "appears to be headed for civil war" because of migrants and a low birth rate, and will soon start executing citizens who hold contrary beliefs—quite possibly an exaggeration. Yet Europe cannot ignore Mr Musk. He recently joined a call between Mr Trump and Volodymyr Zelensky, the Ukrainian president, and has spoken frequently to Russia's Vladimir Putin. Beyond pointing out Europe's economic flaccidity, his biggest gripe seems to be how the EU regulates social media. Newish rules known as the Digital Services Act (DSA) force internet giants to moderate content and remove the worst stuff. To Mr Musk's eyes this amounts to a form of censorship that America won't stand for.

To be fair, Europe has at times played straight into his hands. In August Thierry Breton, then the EU commissioner overseeing the DSA, publicly reminded Mr Musk of its rules on spreading disinformation—just as Mr Musk was readying to interview Mr Trump live on X. The implication was that an American presidential candidate speaking on home soil would have to abide by European rules on free speech, a bizarre overreach that prompted Mr Musk's expletive-laden response. Worse was to come. J.D. Vance, campaigning as Mr Trump's vice-president, fulminated that the Breton episode showed Europe no longer behaved in a manner America should deem worthy of a military alliance. "If NATO wants us to continue supporting them...why don't you respect American values and respect free speech?" he told an interviewer. In other words: give in to Mr Musk's view of how the internet ought to be run, or Lithuania can fend for itself.

The EU backed down, disavowing Mr Breton, who is no longer in the commission. But further fights are inevitable. The bloc opened formal DSA proceedings against X a year ago, and has already preliminarily concluded that it is in breach of some EU rules. Mr Musk has accused Eurocrats of trying to shake him down by offering a "secret deal" (of which there is no evidence). The probe will wrap up soon and could in theory result in fines nearing €1bn ($1.1bn). Meanwhile the bloc has also imposed additional tariffs on cars Tesla makes in China for import to Europe—but granted it the lowest import-duty rate for any electric-car firm.

The other blowhard

Even without Mr Musk, a challenge to Europe's role as global regulator was in the works. The Brussels effect came into being by accident. EU rules are the end point of compromises between its various governments, and so often suitable to countries beyond the bloc, too, which sometimes copy-and-paste whatever Europe has done. Already the system is fraying at the edges. The new rules, whether on AI or data privacy, fall most heavily on Big Tech groups, of which Europe has none. Could the EU really, for example, demand that a tech giant be broken up on antitrust grounds? How would Mr Musk and his pal in the White House react?

Silicon Valley tech giants are delaying launches of some products in the European market, such as AI assistants, ostensibly to give themselves time to obey the bloc's cumbersome regulations. The suggestion is clear: Europe is shrinking as a share of global GDP, and they can live without it if its rules are annoying. The message may be getting through. On November 12th the proposed new EU commissioner overseeing tech, Henna Virkkunen, told the European Parliament that new laws are "not the answer to everything" and that policies to bolster innovation might be needed instead. That sounds like something Mr Musk could have said. ■

Britain

Ed Miliband's renaissance

We are the turbine-builders

The energy secretary shows how to frame the argument over clean power

PAYING THE CLIMATE BILL

TO SEE HOW much Ed Miliband is enjoying his second life in politics, watch him at the dispatch box. Every few weeks MPs get a chance to prod the energy secretary; they receive sharp jabs in return. Tories are lambasted for delaying the roll-out of cheap and popular wind turbines. Greens and Liberal Democrats are chided for appearing eco-er than thou and then blocking the pylons that would carry clean power to people's homes. Mr Miliband picks fights with Reform UK, a flag-waving right-wing party, for failing to back GB Energy, a fledgling state-owned energy firm.

It is almost a decade since Mr Miliband led Labour to a humiliating defeat in the 2015 general election. Four months after the party's return to office, he is arguably the government's most effective minister. It is the energy department and its mission of a clean power system by 2030, say Labour wallahs, to which the prime minister turns when he needs to convey a sense that his government has a purpose.

Since the election, Mr Miliband has approved four giant solar farms in the east of England, which had been gummed up for months. He has lifted a de facto ban on onshore wind in England, which had been in place for nine years. He has overseen an auction round which delivered contracts for 131 renewable-energy projects, the largest-ever haul. His department is preparing changes to the planning system to make it easier and quicker to build turbines, solar arrays and pylons. "These guys have come in with a plan," says Guy Newey, a former Tory adviser who now runs Energy Systems Catapult, a think-tank.

Mr Miliband's instincts are not always right. He may not achieve his targets. But he does know how to frame political fights. There is a logic to his focus on the grid. And he is prepared to temper ambition with pragmatism. That approach holds lessons for politicians elsewhere trying to win support for the transition to clean energy.

This sure-handed second act can partly be ascribed to a long apprenticeship. At 54, Mr Miliband has spent three decades on the front line of Labour politics. He is one of three cabinet members to have held the rank before, and the only one to have returned to his old post (he was the first to head the department for energy and climate change, in 2008). No one expects him to run for the highest office again. "I think that he feels like his career has led him to this point and this cause," says a colleague.

Mr Miliband also draws on his experience as an adviser to Gordon Brown, a former prime minister for whom politics was ▸▸

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— Vistry's woes

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all about creating sharp dividing-lines. Whereas Sir Keir Starmer and Rachel Reeves, the prime minister and chancellor respectively, cloak their decisions in legalistic or budgetary justifications, Mr Miliband's argument is more straightforward.

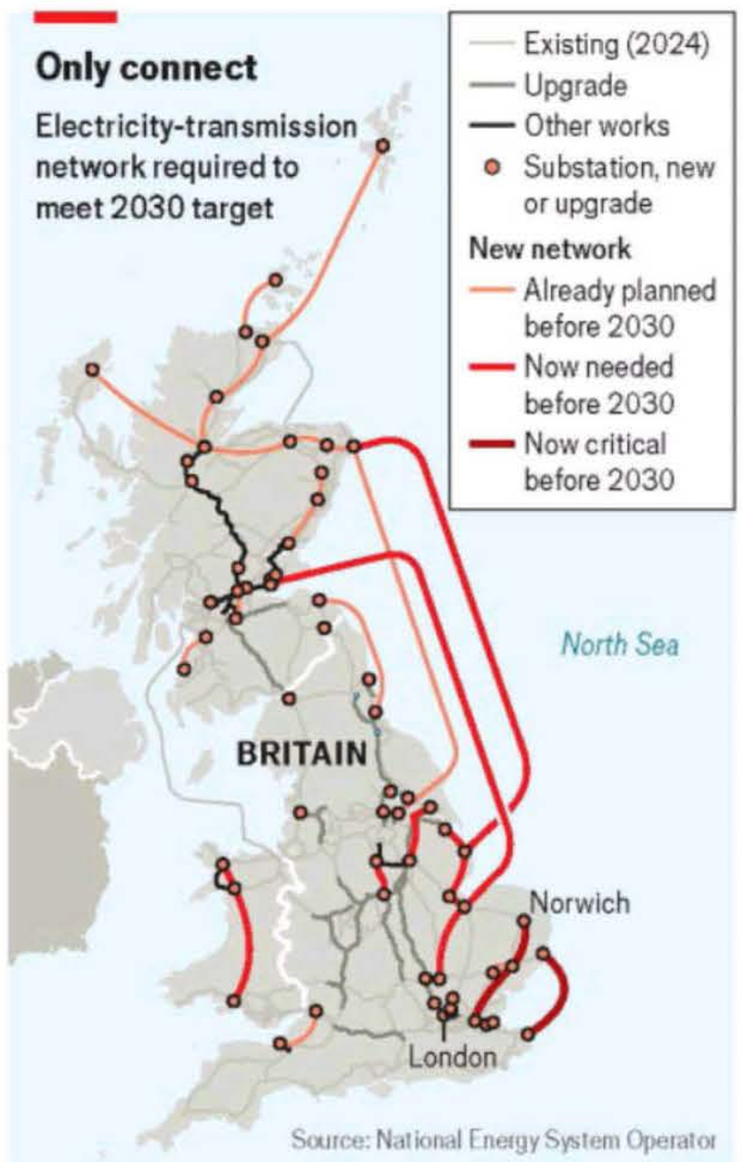
It runs like this. After Russia's invasion of Ukraine, British people realised they were reliant on a volatile gas market controlled by a foreign tyrant. The only way to change that is to have clean "home-grown" power. Taking back control of energy will, he argues, mean cheaper bills and some good jobs; cutting emissions is a happy by-product. Even at this week's COP29 conference in Azerbaijan, where Sir Keir announced a new, tougher target of reducing Britain's emissions by 81% by 2035, Mr Miliband stuck to his message: "The reason we're here is frankly national self-interest."

If the political message is clear, what about the government's actual policies? Decarbonisation will eventually require electrifying nearly everything, but Labour is deliberately focusing its efforts on the grid on the basis that cheaper renewable energy should make it easier to make progress in other areas, such as the roll-out of electric vehicles.

Achieving a clean-power energy system by 2030 would make Britain the first big economy to hit this goal. But what this means had not been properly defined until earlier this month. That was when the National Energy System Operator (NESO), a public body that oversees the electricity and gas systems, said that clean, domestic sources should provide 95% of Britain's electricity over a typical year by the end of the decade. The other 5% would be generated by gas-fired power plants—a pragmatic way of reducing the problem of intermittency, which in Britain is caused mainly by rare spells without wind. By exporting surplus electricity when it is gusty, the government will be able to say that it is generating the same amount of power from clean sources as Britain consumes.

The engineers at NESO say that this definition of the 2030 target can be met, albeit with caveats about how it is "at the limit of what is feasible" and will rely on many things happening "simultaneously, in full and at maximum pace". Getting there will depend first on a huge expansion of renewables, particularly offshore wind. Pylons need to go up faster, including a chain running from Norwich to near London that will doubtless cause locals to erupt in fury.

But Britain needs only a small number of big new transmission lines (see map), and most voters support the upgrades needed to bring them electricity. Slightly fewer new wind farms would be needed if the government managed to nurture an amount of "dispatchable" (ie, usable on demand) low-carbon power, like hydrogen or gas with carbon capture and storage.



Smoothing demand—for instance through the use of smart charging to avoid times of peak electricity usage—is another promising area. It is possible at the moment to shift around 2.5GW of demand at peak times in Britain. With the right policies, NESO thinks that demand flexibility could increase five-fold by 2030.

Three big questions remain. The first is whether Mr Miliband can strike the right balance between the state and the market. In opposition Mr Miliband enthused about a "Green New Deal". His instincts remain statist. That leads to nervousness among some businesses that the government will try, in the words of one executive, to "plan every square inch of the energy system".

There is bitter debate over whether Britain should introduce more market signals in the form of zonal pricing, where the price of electricity varies depending on supply, demand and grid capacity in different regions. Proponents say this would lead to a more efficiently planned grid and lower bills for homes and businesses. "We need regulation to reflect that a local electron is the cheaper one," says Greg Jackson of Octopus, Britain's biggest energy company. Mr Miliband has so far demurred.

The second question concerns Mr Miliband's promise to voters that they will feel the benefits of changes in their pockets by the next election, which is likely to take place in 2029. In reality electricity bills will continue to be influenced by many factors, not all of them in his gift.

The government could take steps to shift levies, which have been used to pay for various schemes like reducing fuel poverty, from electricity to gas bills. And reducing the proportion of the year in which gas is "price-setting" in the electricity market should feed through into lower bills. But globally, the cost of building wind farms remains elevated after a bout of inflation and supply-chain pressures. Electricity bills have already increased this winter as global gas prices have risen. Ironically, Mr Miliband's pledge of lower bills could depend on a glut of liquefied natural gas (LNG) reaching Europe towards the end of the decade, as America and Qatar ramp up their exports.

The third question is whether the government can indeed push decarbonisation beyond the power sector. Britain's success at building wind farms has not been matched by a knack for nudging people to, say, replace their gas boilers. The policy and tax levers to do that lie in other government departments. Ministers remain nervous about imposing extra costs and disruption on stretched households; Ms Reeves ignored an obvious opportunity to increase fuel duty in her budget.

It is possible that Mr Miliband could make remarkable progress and still be the first British energy secretary to breach the country's carbon budgets, five-yearly caps on emissions, under an act which he signed into law in 2008. But even if that happens, he may also help show how to win the fight for clean power. That would be quite the renaissance. ■

The Church of England

The archbishop and the abuser

Why Justin Welby decided, eventually, to resign

IN THE END the pressure became intolerable. On November 12th the Archbishop of Canterbury, Justin Welby, resigned over his response to a child-abuse scandal. Archbishop Welby had previously insisted he would not go, despite criticism of the Church of England and of him personally in a report by Keith Makin, a former director of social services. It concluded that safeguarding failures meant that "arguably the most prolific serial abuser to be associated with the Church of England" (CofE) was never brought to justice.

That person was John Smyth, a lawyer and an apparent pillar of the church community, who was a trustee of an organisation that ran Christian summer camps for boys from leading English private schools. Starting in the 1970s Smyth groomed dozens of young men in Britain and performed sadistic beatings on them under the pretext of administering discipline. One victim told the review: "I remember thinking ▸▸

'he's going to kill me.' I was that scared." Several tried to take their own lives.

In 1982 an Anglican clergyman wrote a report on the abuse but it was not made public and Smyth was not reported to police. Smyth moved to Africa in 1984, where the Makin report says he "was able to abuse boys and young men in Zimbabwe (and possibly South Africa) because of inaction of clergy within the Church of England". Mr Makin says that at least 115 boys and young men across three countries were abused; one boy died in suspicious circumstances at a camp in Zimbabwe. Archbishop Welby says that he did not know about the allegations until 2013, although the report finds that it was "unlikely" that he had no knowledge of concerns raised about Smyth's conduct in Britain in the 1980s, not least because he had as a teenager been in one of the dorms Smyth oversaw at the camps and knew him well enough to exchange Christmas cards.

Church leaders "at the highest level", the archbishop among them, were formally made aware of the accusations against Smyth in 2013. Yet still no official referral was made to the police until 2017; Smyth, who died in 2018, was never charged with anything. "There was a distinct lack of curiosity shown by these senior figures and a tendency towards minimisation of the matter," concludes Mr Makin. Archbishop Welby had a "personal and moral responsibility" to pursue the allegations further.

The archbishop, who was anyway required to step down from his role on his 70th birthday in 14 months, initially tried to tough it out. He apologised to Smyth's victims but said he would not resign, insisting that he had introduced checks and balances to "seek to ensure that the same could not happen today". Many clergy say safeguarding changes have indeed taken place at parish level; a group of survivors of abuse acknowledged such changes in many dioceses to the *Church Times*, an Anglican newspaper. But they also said that the 27 recommendations in the Makin report "reflect similar recommendations in dozens of previous safeguarding reports over 40-plus years that the CofE has previously chosen to ignore or disregard". There is substance to that charge. The CofE set up an Independent Safeguarding Board in 2021, for instance, but it was beset by internal conflicts and was closed in 2023.

Ian Paul, an evangelical on the church's governing General Synod who, together with a liberal and an Anglo-Catholic, launched a petition calling for the archbishop's resignation, says that his campaign was not just about claiming a scalp. "What is needed is a wholesale change of culture in the senior leadership of the church. But I did not believe that change could happen while Justin Welby was still archbishop." Others seem to have reached the same conclusion. The Bishop of Newcastle joined calls for Archbishop Welby to go on November 11th; the next day Sir Keir Starmer, the prime minister, said that victims had been "failed very, very badly".

The lengthy process of choosing a new archbishop now begins. But whether Archbishop Welby's successor can do any better on safeguarding is open to doubt. "This is much bigger than just Welby," says Linda Woodhead, a professor of theology at King's College London. "There is a danger in getting the scalp", warns one clergyman, "that the organisation feels it does not have to change any more, because the heat is taken off, and all the other people who support the old culture remain in place." ■

5G networks

Lost connection

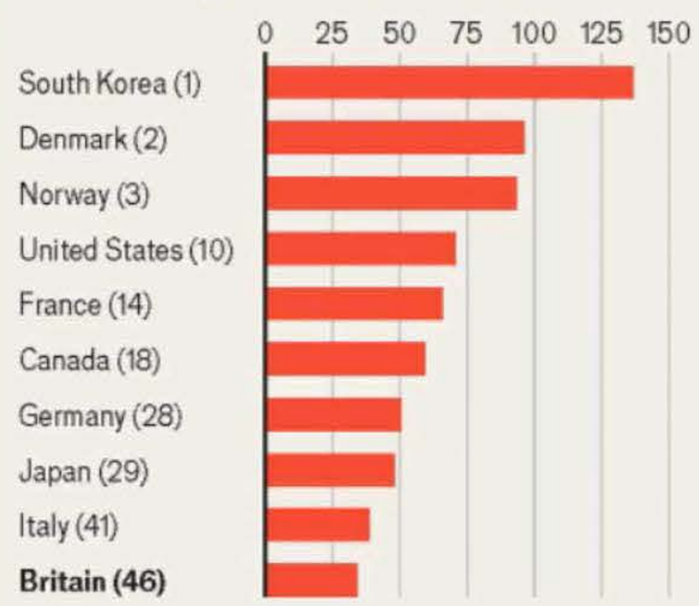
Why Britain has the worst mobile service in the rich world

BRITAIN HAS long been a pioneer in telecoms. In 1837 it built the world's first commercial telegraph; the first transatlantic call was placed from London in 1927; in 1992 a British programmer sent the first text message to a mobile phone. Today it lags rather than leads. According to figures provided to *The Economist* by Opensignal, a research firm, Britain ranks 46th for download speeds out of the 56 developed and developing countries for which there are data (see chart). That gives it the worst mobile service in the rich world.

Some of this is due to demand. Over the past three years data usage on mobile devices has doubled as people stream films and play games. The busiest parts of cities often lack mobile reception because the system is at capacity. But mainly it is an issue of supply. British users of 5G—the fifth generation of networks, which offers speeds up to ten times faster than 4G—are only on it 11% of the time. That puts Britain 43rd out of the 56 countries. This lacklustre performance is caused by a combination of government U-turns, insufficient investment and sclerotic planning.

Buffering

Mobile network average download speed, 2024*, Mbps, (rank out of 56 countries)



Source: Opensignal *July 1st to September 28th

First, the U-turns. Until 2020 Britain's four mobile operators were enthusiastic buyers of 5G equipment manufactured by Huawei, a Chinese firm. But after intense lobbying from America, Britain's politicians reversed course: telecoms operators must now remove all their 5G Huawei equipment by 2027. This has delayed 5G's roll-out. The country's four mobile providers—BT/EE, O2, Three and Vodafone—have spent about £2bn ($2.6bn) over the past four years ripping out and replacing Huawei equipment.

Second, the need for more investment. About 90% of Britain's 5G signals are broadcast from bolt-ons to the existing 4G network. This "non-stand-alone" version of 5G does not allow "network slicing", a way to get greater capacity in congested areas, or the quick response times needed to communicate with new technologies such as self-driving cars.

A new "core network" using stand-alone technology must be installed to get the full benefits of 5G. But, according to Frontier Economics, a consultancy, the four mobile operators are likely to invest only about £9bn of the £22bn-32bn required. A marriage might help. Vodafone and Three, the country's third- and fourth-largest mobile operators, say they are too small to justify the high capital expenditure of stand-alone 5G, and that they would invest £11bn over a decade if they could merge. Karen Egan of Enders Analysis, a consultancy, estimates that synergies would result in a 30% increase in network capacity. The Competition and Markets Authority (CMA), a watchdog, is due to decide on the merger on December 7th; it has suggested that 5G investment would be a legally binding condition for a deal.

Even if the CMA allows the merger, improving 5G network capacity means erecting more masts. In 2022 the rules were loosened to permit masts less than 30 metres high to be built without having to seek planning permission. But operators still complain. Shorter masts cover a smaller area, so more must be built. O2 says it takes at least six months to get a decision on a mast over 30 metres high; applications are often stymied by local opposition.

Overcoming these obstacles is vital for achieving the goal of universal 5G by 2030. It will also be needed for the eventual roll-out of 6G. In laboratory environments the next generation of mobile networks has reportedly notched up speeds 100 times faster than 5G. Britain is anything but that. ■

BAGEHOT

The big squeeze

Exploring the strange politics of wage compression

FOR YOUNG high-flyers with an interest in marine conservation, it is the perfect gig. A charity is hunting for eager graduates (with at least a high upper-second degree and excellent A-level results, naturally) to work full time as a guardian of the ocean. At £25,300 ($32,110), the annual pay is typical for a graduate role. Come April next year, it will also be near the minimum wage.

Graduate schemes with a minimum-wage salary will become only more common after Rachel Reeves, the chancellor, cranked up the statutory minimum in the budget last month. A rise of 6.7%, to £12.21 an hour, will kick in next spring. Someone working full time on a minimum wage can expect to earn over £25,000 a year, about as much as a prospective turtle-botherer.

Wage compression—when wages for skilled and unskilled labour begin to merge—has already changed Britain's labour market. Workers in the middle have struggled; workers at the bottom have, in relative terms, done well. In 1997 a median earner took home almost double the income of someone at the tenth percentile, according to the Resolution Foundation (RF), a think-tank. In 2023 they managed only 50% more. That is largely owing to Britain's increasingly generous minimum wage, which, at two-thirds of median income, is now one of the highest on the planet.

In an era of stagnant wages for Britain's middle class, normally precarious professions—bar workers, cleaners and shop-floor staff—have enjoyed a relative bonanza due to government diktat. Median hourly wages for bar workers jumped by 26% in real terms between 2011 and 2023, according to the RF. In contrast, median salaries overall rose by a paltry 1.9%. In a country as class-obsessed as Britain, that raises an unpleasant question: what happens when middle-class jobs attract the same pay as working-class ones?

Many have not yet absorbed how much has changed. A decade of lousy overall wage growth means that some employers, and prospective employees, assume that any five-figure salary starting with the number two is still relatively generous. A junior graphic designer (preferably with a degree and two years' experience) can expect to earn £22,000, which will soon be below minimum wage. An organiser for a "climate parliament" can command a similar salary, provided they are fluent in English and French.

But those who have clocked the change are often unhappy. Junior doctors, who have been fighting the government over pay for much of the past decade, are the noisiest example. The British Medical Association, their union, has made much of the fact that Pret A Manger employees can earn more than a doctor. For some this was a sign of snobbery (are doctors inherently better people than baristas?). For others it was mere fairness (they are certainly more useful after a car crash). Either way the strategy worked: among Labour's first actions in office earlier this year was handing doctors a 22% pay rise over two years.

Being middle class and on a minimum wage has specific perils. In a progressive tax system those who earn less, pay less. But when graduates are badly paid, this deal turns to dust. From April the threshold for paying back a student loan (£25,000) and the minimum wage on a full-time job will cross over. The result is that any graduate with a full-time job, whether that be stacking shelves in Tesco or training as a lawyer, will face a de facto marginal tax rate of at least 37%. Britain has developed a bizarre tax system based on age (pensioners are exempt from national-insurance contributions) and education (graduates take home less money). If history shows anything, it is that creating a group of people who are over-educated and overtaxed can lead to funny things.

Should voters begin to gripe about wage compression, it would mark the end of the closest thing to a free lunch there has been in British public policy. The minimum wage is the most successful policy intervention of the past quarter-century, argues Nye Cominetti of the RF. Usually policies have pros and cons. The pros came (wages went up for the hitherto badly paid) but the cons never seemed to arrive (unemployment was barely affected). As a result, successive governments, both Conservative and Labour, jacked up the minimum wage at almost every opportunity, like monkeys in a laboratory hooked up to an opium dispenser.

But the political consequences of wage compression cannot be dodged forever. When Mr Cominetti recently appeared on Radio 5, a broadcaster, to extol the virtues of a higher minimum wage, an angry lorry driver preceded him. "What's the point in you working extremely hard if you can earn almost the same just doing minimum-wage jobs?" he asked. An alliance of lorry drivers and doctors would be curious but potentially powerful. Pay compression is not popular so much as little-noticed, at least for now. Politicians confuse equality with fairness at their peril.

The world turned upside down

Politics is less about where people are in the pecking order than where they think they should be. Graduates who work in non-graduate roles are more likely to vote for radical-right parties than their peers in graduate jobs, point out Ben Ansell and Jane Gingrich in a useful paper that does away with the idea that degree-holders in the West are a monolithic blob. The "never made it" are as much of a problem as the "left behind".

Perhaps Britain is happy to be a little more socially democratic. Those in the middle can swallow lower wages in the knowledge that it might make Britain more competitive. They can comfort themselves with the fact that those at the bottom are better off. Maybe their earnings will improve in later life. For many, however, wage compression brings only the realisation that the trappings of a middle-class life—such as a degree, a profession or a job saving turtles—are insufficient compensation for a salary that places them on the lowest rung. That is not where they expected to be. ■

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International

A dangerous limbo

Lost in transition

WASHINGTON, DC

The power-shift from a lame-duck Joe Biden to Donald Trump the disrupter is more fraught than most

JUST HOURS after polling stations closed in California on November 5th, a Minuteman III missile thundered out of the Vandenberg military base on the Pacific coast. Half an hour later and 4,200 miles away, three mock warheads struck Kwajalein atoll in the Marshall Islands. The timing of the test—announced to both Russia and China—was probably no coincidence: America was sending a message. Whoever was elected, its armed forces were ready to respond to any threat.

American presidential transitions are unusually fraught, in part because they are lengthy. For more than 70 days the world's greatest power is in a twilight zone between two presidents: one in power but with dwindling influence; the other triumphant but not yet at the Resolute Desk.

The changeover from President Joe Biden to Donald Trump is more scary than most, given wars raging in Europe and the Middle East, and worries about a new one starting in Asia. The Trump team's contempt for Mr Biden, suspicion of the "deep state" and worrying nominations (see United States section) do not soothe nerves. Mr Trump's team has not signed the customary memorandum with the General Services Administration, so his alternative court at Mar-a-Lago is contacting world leaders without serving diplomats, official interpreters or secure communications.

Sometimes transitions are an opportunity for overtures from rivals—Iran's revolutionaries freed 52 American hostages minutes after Ronald Reagan's inauguration in 1981. Or from allies: this week the European Union redirected billions of euros to defence. Mostly they offer a last chance for presidents to try to secure their legacies. Mr Biden, though, is the lamest of ducks, and bequeaths a turbulent world. Can he do anything beyond mark time?

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Begin with the war in Ukraine. Mr Trump has promised to end the fighting "within a day". That suggests he would cut off support to Ukraine to force it into a deal with Russia. The war may thus intensify as both sides, especially Russia, try to improve their positions ahead of possible ceasefire talks. "Russia has not yet got what it wanted," says Mykhailo Podolyak, an adviser to the Ukrainian president. "Why should Russia stop?"

With the help of North Korean troops, Vladimir Putin, Russia's president, may seek to recover Russian territory in Kursk province that Ukraine seized earlier this year. He may also want to take important ground in Ukraine. Meanwhile, he is attempting to destroy Ukraine's energy grid as the weather turns cold, and to curb its weapons production. At least the risk of Russia's resorting to nuclear weapons appears to have diminished now that its forces are grinding forward; and more so if Mr Putin thinks Mr Trump will favour him.

Mr Biden, for his part, is trying to spend all the remaining arms assistance authorised by Congress—about $6bn—before he leaves the White House. Some hope he might belatedly ease restrictions on deep strikes into Russia, if not with American missiles then at least with European ones using American technology. All this may be too little to stop Russia's advance.

Mr Trump's signals are, as ever, mixed. The reported and actual nominations of ▸▸

hawkish congressmen, such as Marco Rubio, as secretary of state, and of Mike Waltz, as national security adviser, raised hopes among allies that Mr Trump might turn into a more conventional Republican president. He is said to have held a conversation with Mr Putin (denied by the Kremlin) in which he warned Russia not to escalate in Ukraine. Then again, Mr Trump's elder son gleefully reposted a clip saying Ukraine was about to lose its "allowance". And the nomination of a TV culture warrior, Pete Hegseth, as defence secretary, raises worries of chaos at the Pentagon.

The Middle East, meanwhile, poses several risks. One is that a year-long regional war, which started in Gaza and spread to Lebanon and beyond, will expand. Iran and Israel are stuck in a cycle of back-and-forth bombardment. Israel carried out the most recent attack, on October 26th, with air strikes against Iranian air-defence systems and missile-production facilities. Iran has vowed to hit back at Israel. It might do so via proxies in Iraq, rather than directly with ballistic missiles, as it has done twice this year.

Iran knows Mr Trump will return to a policy of "maximum pressure" against it, not least because it is implicated in plots to kill him. Some diplomats reckon Iran will now show restraint. Ali Larijani, a former speaker of Iran's parliament, has urged the government not to launch an "instinctive" response. But others think it will strike anyway. "This might be their last opportunity," says one Arab envoy.

A different risk is that Israel will seek to improve its position, perhaps by attacking Iran pre-emptively and hitting nuclear sites or energy facilities that Mr Biden had restrained it from doing in previous rounds. Israel could move on other fronts as well. Its army is besieging northern Gaza, where the UN has warned of imminent famine. It seems determined to drive Palestinians out of this part of the territory—where some right-wing Israelis hope to rebuild the Jewish settlements that were dismantled in 2005. Bezalel Smotrich, Israel's far-right finance minister, said on November 13th that he had ordered preparations for the annexation of settlements in the occupied West Bank.

Binyamin Netanyahu, the Israeli prime minister, has reason to believe he will enjoy much latitude. In his first term Mr Trump strongly supported Israel. Despite more recent tensions between the two leaders, he has just named Mike Huckabee, a former governor of Arkansas and a pro-settlement evangelical, as his ambassador to Israel.

Mr Biden has consistently failed to mediate a ceasefire, or to compel Mr Netanyahu to ease civilian suffering in Gaza. A 30-day American deadline for Israel to expand the flow of aid to Gaza, backed by the threat of losing some weaponry, has expired with America taking no action.

A final concern is that Iran, having enriched a stockpile of uranium close to weapon grade, may dash for a nuclear bomb, hoping it can do so before Israel notices and before Mr Biden or Mr Trump can muster the will for a bombing campaign to try to push it back.

In Asia the coming months could also be tense. China carried out two large military exercises near Taiwan this year. The next drills could take place around January 1st, when Taiwan's president, Lai Ching-te, gives a new year's address. China is likely to react aggressively whatever he says. Another flashpoint could come if Mr Lai makes a "transit stop" in America, as new Taiwanese presidents usually do.

Mr Biden has repeatedly said America would defend Taiwan if China tried to invade it. Mr Trump has suggested otherwise. Or, comparing himself to a mobster, he has said that Taiwan needs to pay more "protection" money. Some in Taiwan think the country needs to sharply increase defence spending, from 2.5% to 4% of GDP. Tellingly, Taiwanese officials are also discussing a big order of American weapons, reportedly including F-35 fighter jets, air-defence systems, Aegis warships and the E-2D Advanced Hawkeye airborne radar system. Successive American governments have urged Taiwan to avoid such big-ticket equipment that will quickly be lost in a war. But Taiwan may feel they will help it deal with China's current harassment, short of war. And if it gets Mr Trump's attention, all the better.

The Philippines, which has suffered successive run-ins with the Chinese coastguard over disputed waters in the South China Sea, has announced it wants to buy the intermediate-range Typhon missile system from America.

Trouble may emerge elsewhere. North Korea has been testing missiles able to reach the continental United States, and may feel emboldened by its recent defence alliance with Russia. Turkey may feel this is the perfect moment to launch a new offensive against Kurdish fighters in northern Syria. A surge of migrants may try to rush America's border before Mr Trump imposes new restrictions.

There is much uncertainty surrounding Mr Trump. His supporters believe unpredictability strengthens American deterrence. But an irascible, transactional president also frightens allies—particularly if he is intent on levying tariffs of 10-20% on all countries, friend or foe. And all know that, soon enough, it will be Mr Trump who controls America's Minuteman III missiles and its other instruments of power. ■

Coal and climate change

The king that refuses to die

JAKARTA AND KOMATI

Dethroning coal is proving difficult, but cheaper renewables and new regulations offer hope

PAYING THE CLIMATE BILL

BRITAIN WAS the first country to generate electricity from coal. On September 30th that era came to an end when it closed its last coal-fired plant, amid much self-congratulation. But look beyond England's clean and pleasant skies—and those of the mostly rich countries in the OECD, a third of which now have coal-free electricity—and there is little to be smug about.

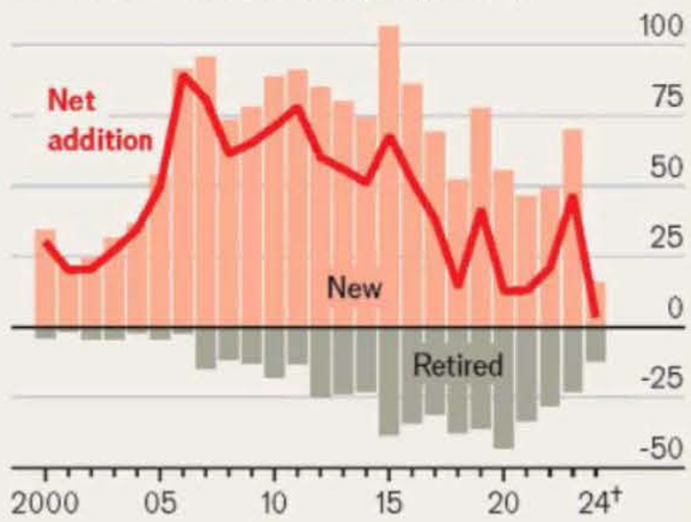
Coal provides around one-third of the world's electricity, much of that in developing countries, which argue it is necessary for economic growth. Yet the arguments for phasing it out as rapidly as possible are also compelling. By polluting the air, coal kills millions of people every year, most of them in poor countries. It contributes mightily to climate change, a global problem but one that disproportionately harms poorer people. Despite this, coal refuses to die.

Last year worldwide coal consumption grew by 4.5% to its highest level ever, notes BloombergNEF, a research firm. The main source of demand is electricity. The world's total generating capacity from coal-fired power stations has grown by 11% since 2015, according to E3G, an advocacy group. There are now more than 6,500 coal-fired power plants worldwide with a combined generating capacity of around 2,245GW. They are still being built. Because burning coal releases much more carbon per unit of energy than burning oil or natural gas, it is especially bad for the climate, accounting for 41% of all greenhouse-gas emissions from fossil fuels.

If the current fleet of coal plants is run normally until 2050, they will emit some 250 gigatonnes of carbon dioxide, according to the International Energy Agency (IEA). Those emissions alone would be enough to provide a better-than-even ▸▸

Seize the fire

World, coal-fired electricity capacity*, GW



*Units generating 30MW or more †Forecast
Source: Global Energy Monitor

chance of global temperatures rising from their current level of about 1.2°C above pre-industrial levels to more than 1.5°C above. Yet to phase out all coal plants by 2040 the world would need to shut down and replace several plants a week.

Can that be done? In theory, yes. Solar and wind energy are cheap and getting cheaper. These days energy systems can cope with such intermittent sources much better than previously, not least because storage technology is improving. And there are clean baseload sources, too, such as nuclear and hydropower.

But there are also hard truths to reckon with. Although coal makes up a small share of GDP, the jobs it supports are often geographically concentrated. In the coal heartlands of Colombia, Indonesia and South Africa it provides 5-8% of employment, the IEA says.

The consequences of hasty transitions are evident in Komati in Mpumalanga, South Africa. The town has been reeling since the closure of its power station and mine two years ago. Hopelessness bred from unemployment is tearing at the heart of the community, says an official.

Eskom, the state-owned electricity utility, has tried to soften the blow by moving workers to different facilities and retraining others. The World Bank has provided South Africa with $497m to repurpose the plant using renewables. Locals are learning to install solar panels and farm fish. Yet Dan Marokane, Eskom's chief executive, calls the shutdown an "atom bomb" for jobs in a country with an official unemployment rate of 33%.

South Africa has become a test case for the Just Energy Transition Partnership (JET-P), a brainchild of the G7 club of rich countries launched in 2021 to accelerate the shift from "coal to clean". Moving its electricity generation away from coal to renewables is expected to cost $47bn, mostly from private investors. Yet South Africa's once-feted plan has stalled. This is partly because of stingy donors, who have offered less money than is needed.

Eskom's ineptitude is also to blame. In recent years South Africa has suffered from relentless power cuts as breakdowns at poorly maintained power stations left the grid without enough capacity. To keep the lights on Eskom has delayed the retirement of three big coal plants.

Undaunted, in 2022 more than a dozen governments and development banks signed JET-P agreements with Indonesia and Vietnam worth $36bn. Emissions from coal will continue to grow as energy needs increase. But under the plan, coal would provide just 20% of electricity in Vietnam by 2030. In Indonesia the share of renewables would rise to about 44%.

In Asia, too, the schemes face challenges. The amount pledged is unprecedented but still not enough; the partners estimate that $359bn is needed from donors and investors. Neither country has fully embraced the partnerships. Vietnamese leaders worry that expensive electricity will scare off manufacturers. Indonesia backtracked on limiting new coal plants because officials worried about having enough cheap and dependable power.

Despite coal's persistence, carbon cutters have reason for hope. Almost two-thirds of the 1,500GW-worth of coal plants that were in development in 2015 have been scrapped, according to the Systems Change Lab, a green coalition. E3G calculates that some 470GW of capacity has been retired since 2000, with America and Europe leading the charge.

The European Union's emissions-trading system is speeding the shift from coal to gas and renewable energy. Other countries, including China, are expanding carbon-pricing schemes. The EU's new Carbon Border Adjustment Mechanism punishes exports from countries reliant on carbon-intensive energy, prompting countries to offset emissions or reconsider coal.

Local opposition to air pollution is also playing a role (see China section). Capacity utilisation at coal plants there has fallen from 55-59% in the early 2010s to 48% in recent years, according to RMI, a think-tank.

Most encouraging is financial innovation involving carbon markets. With the help of the Monetary Authority of Singapore and the Rockefeller Foundation, a firm in the Philippines will generate carbon credits representing the 19m tonnes of emissions that will be avoided by closing a plant early. The Asian Development Bank has a similar scheme involving carbon credits, which it is using to shut a different coal plant in the Philippines 15 years early.

Will and power

South Africa offers further lessons. Eskom's power cuts prompted corporations to embrace solar and wind, which are expected roughly to double as a share of power generation to 17% by 2032. The constraint is not finance nor the cost of solar panels, but the lack of transmission capacity to get power from windswept and sunny lands to cities. Powerful political interests tied to mining and trade unions still try to thwart the transition.

This suggests that top-down schemes to bribe owners to shut down coal-fired plants early are unlikely to be sufficient. Investment in grid transmission and flexibility is needed and countries must do more to mitigate the harm inflicted on coal-dependent towns. If both those steps can be taken by governments and donors, then market forces can be unleashed to add cheap, clean capacity to grids, which would leave much of the world's stock of dirty coal-fired power plants stranded. ■

Big, bad and still burgeoning

THE TELEGRAM

How to avoid Oval Office humiliation

A dozen officials offer tips on the dangerous art of Trump-flattery

WHEN WORLD leaders meet Donald Trump, flattery has its uses but it is "not a silver bullet". That is the considered view of foreign diplomats and American officials who have, between them, spent hundreds of hours in the room with America's 45th and soon to be 47th president. Their counsel is a timely corrective. For the usual wisdom on how to handle Mr Trump could double up as advice on hosting a toddler's birthday party, with its emphasis on lavish presents, easy-to-eat food and unlimited praise.

In reality, Trump-wrangling is a serious business. There are rewards for governments that succeed, such as Japan's. In the first Trump presidency Japanese car companies avoided the "big border tax" that Mr Trump once threatened to impose on them. Mr Trump often grumbled to aides that Japan should pay billions more dollars each year for the privilege of hosting American armed forces, but no formal demand was put on the agenda.

Rather often, Japan's good fortune is ascribed to treats that Mr Trump received from the country's late prime minister, Abe Shinzo. Commentators recall a gold-plated golf club given at a first meeting in 2016 at Trump Tower and the golf games that the two men played over the years, or the American beefburgers served during a visit to Japan in 2019. That is too simple. Mr Trump was wooed as assiduously by his French counterpart, Emmanuel Macron, who fed him steak and ice cream at the Eiffel Tower and took him to a military parade. For all that, multiple sources relate, Mr Trump disliked Mr Macron, finding him "snobbish" and "preachy".

Foreign envoys and American officials offer several reasons why flattery alone does not move Mr Trump. Most straightforwardly, says a diplomat, the next president "isn't an idiot" and cannot be "seduced" into changing his mind. There is agreement that Mr Trump has a short attention span and does not read his briefings. He is a bully, arguing with the help of made-up facts and daring foreign leaders to contradict him. "Please don't, don't be patronising," was the heartfelt advice that a senior American diplomat offered allied governments on handling Mr Trump, before a G7 summit. He is called impatient with nuance, dividing the world into good and bad, winners and losers. But he is not stupid, say those who have seen him at work. They offer such labels as intuitive, instinctive and cunning.

The late Abe had the knack of putting Mr Trump at ease. His lineage as a prime minister's grandson helped, for Mr Trump admires ancient bloodlines. For the same reason, he appreciated meeting Japan's imperial family and Britain's Queen Elizabeth II. Japan's prime minister knew to give Mr Trump tangible wins. Noting the American's fondness for visual aids, he once handed him a colourful map of America that showed job-creating Japanese investments in different states, some marked with bright red "New!" logos, like stickers in a car showroom. A delighted Mr Trump had White House staff post the image.

There is a second reason why flattery does not alter Mr Trump's mind. His core beliefs on trade and foreign policy were formed in the 1980s, and are impervious to change. Over the years several foreign leaders crafted arguments to persuade Mr Trump, and ended meetings sure that these had worked. Then, at their next encounter, Mr Trump had reverted to his original view.

On this point, Gérard Araud, who was the French ambassador to Washington from 2014 to 2019, recalls a specific hazard, namely Mr Trump's habit of seeming to concede a point when bored. He describes Mr Macron spending an hour and a half in April 2018 trying to persuade his host to stay in the JCPOA, a nuclear-arms limitation pact brokered with Iran during the Obama administration. Finally Mr Trump appeared to agree. Leaving the White House, the French ambassador urged his boss to be "very prudent in his pronouncements", sensing that a Trumpian change of heart on Iran was unlikely. A month later, Mr Trump quit the pact.

Third, flattery can make Mr Trump receptive to a leader's words, but only if he also thinks that leader strong. As a former official in his administration puts it: "Donald Trump has no friends. He respects people with power." To that official, Mr Trump considers leaders to be powerful if they lead important countries and have the political authority to turn decisions into actions. Those he took seriously included Abe, Narendra Modi of India, Vladimir Putin of Russia and Xi Jinping of China.

In contrast, Mr Trump loathed politicians who could not honour their promises, and who responded to their weakness by becoming "passive-aggressive". He included in this camp Justin Trudeau of Canada, France's Mr Macron, Angela Merkel of Germany and British prime ministers from Theresa May to Boris Johnson.

Donald Trump stands for something larger

Wise governments learned that Mr Trump has "a very clear sense" of his mandate from an American public that wants him to put their interests first. Mr Trump is both unique and more familiar than many allies initially cared to admit. France's Mr Araud recalls a meeting at which "frankly, what Trump said didn't make any sense", leaving American aides looking at their shoes. Asked for his reaction later, Mr Macron told his ambassador: "You know, there is nothing to take out of that. But he's the most powerful man on earth." Yet shrewd envoys came to see that Mr Trump's views have deep roots in American history. They saw "continuities" with the presidency of Barack Obama, whose courtly eloquence concealed a similar "fatigue with allies".

The moral of the first Trump presidency is that governments over-personalise their relations with America, says a diplomat whose colleagues are busy planning for all Trump contingencies. They should focus more on what they need to do for themselves, he suggests. He is right. Mr Trump might even agree. ■

Business

American business

Levy breaks

Companies hoping for a tax bonanza may be disappointed

CORPORATE AMERICA has at least one big thing to celebrate about the presidential election: it has erased the possibility of a rise in the country's corporate-tax rate, as had been proposed by Democrats. Weighed against the cost of tariffs—and more abstract concerns about the health of America's institutions—the promise of lower taxes and deregulation warmed bosses to Donald Trump during the campaign. Shareholders, who stand to benefit directly, rejoiced at Mr Trump's victory, sending the S&P 500 index of American stocks to a record high.

Muscle memory is partly responsible. The crowning legislative achievement of Mr Trump's first term was the Tax Cuts and Jobs Act (TCJA) of 2017, which lowered America's federal corporate-tax rate from 35% to 21% (see chart on next page). Profits surged. Share buybacks by S&P 500 firms leaped from $540bn in 2017 to $840bn in 2018. Other consequences became clearer with the spilling of academic ink. One recent study finds that the act caused corporate-tax revenue to fall by two-fifths. Investment increased by a more modest 8-14%, depending on how it is measured. "All of the responses we observe in terms of capital accumulation are pretty small relative to the direct budgetary costs," says Eric Zwick of the University of Chicago, one of the paper's authors.

During his campaign Mr Trump promised another tax bonanza—albeit in vague terms. Earlier this year he floated a plan to cut the corporate-tax rate to 20%. Most pundits think his preferred rate would be 15%, as it was in 2016. Indeed, in a speech in September he promised to cutting the rate to that level, though only for companies that manufacture domestically. "You have to make your product in America," Mr Trump repeated to the applauding audience of businessmen, who seemed not to clock how onerous the condition would be.

Mr Trump has also promised to extend the TCJA's tax cuts for individuals, which expire at the end of next year. That is of more than just personal interest to executives, for whom any sign of a hit to consumer spending is bad news.

Company bosses are hopeful that Mr Trump will fiddle with the tax code in other favourable ways as well. Though the TCJA's corporate-rate cut was permanent, some of its rules for firms become less generous over time. One is the global intangible low-taxed income rate—a tax on American firms' foreign profits better known by its sly acronym, GILTI—which is set to rise from at least 10.5% to 13.1% in 2026 unless Mr Trump intervenes. In September the president-elect said he would make some capital expenditures ▸▸

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immediately tax-deductible and expand tax credits for research and development. More controversially, firms are hoping he reverses changes to the treatment of interest payments—since 2022, companies have been allowed to deduct up to 30% of earnings only after, rather than before, depreciation and amortisation. Pursuing that measure would be the first sign of a corporate "money grab", argues William Gale of the Brookings Institution, a think-tank.

Every tax bill has its losers. Those most likely to suffer this time are firms in green industries that benefited from tax breaks under Joe Biden's Inflation Reduction Act. Existing industrial policies will, at the very least, acquire a more hawkish bent. Mary Baker of K&L Gates, a law firm, says there is appetite for tighter rules on the granting of tax credits that might benefit "foreign entities of concern".

Nevertheless, a maximalist interpretation of Mr Trump's various campaign promises implies a big boost to corporate America's profits. Each percentage-point decrease in the statutory rate lifts S&P 500 earnings by nearly 1%, reckon analysts at Goldman Sachs, an investment bank. The benefit would be biggest for firms earning and recognising a high proportion of their profits domestically, such as banks and retailers. Tweaking allowances on interest deduction, meanwhile, would be especially profitable for the sort of highly levered, capital-intensive firms favoured by private equity. Companies will also be weighing up the implications of Mr Trump's more eccentric personal-tax proposals, such as making interest on car loans tax-deductible and exempting tips from taxes.

This is a robbery

Yet as lobbyists limber up to influence the blockbuster tax bill that is likely to dominate Mr Trump's first year in office, some think that Wall Street has become too hopeful about his intentions and his ability to execute them. "Investors overall think there's going to be another tax cut, and I don't think that's going to be proved correct," says Andy Laperriere of Piper Sandler, an investment bank.

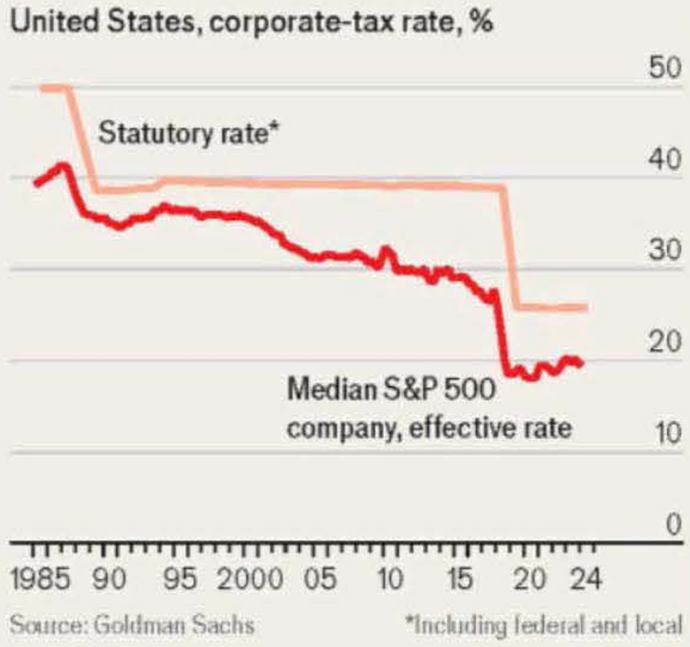
If there is a cut at all, many in Washington now view the best-case scenario as a reduction in the corporate rate to 15% only for companies that produce at home. "It has a certain coherence with the tariff proposals," says John Gimigliano of KPMG, an accounting firm. Determining which firms would qualify, though, is a vexed question. According to Kyle Pomerleau of the American Enterprise Institute, another think-tank, the difficulty of drawing a line between manufacturing and other income was one of the reasons why lawmakers got rid of a similar rule when the TCJA was passed. "McDonald's was getting a deduction for manufacturing hamburgers. It's not something you can target at a specific activity," he says.

It is America's budget deficit, though, that is the elephant in the room. The Congressional Budget Office, a non-partisan scorekeeper, expects the country's debt-to-GDP ratio to hit an all-time high later this decade, a worry reflected in the rising yield on America's government bonds. Mr Trump must navigate this with only a narrow majority in the House, where tax legislation must originate.

By comparison, corporate America's finances are in rude health. And as profits have continued to rise, the reputation of big business has sunk. Daniel Bunn of the Tax Foundation, one more think-tank, expects some Republicans in the House to be wary of handing tax cuts to firms. "These folks are sceptical of large corporates because of their size, their influence, their preferences on social policies and things of that nature," he says. Bosses have been excited by the carrot of tax breaks more than they have been frightened by the stick of tariffs. It is possible, though, that the carrot will be much smaller than they hoped for. ■

How low can he go?

United States, corporate-tax rate, %



Source: Goldman Sachs *Including federal and local

German business

Return of the Wundertüte

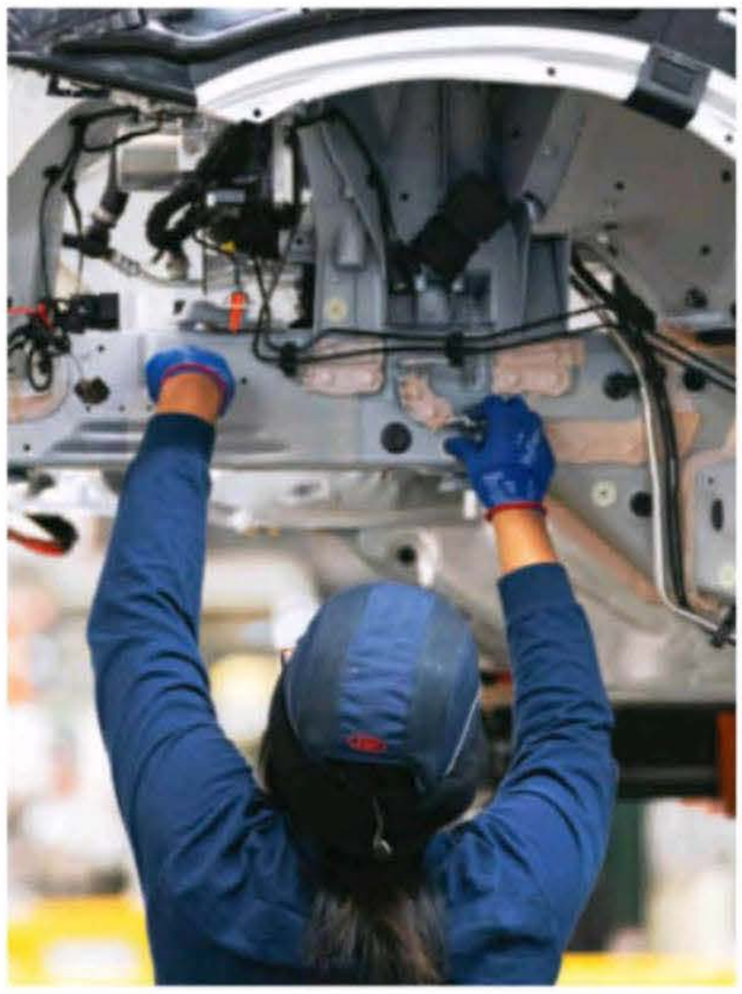
BERLIN

How bad will Donald Trump be for German businesses?

GERMAN BOSSES can't catch a break. Since Russia's invasion of Ukraine nearly three years ago their firms have been pummelled by surging energy prices, slowing demand in China, stiffening competition, fractious workers and a dysfunctional (though soon to be ousted) government. Shares in German companies have risen by just 2% since the start of 2022, compared with 16% for those in rich countries as a whole (see chart on next page). Now they are wringing their hands over Donald Trump's return to power.

German businesses have much at stake. America is by far their biggest export market. Last year Germany shipped $160bn-worth of goods there, and imported $77bn-worth in return. Only China, Mexico and Vietnam have larger trade surpluses with America. That will put German businesses squarely in Mr Trump's protectionist crosshairs. Shortly after the American election the BDI, Germany's main industry association, warned that, with Mr Trump back in the White House, "the tone will become harsher and the protectionist course will consistently be pursued." The Ifo Institute for Economic Research in Munich has estimated that German exports to America could drop by as much as 15% if the president-elect sticks with his promise of slapping a tariff of 10-20% on all imports.

Germany's bosses may take solace from three things. The first is that Mr Trump often blusters, and much of what he has said will not come to pass. "Nobody knows what lies ahead with the *Wundertüte* [bag of surprises] Trump," says Michael Hüther, head of the German Economic Institute, a think-tank in Cologne. In 2018 Mr Trump imposed tariffs on European steel and aluminium, but he stopped short of a wider ▸▸



Going to America

trade war with the continent. A 25% tariff on European cars that he threatened during his first term was never imposed.

However hard Germany is hit with tariffs, China is bound to be hit harder still—a second source of consolation for Deutschland AG. Mr Trump has spoken of imposing a 60% levy on imports from China, which compete with those from Germany in industries ranging from white goods to machinery. German goods should also become relatively more attractive to customers in America as the dollar strengthens, thanks to expectations that a Trumpian cocktail of tariffs and tax cuts will rekindle inflation and keep interest rates elevated.

Perhaps the biggest source of comfort, at least for some German businesses, will be the investments they have already made to manufacture more of their wares in America. Lured by the country's relatively cheap energy and the lavish subsidies on offer through the Inflation Reduction Act, German companies announced almost $16bn of investments in America last year, roughly double the previous year's level and far in excess of the $6bn they pledged to China, according to fDi Intelligence, a data provider. Investments in America accounted for 15% of the total by German businesses abroad in 2023, compared with 6% the year before.

On the campaign trail Mr Trump declared, "I want German car companies to become American car companies. I want them to build their plants here." They have already done that. Last year German carmakers manufactured 900,000 cars in America, half of which were exported, according to the VDA, a lobby group for Germany's auto industry. That is more than double the 400,000 they exported to America. BMW employs 11,000 people at its plant in Spartanburg, South Carolina—one of its largest. Mercedes-Benz has 6,100 workers at its factory in Tuscaloosa, Alabama. Volkswagen employs 5,500 in Chattanooga, Tennessee. It would be costly to reconfigure these plants to replace imported models hit by tariffs, but doing so could help lessen the blow (though not for workers back home or in Mexico, where a number of German carmakers also have factories). The day after the election Oliver Zipse, the boss of BMW, mused that American tariffs may even give his firm an advantage over rivals thanks to its large footprint in the country.

Germany's smaller manufacturers, collectively known as the *Mittelstand*, will not be so lucky. Few of them have the scale necessary to set up a factory in America. Germany's machinery industry exports around 14% of its production to the country, says Karl Haeusgen, chairman of Hawe, a maker of hydraulic pumps, who used to lead the association of machinery makers (VDMA). Roughly 90% of the VDMA's member firms have fewer than 250 employees. Germany's bosses are right to worry about the return of Mr Trump—but some stand to lose more than others. ■

Semiconductors

TSMC's geopolitical tightrope

Balancing the demands of different governments is proving tricky

TSMC IS RIDING high. The Taiwanese chipmaker—sole supplier of artificial-intelligence (AI) chips to Nvidia, the world's most valuable chip designer—has seen sales more than double since the start of 2020. While other semiconductor firms fret about cooling demand for gadgets and cars, TSMC believes demand for AI is just gearing up. Investors agree, propelling its market capitalisation towards $1trn and into the world's ten most valuable firms.

As a critical supplier to American tech giants based on an island claimed by China, TSMC is in an awkward spot. But until recently it profited even from the Sino-American rivalry. Chinese companies, barred by Uncle Sam from using Nvidia's chips, turned to TSMC to build their own. Recent events, though, suggest geopolitical constraints are starting to bind.

Last month TSMC revealed that chips it had made for a Chinese customer had been incorporated in specialist AI silicon for Huawei, a Chinese telecoms giant which since 2020 has been barred by American sanctions from working with TSMC and Western suppliers. Huawei denies breaching the sanctions. Nonetheless, TSMC told its Chinese customers that from November 11th it would no longer make AI chips for them using its most advanced manufacturing technology.

This will hurt China's AI chip designers and startups; TSMC makes most of the world's advanced chips. The damage to TSMC itself, though, will be small, at least initially. TrendForce, a research firm, estimates that closer regulatory scrutiny or the banning of more customers could threaten 5-8% of sales.

But China is not the only source of worry for TSMC. Taiwan's government has become more vocal about maintaining its chipmaking supremacy. This month a minister said that TSMC was required by law to keep its most advanced technology at home, according to the *Taipei Times*. TSMC is due to launch its newest production process, which it calls N2, in Taiwan next year.

A source close to the company notes that Taiwan is TSMC's home research hub, so new technologies are always introduced there first. In Arizona, where the company is building three chip factories, the previous generation of its technology, N4, is now operational. The company expects N2 to reach America only around 2030. The timing of the minister's comments probably reflects concern that TSMC could come under pressure to bring its most advanced technology to America ahead of schedule.

The government's unease is not baseless. Donald Trump, America's president-elect, has accused Taiwan of "stealing" America's chip industry, and has slammed the CHIPS Act, a $50bn package of subsidies and tax credits to lure chipmaking to America. TSMC, which is spending around $65bn to build factories in the country, is in line for $6.6bn in grants and $5bn in loans. Mr Trump has argued that tariffs on chips would be more effective than subsidies in boosting domestic production.

That is doubtful. For one, tariffs would need to be steep to make production in America appealing, considering it is a third more expensive to do so there than in Taiwan. The cost would be borne chiefly by American firms such as Apple, Google and Nvidia which design chips and have them made abroad. And meeting all demand domestically is a tall order. The Semiconductor Industry Association, a lobby group, estimates that chipmakers' capital spending in America between now and 2032 will exceed $640bn. Even that would leave America with less than a third of global advanced chipmaking capacity, far short of its demand.

Intel and Samsung, the only other makers of leading-edge chips, have delayed plans for their own factories in America because of financial difficulties. That leaves TSMC as the go-to supplier for American companies. And they, in turn, account for two-thirds of TSMC's sales. America thus needs TSMC as much as TSMC needs America. Even so, balancing the demands of powerful governments looks as delicate an act as wiring billions of microscopic transistors. ■

Footwear

Trainer wars

ZURICH

Challenger brands are catching up with Nike and Adidas

THE ORIGIN of On, a Swiss sportswear brand, is unusual. In 2010 Olivier Bernhard, a triathlete, stuck bits of garden hose to the bottom of his trainers for added cushioning. The idea worked so well that he and two friends decided to make a business out of it. Their shoes were a hit; last year the company made almost $2bn in sales. On November 12th it reported that its revenue in the quarter to September grew by 32%, year on year. On now has a market value of $17bn.

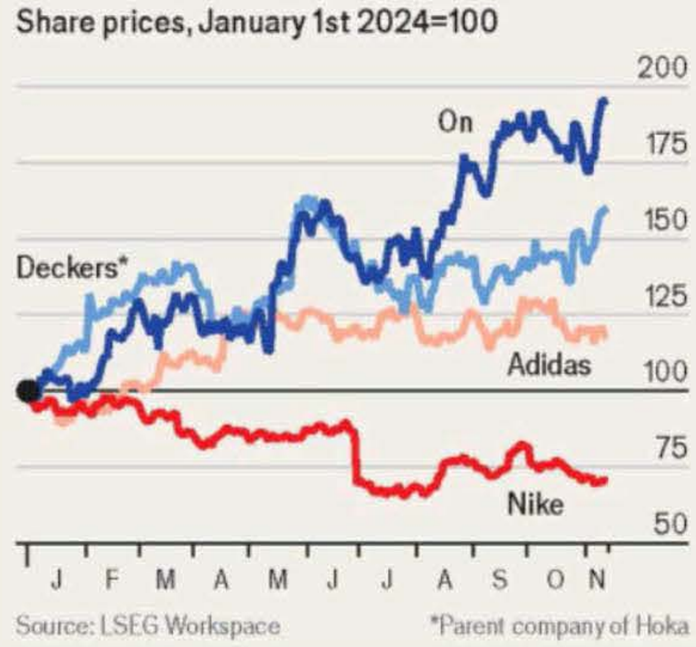
The global sportswear industry has long been dominated by two companies: Nike and Adidas. Last year they accounted for 35% and 16%, respectively, of the $146bn in net sales generated by the 15 biggest sportswear brands, according to Morgan Stanley, an investment bank. But that is down from a combined 63% in 2018. Challengers are gaining ground, including established brands like New Balance and Asics as well as newer ones like On and Hoka. In China local firms such as Anta and Li-Ning are adding to the competition. The swoosh has been hit especially hard: over the past year its shares have plunged by 27% (see chart). What went wrong for sportswear's reigning champions?

The winners and losers of the sportswear trade are decided on one product: trainers (or sneakers, as they are known outside Britain). Footwear makes up the bulk of sales at most big sportswear firms: 68% at Nike and 58% at Adidas. And shoes are where these companies differentiate themselves. It is more difficult to produce a T-shirt that stands out, notes Adam Cochrane of Deutsche Bank.

Sales of trainers have lately been outpacing the rest of the sportswear market. According to Sporting Goods Intelligence Europe, a research firm, sales of branded sports footwear rose by almost 50% from 2018 to 2023; the sportswear market as a whole grew by less than 20%. Running shoes in particular have done well. Jogging gained popularity during the pandemic when gyms were closed, and the habit has stuck for many. The New York and London marathons saw record participation this year, with roughly 55,000 running in each event. Running clubs have even become a place for young people to socialise and find love. The trend towards ever more casual fashion has further lifted demand, with running shoes no longer an odd sight around the office.

Not doing it

Share prices, January 1st 2024=100



Source: LSEG Workspace *Parent company of Hoka

Booming demand for trainers has given challengers an opening. Low barriers to entry have helped them seize it. Most sportswear groups outsource production to the same few suppliers in East Asia. Social media have made it easier to reach potential customers. It is relatively straightforward to establish a running brand, reckons Monique Pollard of Citigroup, another bank. Because running draws smaller audiences than, say, football, sponsorship deals are cheaper. "It's not a massive money sport," Ms Pollard explains.

Challenger brands have used innovative designs to help them stand out. Hoka, part of Deckers Brands, sells running shoes with comically thick soles. On's latest super-light marathon shoes are made by a robotic arm using a single piece of thermoplastic fibre. The centrepiece of On's headquarters in Zurich is a research-and-development (R&D) centre where designers paste materials together into prototype trainers they call "monsters". Analysts say that Nike, by contrast, has fallen behind on R&D, while Adidas has become too reliant on its range of fashion trainers. (Fans of its Samba model, part of that range, were dismayed earlier this year by a photograph of Rishi Sunak, the country's prime minister at the time, sporting a pair. Mr Sunak later issued a "fulsome apology".)

On your marks

Nike and Adidas have also made a mess of their distribution. In recent years the pair have cut ties with some big sports retailers in favour of selling through their own stores, websites and apps in an effort to claw back profits and gain a tighter grip on the customer experience. Nike's direct-to-consumer sales accounted for 44% of its total in the 12 months to May, up from 32% in the same period five years earlier. It is a similar story at Adidas. The strategy, though, has not played out as hoped. "The retailers said: well if you're not going to support us we're going to fill our shelf space with the new up-and-coming brands," explains Tom Astrella, an industry consultant. "The brand needs to be where the customer wants to shop," explains Martin Hoffman, co-CEO of On.

A marathon, not a sprint

The industry's two frontrunners are trying to pick up their pace. Nike launched a range of new products at an event in Paris earlier this year, including the latest version of its popular Pegasus model, for which it fast-tracked development. In September it replaced its chief executive with a company veteran who has pledged to overhaul its strategy. Adidas is expected to sell the last of its Yeezy line, designed by Kanye West, by the close of 2024, after parting ways with the rapper following a series of antisemitic outbursts. Both Nike and Adidas are patching up their relationships with retailers, too.

In the meantime, some of the challenger brands are pressing their advantage by expanding beyond performance-focused running shoes into fashion trainers and apparel, for which profit margins tend to be higher. On has produced a fashion collection with Loewe, a Spanish luxury brand, and recently launched an advertising campaign with Zendaya, an American actress. Such moves could further propel growth. But they could also be a costly distraction. In the history of sportswear, only two firms, Nike and Adidas, have managed to build successful fashion labels off the back of their running shoes. The challengers may yet lose their footing. ■

Big oil and climate change

A postcard from Baku

BAKU

The oil industry may be softening its stance on climate-change regulation

A SPECTRE HANGS over Baku, the capital of Azerbaijan, where diplomats, scientists and activists are gathered for the UN's annual climate-change summit. Last time he was in office Donald Trump, a fossil-fuel booster and climate-science denier, yanked America out of the UN's Paris climate agreement (it later rejoined). The president-elect has vowed to do so again on his first day back in office.

To add to climate warriors' gloom, Shell, a British oil giant, won an important legal victory this week. In 2021 a Dutch court had ordered the company to cut its emissions of greenhouse gases by 45% by 2030, in line with the Paris agreement. On November 12th the Hague Court of Appeal overturned the ruling.

Yet those championing climate action also received a boost from an unexpected quarter this week. "We will continue to advocate for the world to address greenhouse-gas emissions and the world needs to do this on a collective basis," declared Darren Woods (pictured), the boss of ExxonMobil, America's biggest oil-and-gas company, at the event in Baku. He added, for good measure, "I'm not sure how 'drill, baby, drill' [a frequent Trump campaign chant] translates into policy."

Although the Dutch judgment and Mr Woods's remarks send seemingly conflicting signals on the outlook for climate action, two threads connect them. One is a growing recognition that government regulation, which oilmen reflexively criticise, matters in a world worried about the climate. The appeal court made it clear that responsibility for responding to climate change lies mainly with governments, not companies. It did not let firms off the hook; Shell, it said, had a duty to "limit its carbon-dioxide emissions". But it found insufficient scientific basis for a court to impose emissions targets on firms.

Mr Woods, too, appears to be converted to the need for government intervention on the climate—or at least some policy continuity. In an interview with *The Economist*, he cautions Mr Trump against scrapping America's Inflation Reduction Act, a law passed in 2022 that offers generous subsidies and tax incentives for clean technologies like hydrogen and carbon capture in which ExxonMobil is now investing. He also warns Mr Trump against leaving the Paris agreement: "It doesn't benefit our country going in and out, in and out."

The second connecting thread is the need for better measurement of emissions. Although the Dutch court acknowledged Shell's efforts at reducing emissions from its own operations, it noted the difficulty of measuring and attributing those generated by the fuels it sells. For its part, ExxonMobil wants a global effort to lower the carbon intensity of products, based on standardised metrics, which are currently lacking. "Let's establish a global accounting system for carbon," Mr Woods says. Such words would have been unthinkable from an Exxon boss a generation ago. ■

Honeywell

A sticky situation

Elliott wants to break up America's last big industrial conglomerate

VIMAL KAPUR, the boss of Honeywell, should have seen it coming. Industrial conglomerates like his have long been out of fashion. Between the beginning of June last year, when Mr Kapur took over at Honeywell, and November 11th the firm's shares had risen by just 16%, compared with 46% for industrial companies in America's S&P 500 index. On November 12th Elliott Management, a feared activist investor run by Paul Singer, announced it had taken a $5bn stake in the company, probably its largest ever such position, and called for Honeywell to break itself up. Investors seemed pleased with the idea, sending Honeywell's shares up by 4% on the day of the announcement.

To his credit, Mr Kapur has been busily making changes at Honeywell, which manufactures everything from masks to machinery. He has reoriented the group around three big themes—automation, the future of aviation and the energy transition—and made $10bn-worth of acquisitions to bolster its businesses in those areas, with purchases including an industrial-software company, a radio-equipment manufacturer and a maker of liquefied-natural-gas equipment. At the same time, he has made plans to divest peripheral businesses such as a specialty-chemicals unit, raised the company's dividend and bought back shares from investors.

All this, Mr Kapur has claimed, is "accelerating value creation". Yet it has not been enough to reverse the lacklustre financial performance in recent years of America's last big industrial conglomerate. Although Honeywell makes as healthy a profit margin from its automation and aerospace businesses as its peers, the company's growth continues to be tepid. Excluding acquisitions, its revenue rose by 3% in the quarter to September, compared with the previous year, falling short of Mr Kapur's ambition of 4-7%. That continues a disappointing pattern. In a letter to Honeywell's shareholders, Elliott pointed out that the company's earnings per share grew at 3% between 2019 and 2024, among the slowest of its peer group. Its price-to-earnings ratio has also lagged.

Elliott acknowledged Mr Kapur's efforts at simplification, but described these as "incremental", arguing that they failed to resolve the underlying problem of Honeywell's conglomerate structure, which makes the company too complex to ▸▸

manage. Instead, Elliott wants Honeywell to break itself into two separate companies focused on aerospace and automation.

Its case is strengthened by the success of similar breakups in the past few years. In January last year the market capitalisation of General Electric, a once mighty American conglomerate that has since split itself into three standalone businesses, was about $90bn. Today those businesses have a combined value of around $325bn. The breakups of Ingersoll Rand and United Technologies, both completed in 2020, delivered far more value for shareholders than analysts first expected, according to Melius, a research firm. In Elliott's view, Honeywell's breakup could result in share-price gains of as much as 75%, lifting its market value to more than $240bn.

The argument is compelling and the size of Elliott's stake shows conviction. The question now is whether Mr Kapur will listen. Elliott is not the first activist investor to call on Honeywell to break itself up. In 2017 Dan Loeb of Third Point, another Wall Street titan, tried to get the company to separate out its aerospace division. Honeywell's boss at the time, Darius Adamczyk, rejected the recommendation, though he did sell off various smaller businesses, including Resideo, a maker of smart-home products. Mr Kapur has yet to say whether he will heed the call for a breakup this time. With investors growing increasingly impatient, though, he may have little choice. ■

BARTLEBY

The magic and the minefield of confidence

Self-doubt, hubris and everything in between

CONFIDENCE IS CONTAGIOUS. Someone declaring a position with ringing certainty is more likely to inspire than someone who hedges their bets. "We may fight them on the beaches; it depends a bit on the weather," would have been a lot less persuasive. What is true of Churchill's wartime oratory is true in less dramatic circumstances. A study by Matthias Brauer of the University of Mannheim and his co-authors analysed language used in letters from activist investors; it found that more confident letters were associated with more successful activist campaigns.

Confidence confers status. In a study published in 2012 by Cameron Anderson of the University of California, Berkeley and his co-authors, students on an MBA course were asked to take an online survey before they started classes. The questionnaire asked participants to say if they recognised certain names, events and works of art; unknown to them, the options included both genuine choices, such as Maximilien Robespierre and "Pygmalion", and made-up ones like Bonnie Prince Lorenzo and "Windemere Wild". Overconfident students who had picked more fictitious entries turned out to have the most influence on their classmates, according to end-of-term ratings.

Confidence without competence will only get you so far. If you go around telling people how much you love "The One Musketeer", you will probably not be that influential. But competence without confidence imposes limits, too. Self-doubters are less likely to put themselves forward for big promotions. Irrational levels of self-belief are a hallmark of many successful founders. A recent paper by Terhi Maczulskij and Jutta Viinikainen, two Finnish academics, looked at the relationship between personality traits and employment status in Finland, and found that higher self-confidence was predictive both of entrepreneurship and of entrepreneurial success.

As much as confidence brings rewards, however, it also brings danger. Work by Ulrike Malmendier of the University of California, Berkeley and Geoffrey Tate of the University of Maryland has found that overconfident bosses are much more likely to undertake acquisitions (though they are more averse to external financing, believing that it undervalues their businesses). Their acquisitions are also more likely to destroy value.

Another paper, by Guoli Chen of INSEAD and his co-authors, looked at the relationship between CEOs' confidence and their earnings forecasts. The researchers found that bosses with inflated levels of self-belief were slower to adjust their forecasts when they proved inaccurate. "Put simply," they conclude, "overconfident executives who make mistakes continue to be wrong for longer."

In an ideal world, confidence would be distributed evenly and in just the right quantities: an optimally confident person is someone secure enough to trust their own judgment and to accept that it is fallible. In practice, confidence is distributed very lumpily and is also susceptible to feedback loops.

A confident person ("I'm so great") is liable to place even more faith in their own abilities if they have success ("I'm so great and here's the job title to prove it"). One study by Nathanael Fast of the University of Southern California and his co-authors tested people's willingness to bet on how they would do in a difficult general-knowledge quiz. Participants who were asked how much power they had at work before making their bets staked more (and lost more) than people of similar seniority who were only asked about their roles after deciding what to gamble.

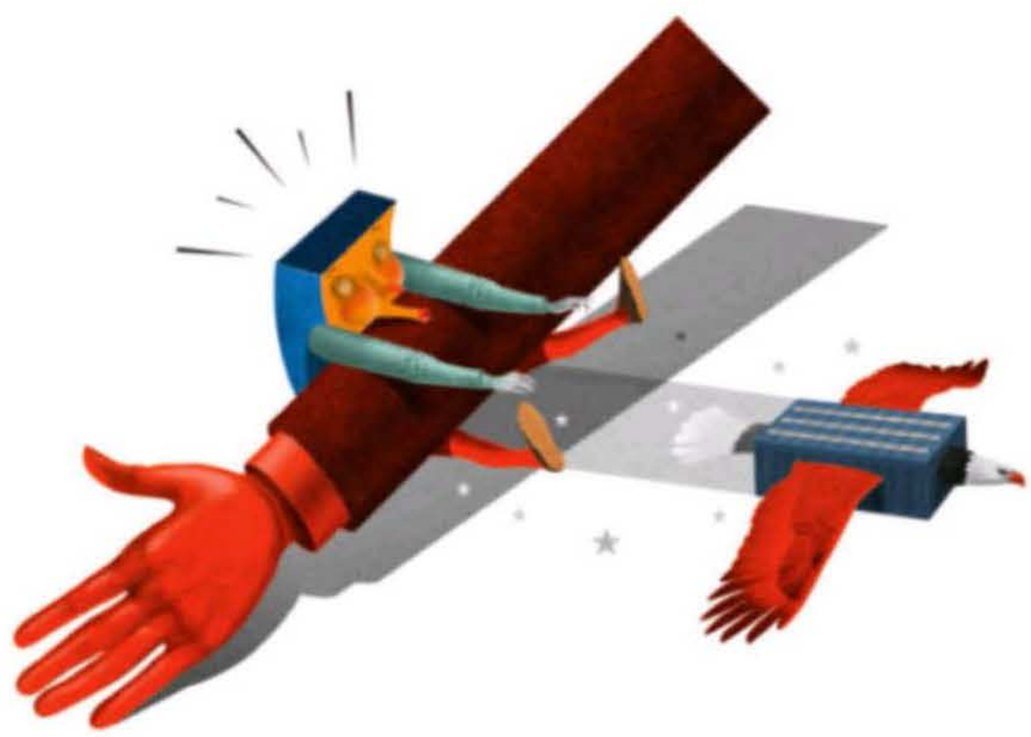
This messy picture resolves into two broad propositions for managers to reflect on. First, puffed-up people need guardrails. A new paper by Priscilla Kraft of WHU, a German business school, and her co-authors finds that overconfident bosses of American high-tech firms have a better record of making breakthrough innovations if they are constrained by powerful and expert boards.

Second, self-doubters need encouragement to fulfil their potential. That might come from managers, mentors or even themselves. A study by Joris Lammers of the University of Cologne and his co-authors primed some participants in a mock interview process to think of times when they had wielded power. Independent evaluators who were not aware of the experiment found that they wrote more persuasive cover letters and did better in face-to-face interviews than other applicants. Confidence can be natural. It can also be a trick.

SCHUMPETER

America First, business edition

Which firms will—and won't—do well under Donald Trump?



APART OF Donald Trump's political genius is being all things to all people—or at least to all his supporters. He has said so many contradictory things, throughout his public life and during the presidential campaign, that it is easy to latch on to the bits you like and either ignore those you don't, or dismiss them as braggadocio. Investors, it seems, are no different. The former president's decisive victory on November 5th sparked a global rally in equities, as stockpickers filled the Trump-shaped hole in their vision of the future with hopes and dreams. In those reveries, lower taxes and less red tape propel the planet's biggest economy, and with it the economy of the planet as a whole. By the end of the week stocks were up by 2.4% globally relative to election day.

Look at share prices and Mr Trump somehow seems great for both Tesla's electric vehicles (EVs) and Detroit's gas-guzzlers; for Wall Street and for crypto firms; for American manufacturers, whom he vows to protect, and for Mexican firms, from which they allegedly need protecting; and for oil stocks, even though his urging to "drill, baby, drill" could depress profits by denting crude prices. Even shares in Chinese firms, cannon fodder in any Trumpian trade war, gained 2% by the end of November 7th.

The world is complicated and not everything revolves around the American vote (really). On November 8th China unveiled a $1.4trn stimulus package to jolt the world's second-biggest economy. A day earlier the government imploded in the third-biggest, Germany. The fourth-biggest, Japan, has looked shaky since a general election on October 27th, where no party won a majority. Even in America, investors' enthusiasm may owe more to the decisiveness of Mr Trump's win, which eliminated worries about post-election unrest, than to the winner himself.

All of which makes predicting which businesses will and will not thrive in the next four years a mug's game—especially until it becomes clear who will be making policy under Mr Trump. Call Schumpeter a mug, then—or enough of one to venture three guesses. First, American firms will do better than non-American ones. Second, in America, smaller listed companies should enjoy a bigger boost than larger ones. Third, Mr Trump and his cronies may not make out like bandits.

The main reason corporate America as a whole ought to best its peers is that it has been doing so for years, Trump or no Trump. American firms are bigger, grow faster and turn fatter profits than rivals in other countries. On top of that starting advantage they would, obviously, benefit from any cuts to corporate taxes, which flow automatically to their bottom lines, and from deregulation, which cuts other costs.

Although legal and legislative hurdles might get in the way of Mr Trump's campaign promise to slap a 10-20% tariff on all foreign goods, and 60% for Chinese ones, some increase is likely. American firms would pay more for imports and face retaliation when selling abroad. Lucky for them, they are on average less exposed to global commerce than multinationals in the export-oriented economies of China, Europe and Japan. If worse comes to worst, America Inc can always fall back on its vast domestic market. Tariffs won't be "beautiful", to use Mr Trump's locution, for shoppers, but in the short run they needn't be ugly for profits.

The S&P 500 index of America's largest listed firms jumped by 3.5% in the week after the election, while similar indices in other places have risen less (China, Japan, Mexico) or fallen (Europe, India, Hong Kong). Impressive—until you see the 5.8% leap by the Russell 2000, which tracks the smallest public companies in America. This is a welcome change for not-so-big business, whose returns have lagged behind those of corporate superstars for about ten years, the longest spell in decades, according to Steven DeSanctis of Jefferies, an investment bank.

Now things may look up for business's Davids. They are less able than the Goliaths to slice through tedious bureaucracy, so less of it would benefit them more. Under Mr Trump, who fancies himself dealmaker-in-chief, trustbusters may wave through more acquisitions, which create value for the smaller target's shareholders (though not necessarily for those of the buyer).

And in the event of a tariff tit-for-tat, smaller firms tend to be less exposed to international trade than multinationals. The two biggest post-election winners among America's 1,500 most valuable firms were domestically focused tiddlers (and the stuff of Democrats' nightmares): GEO Group, which among other things runs detention centres for migrants, and CoreCivic, a private-prison operator. Each gained two-thirds in value over three days, bringing their combined market capitalisation to nearly $6bn.

Donald & Co: buy, hold or sell?

Exactly how much Mr Trump and his chums will end up profiting is uncertain. Elon Musk has added around $40bn to his fortune thanks to the soaring price of Tesla shares, up by around 30% since November 5th—a tidy return on the $100m or so he spent on helping elect Mr Trump. An early test of the bromance looms. Mr Trump's campaign promised to repeal emissions rules. But these let Tesla sell credits to carmakers that do not make enough EVs to meet regulatory standards. According to Jefferies, sales of such credits accounted for 35% of the free cashflow Tesla generated between 2019 and 2023. What happens next will be a useful guide to Mr Musk's influence over policy—and to the performance of his commercial empire.

Things look hazier, alas, for the listed parent of Mr Trump's X clone, Truth Social. After wild swings its shares were 10% cheaper a week after the election. On polling day it reported a net loss of $19m on sales of $1m. The American president's immense power is no match for arithmetic. ■

Finance & economics

Globalisation

America v the world

SINGAPORE AND WASHINGTON, DC

Donald Trump wants to reshape global flows of goods, capital and labour. The consequences will be felt everywhere

ACROSS CABINET tables, boardrooms and diplomatic missions this week, one topic of discussion has overshadowed all others. The sweeping victory of Donald Trump and the Republican Party in America's elections will give huge powers to an impulsive president with unorthodox economic beliefs and a belligerent approach to negotiation. Bigwigs in government and business all over are scrambling to analyse the consequences—for America and for the rest of the world.

America, the world's largest economy, issues the global reserve currency and hosts the planet's biggest banks and firms. Its scale, depth and interwovenness with the global economy mean that even small policy changes at home can resonate far beyond its shores. Mr Trump has promised to overhaul the main pillars of the American economy, from trade and regulation to immigration. His policies stand to reshape the flows of goods, capital and labour that irrigate the world economy. This will create some winners, and many losers, all over the globe.

Start with the flow of goods. Mr Trump is deeply suspicious of trade. "The most beautiful word in the dictionary is tariff," he told a business audience in October. He has advocated a universal protectionist wall, with tariffs of 10-20% on all imported goods, in addition to much higher tariffs aimed at an unfortunate few.

The proposals may not be implemented in full. "On day one they'll lay out something that will get everyone's attention but won't go straight for universal tariffs because that would lead to stockmarket destruction," says Sarah Bianchi, a former deputy United States trade representative. Mr Trump may, in part, use tariff threats to extract concessions from friends and enemies alike. Still, implementing just a fraction of what he has proposed would make for America's largest increase in tariffs since the 1930s.

Who might the administration choose to hit hardest? Mr Trump and his advisers are obsessed with bilateral balances. Any country that records a big trade surplus with America, they reckon, must be cheating Uncle Sam. The list of villains is long (see chart on next page). The president-elect has hinted he would slap a 60% tariff on all Chinese goods, five times the current average level. Analysts reckon China's exports to America could more than halve as a result, knocking one percentage point off China's GDP amid already tepid growth. The impact would be limited by the fact that Mr Trump's original tariffs, kept by Joe Biden, have already caused China's exports to America to dwindle.

Mr Trump has also threatened tariffs of ▸▸

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25% on most Mexican goods, with cars subject to much higher levies. That would badly hurt Mexico. The value of the country's goods exports to America is equivalent to 27% of its GDP, compared with less than 3% for China. Mexico has fewer alternatives, too. More than four-fifths of its exports go to its northern neighbour.

The EU also has reasons to fret. The bloc runs a goods-trade surplus of around $200bn with America. Goldman Sachs, a bank, forecasts that new tariffs could shave 0.5% off Europe's GDP, with Germany, the bloc's biggest economy, taking the worst hit. Many other countries could find themselves in the firing line. Vietnam's trade surplus with America hit $100bn last year. Those of Canada, India, Japan, South Korea, Switzerland, Taiwan and Thailand run into the tens of billions of dollars.

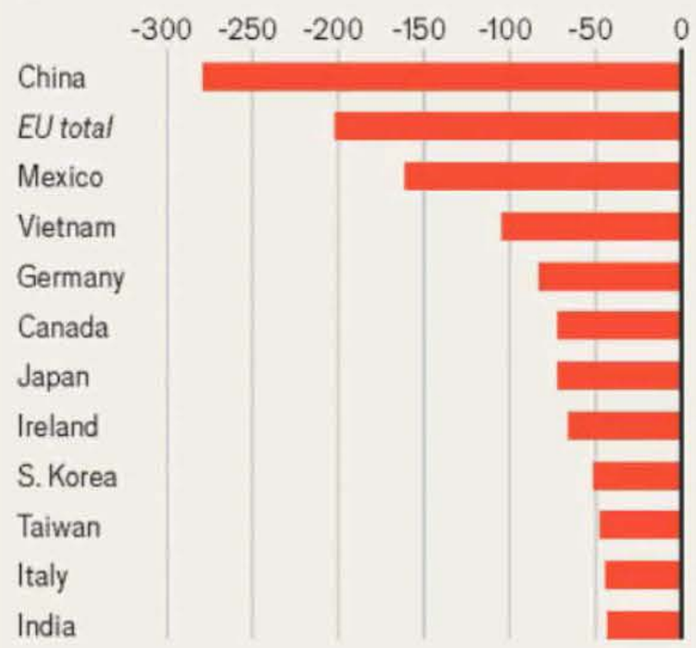
Should a tsunami of tariffs materialise, few countries would prosper. But some may gain relative advantages. Allies without glaring trade surpluses with America may be able to secure exemptions (such a deal is reportedly under consideration for Britain). Other countries may benefit by not being China. Some multinational firms will speed up relocation efforts. Steve Madden, an American fashion firm, announced it would move its Chinese production sites elsewhere. Black & Decker, a toolmaker, has said it will do the same if Mr Trump goes ahead with his tariffs. Firms leaving China may be tempted to shift to Mexico and South-East Asia—despite these countries being potential targets for higher levies.

The global reallocation of capital—the second big shift—is already in full swing, even though Mr Trump will not be inaugurated for another two months. Investors expect his proposed mix of tax cuts and deregulation to boost domestic corporate profits. The S&P 500, an index of large American firms, hit fresh records from November 6th to 11th—while stocks around the rest of the world dropped by around 2%. "We are at an extraordinary confluence of strong American economic performance, weakness in the rest of the world and the likelihood of a set of policies that will further turbocharge the US and its financial markets," says Eswar Prasad of Cornell University. "It is increasingly difficult for fund managers to make the case for diversification away from the US market."

Deregulation could also give American firms a cost advantage over foreign ones. Mr Trump has promised to slash environmental rules while pushing down energy costs at home—a worry for European firms, which already suffer from higher electricity prices. "If they abandon climate rules and we continue our course, we are going to be fully knocked out in manufacturing," says Luis Garicano, a former member of the European Parliament now at the London School of Economics.

The hit list

United States, top contributors to goods-trade deficit, 2023, $bn



Source: BEA

Investors have also been lured to America's currency. The dollar has climbed by 3% against a basket of foreign currencies since November 5th. The Republicans' clean sweep, including majorities in both chambers of Congress, promises to take it higher still. Fiscal laxity was likely regardless of who won the election, but an absence of political gridlock will allow deficits to widen even more. Coupled with the inflationary pressures of higher tariffs and tighter labour markets as immigration ebbs, this could force the Federal Reserve to hold interest rates higher for longer, keeping the dollar strong.

Dollar dolour

This is bad news for poorer countries. A mightier dollar buoys the value of their imports, many of which (particularly commodities) are priced in the currency. Those that have borrowed in dollars will see the value of their debts soar. Research by the IMF published last year suggests that every 10% rise in the dollar's value reduces economic output in emerging markets by about 1.9% after six months, and that these effects linger for two and a half years. Higher interest rates in America also make the rest of the world less attractive. Capital flows out of emerging markets, forcing their central banks to raise rates to prop up currencies already weakened by deteriorating trade balances. That reduces lending and investment just when those economies need a boost.

Mr Trump's policies are also set to reshape migration flows—the third big upset. He has repeatedly promised to deport millions of illegal immigrants. Mexico, again, would suffer more than any other large economy. Reintegrating a huge mass of workers into its labour market could take years, causing unemployment to surge. Mass deportations would also choke off remittances from America to Mexico—the largest single route for such payments. Transfers ran to over $60bn last year, outstripping the amount of foreign direct investment Mexico received.

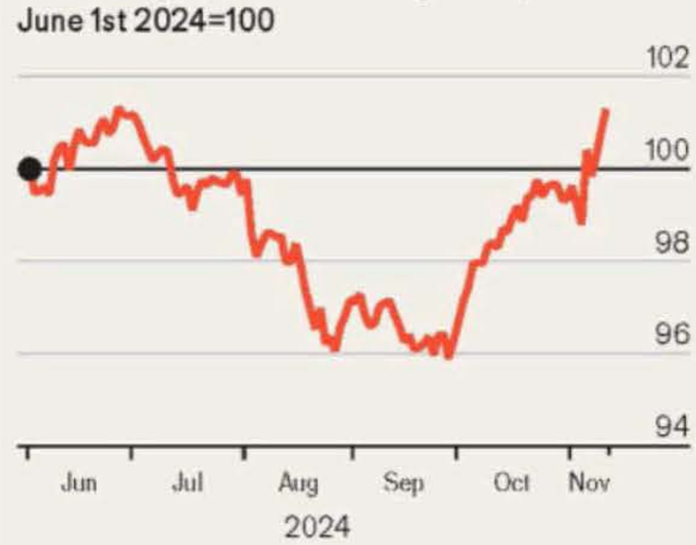
Deportations could also cripple economies across central America and the Caribbean. In 2021 El Salvador, Guatemala and Honduras received between $6bn and $14bn in remittances from America, accounting for between 16% and 23% of their GDP—a number that has been rising steadily in recent years as cross-continental migration has grown.

The incoming administration's policy on high-skilled migration is less clear. In June Mr Trump suggested that students graduating from American universities should be eligible for green cards, which give the holder permanent residency. But during its last time in office, his administration restricted immigration even from high-skilled workers. Should that happen again, other parts of the world could benefit. Skilled migrants tend to be highly mobile. If America no longer welcomes them they may flock to other rich, English-speaking countries, such as Australia and Britain. Research by Saerom Lee and Britta ▸▸

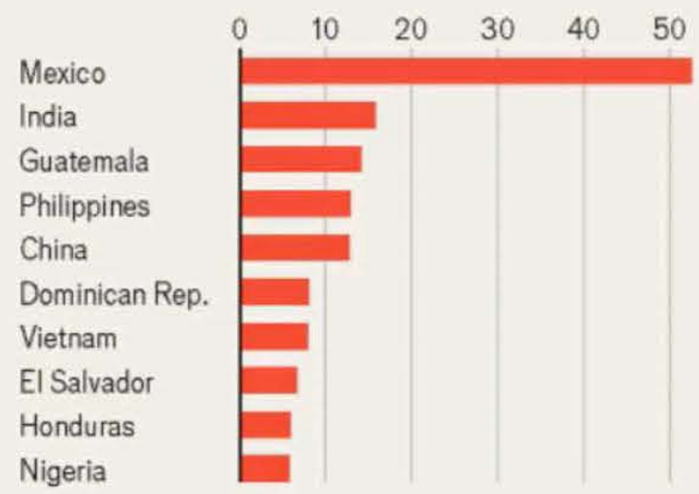
Donald's buck

United States

Trade-weighted dollar exchange rate*, June 1st 2024=100



Top destinations for remittance outflows, 2021, $bn



Sources: LSEG Workspace; Migration Policy Institute

*Against six major currencies

Glennon of the University of Pennsylvania suggests that Canada's startup visa programme, launched in 2013, led to a 69% increase in the following eight years in the number of migrants based in America who moved to Canada to start firms.

Mr Trump's exact policies will not be known for months, but who stands to lose most from them is already clear. Faced with high barriers on at least two fronts—trade and migration—Mexico seems set for a great deal of economic pain. The new administration will throw yet more sand in the gears of China's export machine, compounding the country's domestic woes. And on top of tariffs, a growing transatlantic gap in the regulatory burden could sap the European economy.

The list of winners, on the other hand, is likely to be short. If they play their cards right, it could include close allies such as Britain and Australia. Countries that pump a lot of oil, which used to run big trade surpluses with America, will probably be sheltered from tariffs because, thanks to surging shale production, Uncle Sam has been a net exporter of the stuff since 2021. If they can stay out of Mr Trump's eyeline, smaller export-focused countries in Asia may benefit from the redeployment of manufacturing from China, as they already have in recent years.

There are two lingering sources of uncertainty. One is the inherent unpredictability of Mr Trump's policymaking. Competition for his ear will be central to this process, which is not reassuring. His courtiers range from Silicon Valley moguls wanting few restrictions on skilled migration to border hawks in the America First camp; from hedge-funders who see tariffs as bargaining chips to mercantilists keen on slashing imports at all costs. Mr Trump may wield his tariffs Godfather-style, granting exemptions to countries and companies according to how much they bend to his will. The White House will become a hub for lobbyists. Special favours may end up eroding competition and tainting America's reputation abroad.

The other source of uncertainty is how governments around the world respond to the administration's threats and punishments. In a zero-sum world for commerce, the temptation to impose retaliatory tariffs and other protectionist measures will grow. Many of America's trading partners will simply hope to avoid the worst of Mr Trump's ire. A bolder, if less probable response would be to band together. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership, a trade deal between nations in the Americas and Asia, continued after Mr Trump pulled out of it during his first term. More ambitious accords could keep the flame of international trade alive, waiting for America to return to the table. ■

Economic tsars

Money mantras

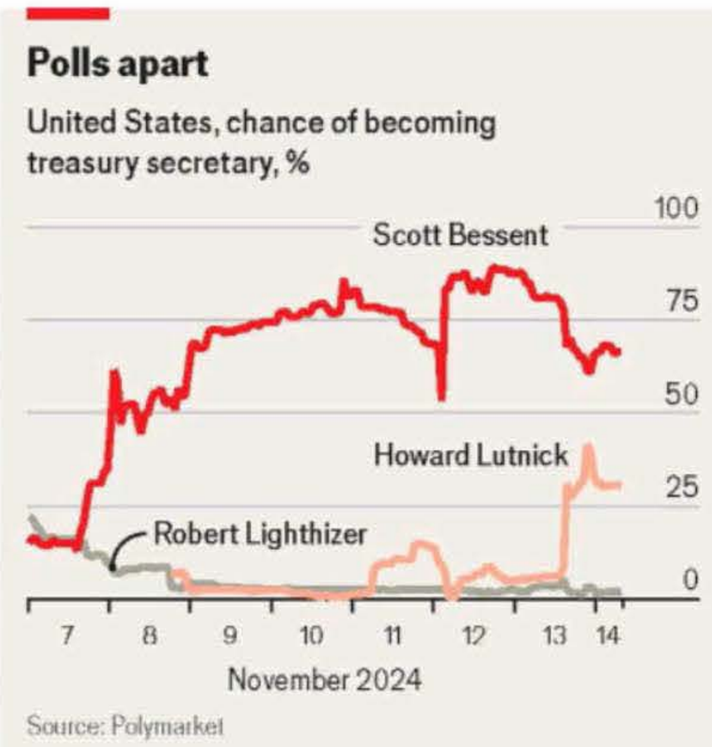
NEW YORK

What does America's next treasury secretary believe?

TO HEAR DONALD TRUMP'S transition team describe it, everyone wants to work for him. Howard Lutnick, the boss of Cantor Fitzgerald, an investment firm, and a co-head of the recruitment crew, has bragged that he is in touch with "the top 150 businesspeople across the United States of America". A vast array of names has been bandied about for all kinds of roles, including treasury secretary—from Jamie Dimon, boss of JPMorgan Chase, a bank (who has repeatedly insisted he has no interest in the job), to Jay Clayton, who ran the Securities and Exchange Commission during Mr Trump's first term (but who is apparently angling for other things), to Steven Mnuchin (who did the job last time but does not want it back).

From this milieu, however, a few clear frontrunners have emerged. With the caveat that the market is relatively thin—less than $500,000 has been wagered on the question on Polymarket, America's largest prediction site—punters have given serious chances to three possible choices in recent days. Two are Wall-Street types who favour a broad mix of pro-business, protectionist policies. The third is a wild card focused on crushing inbound trade. Who among them—if any—gets picked will say much about Mr Trump's second-term economic priorities.

Speculators give by far the best chance to Scott Bessent, who runs Key Square Capital, a hedge fund (see chart). He has been the odds-on favourite for days, ever since it was revealed that he was hobnobbing with Mr Trump at Mar-a-Lago over the weekend. Key advisers are backing him for the post; on November 10th he published an op-ed in the *Wall Street Journal* outlining why he thinks Mr Trump's agenda will turbocharge the economy. (It had looked as though Mr Trump was choosing between Mr Bessent and John Paulson, a hedge-fund titan whom Mr Trump name-checked in January as a possible pick. But Mr Paulson announced on November 12th that he was no longer pursuing the job.) Then Mr Lutnick himself made a serious bid for the role. Betting markets give him a 30% chance of prevailing.



Mr Bessent and Mr Lutnick, at a glance, have much in common. Both have lived in New York City for most of their professional lives. Both became billionaires through success in high finance. And both have backed Mr Trump's campaign heavily, either through hosting fundraising events or with donations of their own. In recent interviews or op-eds, both have called for deregulation, lower taxes and tariffs.

The wild-card choice would be Robert Lighthizer. He was the architect of Mr Trump's tariffs during his first term and is a vociferous advocate of more intervention on trade. In an opinion piece for *The Economist* in March he argued that a blanket 10% tariff on imported goods would create "high-paying industrial jobs". In the days after Mr Trump's election Mr Lighthizer, a former Wall Street lawyer who was America's trade representative in the first Trump administration, was thought to have a decent shot—but there have been mixed signals from Mr Trump's inner circle about his prospects since. Choosing him would reveal that trade policy is Mr Trump's main priority—and might cause investors to rethink their enthusiasm for Trumponomics.

At the time of writing, markets were favouring Mr Bessent as the pick. What agenda might the Treasury pursue under his stewardship? In interviews he projects the obsequious loyalty Mr Trump enjoys—he told CNBC "I'm going to do whatever Donald Trump asks"—and signals he favours policies Mr Trump fetishises, such as slashing taxes and red tape. But elsewhere he and the president-elect might differ. In particular, Mr Bessent appears to care deeply about containing government debt: he characterised the big deficits and state subsidies of the Biden era as a "return to central planning" in a speech in June. His plan to bring the deficit down would almost certainly include gutting the green subsidies in the Inflation Reduction Act, a law enacted in 2022 that he has described as a budgetary "doomsday machine".

Mr Bessent has also characterised the maximalist tariffs Mr Trump promised on the campaign trail as more of a negotiating position than a real policy. And he seems less inclined to try to mess with the dollar than Mr Trump, who has often bemoaned the currency's strength and appears keen to push its value down. On November 10th ▸▸

Mr Bessent wrote that the greenback's bounce since the election is "a vote of confidence in US leadership". That he believes in market exchange rates should not come as a surprise. It would be ironic if a former protégé of George Soros, the financier known for "breaking the Bank of England" with big short bets against the pound, could be persuaded that the state should be the one setting exchange rates.

This might have given the president-elect some pause; Mr Lutnick's chances are rising. He has called tariffs a mere negotiation position, too. But he has defended them more forcefully in interviews, touting their benefits and disclaiming their potential economic fallout. He also seems more charismatic and at ease on air than does Mr Bessent.

Still, Mr Bessent may hope he has an ace up his sleeve. In the past, Mr Trump has described choosing Jerome Powell, the current chairman of the Federal Reserve, as the "worst mistake" of his presidency. But sacking him before his term ends in 2026 might be legally impossible, and trying to do so could be an embarrassing failure. As a result, Mr Bessent has laid out an alternative plan: appointing Mr Powell's successor perhaps a year in advance of the end of his term, with the chair-in-waiting offering alternative forward guidance on policy. The scheme is unlikely to work. But it is just the type of gambit—craftily disdainful of norms and propriety—that might help him woo Mr Trump. ■

BUTTONWOOD
Risk off

Why financial markets are so oddly calm

ONE THING nobody thinks of Donald Trump's return to the White House is that it will herald four years of quiet, predictable government. Here, then, is a puzzle for readers interested in the more abstract bits of finance. Why was Mr Trump's re-election greeted by resounding drops in volatility all across the world's most important markets?

First, a primer for those who slept through Quantitative Finance 101. Volatility is commonly used as a proxy for uncertainty or risk, and describes how much asset prices fluctuate. Historical volatility measures the spread of past daily price movements, telling you how far you should expect any given value to be from the average. Say, for instance, you are told that a stockmarket index has had an average annual return of 10%, with a volatility of 20%. That means that in roughly two-thirds of previous years, the index's returns were somewhere between -10% and 30%. Higher volatility would have meant more turbulent markets and a wider range. Lower volatility would have meant a tighter range and more millpond-like markets.

So much for the rear-view mirror—investors care more about what lies ahead. This, of course, is harder to determine. But if the market expects big swings in prices, traders will seek more insurance against such swings than they would if they expected conditions to be placid. These expectations, therefore, dictate the cost of insurance contracts, or "options". Apply some maths worked out in the 1970s by Fischer Black and Myron Scholes, two economists, and you can work backwards, converting options prices into "implied volatility". You now have the market's collective judgment on how jumpy asset prices will be.

The surprise is that, as traders rushed

November surprise

United States, implied-volatility measures
October 18th 2024=100

Source: Bloomberg *VIX index †MOVE index

to price in Mr Trump's sweeping victory, the collective judgment reached in the biggest markets of all was: "a lot less jumpy than before". Election day set off a plunge in the VIX index, which measures the implied volatility of the S&P 500 share index of large American firms. The MOVE index, the equivalent for dollar interest rates, followed suit. So did the volatility of the exchange rate between dollars and euros, the world's most heavily traded currency pair, and of that between dollars and yen, the second-most-traded pair.

Share prices soaring on the promise of tax cuts are one thing. The idea that investors believe another Trump presidency will make financial markets less risky is harder to fathom. Mr Trump threatens to widen a fiscal deficit that already yawns, impose tariffs reminiscent of those in the 1930s and undermine an international order that provides a foundation for firms' supply chains. Perhaps investors' returns will be stellar in spite of all that. Few, though, think their risk of losses has ebbed away, and even fewer that the world has just become a more predictable place.

Instead, this is a rare moment in which the differences between volatility and risk—concepts investors often use interchangeably—are crystal clear. Volatility is a tightly defined calculation. It is the standard deviation of price fluctuations expected over a set timeline (30 days for the MOVE and the VIX), assuming they are distributed along a bell curve and that options are priced accordingly. If, say, an election falls within the chosen timeline, the volatility of affected asset prices will duly rise to account for the difference in possible outcomes. It will then fall once the outcome is known and prices themselves have incorporated it. Volatility is therefore an excellent tool for modelling some of the randomness that drives financial markets.

Some, but not all. In reality, the randomness of both markets and the world they reflect is wilder than this. Extreme events (think of wars, financial crises or pandemics) occur far more often than a well-behaved bell curve would suggest. It is often impossible to attach a distribution of probabilities to their potential outcomes, or even to specify the full range of these. They certainly don't come with tightly defined timelines. Good luck mapping out how each chain of events that could follow a Chinese blockade of Taiwan would affect the euro-dollar exchange rate.

An instinctive understanding of risk allows for this wild randomness in ways that a statistical measure such as volatility cannot. That is especially true for options traders, who, if asked for a contract insuring against too extreme a move, will simply name a price high enough to dissuade the buyer. Investors, in other words, do not think Mr Trump's presidency will be predictable. They think its unpredictability is unpriceable.

Cryptocurrencies

Bitcoin flip

Why crypto mania is reaching new heights

DONALD TRUMP'S victory tastes of revenge—not just for the man but also for crypto bros and their assets of choice. On election night, as it became clear Mr Trump had won America's presidential election, the price of bitcoin, the most widely traded cryptocurrency, jumped by 10%. On November 13th, just before Republicans secured control of Congress, it shot above $93,000. Since mid-October it has surged by nearly 50% (see chart).

Bitcoin is not alone in feeling the love. Excluding stablecoins, which are designed to avoid price swings, the top 20 crypto coins have appreciated even faster, on average, than bitcoin over the past week. Dogecoin, a meme coin often promoted by Elon Musk, a Trump fan-turned-adviser, has risen by 140% since election day. The value of the global cryptocurrency market hit $3trn for the first time on November 12th.

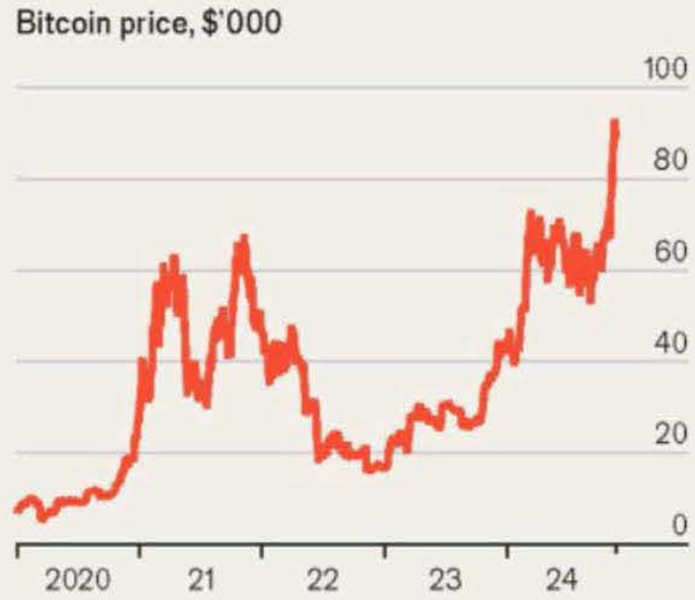
That marks a stunning comeback from 2022-23, when a perfect storm sent cryptocurrencies tumbling from the peaks they had reached during the mania of 2021. Back then the Federal Reserve was briskly raising interest rates, cooling the speculative fever that had gripped markets in the wake of the covid-19 pandemic. Mismanagement and fraud caused several crypto firms once deemed above board—not least FTX, one of the largest crypto exchanges—to collapse, tainting the entire industry. Financial watchdogs were starting to growl.

In late 2023, when America's presidential primaries came into view, the industry saw an opportunity to turn the tables. In the ensuing months Mr Trump proved to be a bombastic champion of crypto. Online he promoted World Liberty Financial, a decentralised-finance project backed by his family. At rallies he promised to make America "the bitcoin superpower of the world". Crypto lobbyists spent more than $100m backing sympathetic candidates for Congress during the election cycle.

The mood music during the campaign is one reason crypto investors are cheering Mr Trump's return to the White House. They are also hoping that a changing of the guard will make regulation kinder to crypto. In July, when Mr Trump addressed a rapturous crowd at the industry's biggest jamboree, the loudest cheer erupted when he promised to fire Gary Gensler, the chairman of the Securities and Exchange Commission (SEC). "From now on the rules will be written by people who love your industry," he said then. Mr Trump, in fact, cannot fire Mr Gensler without cause before the end of his term, in 2026—though it is customary for SEC chairs to resign when a new president takes office anyway.

Trump jump

Bitcoin price, $'000



Source: LSEG Workspace

Mr Gensler's departure would rid the industry of a perfect villain. He is unconvinced of cryptocurrencies' merits, doubting that they will ever gain the acceptability of traditional currencies. He has painted the crypto world, not without cause, as rife with scammers and thieves. And he has taken a long list of prominent crypto firms to court, ranging from Kraken and Coinbase (two crypto exchanges) to Ripple (a cryptocurrency issuer) and Cumberland DRW (a broker-dealer). That has forced many crypto ventures to pay huge legal fees and invest heavily in compliance. Legal problems and spiralling costs have cast a cloud over the industry's future.

At the heart of Mr Gensler's crusade is the contention that many digital currencies are in fact securities—the regulation of which falls under the SEC's purview—and that the firms that issue, trade or offer them for sale should therefore have registered with the commission. Issuers and dealers of securities must disclose more information to regulators, and provide greater protection to clients, than digital-asset firms would like. They would prefer that cryptocurrencies be regulated under a bespoke (and presumably light-touch) regime, or as commodities, which are overseen by the less intrusive Commodity Futures Trading Commission (CFTC).

Under a second Trump administration, rules governing digital assets may be not only more lenient but also more consistent. In recent years the SEC and the CFTC have regularly squabbled over which crypto assets fall under their remit. Both, for example, have in the past claimed jurisdiction over ether, the second most popular cryptocurrency, though the SEC eventually relented (bitcoin, too, is deemed a commodity). Crypto firms have also accused Mr Gensler of constantly changing the SEC rules applying to digital assets.

Clarity may be the biggest prize eyed by those hoping to develop crypto into an asset class beloved of institutional investors, which, in the absence of stable rules and the presence of controversy, have largely stayed away. Whether clarity will come is not yet clear. Mr Trump may sing cryptocurrencies' praises, but his love for them does not stretch back far. In 2021 he called bitcoin a "scam against the dollar". Hope for consistency under Trump 2.0 may yet prove overhyped. ■

Climate finance

Reality cheque

Why decarbonising the poor world need not cost the Earth

PAYING THE CLIMATE BILL

THE TRICKIEST issue facing the climate negotiations at COP29, which began in Baku on November 11th, goes by the opaque name of the "new collective quantified goal" (NCQG), mainly because that is more dignified than "bigger pile of money". The NCQG is meant to replace the longstanding goal of an annual $100bn a year in climate finance from richer countries to poorer ones. It is supposed to be in place by next year, when all countries are expected to say what they are going to do to cut emissions in the next ten years.

A small NCQG, say some developing countries, means less ambitious plans. The chances of a large one, though, look slim. In part that is because rich countries dragged their feet over the old smaller goal. In part it is because Donald Trump, America's president-elect, is a climate sceptic who wants to spend less abroad. And in part it is because negotiators from all sides tend to make the optics dire whether or not there is progress to be made.

If the negotiators can get their act together, though, there is a significant win to be had. Paying for poor countries to go green should cost less than is widely thought. Moreover, robust channels exist to raise and deploy the money.

To estimate the developing world's requirements in climate finance, economists add together three financing needs. One is the amount of public money necessary to spark enough private investment in renewable energy. Another comprises compensation paid to poor countries for shutting coal plants (which pollute a lot, see International section) while keeping rainforests untouched (allowing for carbon to be stored). Both are crucial to keep net emissions under control. The third bucket—which includes "adaptation" funding to cope with a warmer planet—pursues a different goal. It is obviously necessary; it is also an inherently fuzzier category, and one where developing and developed countries sit far apart.

Excluding adaptation finance from this budget makes the picture clearer. Take the funds to foster renewables first. One of the developing world's problems is that building lots of solar farms and wind turbines requires a great deal of up-front capital that private investors, cagey about putting money into risky markets, are unwilling to provide. Commercial lenders, for their part, often charge extortionate rates. The good news is that, in many of these countries, a little help from public backers can go a long way towards luring investors and slashing borrowing costs. The Energy Transitions Commission (ETC), a think-tank, estimates that yearly climate investments in the developing world (excluding China) need to triple to $900bn to keep global temperatures from rising by more than 2°C above pre-industrial levels. Most of this will come from governments and the private sector, but development banks' green subsidies will also need to rise, from $50bn now to $144bn.

This is not a benefit that can be achieved by simply lending to renewable ventures at bargain rates. That would lock in a lot of capital in each transaction and create opportunity costs. Better to provide commercial lenders and investors with guarantees, where a public entity offers to take losses should a project fail to make its promised returns. Those instruments are in fashion: in February the World Bank launched a fund to double loan guarantees to $20bn by 2030. Regional development banks have also clubbed together to provide insurance for green projects and ease repayment schedules.

To encourage developing countries to ditch coal power and keep trees alive—the second aim—rich countries have few options other than offering money. The ETC reckons that, to stick to 2°C of global warming, such handouts must reach $300bn by 2030. Together with subsidies needed to jumpstart renewable projects, this means rich countries must mobilise around half a trillion dollars each year by the end of the decade. Some of this would end up not being spent, as guarantees are intended only as safety-nets. Yet most estimates reckon that adaptation needs could end up doubling the amounts required.

How should climate funds be disbursed? A package of bilateral deals between rich and developing countries would expose funding to geopolitical whims and make it hard to track total commitments. It would probably be wasteful, too, as rich-world governments seek a return on their investments by demanding that the money is used to purchase their own equipment. Creating new multilateral institutions, on the other hand, could end in failure, as rich countries hesitate to trust them and would-be shareholders squabble over terms and conditions. Specialised institutions launched in recent decades are struggling to take off: the Green Climate Fund, the biggest such venture, has disbursed only $16bn since it opened in 2010.

It would be wiser to entrust the World Bank with such a mission. That would require the lender to grow: the ETC's recommended climate-finance pot is worth about six times what the bank doles out in a year. The institution could borrow a bit more against its equity without damaging its credit rating. On October 15th Ajay Banga, its president, announced that it would decrease its equity ratio to 18% of its borrowing, down from 19%, freeing up $15bn a year. The bank would need a mighty capital injection, too. Geopolitical tensions complicate the task. China is unlikely to be more generous without more of a say, and America refuses to give up its veto over the institution's decisions.

Sticking with the status quo would be a huge wasted opportunity. Rich countries would get a much bigger bang for their buck—in terms of global emissions reductions—by spending money in the global south. The financial channels and the instruments exist, and the will is there. In an interview with *The Economist*, Mr Banga says he wants 45% of its lending to go to helping poor countries reduce emissions rather than alleviate poverty (triple the current ratio). On November 12th, multilateral development lenders including the World Bank pledged to increase their climate finance to $120bn by 2030 (including $42bn for adaptation). In Baku, a breakdown of talks over climate finance would be an abdication of responsibilities. It would also be a massive failure of imagination. ■

FREE EXCHANGE

Misery business

Why economists need new indicators of economic discomfort

WHEN JIMMY CARTER, the Democratic candidate for American president in 1976, wanted to criticise the record of the incumbent Gerald Ford, he reached for a number invented by the economist Arthur Okun. A rough-and-ready indicator of the state of the economy, what Okun called the economic discomfort index added together the unemployment rate with the level of inflation. Four years later Ronald Reagan, the Republican candidate, renamed the indicator to the pithier misery index and used it against Mr Carter, who had presided over rising inflation and unemployment. Reagan went on to win the election and the subsequent one, in 1984, as the index fell on his watch.

Taken at face value the misery index pointed to a victory for Kamala Harris, the Democratic candidate in America's latest presidential election. Over the course of President Joe Biden's term, in which Ms Harris served as vice-president, the index fell from 7.8 to 6.7. Many of the biggest moves came in recent months, as inflation dropped and the labour market stayed strong. America was, according to this measure at least, far less miserable than when Reagan declared "It's morning again in America" in 1984, when Bill Clinton won re-election with the New Economy in 1996 and when Barack Obama won his second term in 2012. America was, supposedly, less miserable than had been typical for the past 40 years. Ms Harris still lost.

Misery loves company. Electorates representing roughly half the world's population have voted so far in 2024 and incumbents have performed poorly nearly everywhere. From Emmanuel Macron in France (misery index of 10.9 on the eve of the polls) to the Liberal Democratic Party in Japan (4.9), governing parties have been rebuked by angry voters. That is worrying many economists, who think such results will lead policymakers to take the wrong lesson from the post-pandemic era. The combination of fiscal and monetary stimulus has allowed for a rapid and job-rich recovery, avoiding the decade of stagnation that followed the financial crisis of 2007-09. That things could have been worse, however, does not seem to have spurred voters to reward their leaders.

Economists appear to be missing something fundamental about how people experience the economy. There have been previous attempts to better outline the contours of misery. In 1999 Robert Barro, then a macroeconomist at Harvard, suggested augmenting the index with long-term interest rates and the estimated gap between economic growth and its potential. He also suggested that cumulative change over the course of a term, rather than the index's absolute level, would better predict elections. It did not. Al Gore, the Democratic candidate in 2000, lost despite an improvement in Barro's index during Mr Clinton's second term.

Still, Mr Barro made two good observations that economists are relearning. The first is that the starting-point matters. Much of the improvement in the misery index over Mr Biden's term came from falling unemployment, which was at 6% when he took office With incomes supported by loan forbearance and stimulus cheques, however, voters felt less pain than they had done in previous recessions. Then the cheques stopped and inflation soared; real disposable personal income is still lower for many Americans today than in 2021, despite a red-hot jobs market. Many voters would have compared Mr Biden's economic record with Donald Trump's before the pandemic, when the misery index hovered around its lowest since the second world war.

The second lesson is that interest rates matter. Including both rates and inflation in a misery index may look like double-counting: according to Irving Fisher, an economist, interest rates incorporate expectations of future inflation. Consumer-price indices (CPI) do not include interest rates even though most non-economists regard them as one of the most important prices for their standard of living. Yet a recent working paper by Marijn Bolhuis, Judd Cramer, Karl Schulz and Larry Summers investigating why surveys of consumer confidence across rich countries have diverged from "hard" indicators of the state of the economy—such as GDP growth and joblessness—concludes it is entirely explained by increases in interest rates. Including payments for mortgages and car loans in CPI corrects the anomaly.

Poor comparison

Post-pandemic stimulus has helped America's economy outpace its peers, reduced inequality and shrunk the racial employment gap—all of which are welcome. In trying to explain why voters rejected these gains on election day, fans of the policy are now pointing fingers. The media, they say, were too negative. The Democrats did not do enough to trumpet their successes. Conservative central bankers, more concerned with their own legacy, overreacted to inflation, much of which would have gone away on its own. A better approach would be to think about what can be done next time to keep miserable side-effects to a minimum.

That could mean finding alternative ways to control inflation shocks without resorting to tight monetary policy. But here, too, unworkable ideas prevail. Isabella Weber, an economist, has argued (incorrectly, in this newspaper's view) that companies used the post-pandemic inflation surge as an excuse to disproportionately raise prices. She has advocated buffer stocks and price controls to keep inflation down. To temper post-pandemic inflation, though, the buffer stocks would have had to be colossal; price controls, meanwhile, can provoke shortages. Getting support policies right, thereby avoiding an inflationary shock altogether, is a surer bet. The reality is that Mr Biden's second stimulus package, passed in 2021, boosted demand when the economy was struggling to produce. That exacerbated inflation, which left voters feeling poorer. Misery may be the result of an unforced error. ■

Science & technology

Climate change

Future imperfect

Artificial intelligence is making climate models more useful

PAYING THE CLIMATE BILL

THE DIPLOMATIC ructions at COP29, the United Nations climate conference currently under way in the Azerbaijani capital of Baku, are based largely on computer models. Some model what climate change might look like; others the cost of mitigating it (see Briefing).

No model is perfect. Those modelling climate trends and impacts are forced to exclude many things, either because the underlying scientific processes are not yet understood or because representing them is too computationally costly. This results in significant uncertainty in the results of simulations, which comes with real-world consequences. Delegates' main fight in Baku, for example, will be over how much money poor countries should be given to help them decarbonise, adapt or recover. The amount needed for adaptation and recovery depends on factors such as sea-level rise and seasonal variation that climate modellers still struggle to predict with much certainty. As negotiations become ever more specific, more accurate projections will be increasingly important.

The models that carry most weight in such discussions are those run as part of the Coupled Model Intercomparison Project (CMIP), an initiative which co-ordinates over 100 models produced by roughly 50 teams of climate scientists from around the world. All of them attempt to tackle the problem in the same way: splitting up the world and its atmosphere into a grid of cells, before using equations representing physical processes to estimate what the conditions in each cell might be and how they might change over time.

When CMIP started in 1995, most models used cells that were hundreds of kilometres wide—meaning they could make useful predictions about what might happen to a continent, but not necessarily to individual countries. Halving the size of cells requires roughly ten times more computing power; today's models, thousands of times more powerful, can simulate cells of around 50km per side.

Clever computational tricks can make them more detailed still. They have also grown better at representing the elaborate interactions at play between the atmosphere, oceans and land—such as how heat flows through ocean eddies or how soil moisture changes alongside temperature. But many of the most complex systems remain elusive. Clouds, for example, pose a serious problem, both because they are too small to be captured in 50km cells and because even small changes in their behaviour can lead to big differences in projected levels of warming.

Better data will help. But a more immediate way to improve the climate models is to use artificial intelligence (AI). Model- ▸▸

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makers in this field have begun asserting boldly that they will soon be able to overcome some of the resolution and data problems faced by conventional climate models and get results more quickly, too.

Engineers from Google have been among the most bullish. NeuralGCM, the company's leading AI weather and climate model, has been trained on 40 years of weather data and has already proved itself to be as good at forecasting the weather as the models for and by which these data were originally compiled. In a paper published in *Nature* in July, Google claimed its model will soon be able to make projections over longer timescales faster, and using less power, than existing climate models. With additional training, the researchers also reckon NeuralGCM will be able to offer more certainty in important areas like shifts in monsoons and tropical cyclones.

This optimism, say the researchers, comes from the unique abilities of machine-learning tools. Where existing models sidestep intractable physics problems by using approximation, NeuralGCM's creators claim it can be guided by spotting patterns in historical data and observations. These claims sound impressive, but are yet to be evaluated. In a preprint posted online in October, a team of modellers from the Lawrence Livermore National Laboratory in California noted that NeuralGCM will remain limited until it incorporates more of the physics at play on land.

Others are more sceptical that AI methods used in short-term weather forecasting can be successfully applied to the climate. "Weather and climate are both based on physics," says Gavin Schmidt, a climate scientist who runs NASA's Goddard Institute for Space Studies, but pose different modelling challenges. For one thing, the available data are rarely of the same quality. For weather forecasting, huge swathes of excellent data are generated every day and, therefore, able to continuously validate the previous day's predictions. Climate models do not enjoy the same luxury. In addition, they face the challenge of simulating conditions more extreme than any previously observed, and over centuries rather than days.

AI can nonetheless help improve climate models by addressing another major source of uncertainty: human behaviour. Until now, this has been overcome by codifying different social and political choices into sets of fixed scenarios which can each then be modelled. This method makes evaluations possible, but is inflexible and often vague. With the help of AI, existing tools known as emulators can customise conventional models to suit their end users' needs. Such emulators are now used by cities planning infrastructure projects, by insurers assessing risk and by agricultural firms estimating changes in crop yields.

Unlike models such as Google's NeuralGCM, which is trained on the same weather data as today's top climate models, emulators are typically trained on the outputs of full-scale climate models. This allows them to piggyback on improvements to the models themselves—both the new physics they are able to model and the ways in which they extrapolate beyond historical data. One such emulator, developed by the Commonwealth Scientific Industrial Research Organisation in Australia in 2023, for example, was capable of adjusting predictions linked to future emissions levels one million times faster than the model it was trained on.

Reducing the uncertainties in climate models and, perhaps more important, making them more widely available, will hone their usefulness for those tasked with the complex challenge of dealing with climate change. And that will, hopefully, mean a better response. ■

Urban mining

Goldbugs at work

CAMBRIDGE, ENGLAND

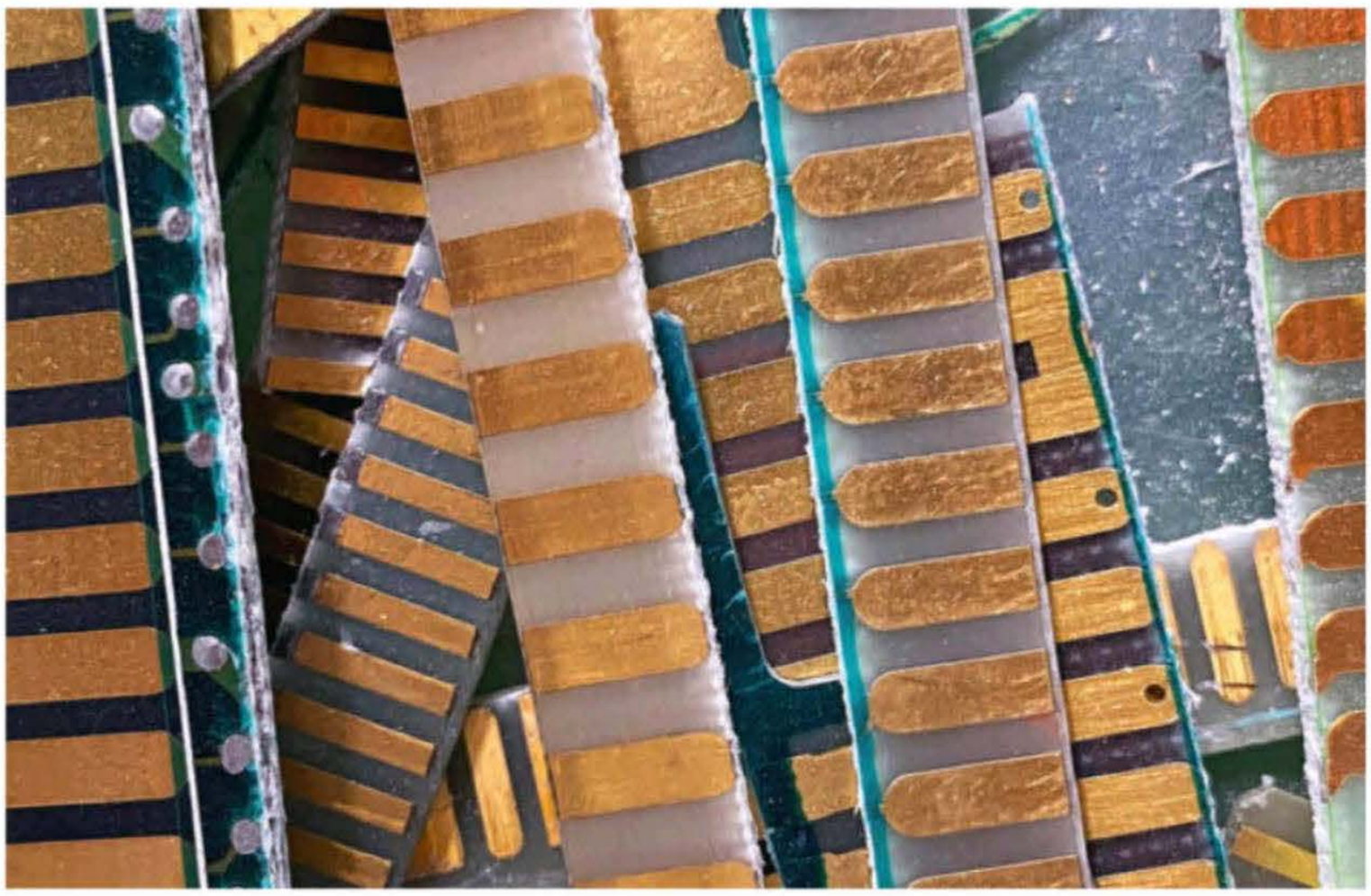
Bacteria can help recover precious metals from electronic waste

GOLD MINING can be a dirty business. Even with relatively rich deposits, usually found in remote areas, you need giant excavators, huge crushing machines, lots of water and highly toxic chemicals, like acids and cyanide, to extract just ten grams of gold from a single tonne of ore (there are 31 grams in a troy ounce). At current rates, that is worth over $800.

A different sort of pay dirt, however, offers the prospect of a much greater return for urban miners: the printed circuit boards (PCBs) found in rapidly growing mountains of electronic waste. Estimates vary, but a tonne of PCBs could contain 150 grams or more of pure gold, which, because it does not tarnish, produces stable electrical connections. There are also other valuable materials used alongside gold, including silver, palladium and copper, which, if recovered, could push the total haul to well above $20,000 per tonne.

According to the UN, some 62m tonnes of electrical items, ranging from domestic goods to computers and mobile phones, were disposed of globally in 2022. Less than a quarter is reckoned to be recycled, at least in any formal way. Typically, the PCBs are removed and crushed before being either burned in a furnace to melt out metals or treated with chemical solvents, like strong acids. As these processes produce large carbon emissions and have poisonous by-products that are difficult to clear up, companies are developing a number of cleaner recycling methods. One of the more intriguing employs bacteria to do the actual extraction of metals.

Bioleaching, as this process is called, is an old idea: more than 2,000 years ago, the leaching of metal was seen to turn the water in copper mines blue. It was not until the 1950s, though, after bacteria were found to be responsible for the phenomenon, that the process was commercialised to recover leftover material in tailings, the liquid and solid waste from mining operations. Bioleaching relies on the metabolism of certain naturally occurring bacteria, such as *Acidithiobacillus ferrooxidans*, which produce oxidising agents that dissolve metals into solution. The metals can then be recovered with various separation ▸▸



Worth its weight in circuitry

and filtration methods. When used outdoors on tailings the process can take months and is not very efficient.

Contained within a custom-built modern processing plant, however, bioleaching can be sped up and improved with the use of a combination of similar bacteria. These, too, are naturally occurring and safe to work with as they are non-pathogenic. The trick, according to Bioscope Technologies, an urban-mining company building a bioleaching plant in Cambridge, England, is to keep the bacteria in their preferred conditions. This includes a carefully controlled acidic environment, a warm temperature below 50°C and a good supply of oxygen bubbled into their breeding tanks. Once these pampered bacteria are mixed with crushed PCBs in a reaction chamber they digest many of the metals within a day or two.

The resulting liquid is then treated in a number of ways to recover the metals. Gold quickly precipitates out with the addition of a little water. An electric current passed through the liquid in an enclosed system recovers copper in a manner similar to electroplating. Having done their stuff, the bacteria are returned to their breeding tanks before being used again.

The idea is to create an enclosed, circular recycling system that accelerates a natural process and is sustainable, says Jeff Bormann, Bioscope's chief executive. Trial production runs are already under way with full production due to begin in January. The Cambridge plant has the capacity to process 1,000 tonnes of PCBs a year, although plans are already being discussed to build a much bigger one.

Bioscope was set up as a separate entity by N2S, a sister company that specialises in recycling IT equipment, and which supplies Bioscope with the crushed PCBS. Before being treated, Bioscope mechanically separates out plastics and fibreglass, the base material on which the circuits are built. Plastics can be sent for recycling and the company extracts silica from the fibreglass for use in specialised ceramics.

The process is capable of recovering almost all the gold, silver, copper and palladium from the crushed PCBs, although the exact amount depends on the type of circuits being recycled. Servers and telecoms equipment tend to contain the most precious metals, domestic appliances less so. The recovered metals are pure enough to be used again in electronics.

At the end of all the treatments, nothing is yet being thrown away for good. This is because new bioleaching methods are being developed to get at some of the non-precious, though still valuable, metals in PCBs. The recovery of tin was recently added, says Mr Bormann, with zinc, gallium and tantalum planned for next year. The goldbugs have plenty of work ahead. ■

Racket sports

Shuttle shock

Physics reveals the least disruptive design for a ventilated badminton arena

ANYONE WHO has tried to play badminton at the beach will be familiar with the problem of wind blowing their feathered shuttlecocks off-course. On anything other than a completely calm day, playing even a half-serious game outside is a hopeless endeavour.

For that reason, all fully serious matches are played indoors. That reduces the problem of gusting shuttlecocks. But it does not eliminate it entirely. Indoor arenas must have ventilation, after all, and that sets up air currents of its own. When Annie and Kerry Xu, a pair of American players, were knocked out of the Paris Olympics earlier this year, one reason they gave was that they had not mastered the "drift" of their shuttlecocks in the newly built Adidas Arena, in the city's 18th arrondissement.

For professionals, this is simply part of the sport. But it may be a smaller part in future. In a paper published on November 12th in *Physics of Fluids*, a group of researchers led by Karthik Jayanarasimhan, an engineer at the Saveetha Institute of Medical and Technical Sciences, in Chennai, examine how to design an arena to minimise the problem.

The researchers investigated arenas with hemi-cylindrical barrel-roof designs. Such designs are popular: they are strong, give plenty of vertical room and offer unobstructed sightlines, all useful features in an indoor sports arena. The team examined two different ventilation layouts. In one the arena had ventilation holes on the gable ends, so that outside air flows down the length of the barrel; in the other the holes were on the front and back walls, so that air flows crosswise. For each configuration, they looked at three different roof heights.

They then fed their six virtual arenas (as well as one reference flat-roofed design) into fluid-dynamics software, which aims to simulate how air would move through the structures. Once all the numbers had been crunched, a clear winner emerged. A barrel-roofed design with the ventilation openings on the gable ends, and in which the height of the roof is slightly less than the breadth of the building, offered the calmest conditions on-court, without compromising ventilation.

If going to all this trouble seems a bit over the top, perhaps it shouldn't. In some parts of the world—notably East Asia—badminton is big business. In 2014 the organisers of the Asian Games in South Korea were forced to deny claims from China that air-conditioning systems had been manipulated to favour local players. In future, perhaps physics could help clear the air.

Ready to ruffle some feathers

Conservation

Fish out of water

OSLO

Climate change and aquaculture are endangering Norway's wild Atlantic salmon

EACH SUMMER, on the banks of the Orkla river in western Norway, the Grindal Salmon Lodge attracts anglers seeking a bucket-list fish. The season for wild Atlantic salmon, which swim upstream from the ocean, starts on June 1st, and for months after, the whipping of fly-lines accompanies the low rumble of white water wending its way down to the fjord below.

That is, at least, how it normally goes. But in June, just three weeks after the river opened, angling for salmon was banned on the Orkla and 32 other Norwegian waterways, as well as on vast stretches of coastline. There simply weren't enough fish.

Wild Atlantic salmon stocks have been in decline for decades, with the two lowest annual returns recorded in 2021 and 2023. But the problem runs deeper than too few salmon making it upstream: those that do are not able to spawn. The data for 2024 are still being collated, but preliminary results across Norway show that the number of mature salmon returning to lay eggs has crashed, boding ill for the next generation. Too many females are dying at sea.

Atlantic salmon are anadromous, hatching in freshwater and remaining there for a few years before heading to the open ocean in springtime to hunt and grow. Most return between one and three winters later to spawn, with females rarely coming back before they have spent two years at sea. In any given year, says Per Tommy Fjeldheim, a senior engineer at the Etne river research station run by Norway's Institute of Marine Research (IMR), more of the larger "two-sea-winter" fish should be seen swimming upriver than the smaller "one-sea-winter" fish that are 95% male. In recent years, however, Etne has been flooded with juvenile males, though large egg-laying females have been scarce.

Norway's multi-billion-dollar fish-farming industry shoulders much of the blame for dwindling wild-salmon stocks. Parasites and disease thrive among captive fish, which then spread beyond their nets. At the Etne river site, which opens out into one of the busiest fish-farming fjords in the country, every single fish your correspondent saw was infested with lice.

Escaped farmed fish also pose a genetic risk to their wild cousins. "Wild salmon are adapted to the exact river they spawn in. They're very specialised," says Eva Thorstad, a member of the Norwegian Scientific Advisory Committee on Atlantic Salmon. Farmed salmon, by contrast, are bred exclusively for size. "They don't survive as well in natural environments," she says. That means interbreeding between the two reduces the quality of wild varieties.

But for all the problems caused by fish farming, scientists say it is probably not responsible for the rising death toll among mature salmon. If it were, that mortality would vary with the density of fish-farming enterprises (as rates of parasitism and disease already do). Something else, then, is happening out in the open ocean.

One theory is that changing currents and warming seas are affecting the quality and quantity of food available in the waters in which more mature fish swim. In their first year at sea, Atlantic salmon travel to the Norwegian and Barents seas to feed, while older fish tend to visit Greenland's coastal waters. Data sets from the past year show that schools of capelin, an important prey species near Greenland, have been migrating away from the feeding grounds of Atlantic salmon—perhaps as a result of these changing conditions.

Another theory, put forward by Kjell Rong Utne at the IMR, is that predation is to blame. He suggests declining capelin stocks are driving other hungry predators to feast on salmon instead. Here, again, climate change might be responsible. Rising temperatures in the Arctic have meant more ice floes bobbing past the eastern coast of Greenland. Dr Utne wonders whether these might provide the right kind of salmon-fishing spots for seals and other piscivorous mammals.

Working out the answers would require researchers to monitor thousands of kilometres of Arctic coastline in the depths of winter. For now, the communities that rely on angling tourism believe the fish-farming industry can do more to help. Many Norwegian scientists agree. At the very least, they say, outdated technologies such as open-net cages should make way for escape-free aquaculture methods. Failing that, other options include more robust lice-killing techniques, such as pouring chlorine directly into rivers.

Catch as catch can

At the Etne river research station, they are doing their part. A floating trap spans the water from bank to bank, with each fish that enters weighed by ecologists clad in chest-high waders. Scale and fin samples are taken for analysis before the fish is re-released, with all the action live-streamed by an underwater camera. To keep the genetic pool intact, any farmed salmon that swim upstream there get clubbed to death with an offcut two-by-four (the club-wielder, Henrik Weiss, explains that the official salmon stick was chewed to pieces by a dog). What is more, says Mr Fjeldheim, footage from the camera is being used to train an artificial-intelligence (AI) model that will be able to tell farmed and wild fish apart. A tool of that kind could help anglers decide which of their catch to release and which to dispatch.

Larger-scale solutions are needed. On top of fish farming and climate change, Atlantic salmon also have to contend with increasing numbers of invasive species, rising levels of pollution and acid rain. It is a big ask, even for a fish that's used to swimming upstream. ■

Culture

Ancient Rome on screen

What does "Gladiator II" get wrong?

Its artistic errors are even worse than its historical ones

WHAT IS THE silliest moment in "Gladiator II"? Is it when a gladiator rides a rhino in the arena? Or when the hero, Lucius (Paul Mescal), fights alongside his wife in battle? (She has been provided with armour moulded to her breasts, armies in the third century being famous equal-opportunity employers, of course.) Or is it when he battles a computer-generated monkey—part-gibbon, part-Gollum?

Or maybe it is the way he keeps quoting from the first "Gladiator", saying "Strength and honour" and "I will have my vengeance"—though he avoids asking "Are you not entertained?" Probably because the answer will be: not as much as before.

When the first "Gladiator" was released in 2000, the world was instantly smitten with Maximus Decimus Meridius (played by Russell Crowe)—self-described "father to a murdered son, husband to a murdered wife" and possessor of the finest forearms seen on screen for a while. Critics sniffed ("grandiose and silly", tutted one). But almost everyone ignored them: "Gladiator" became the second-highest-grossing film of the year. It won five Academy awards and the adoration of classicists, whose subject suddenly seemed fashionable rather than fusty. "I loved it," says Dame Mary Beard, a classicist. "I cried."

Now "Gladiator" is back, with the sequel storming modern arenas (called cinemas) on November 15th in Britain and November 22nd in America. The last film ended in a bloodbath: in art as in life, Roman gladiators and emperors have notably short life expectancies. This has necessitated considerable cast changes.

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But a lot feels familiar. Manly, moody Maximus has been replaced by manly, moody Lucius. Mad emperor Commodus has become two mad emperors: Caracalla and Geta. "Gladiator II" offers the same blend of swords, sandals and sweatiness—and largely the same plot. Lucius, like Maximus (spoiler: they turn out to be related), is captured as a slave in battle, brought to Rome, then strives to free it from evil emperors. Like Maximus, Lucius yearns for "the dream that was Rome". Unfortunately, quite what Sir Ridley Scott, the director of both the sequel and the original, understands this dream to be is not so clear the second time round.

All period dramas are set not in one era but two: the one they are ostensibly about and the one in which they are filmed. "Bridgerton", with its "Downton Abbey" dialogue and colour-blind casting, was more about 2020 than 1813.

Roman epics are similarly dated, since people use Romans "partly as an image of ourselves", says Dame Mary. For example, "Quo Vadis" (1951) hymned Christianity; the television series "I, Claudius" offered racy debauchery reflective of the 1970s. The original "Gladiator" expressed idealism about democracy, fitting for the turn of the millennium. (Marcus Aurelius wants Maximus to help return power to the people.) Here was history, backing up to Francis Fukuyama's "The End of History". ▸▸

This film feels more muddled. Lip-service is paid to democracy, but belief in it, on-screen as off, feels far feebler than before. This film's true villains are—as so often in cinema today—the idle rich. Its heroes are Rome's immigrant workers.

Thus the enslaved Lucius toils with superhuman strength throughout. His fellow gladiators also come across well; as does their Indian doctor. Even the wicked gladiator "master" Macrinus (Denzel Washington) is more appealing than the dimwit aristocrats he serves. What is the dream that is Rome? To judge by the sequel, full employment, outwitting the rich and genial race relations (the cast is extremely diverse). Women are improbably emancipated here: fighting in battle and bellowing in the Colosseum alongside the men. It is all very 2024—and very worthy. What it is not is very thrilling.

That does not make it bad history. Ancient Rome was notably diverse. The Roman Empire stretched from Spain to Syria; it had a population of around 60m, with many people on the move. Pottery from North Africa turned up in Iona, Scotland; rhetoricians from Gaul turned up in Iceland. Everyone turned up at the Colosseum in Rome when it opened. Arabians, Egyptians, Yemenis, Ethiopians, Germans were all there, wrote Martial, a poet.

And Romans were largely uninterested in the skin colour of that culture. A north African might become emperor (as Macrinus later did in 217AD) almost without comment on his skin. Rome was not a racial utopia; far from it. But the ancient Romans' prejudices were not the same as society's today. The peoples Romans really loathed were hairy northern ones. Germany was menacing; Britain was dismal; and the inhabitants of Ireland were, according to the geographer Strabo, "man-eaters as well as heavy eaters" who had "sex...with their mothers".

Thumbs down

If this film's message is a bit more muddled, so, too, is its aesthetic. The first film had not one strong, silent hero but two: Maximus and Rome itself. It began with a battle in stern, steely Germania before moving to a Rome that was even sterner. The overall effect was sinister fascist chic. Many scenes—imperial eagles silhouetted against the sky, drummers drumming—offered shot-for-shot echoes of "Triumph of the Will" (1935), Leni Riefenstahl's propaganda film about the Nazis.

If the first "Gladiator" evoked the military camp, this one verges on high camp. It begins with a silly sea battle in north-west Africa before moving to a very different Rome, where idle aristocrats indulge in nakedness, nipple coverings and what can only be called canoodling. It is meant to be racy, but by real Roman standards it is pretty tame. The insane emperor Elagabalus had himself towed in a chariot by four naked women and allegedly smothered dinner guests to death with flowers. In "Gladiator II" the most obvious imperial excesses involve a bottle of hair gel. When men think of Rome multiple times a day, as social media allege, it is almost certainly not this Rome they are thinking of.

Meanwhile, the film adds in improbable historical fictions. It floods the Colosseum for mock naval battles (which almost certainly did happen, by diverting a local aqueduct). But the film adds fake desert islands, palm trees and sharks (which did not). And the less said about the computer-generated monkey, the better. This film does not so much jump the shark as pop it in the Colosseum and add palm trees.

Of course, if you want historical accuracy, "Why are you watching a film?" asks Dame Mary. The first "Gladiator" took plenty of dramatic liberties. Moreover, all films have to condense and simplify. John le Carré said turning a book into a film was like turning "a cow into an Oxo cube" of beef stock. Turning an empire that lasted for a millennium into one two-and-a-half-hour film is harder yet. Nuance is inevitably lost. For example, Romans are portrayed as mindlessly bloodthirsty, but many loathed the arena: Seneca, a Roman philosopher, thought merely attending it made a man more "cruel and inhuman".

However, this film's problems are more profound than mere inaccuracy. Great Roman rulers remodelled Rome to suit themselves: Hadrian rebuilt the Pantheon; Titus completed the Colosseum; Augustus turned brick into marble. Great films do the same, reshaping the Rome of the imagination. More than two decades ago, Sir Ridley changed the way you think of Rome. This film will not. ■

Terrorism's trials

The night that nearly broke Paris

The long shadow of the terrorist attacks of 2015

V13. By Emmanuel Carrère. Translated by John Lambert. *Farrar, Straus and Giroux; 320 pages; $29. Fern Press; £20*

A CONVOY OF three rental cars left Charleroi, Belgium, and crossed into France, heading towards Paris. They carried ten jihadists on a mission to spread terror throughout the French capital—and capture the attention of the world. On Friday November 13th 2015, wearing suicide jackets and heavily armed, they murdered 130 people and wounded hundreds more at three sites in Paris: the Bataclan music venue, nearby terrace cafés and outside the national stadium, Stade de France. It was the deadliest attack on French soil since the second world war.

Nine years on, the scars of the French capital are, in many ways, hard to discern. The City of Light, consumed for months by darkness and fear, is once again a place of insouciant revelry and simple pleasures. On a recent weekday evening on Boulevard Voltaire, youngsters queued for a gig at the Bataclan, its name now lit up in electric blue. At La Belle Équipe café, where 21 people were murdered in the attacks, a young couple sipped cocktails quietly at a pavement table. Nobody flinched when a police car tore by with its siren wailing, a sound that haunted the city that night.

Yet the trauma of November 13th lingers: in lives ended, families broken, spaces shrunk. In 2017 a survivor of the Bataclan massacre, then in a psychiatric ward, took his own life. A recent follow-up study of 502 survivors showed that respondents continued to suffer from anxiety, depression, hyper-vigilance and other problems. Over the past couple of years French writers and film-makers have tried to unpack the horror, and its legacy, with works such as "Un An, une Nuit" ("One Year, One

Darkness, despite the candle light

Night"), "Novembre" ("November") and "Revoir Paris" ("Paris Memories").

One new book is "V13"—for *Vendredi* (Friday) the 13th—by Emmanuel Carrère, a French writer of novels and literary non-fiction. For nine months in 2021-22 he sat on a bench in a specially built courtroom for the trial of Salah Abdeslam, the only survivor among the band of killers, and of 19 people linked to the attacks. The case was the largest ever in France and involved 2,400 plaintiffs, 350 lawyers and a 542-volume legal brief. Survivors' testimonies were heard at a rate of around 15 a day.

The resulting book is a curious but compelling mix of dramatic reconstruction, psychological deliberation and personal reflection. Mr Carrère, known for his sometimes intrusive first-person narratives, looks horror in the eye. A survivor of the Bataclan massacre, in which 90 people were murdered at a rock concert, tells the court: "I saw that my cheek had been ripped off and was hanging down beside my face. I put my right hand into my mouth to pull out my teeth so that I wouldn't choke on them." Another had described crawling to safety through a "human mud" of flesh and bloody remains.

The perpetrators, Mr Carrère notes, were not wayward dropouts or welfare cases. Mr Abdeslam, who drove one of the convoy cars but never activated his own suicide belt, passed his technological *baccalauréat* school-leaving exam. Abdelhamid Abaaoud, who trained for jihad in the Syrian city of Raqqa and gunned down drinkers at the Paris terrace cafés, came from a comfortable family of shop-owners in Belgium. The other terrorists were, rather, weed-smoking petty criminals and wheeler-dealers, radicalised by Islamic State, online or in Syria.

Mr Carrère has an eye for unexpected discomfort, including his own. During most of the trial Mr Abdeslam, at one point France's most-wanted man, was by turns silent, evasive and contradictory, handing the public "a tissue of incoherences and unlikelihoods". In the final days of questioning, though, the accused "manages to move us", sniffing back "a convincing sob" and asking for forgiveness.

Ultimately, Mr Carrère concludes that worrying about the accused's sincerity matters little. Mr Abdeslam's state of mind is "an abysmal void wrapped in lies, which one regrets with stunned amazement having spent so much time thinking about".

The quest for justice was quite another matter. The court convicted Mr Abdeslam of acts of terrorism and sentenced him to life without parole. The trial allowed suffering to be heard, shared and recorded. And in time Parisians have returned to normal. It is the same bustling, convivial city as before, but for those with memories of that horrific night, forever different. ■

How to think about energy transitions

You burn something new every day

PAYING THE CLIMATE BILL

More and More and More. By Jean-Baptiste Fressoz. *Allen Lane; 320 pages; £25. To be published in America by Harper in August 2025; $32.50*

THOSE ATTENDING COP29, the UN climate conference in Azerbaijan, from November 11th-22nd, can expect to get heartily sick of hearing the phrase "energy transition". In a way, its ubiquity is welcome. There was a time in the 1980s and 1990s when governments that thought about climate change at all felt there would be nothing they could do but adapt to its ill-effects. The belief that an energy transition can instead help bring the process to a halt has marked an important move away from such fatalism.

But as Jean-Baptiste Fressoz, a French academic, explains in a necessary, eye-opening and frequently gobsmacking book newly translated into English, the energy transition is a concept misused and misunderstood to the brink of meaninglessness. The term was coined in 1967 by Harrison Brown, an American physicist. To him it meant a managed move from a world growing through the use of exhaustible fossil fuels to one in a steady state powered by nuclear: the analogy was to the "demographic transition" in which health and wealth slowed population growth.

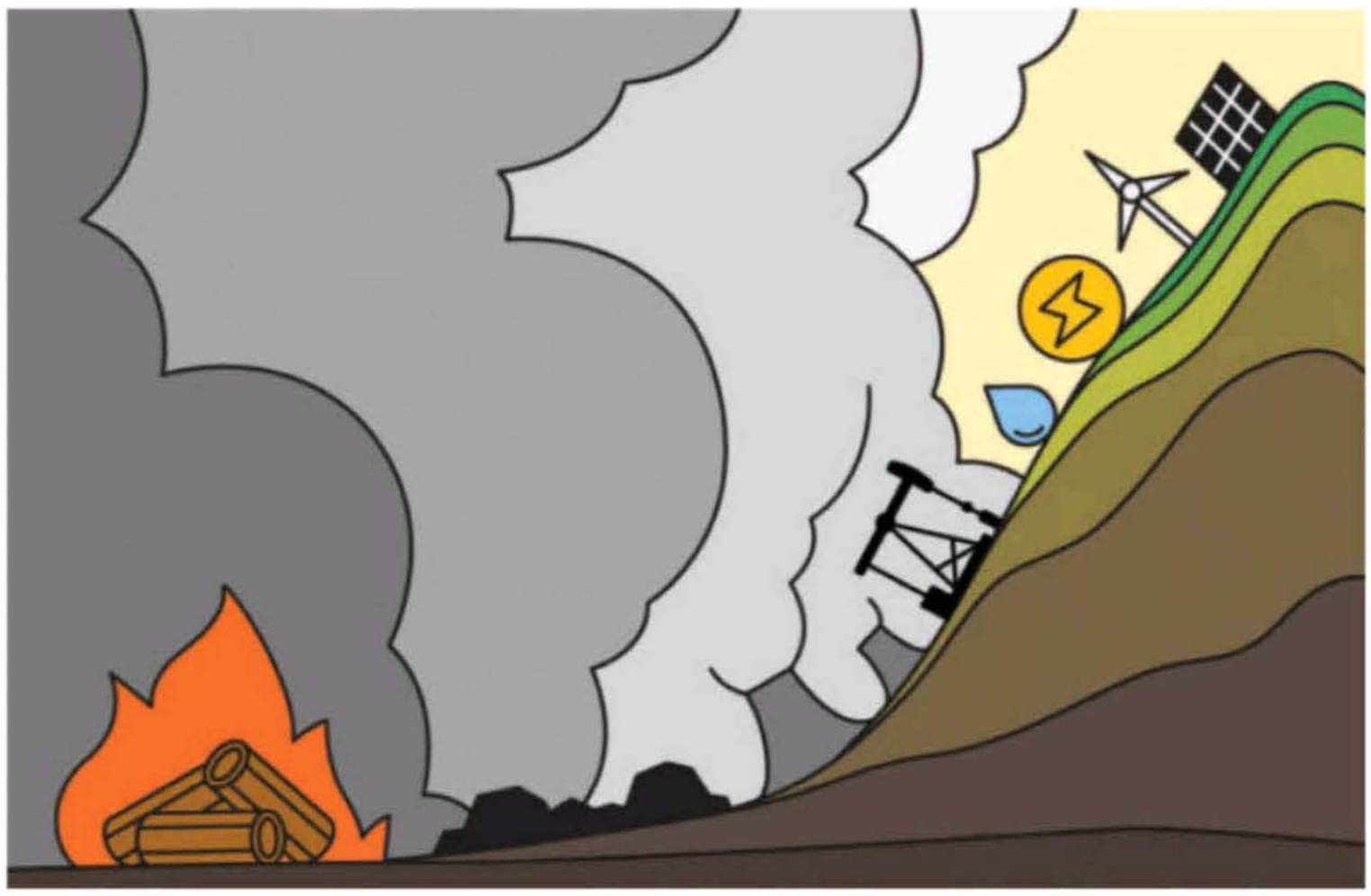
Just ten years later President Jimmy Carter was using the idea in a presidential address. But in that decade its meaning had changed. Mr Carter's talk of a transition from wood to coal, then coal to oil and gas, followed the ideas of Cesare Marchetti, an Italian physicist, who saw energy transitions not as a response to resource depletion but as the result of slow and inevitable technological diffusion.

This interpretation of energy transition is quite close to the one now used in climate circles. Unfortunately, it has no real standing in history. At the time Mr Carter was speaking, America had not moved away from coal at all: it was deriving nearly as much energy from it as from natural gas, and coal's use was climbing. Today's world burns much more firewood than it did when firewood was all it had.

Historians of technology have long had a tendency to give priority to innovation, rather than to what is actually in common use. Dr Fressoz, like his mentor David Edgerton, Britain's pre-eminent scholar in the field, fights back against this. Histories of the "coal age" need to understand that fuel was still dominated by wood until 1900, just as archaeologists understand that stone continued to be crucial after the introduction of bronze. More often energy "transitions" have co-existed as additions and transformations rather than as clean breaks and rapid replacements.

This is because fuels for combustion have material uses that shape the energy system profoundly. In the early 20th century Britain was employing more wood as props in its coal mines than it had been burning as fuel in the 18th century; the early oil industry's infrastructure of derricks and tanks was almost entirely wooden, too.

Today oil's infrastructure is almost en- ▸▸



tirely steel, a material that gets its carbonised strength in furnaces fired with supposedly displaced coal. No coal, no steel, no oil. There are a few exceptions. Dr Fressoz's eye for oddity and irony picks out Vallourec, a provider of steel tubing to the hydrocarbon industry with forestry interests. Every year it burns as much wood to make charcoal, in order to make steel, as the entire oil industry used to build infrastructure in the 19th century.

The lesson is that technology, rather than sweeping away the "old", often imbues it with new life instead. Before fossil fuels made felling trees and transporting firewood long distances cheap, megacities fuelled largely with woodland charcoal were not possible. Now "Lagos, Kinshasa, Dakar and Dar es Salaam alone consume more wood than large European countries did a century ago," Dr Fressoz reports.

But the author worries that the current notion of an energy transition ignores the idea's history of looking forward to futures that do not arrive—and sometimes thereby providing an excuse for inaction. Misunderstanding past transitions as replacements allows policymakers to act as if subsidising renewables is enough. It is not. Removing fossil fuels from the energy mix will require something akin to an amputation. The vivid sense of the scale and complexity of the world's material and energetic flows provided by this book makes clear what a difficult, and possibly bloody, operation that will have to be. ■

BACK STORY

Prince Charmless and the ice slipper

Many stories rely on character types. The best reimagine them, as "Anora" shows

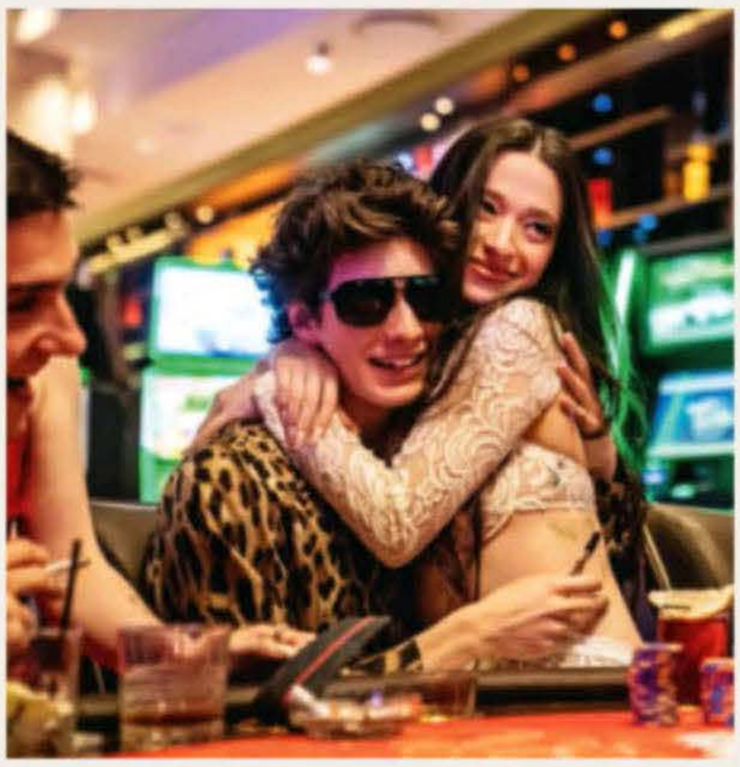
HE HASN'T BEEN around for long, either in reality or fiction, but the Russian oligarch and his entourage are already familiar figures. They splurge their petrodollars on yachts and Cristal champagne, wowing Westerners with their profligacy. The oligarch's minder has a thick neck, dead eyes and a conscience unruffled by violence. Noirish thrillers like "McMafia" are their genre.

The sex worker is a longer-standing fixture of cinema and appears in several guises. She (and occasionally he) might emerge from poverty and succumb to a grisly fate. She may be an object of glitzy prurience. Or she is Cinderella in stilettos, redeemed by a rich man's love. She flits from romantic comedies to crime yarns and erotica.

"Anora", a film by Sean Baker, an offbeat director, brings these two character types together—sort of. Its heroine fits all the sex-worker templates and none. Its Russian crew are predictably ruthless, but also tender and contrite. Tipped for Oscar glory, "Anora" shows up the inadequacies of stereotypes and formulas, yet in doing so demonstrates their power. The film relies on them for its impact. Many good stories do.

The name of the 23-year-old heroine (played wonderfully by Mikey Madison) is Anora, but she goes by Ani. At night she lap-dances at a club in Manhattan; by day she sleeps in a grotty pad in Brighton Beach. Vanya (Mark Eydelshteyn) is the goofily obnoxious, manchild son of a Russian oligarch. He buys a dance from Ani, then pays her for sex in his parents' mansion, then hires her as his girlfriend for a week, flies her to Las Vegas for a bender—and marries her. So far, so "Pretty Woman", only with much more nudity and ketamine.

But now the trouble starts—for both



Ani and your preconceptions. An Armenian priest who moonlights as Vanya's babysitter turns up with his brother and Igor (Yuriy Borisov), an enforcer first called simply "the Russian". Their job is to make the marriage go away, perhaps, you fear, by swapping Ani's heels for a pair of concrete boots. But the toughs aren't quite what they seem, and it is she who, fighting for her life, and for the life she dreams of, lands the fiercest kicks.

Vanya scarpers. Since his presence is needed to have the marriage annulled, a screwball quest to find him ensues. Mr Baker's film, it becomes clear, will no more conform to type than will its protagonist. Its middle stretch is an absurdist nocturnal trek on which truths come to light, like King Lear's sojourn on the heath but on the boardwalk in Coney Island. To find her husband, Ani rides along with the Armenians and Igor. In a world of overlords and underlings, however, might they ultimately be on the same side?

According to critical theorists, fiction has a finite number of basic plots. There are supposedly either six, seven, 20 or 36 of them: "overcoming the monster", "rags to riches", "voyage and return" and so on. That may be an exaggeration, but, inevitably, punters experience each drama through the prism of similar tales they have been told before. Originality often lies not in breaking the mould but in finessing it. "Anora" does that ingeniously, in particular in the depth and nuances of Ani and "the Russian".

In essence its structure resembles that of another of the year's kookier movies: "Hit Man", a caper about an undercover cop who, while posing as an assassin, falls in love with a would-be client—a romantic pairing even less propitious than a stripper and an oligarch's heir. Likewise toying with stereotypes, that film, too, asks whether people are trapped in the roles life assigns to them, or can shape-shift into new ones.

Yes, says "Hit Man". Of course not, says Mr Baker, who dodges cliché but not reality. Ani is under no illusions, and neither is "Anora" (which is, after all, the name she prefers not to use). Megawealth like Vanya's can be its own form of prison, but it affords an ironclad impunity from the consequences of his mistakes. Like the nude-shaped vodka luge at his bacchanalian house party, if a magic slipper is on offer, it is made of ice, not glass, and it melts.

Life isn't a fairy tale or a feel-good movie. "Anora" invokes those fantasies only to repudiate them. But it does the same with the other genres that, at first, its characters seem destined to reprise. Here, proficiency with a baseball bat need not make you a monster. Ani's brass and steel conceal a wrenching vulnerability. And when she seems doomed to the scrapheap of bleak social realism, she earns a kind of love story, if not the one you were expecting.

The best films of 2024

Not the same old stories

The highlights of the big screen feature nuns and cardinals, robots and strippers

"All of Us Strangers"
In the year's most tender and intimate film, a lonely screenwriter (Andrew Scott) visits his childhood home and meets the ghosts of his parents (Claire Foy and Jamie Bell). They were killed when he was a boy, but now he has one last chance to talk to them about their brief time together.

"All We Imagine as Light"
A sensitive study of three women (Kani Kusruti, Divya Prabha, Chhaya Kadam) who work together in a bustling Mumbai hospital. By night, the city offers enchanting glimmers of freedom, but the reality of life with little money or independence returns in the morning.

"Anora"
A frenzied farce about a dancer in a strip club (Mikey Madison) who is paid to be the girlfriend of a Russian oligarch's brattish son. The winner of the Palme d'Or, the top prize at Cannes Film Festival, this is a more complex "Pretty Woman" for a new generation.

"Babygirl"
A married boss of a robotics firm (Nicole Kidman, at her daring best) has an affair with a manipulative young intern (Harris Dickinson). It could be the premise of a glossy erotic thriller, but "Babygirl" is an edgier proposition, which pays more attention to raw emotion than naked flesh.

"La Chimera"
A rumpled English archaeologist (Josh O'Connor) slouches around Tuscany in the 1980s, dreaming of being reunited with a lost love. He helps a rollicking band of grave robbers unearth Etruscan artefacts to sell on the black market. But should some treasures—and some relationships—be left in the past?

"Conclave"
Adapted from Robert Harris's novel, this superbly controlled and slyly funny thriller stars Ralph Fiennes as a cardinal overseeing the election of a new pope. He soon learns that the front-runners have more secrets than he bargained for.

"Green Border"
Belarus has lured refugees onto its territory, pretending to offer an easy route into the European Union. Polish border guards bar the way; Belarusian guards will not let the migrants turn back. A touching, infuriating tale of how families seeking a better life become pawns of a despot.

"Immaculate"
An American nun (Sydney Sweeney) moves to an Italian convent, only to find that a geneticist-turned-priest is planning to clone Jesus Christ. As exploitative as it sounds, "Immaculate" is one of the most beautifully shot and cleverly constructed horror films in years.

"Love Lies Bleeding"
Kristen Stewart and Katy O'Brian play a small-town gym manager and a bodybuilder who team up against a murderous gun-runner (Ed Harris). This darkly comic crime thriller gets more and more violent, hallucinatory and sensual as it goes along. Be warned, however: it is not for the faint-hearted.

"Monster"
A Japanese widow (Ando Sakura) is frightened by the strange behaviour of her son (Kurokawa Soya). His actions are explained from three angles in three sections, the first a mystery, the second a satirical farce and the third a wistful drama. A deeply humane film.

"Nickel Boys"
A dreamlike, impressionistic account of two boys (Ethan Herisse, Brandon Wilson) experiencing a brutally racist reform school in Florida in the 1960s and the aftermath. The period drama is adapted from the Pulitzer-prizewinning novel by Colson Whitehead, which is based on real events.

"Perfect Days"
Wim Wenders's lyrical drama chronicles a few days in the life of Hirayama (Yakusho Koji), a loner who cleans public toilets in Tokyo. As modest as his life might be, Hirayama approaches his work and his hobbies with such dedication that his days do seem close to perfect.

"Robot Dreams"
This adaptation of Sara Varon's graphic novel is set in New York in the 1980s, where an anthropomorphised dog befriends a rusty robot. Every frame is crammed with ingenious jokes, but the film does not have a word of dialogue. Insightful and heartrending.

"Sasquatch Sunset"
Four shaggy Bigfoots roam around a seemingly unspoilt wilderness. The actors (including Jesse Eisenberg and Riley Keough) are unrecognisable, but the creatures are distinctive, lovable characters all the same. Both a wonderfully inventive comedy and a haunting eco-fable.

"The Substance"
A Hollywood has-been (Demi Moore) pays to have herself cloned, so that her younger, perkier self (Margaret Qualley) can relive her glory days. A colourful lampoon of sexism and ageism in the entertainment industry that mutates into an uproariously gory monster movie. ■

All films were released in America or Britain this year

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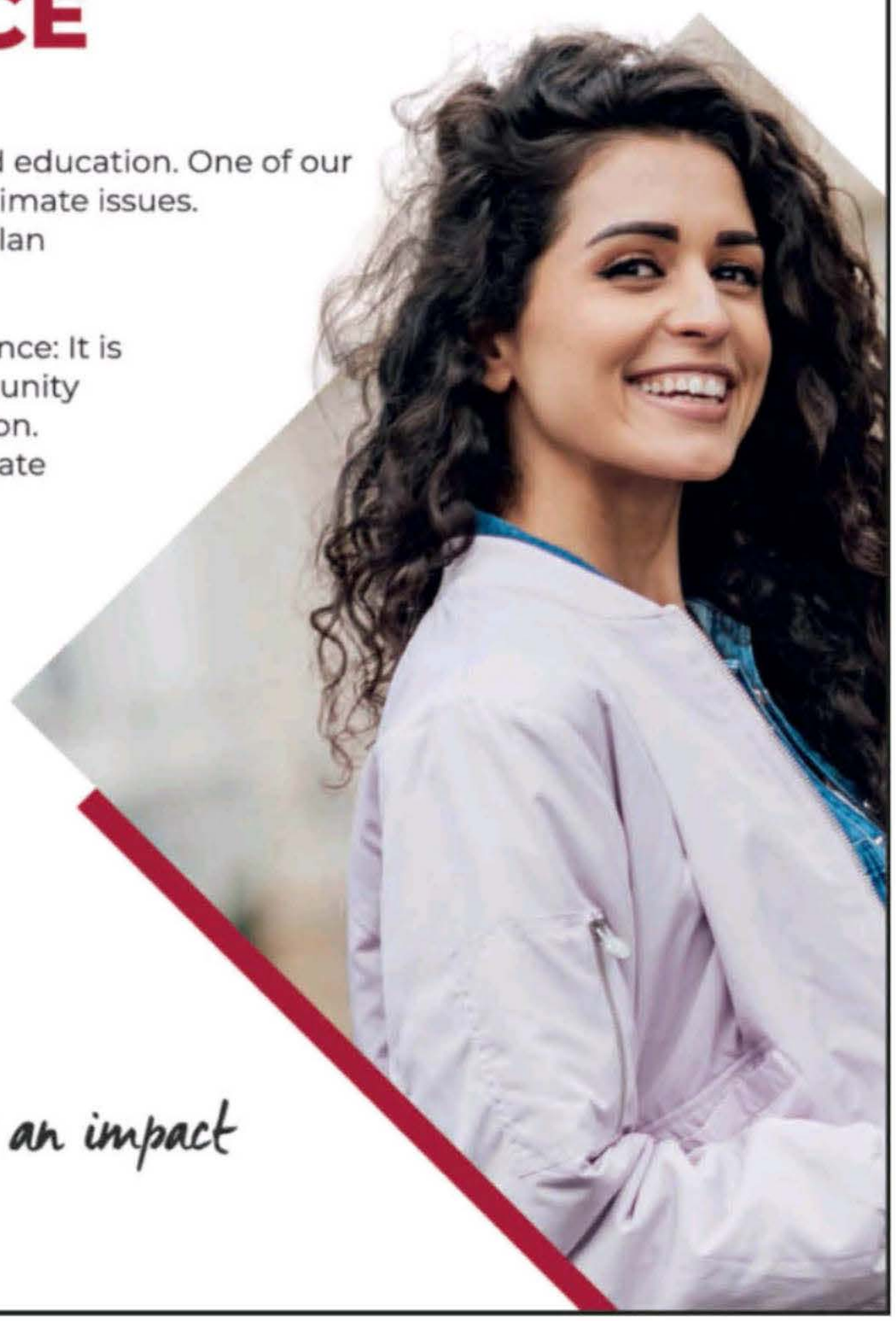
EDHEC is a leader in finance research and education. One of our top priorities is sustainable finance and climate issues. This is shown in our ambitious strategic plan of «Generations 2050».

Today, we offer a unique approach to finance: It is our ambition to form a committed community of leaders with real skills and determination. Thus equipped, they will be able to integrate environmental, social and governance factors into all financial decision-making processes.



Make an impact

Economic & financial indicators

	Gross domestic product, % change on year ago: latest		quarter*	2024†	Consumer prices, % change on year ago: latest		2024†	Unemployment rate, %		Current-account balance, % of GDP, 2024†	Budget balance, % of GDP, 2024†	Interest rates: 10-yr gov't bonds, latest, %		change on year ago, bp	Currency units: per $, Nov 13th	% change on year ago
United States	2.7	Q3	2.8	2.7	2.6	Oct	3.0	4.1	Oct	-3.4	-6.8	4.4		-19.0	-	
China	4.6	Q3	3.6	4.9	0.3	Oct	0.5	5.1	Sep†§	0.7	-4.4	1.7	§§	-78.0	7.22	1.0
Japan	-1.0	Q2	2.9	0.2	2.5	Sep	2.6	2.4	Sep	3.7	-4.7	1.1		17.0	155	-2.1
Britain	0.7	Q2	1.8	1.1	1.7	Sep	2.9	4.3	Aug††	-2.9	-4.0	4.4		5.0	0.79	3.8
Canada	0.9	Q2	2.1	1.2	1.6	Sep	2.3	6.5	Oct	-1.2	-1.2	3.3		-52.0	1.40	-1.4
Euro area	0.9	Q3	1.5	0.8	2.0	Oct	2.4	6.3	Sep	3.2	-3.1	2.4		-30.0	0.94	-1.1
Austria	-0.9	Q2	-0.2‡	-0.3	1.8	Oct	2.9	5.6	Sep	2.4	-2.4	2.9		-46.0	0.94	-1.1
Belgium	1.1	Q3	0.8	1.1	4.7	Oct	4.0	5.5	Sep	-0.9	-4.6	3.0		-33.0	0.94	-1.1
France	1.3	Q3	1.5	1.2	1.5	Oct	2.5	7.6	Sep	-0.6	-6.1	3.3		44.0	0.94	-1.1
Germany	-0.2	Q3	0.7	-0.1	2.4	Oct	2.4	3.5	Sep	6.3	-1.6	2.4		-30.0	0.94	-1.1
Greece	2.7	Q2	4.4	2.2	3.1	Oct	2.9	9.3	Sep	-6.4	-1.3	3.3		-66.0	0.94	-1.1
Italy	0.4	Q3	-0.1	0.6	1.0	Oct	1.2	6.1	Sep	1.5	-4.3	3.7		-91.0	0.94	-1.1
Netherlands	0.8	Q2	4.1	0.6	3.3	Oct	3.4	3.7	Sep	9.6	-1.9	2.7		-38.0	0.94	-1.1
Spain	3.4	Q3	3.4	2.7	1.8	Oct	3.0	11.2	Sep	2.6	-3.2	3.1		-62.0	0.94	-1.1
Czech Republic	0.9	Q2	1.5	1.1	2.8	Oct	2.2	2.9	Sep‡	0.3	-2.5	4.0		-55.0	23.9	-3.7
Denmark	4.4	Q2	4.6	1.8	1.6	Oct	1.3	2.9	Sep	10.8	2.1	2.2		-79.0	7.05	-1.0
Norway	4.2	Q2	5.7	1.0	2.6	Oct	2.2	4.0	Aug‡‡	17.0	12.3	3.8		-8.0	11.1	-0.1
Poland	3.2	Q2	5.7	3.1	5.0	Oct	3.8	5.0	Oct§	1.4	-5.7	5.8		7.0	4.10	1.0
Russia	3.1	Q3	na	3.7	8.5	Oct	8.5	2.4	Sep§	3.1	-1.7	15.7		376	98.5	-7.2
Sweden	0.2	Q3	-0.4	0.7	1.6	Oct	2.0	8.2	Sep§	6.3	-0.8	2.1		-75.0	11.0	-1.1
Switzerland	1.8	Q2	2.8	1.2	0.6	Oct	1.2	2.6	Oct	7.4	0.2	0.4		-70.0	0.88	2.3
Turkey	2.5	Q2	0.3	2.9	48.6	Oct	57.7	8.6	Sep§	-1.8	-4.5	28.0		83.0	34.3	-16.8
Australia	1.0	Q2	0.9	1.1	2.8	Q3	3.1	4.1	Oct	-1.4	-1.0	4.6		-10.0	1.54	1.9
Hong Kong	1.8	Q3	-4.3	3.1	2.2	Sep	2.3	3.0	Sep‡‡	11.9	-3.1	3.5		-65.0	7.78	0.4
India	6.7	Q2	4.5	7.0	6.2	Oct	4.7	8.7	Oct	-0.5	-4.9	6.8		-48.0	84.4	-1.3
Indonesia	4.9	Q3	3.8	5.1	1.7	Oct	2.2	4.9	Q3§	-0.1	-2.5	6.9		1.0	15,775	-0.5
Malaysia	5.3	Q3	6.2	5.1	1.8	Sep	1.9	3.2	Sep§	2.6	-4.5	3.9		-3.0	4.45	5.8
Pakistan	2.8	2024**	na	2.8	7.2	Oct	13.6	6.3	2021	-1.2	-7.4	12.1	†††	-301	278	3.3
Philippines	5.2	Q3	7.0	5.5	2.3	Oct	3.2	4.7	Q3§	-2.9	-6.1	6.0		-72.0	58.8	-4.6
Singapore	4.1	Q3	8.7	3.1	2.0	Sep	2.6	1.8	Q3	19.8	0.2	2.9		-21.0	1.34	1.5
South Korea	1.7	Q3	0.5	2.3	1.3	Oct	2.4	2.3	Oct§	3.3	-1.8	3.1		-93.0	1,407	-5.8
Taiwan	4.0	Q3	4.4	4.2	1.7	Oct	2.1	3.4	Sep	14.1	0.5	1.5		26.0	32.5	-0.5
Thailand	2.3	Q2	3.1	2.5	0.8	Oct	0.6	0.8	Sep§	1.9	-3.7	2.4		-71.0	34.7	3.9
Argentina	-1.7	Q2	-6.8	-3.5	193	Oct	221.2	7.6	Q2§	0.9	nil	na		na	998	-64.9
Brazil	3.3	Q2	5.9	3.0	4.8	Oct	4.3	6.4	Sep§‡‡	-1.5	-7.6	12.9		154	5.80	-15.3
Chile	1.6	Q2	-2.5	2.1	4.7	Oct	4.0	8.7	Sep§‡‡	-2.6	-2.4	5.9		-25.0	981	-6.0
Colombia	1.8	Q2	0.4	1.6	5.4	Oct	6.7	9.1	Sep§	-2.7	-5.7	10.4		-58.0	4,504	-10.4
Mexico	1.5	Q3	4.1	1.4	4.8	Oct	4.8	2.7	Sep	0.3	-5.2	10.0		37.0	20.6	-14.5
Peru	3.6	Q2	9.8	3.0	2.0	Oct	2.4	4.9	Sep§	1.0	-4.0	6.6		-47.0	3.80	-0.3
Egypt	2.4	Q2	12.6	2.4	26.5	Oct	28.5	6.5	Q2§	-5.2	-3.7	na		na	49.3	-37.3
Israel	-2.2	Q2	0.3	0.3	3.5	Sep	3.2	2.7	Sep	4.9	-7.3	4.8		39.0	3.75	2.9
Saudi Arabia	-0.8	2023	na	1.5	1.9	Oct	1.7	3.3	Q2	-0.9	-2.4	na		na	3.76	-0.3
South Africa	0.3	Q2	1.8	1.1	3.7	Sep	4.6	32.1	Q3§	-1.8	-5.2	9.2		-125	18.2	3.1

*% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. ‡‡3-month moving average. §§5-year yield. †††Dollar-denominated bonds. Source: Haver Analytics Note: Euro area consumer prices are harmonised.

Markets

In local currency	Index Nov 13th	% change on: one week	Dec 29th 2023
United States S&P 500	5,985.4	1.0	25.5
United States NAS Comp	19,230.7	1.3	28.1
China Shanghai Comp	3,439.3	1.6	15.6
China Shenzhen Comp	2,119.8	3.4	15.3
Japan Nikkei 225	38,721.7	-1.9	15.7
Japan Topix	2,708.4	-0.3	14.5
Britain FTSE 100	8,030.3	-1.7	3.8
Canada S&P TSX	24,989.0	1.4	19.2
Euro area EURO STOXX 50	4,740.3	-1.3	4.8
France CAC 40	7,216.8	-2.1	4.3
Germany DAX*	19,003.1	-0.2	13.4
Italy FTSE/MIB	33,707.5	-0.7	11.1
Netherlands AEX	863.0	-1.4	9.7
Spain IBEX 35	11,377.1	-1.0	12.6
Poland WIG	80,361.7	-0.2	2.4
Russia RTS, $ terms	885.2	3.6	-18.3
Switzerland SMI	11,703.8	-1.2	5.1
Turkey BIST	9,300.3	4.9	24.5
Australia All Ord.	8,450.9	-0.1	7.9
Hong Kong Hang Seng	19,823.5	-3.5	16.3
India BSE	77,690.9	-3.3	7.5
Indonesia IDX	7,308.7	-1.0	0.5
Malaysia KLSE	1,611.5	-1.4	10.8

	Index Nov 13th	% change on: one week	Dec 29th 2023
Pakistan KSE	93,355.4	1.4	49.5
Singapore STI	3,720.3	3.3	14.8
South Korea KOSPI	2,417.1	-5.7	-9.0
Taiwan TWI	22,860.2	-1.5	27.5
Thailand SET	1,451.5	-1.1	2.5
Argentina MERV	2,042,551.0	3.3	119.7
Brazil BVSP*	127,733.9	-2.0	-4.8
Mexico IPC	50,747.6	-1.9	-11.6
Egypt EGX 30	31,433.0	1.2	26.3
Israel TA-125	2,305.2	3.4	22.2
Saudi Arabia Tadawul	11,930.5	-1.3	-0.3
South Africa JSE AS	83,803.1	-1.8	9.0
World, dev'd MSCI	3,767.1	0.4	18.9
Emerging markets MSCI	1,093.7	-3.4	6.8

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 29th 2023
Investment grade	91	154
High-yield	302	502

Sources: LSEG Workspace; Moscow Exchange; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

The Economist commodity-price index, 2020=100	Nov 5th	Nov 12th*	% change on: month	year
Dollar Index				
All items	130.8	130.3	-0.7	1.4
Food	137.7	141.0	1.6	3.7
Industrials				
All	125.1	121.5	-2.8	-0.7
Non-food agriculturals	133.2	134.7	1.4	9.8
Metals	123.0	118.2	-3.9	-3.4
Sterling Index				
All items	129.3	131.2	1.9	-1.0
Euro Index				
All items	137.1	140.4	2.1	3.6
Gold				
$ per oz	2,742.2	2,599.8	2.4	32.1
Brent				
$ per barrel	76.1	72.2	-2.1	-12.6

Sources: Bloomberg; CME Group; FT; LSEG Workspace; NZ Wool Services; S&P Global Commodity Insights; Thompson Lloyd & Ewart; USDA; WSJ. *Provisional.

For historical indicators data, visit economist.com/economic-and-financial-indicators

OBITUARY
Baltazar Ushca

The world's last-known harvester of glacial ice died on October 11th, aged 80

SOMETIME IN 1822 Simón Bolívar, the Great Liberator of Latin America, fell into a delirium. He dreamed he had climbed the slopes of Mount Chimborazo, Ecuador's highest peak, in the tracks of Alexander von Humboldt. But Humboldt, in 1802, had not reached the top. No human foot had ever trodden the "ice-white hair" of Chimborazo, Bolívar wrote, or "blemished the diamond crown placed [there] by Eternity". He dared to. At the top he was possessed by the God of Colombia and met Time, a bent old man. Time, having first scorned Bolívar as nothing, then showed him the secrets of the universe.

When he had this vision Bolívar was staying in Riobamba, just below the great mountain. And it was from a village nearby, usually on Thursdays and Fridays, that Baltazar Ushca would set out from his house to climb it too. In the dawn light, after a hunk of bread and a bowl of coffee, he would get his donkeys ready. An early start was important, before the sun began to melt the snow. Leaving behind the washing line and the dogs stretched in the dirt, he too would make for the crystal peak of Chimborazo.

Like Bolívar, he felt he was approaching a holy place. When measured from the centre of the earth, not sea level, Chimborazo's summit was the point nearest the sun. Sun-power, he knew, was in the ice. His journey began with a prayer to *Taita*—Father—Chimborazo to guard the journey, preserve him from falling rocks, see he didn't get too tired and guide him home again. For all his working life, *Taita* had looked after him.

It was always cold on the mountain, the domain of snow and sleet. But he seldom wore more than his scarlet poncho over a light jumper, everyday trousers, a black felt Ecuadorean hat and rubber boots. No gloves; his work would keep him warm. So would his love for it, which gave him a perpetual smile. First, he had to ride, walk and climb 16 steep, rocky miles to the ice-mine. It took several hours. There he had to clear away a layer of dirt, rocks and ash about half a metre thick. Underneath lay the glacier, compacted, ancient ice, still shining like diamond. Chimborazo was crowned with 17 glaciers, bright in their upper reaches and covered with permanent snow. But his work lay lower down. Right here, wielding his ice-pick, he could open up the mountain.

His parents had been there before him, both father and mother. Back in those days there would be 40 or so people working in the ice-mine; women too, though Chimborazo was not necessarily safe for them. Local legend said that if a girl went up the mountain alone, she would get pregnant, and her child would be born with a shock of ice-white hair. His father's hair had been like that, so his obvious career was ice-cutting. It was no shame. The villagers of the area depended on Chimborazo both for water and for ice too, to preserve their food before refrigeration arrived. The ice men, *hieleros*, were essential and were heroes. At 15, never having bothered with school, Baltazar joined them.

He had to wait until that age to be strong enough. At 4,500 metres, the air was thin. Cutting a huge block from the glacier required a deep, sharp breath before every swing of the pick. He worked in a shower of ice, each shard catching the light. This ice was special. Factory ice, used everywhere now, was dull and grey; fresh mountain ice glittered, and was packed with gleaming bubbles of air. Factory ice had chlorine in it, but here was real ice, sweet and delicious, like mineral water. It cured hangovers and fevers, and was full of vitamins for bones. Apart from breaking his foot once, he had never hurt any bone on Chimborazo. He could work until God took him.

Once the block he was cutting had fallen, he chopped it with his ice-axe into six small ones. Six were all his three donkeys could carry down the mountain. Each block, parcelled up in dry grass and roped on panier-style, weighed between 30 and 45 kilograms, as much as he could lift. Plucking six thick bunches of grass from the *pajonal*, the rough, flat fields at the foot of Chimborazo, was a job he did on his way up. It took an hour to get enough, and he stuffed more in his boots instead of socks. This straw, woven into clumsy mats, stopped the blocks from melting almost completely. Walking behind his donkeys now, they went back down.

For all these hours of toil he got very little. Each grass-swathed block of ice, toted through Riobamba on his back, earned him only $5 at the market. Two "traditional" cafés were his main customers. They used his ice in fruit shakes, and would treat him to his favourite, pink and frothy, after the sale. At Hugo's, "El Punto Maximo del Sabor", he had dealt with the lovely Rosa for more than 55 years. Everyone around town, when given a choice, could taste the difference; but it was the dull chlorinated stuff they bought in bags from the supermarket.

So he was still very poor. Luckily he also kept sheep and grew potatoes. For a while he earned extra cash from tourists who came especially to watch him cutting ice, but when he found that the travel companies were charging them $200 a day, he kept his distance. Film crews visited too, because he was now famous. All this paid for two new front teeth to replace his rotten ones. The authorities in Guano, a neighbouring town, made a fuss of him, even putting a statue of him in the museum. It was larger and handsomer than he was, and made him laugh. He was proud to cut ice, but knew he was the last. There were so many better, easier jobs.

Another factor counted, too. The weather on the mountain was now only a little bit cold. He could grow potatoes higher up the slopes, if he cared to do that, as he got older; but this meant that the ice-mass was retreating, getting ever-harder to reach. It was also more dangerous to make the climb, as the ice that bound the rocks together increasingly melted and let them loose. Above Riobamba, Chimborazo's shape was changing. The gods no longer slept as soundly as before. ■

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