FINANCIAL TIMES

MONDAY 26 OCTOBER 2020

NEWS PROVIDER OF THE YEAR

UK £2.90 Channel Islands £3.20; Republic of Ireland €3.20

Gupta's gamble
British tycoon bids to capture a German steel icon — PAGE 11

Lessons from Africa
Past experience drove effective Covid response — FT SERIES, PAGE 23

Take a day off
Plaudits for employers who strive to stop burnout — PILITA CLARK, PAGE 26

Tour de force
Briton takes cycling glory

British cyclist Tao Geoghegan Hart claimed a triumph in the Giro D'Italia yesterday, snatching victory on the final day to become the fifth UK rider to win a classic "grand tour" road race.

Geoghegan Hart, 25, started the closing time trial in second place a shade behind Australian Jai Hindley, but won by 39 seconds to take the title. At the start three weeks ago, his role was to support Ineos-Grenadiers team leader and former Tour de France winner Geraint Thomas. But Thomas crashed out, leaving Geoghegan Hart his chance.

Since Bradley Wiggins became the first Briton to win the Tour de France in 2012, Chris Froome has won the Tour four times, Spain's Vuelta twice and the Giro once.

Reuters

Trump claims Covid is 'rounding the turn' despite spike in US cases

- President in final re-election push
- Biden holds poll lead
- Concerns for UK trade deal

LAUREN FEDOR — WASHINGTON

Donald Trump yesterday shrugged off a sharp rise in Covid-19 cases across the US and a fresh outbreak in the White House as he launched the final week of his re-election campaign battling to overturn Democratic challenger Joe Biden's lead in the polls.

New case numbers in the US have surged in the past few days, with a number of states reporting record infections over the weekend. A handful of aides to vice-president Mike Pence were among those to catch the virus, including his chief of staff, weeks after Mr Trump, his wife and a number of other close associates contracted the disease.

But speaking at a rally in New Hampshire yesterday, Mr Trump repeated his claim that the rapid increase in infections was due to improved testing, rather than a worsening outbreak.

"You know why we have cases so much? Because that's all we do is test," he told a crowd in the city of Manchester. "Even without the vaccines, we're rounding the turn. It's going to be over."

Mr Pence has vowed to press ahead with his busy schedule this week, including an expected appearance in the Senate today for a vote to confirm Amy Coney Barrett's nomination to the Supreme Court.

With Mr Biden seeking to focus the campaign on the president's perceived mishandling of the pandemic, which has resulted in almost 220,000 deaths, Mark Meadows, White House chief of staff, told CNN: "We are not going to control the pandemic. We are going to control the fact that we get vaccines, therapeutics and other mitigations."

Kamala Harris, Mr Biden's running mate, told reporters that Mr Meadows' comments were a sign the White House was "admitting defeat" in the battle against Covid-19. Ms Harris and Mr Biden have promised to make containing the virus their top priority if they emerge victorious next week.

Mr Trump is running out of time to catch his Democratic rival, who leads in national opinion polls by 8.7 percentage points, according to Financial Times analysis of Real Clear Politics data. The former vice-president is also polling ahead in several key swing states.

A Biden victory would leave the British government scrambling to rebuild ties with Washington. Downing Street had hoped that Boris Johnson's close relationship with Mr Trump would help secure a swift US-UK trade deal, something Mr Biden is unlikely to prioritise.

However, British officials insist there is much common ground between the prime minister and Mr Biden, particularly on issues such as climate change and multilateralism.

With just over a week to go until election day, more than 58m Americans have cast their ballots early, either in-person or by mail, according to the University of Florida's US Elections Project. Millions more are expected to vote in the coming days.

Donald Trump told a rally in New Hampshire yesterday: 'You know why we have cases so much? Because that's all we do is test'

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Briefing

▸ Cenovus snaps up rival in $7.8bn deal

Cenovus Energy is to buy rival Canadian oil producer Husky Energy, controlled by Hong Kong billionaire Li Ka-shing, in a C$10.2bn ($7.8bn) deal as a wave of sector consolidation gathers speed. — PAGE 10

▸ Oxford trials lift hopes for elderly

A Covid-19 vaccine developed by Oxford university has produced a robust immune response in elderly people. — PAGE 2; FT SERIES, PAGE 23; EDITORIAL COMMENT, PAGE 24; OPINION, PAGE 25; LEX, PAGE 26

▸ Lenders seek debt collection help

Banks have asked specialist debt collectors to help lead the recovery of tens of billions of pounds of government-backed small business loans, as they prepare for an expected wave of defaults and fraud cases. — PAGE 13

▸ Spain to tap Brussels recovery fund

Madrid plans to borrow €27bn against future grants from the EU's virus recovery fund. Foreign minister Arancha González said a clear plan and a budget was needed to dispel uncertainty. — PAGE 4

▸ TV makers fear UK import tariffs

EU television manufacturers have warned that they risk being locked out of the benefits of a future UK trade deal. — PAGE 4

▸ Europe's regions chafe at virus curbs

Political leaders in big European cities have resisted restrictions imposed by nation governments in a sign of how disagreements are weighing on efforts to contain the pandemic. — PAGE 6

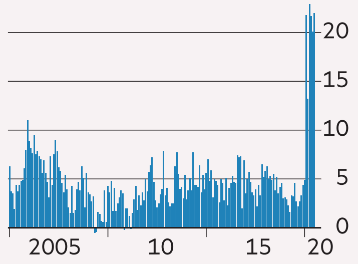
▸ Japan PM pushes fertility treatment

Japanese prime minister Yoshihide Suga wants national health insurance to cover in vitro fertilisation to counter falling birth rates. — PAGE 5

Datawatch

Drink up

Year-on-year change in sales of beer and wine at liquor stores in the US (%)



Seasonally adjusted data
Source: Federal Reserve Bank of St. Louis

Sales at outlets supplying beer, wine and liquor in the US increased more than a fifth in March — when the country first went into lockdown — compared with the previous year. They have since remained consistently high

Questions mount over financing for Asda deal

When Blackburn brothers Mohsin and Zuber Issa joined with TDR Capital to buy Asda for £6.8bn they received praise for returning the Walmart-owned grocery chain to UK ownership. But concerns over levels of debt at their petrol stations business has led some dealmakers to question whether the pair have bitten off more than they can chew and raised calls for greater transparency on how they plan to finance the supermarket purchase.

Analysis ▸ PAGE 13

Private jet operators reap windfall as wealthy flyers splash out to avoid virus

PHILIP GEORGIADIS AND ALICE HANCOCK

Soaring numbers of wealthy flyers are switching to private jets to reduce the risk of catching Covid-19 from other passengers on regular commercial flights.

Several private jet operators and brokers have reported an influx of business from first-time users who are happy to pay a premium for a bespoke itinerary, involving minimal contact with the travelling public — both in the air and on the ground.

While commercial flight numbers have halved, the number of private flights only dipped 10 per cent between September 1 and October 15 compared with last year, according to aviation consultancy WingX.

In August, the number of private flights rose compared with last year, boosted by travellers racing home ahead of new restrictions in the face of rising case numbers.

"The crisis has helped raise the profile and benefits of flying privately among those who can afford to do this," said Oliver Stone, managing director of broker Colibri Aircraft.

A short haul on-demand private charter flight in Europe typically starts from €4,500 (£4,010) according to LunaJets, depending on the size of the jet and distance travelled.

However, taking the "empty leg" return journey from another booking could cost as little as €2,000 (£1,779) bringing the cost of private air travel closer to that of flying business class.

Marine Eugene, managing director of Flexjet, said that most passengers were leisure travellers, but there had been a limited recovery in business trips, including expensive long-haul flights.

"These are families keeping their circles tight, individual executives or teams of colleagues that need to conduct business overseas that before would have used private flying only for short hops," she said.

Flexjet said business this autumn was running at about 85 per cent of last year's levels. However, the industry is not immune to wider problems across the sector. With the holiday season over, some worry the corporate travel market could suffer from restrictions caused by the second wave of virus cases.

Alain Leboursier, managing director of LunaJets, said he expected the next few months to be tough. "When somewhere is closed, it is closed for everybody — it doesn't matter if you come in on a private jet."

World Markets

STOCK MARKETS

	Oct 23	Oct 16	%Week
S&P 500	3465.39	3483.81	-0.53
Nasdaq Composite	11548.28	11671.56	-1.06
Dow Jones Ind	28335.57	28606.31	-0.95
FTSEurofirst 300	1402.56	1422.19	-1.38
Euro Stoxx 50	3198.86	3245.47	-1.44
FTSE 100	5860.28	5919.58	-1.00
FTSE All-Share	3310.38	3325.67	-0.46
CAC 40	4909.64	4935.86	-0.53
Xetra Dax	12645.75	12908.99	-2.04
Nikkei	23516.59	23507.23	0.04
Hang Seng	24918.78	24158.54	3.15
MSCI World $	2421.00	-	
MSCI EM $	1136.54	-	
MSCI ACWI $	579.92	-	

CURRENCIES

	Oct 23	Oct 16
$ per €	1.184	1.172
$ per £	1.304	1.293
£ per €	0.907	0.907
¥ per $	104.835	105.415
¥ per £	136.737	136.287
SFr per €	1.073	1.072
€ per $	0.845	0.853

	Oct 23	Oct 16
£ per $	0.767	0.774
€ per £	1.102	1.103
¥ per €	124.077	123.547
£ index	77.852	77.795
SFr per £	1.182	1.182

COMMODITIES

	Oct 23	Oct 16	%Week
Oil WTI $	39.74	40.76	-2.50
Oil Brent $	41.65	42.80	-2.69
Gold $	1900.95	1891.90	0.48

INTEREST RATES

	price	yield	chg
US Gov 10 yr	106.31	0.84	0.00
UK Gov 10 yr		0.28	0.00
Ger Gov 10 yr		-0.58	-0.01
Jpn Gov 10 yr	100.92	0.03	0.00
US Gov 30 yr	114.92	1.66	0.01
Ger Gov 2 yr	105.36	-0.76	0.01

	price	prev	chg
Fed Funds Eff	0.10	0.09	0.01
US 3m Bills	0.09	0.10	-0.01
Euro Libor 3m	-0.53	-0.52	-0.01
UK 3m	0.05	0.05	0.00

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Data provided by Morningstar

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Covid-19

Oxford vaccine trials offer hope for elderly

Protective antibodies and T-cells triggered in older age groups at highest risk

SARAH NEVILLE, CLIVE COOKSON AND ANNA GROSS

A vaccine considered a frontrunner in the race to protect the global population from Covid-19 has produced a robust immune response in elderly people, the group at highest risk from the disease, according to two people familiar with the finding.

The discovery that the vaccine being developed by the University of Oxford, in collaboration with AstraZeneca, triggers protective antibodies and T-cells in older age groups has encouraged researchers as they seek evidence that it will spare those in later life from serious illness or death from the virus.

Age has emerged as the principal risk factor for a severe bout of Covid-19. However, the immune system weakens with age, raising concerns that the very group that most needs the protection of a vaccine may generate the least effective response to one.

People aware of the results from "immunogenicity" blood tests carried out on a subset of older participants say the findings echo data from July that showed the vaccine generated "robust immune responses" in a group of healthy adults aged between 18 and 55.

The earlier findings showed the vaccine induced two forms of human immune response — generating antibodies and T-cells — for at least 56 days, according to an analysis in The Lancet medical journal.

Positive immunogenicity tests do not guarantee the vaccine will ultimately prove safe and effective in older people. That will not be known until full trial data for this age group are analysed.

However, researchers have been encouraged by the latest development, details of which are shortly to be published in a clinical journal. The University of Oxford declined to comment.

Jonathan Ball, professor of virology at the University of Nottingham, said: "If what they've got is data that show the vaccine generates good immunity, as measured in the lab, in the age group over-55, and that also includes good responses in people who are even older than that, that's a promising sign."

He cautioned, however, that while good immunogenicity data would be encouraging, "ultimately it's whether the vaccine protects against serious disease that's crucial and we will only know that from phase 3 trials".

One person familiar with thinking in Whitehall suggested there was optimism that vaccination of priority groups such as NHS staff on the frontline in the Covid-19 fight might be able to get under way as early as January.

But one official played down that speedy timetable, suggesting there were still considerable uncertainties.

Additional reporting by Jim Pickard

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Healthcare. Immigration fears

Dentists warn of recruitment crisis

Brexit and pandemic create 'perfect storm' in some areas, according to industry body

PETER FOSTER — PUBLIC POLICY EDITOR

The British dental industry is facing an impending recruitment "crisis" with Brexit uncertainty and the pandemic choking the supply of overseas dentists, the industry's trade body has warned.

The industry has told MPs that uncertainty over the UK's new immigration system and the long-term validity of European Economic Area (EEA) qualifications after Brexit, coupled with a backlog of up to 15m missed dental appointments caused by the coronavirus crisis, was creating a "perfect storm" in some areas of the UK.

Neil Carmichael, chair of the Association of Dental Groups, which represents major national providers including MyDentist and Bupa, said the government needed to take urgent action to continue to make the UK attractive to dentists from the European Economic Area.

"The dental workforce is set to face a crisis in 2021 as overseas recruitment could dry up. As mutual recognition [of qualifications] and freedom of movement fall away at the end of the [Brexit] transition period, the UK could look a much less attractive place for EEA dentists to practice," he said.

The ending of free movement of people when the Brexit transition period expires on December 31 is expected to put pressure on the healthcare industry more broadly, with the government last week refusing to ease recruitment rules for skilled workers such as care home managers.

Dentists from the EEA make up 17 per cent of all registered UK dentists but in some more deprived parts of the UK up to 30 per cent of NHS dentists are drawn from Europe, notably Poland, Spain and Romania.

Gabriela Pueyo, general manager at Bupa Dental Care, said that recruitment was particularly hard in rural areas, such as Devon and Cornwall, where this year it was taking an average of 162 days to fill vacancies.

"With ongoing challenges, Brexit has added to the scale of the skills shortage. Hiring EU candidates is set to become even more difficult for the sector if recognition of EU titles is not maintained," she added.

The total value of the dental industry is estimated at around £6bn a year by the ADG, of which two-thirds is spent by the government and one-third via private dentistry.

Figures from the General Dental Council (GDC) show that the number of new EEA dentists registering in the UK has been falling over the past decade, from 970 in 2011 to just 398 in 2019.

However, the total number of registered EEA dentists in the UK has remained stable at 6,800, suggesting fewer dentists from Europe have been leaving the UK over this time.

In a briefing note circulated to MPs earlier this month, the ADG called on the government to double the number of places at UK universities for British dentists from current levels, which it said were capped at 800 places a year.

It also wants the government to legislate to recognise EU qualifications in the UK for at least five years after January 1 next year, taking into account the length of time it takes for a dentist to qualify.

It has also proposed that the GDC recognise qualifications from high-performing non-EEA dental schools in countries like India, which has a surfeit of dentists, and make it easier for those dentists to register to practice in the UK.

Currently non-EEA dentists must pass the stringent Overseas Registration Examination which offers only 500 places a year and takes 18 months to complete and has a pass rate of less than 50 per cent.

This year the exams were cancelled because of Covid-19, further reducing the recruitment of new dentists. The ADG has urged the government support the expansion of the exam to cover 1,500 places.

The GDC said the UK would continue to automatically recognise EEA qualifications for two years after Brexit while a new regime was worked out, but that the government would need to pass legislation to enable it to reform the exams and extend recognition of EEA qualifications.

Sophia Wolpers, Brexit director at London First, a network of business leaders who promote the capital's interests, said failure to prioritise the EU mutual recognition of professional qualifications would make it harder for many businesses to deliver services.

"We rely on high-skilled talent across our services professions, and the government should do all it can to ensure the UK is an attractive destination for these workers," she said.

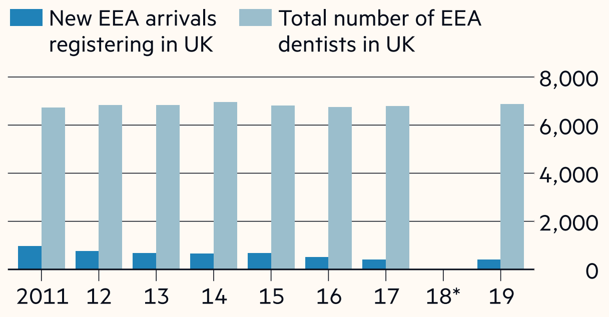
The Department of Health and Social Care said it was committed to addressing staffing shortages and that it had launched a health and care visa to encourage more overseas doctors and dentists to come and work in the NHS.

"Work is taking place to explore additional opportunities for dental training, improve staff retention and find flexible and effective ways to ensure we have sufficient staff with the necessary skills and experience," it added.

'With ongoing challenges, Brexit has added to the scale of the skills shortage'
Gabriela Pueyo, Bupa Dental Care

Backlog widens: up to 15m dental appointments have been missed because of the coronavirus crisis — Leon Neal/Getty

The number of new European dentists arriving in the UK was falling before Brexit
But the overall number of dentists from the EEA has remained stable



* No data were published in 2018
Source: General Dental Council annual report 2019

Food fight

Labour ready to force vote on free meals for children

ROBERT WRIGHT AND BETHAN STATON

Labour leader Keir Starmer said yesterday his party would force another parliamentary vote on the provision of free meals for England's poorest children during school holidays, as ministers resisted growing pressure to rethink their controversial stance on the issue.

Boris Johnson's government voted against a Labour party motion last week to issue vouchers during holidays until next spring, rejecting calls to repeat an earlier U-turn on extending free school meals to the most deprived children during the summer holidays.

The issue has revealed polarised views on child food poverty, which have been brought into sharp focus during the coronavirus crisis as a result of a campaign by the England and Manchester United footballer Marcus Rashford.

Yesterday Northern Ireland secretary Brandon Lewis maintained the government's stance that benefits and funding for local authorities were doing enough to keep England's poorest children fed during the school half-term holidays, just starting in most of the country, and that specific funding for meals was unnecessary.

Speaking on the BBC's Andrew Marr Show, Mr Lewis added that the situation was different because schools, which were closed before the summer break, have been open in recent weeks.

Mr Lewis said grants to local authorities in England — which he said had been given £63m to cover extra costs during the half-term period — were the "right way" to offer support for the poorest families.

"It's making sure that local authorities can give that support," Mr Lewis said. "They know their areas best."

The Welsh, Scottish and Northern Irish governments have all agreed to some extension of their free school meals programmes to cover holidays.

In England, multiple businesses and local authorities — including several run by Mr Lewis's own Conservative party — have pledged to provide food for poor children during school breaks.

Five Conservative MPs rebelled when Labour staged a vote on the issue last week and many more have sounded restive about defending the current stance.

Sir Keir wrote on Twitter yesterday morning that his party would force another vote on free school meals if the government refused to "change course" before the Christmas break.

"It's not too late to do the right thing," the Labour leader wrote.

As outrage at the government's decision mounted last week, businesses, charities and local councils began offering free meals for disadvantaged children, and a crowdsourced map yesterday displayed nearly 600 locations.

About 1.4m children were eligible for free school meals in January, according to the most recent figures available, but the Food Foundation, a charity, estimates that number may have risen to 2.2m as a result of economic hardship since coronavirus lockdown measures were introduced earlier this year.

Robert Halfon, chair of parliament's education committee, one of the Conservatives to vote with Labour last Wednesday, said the government needed to create a long-term plan.

Infrastructure spending

HS2 project slow and prone to waste, claim academics

GILL PLIMMER

The government should avoid large, bespoke infrastructure projects such as the HS2 railway line when it looks to construction to boost the economy in the wake of the Covid-19 crisis, a report by a leading group of Oxford university academics said.

Such projects are too slow, costly and risky to effectively stimulate gross domestic product, the academics said in the report that looks at how the government, the public and business can manage risks posed by pandemics and natural disasters.

"HS2 is the type of project that should be avoided because it is bespoke, slow and prone to waste," said Bent Flyvbjerg, professor of major programme management at the University of Oxford's Said business school.

"You need the exact opposite to successfully stimulate GDP: standardised, fast and frugal."

Chancellor Rishi Sunak promised last week to invest in "infrastructure to deliver our ambitious plans to unite and level up the country [and] drive our economic recovery".

But there are concerns over how much public money the Treasury is willing to spend on infrastructure following the Covid-19 crisis.

Prof Flyvbjerg said the government should back smaller projects such as wind farms, solar, battery storage, and anything else that can be built quickly using a standardised modular approach, "without compromising quality and aesthetics". Schools, housing, hospitals and care homes are other examples, he argues.

In February, Prime Minister Boris Johnson reset the budget and timeline for the HS2 high-speed line, which will run from London to Birmingham in its first phase and is due to be completed between 2029 and 2033.

The Department for Transport said the cost of the entire Y-shaped line, which would ultimately connect the Midlands, Manchester and Leeds, is expected to cost £98bn.

Support scheme

Fraudulent coronavirus loan applications go unreported

MATTHEW VINCENT AND KATE BEIOLEY

Bogus applications for coronavirus support loans have gone almost entirely unreported, with less than 0.5 per cent of the expected fraud cases being flagged to the police.

Latest figures from the national Action Fraud service show that only 176 reports of fraud citing a government-backed lending scheme have been received in the year to date. Of these, 95 were crime reports, detailing offences that had taken place, and the remaining 81 were information reports, about attempted crimes.

However, earlier this month, government spending watchdog the National Audit Office reported that the bounce back loan scheme alone had delivered £36.9bn to more than 1.2m applicants. Separately, the Cabinet Office has warned that fraud losses from these loans were likely to be "significantly above" the typical range of 0.5-5 per cent, suggesting at least £1.85bn had been claimed dishonestly.

With BBLS sums limited to a maximum of £50,000 per applicant, those fraud losses would statistically be widely spread, stemming from at least 36,900 of the loans applied for to date, according to FT calculations. The relatively small number of crime reports suggest that fewer than 0.5 per cent of the expected bogus applicants have yet been detected.

Action Fraud's numbers also include reports relating to the coronavirus business interruption loan scheme, for which there have been 73,000 successful applications, meaning the proportion of detected frauds compared with the overall number of loans being approved at this point could be lower.

The Cabinet Office said that action was being taken to combat the fraud risk. "These reports are one of a range of sources we use to assess potential fraud levels. We have recently launched an anonymous hotline with the independent charity CrimeStoppers to gather information and increase reporting and awareness of fraud."

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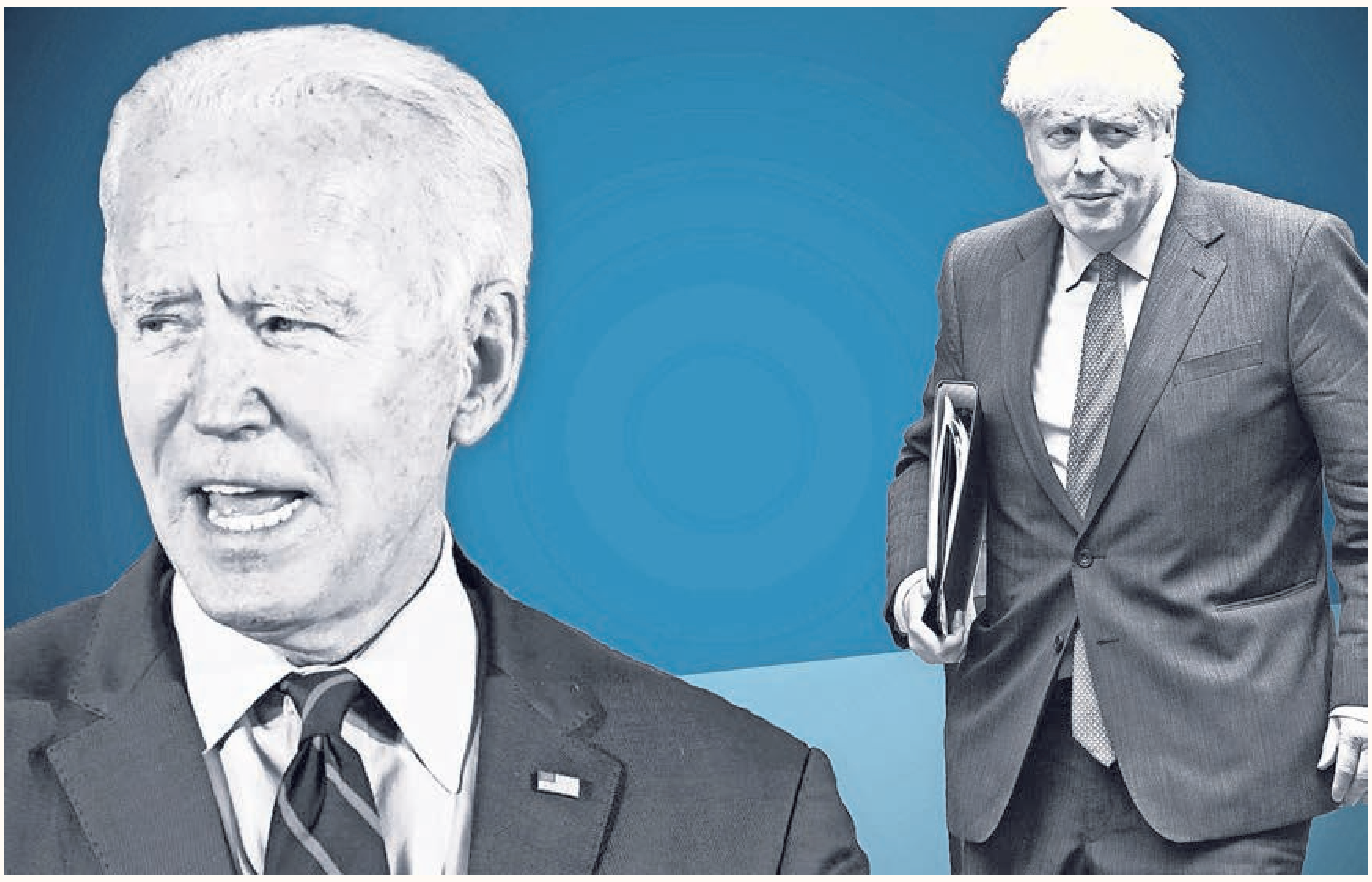
Downing St edgy about US trade deal if Biden wins

No 10 fears losing momentum towards pact if Trump is ousted from White House

KIRAN STACEY, AIME WILLIAMS AND KATRINA MANSON — WASHINGTON
JASMINE CAMERON-CHILESHE
LONDON



No contact: should Joe Biden, left, win the White House, Boris Johnson, right, and his government are concerned they have not been able to foster close links with the Democrat
FT montage/Getty

British officials have not been able to meet a single senior member of Joe Biden's foreign policy team in recent weeks, hampering Downing Street's preparations for what might happen should the Democratic candidate win next week's presidential election.

Foreign Office staff had hoped to meet Mr Biden's closest foreign policy advisers before the election on November 3, but senior officials in London and Washington said the UK had been rebuffed as part of a broader strategy by his team to avoid meeting foreign governments during the campaign.

The lack of contact has made it harder for Boris Johnson's government to plan for what might happen should Mr Biden win, as polls predict. The prime minister has formed a strong bond with President Donald Trump and some in London are concerned they have not been able to foster such close links with his opponent, potentially throwing the future of a US-UK trade deal into doubt.

"Biden's team is being very cautious with their contacts, especially after all the Russian stuff at the last election," one British official said. Mr Trump has been mired in scandal since the beginning of his presidency because of allegations about connections between his 2016 campaign and Russian officials.

A Biden official said that neither of the former vice-president's top foreign policy officials — Tony Blinken and Jake Sullivan — had made "any substantive contact with British officials".

Mr Johnson's relationship with Mr Trump, who backed Brexit and calls his British counterpart "Britain Trump", is much closer. Downing Street was hoping the goodwill between the two leaders would help smooth the path of a trade deal, London's top priority when it comes to its relations with Washington.

But with Mr Biden about 9 percentage points ahead in the polls, Mr Johnson's advisers are concerned momentum towards a trade agreement could soon be lost. Both parties are working on a tight deadline — a US law governing the ratification of trade deals expires in July. That law allows trade deals to be fast-tracked through Congress, but to be covered by it, a US-UK agreement must be in place by April.

British officials have been trying to draw up trade proposals that are more likely to win Mr Biden's approval, such as including tougher protections for the environment and workers' rights.

"We need to be able to turn around to a new administration, and say, 'Look we're almost done, would you like to 'Bidenise' this agreement?'" said one UK official. "You can have a bit more on labour, a bit more on the environment, and you can claim that as an early win."

But British diplomats accept that if Mr Biden does come to power, securing a trade deal with the UK is unlikely to be high on his agenda. Dan Ikenson, director of trade policy studies at the Cato Institute, said: "The UK is desperate for a deal that the likely incoming US government doesn't much care about."

Instead, many believe Mr Biden is likely to follow the lead of former president Barack Obama in making Berlin his primary relationship in Europe. "Biden is an old-fashioned Atlanticist," said John Kerr, a former British ambassador to Washington. "But [Angela] Merkel and Merkel's successor will be the main interest in America."

Even if a deal can be agreed, it could still be scuppered if the UK leaves the EU without a deal, or with a deal that US politicians believe undermines the Good Friday Agreement, the peace deal that settled three decades of sectarian violence in on the island of Ireland.

Mr Biden, who is proud of his Irish roots, has warned publicly he would make a trade deal contingent on respecting the Northern Irish peace plan. And even under a second Trump administration, Democratic members of Congress say they will veto any trade agreement they believe threatens the peace deal. Sam Lowe, senior research fellow at the Centre for European Reform, said: "The US does have a special relationship with a country but it is Ireland, not the UK."

Despite this, Mr Johnson is closer to Mr Biden on many policy issues than he is to Mr Trump, including the environment, Iran, and multilateralism in general. The UK is chairing both the G7 and the UN climate talks in 2021, and Number 10 is hoping to use those positions to focus on those issues.

Simon Fraser, former Foreign Office head, said: "On defence spending and Nato they will try to re-engage America more enthusiastically in the Nato alliance [and] look for ways to get America re-engaged in multilateralism."

> 'The UK is desperate for a deal that the likely incoming US government doesn't much care about'

On China diplomacy China, however, while the combative nature of relations between Washington and Beijing would likely ease under Mr Biden, he is unlikely to take a radically different policy position to his predecessor. "The US has become anti-China," said Mr Kerr.

British officials accept the Biden team's de facto ban on meeting foreign governments means they will have to move quickly to secure high-level meetings if he becomes president.

But some warn that the mixture of the UK's declining influence in Europe and Mr Johnson's perceived closeness to Mr Trump will make that difficult.

One former British diplomat said: "Every British prime minister aspires to be the first foreign visitor to the Oval Office when there is a new president. But I would be surprised if Boris Johnson's was the first head of government call Mr Biden returned if he won."

Black voters rally page 8
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Post-Brexit ties

Europe's TV makers fear UK import tariffs

Manufacturers warn EU chief negotiator of threat to their profit margins

JIM BRUNSDEN — BRUSSELS

EU television manufacturers have warned that they may be locked out of the benefits of a future UK trade deal, threatening thousands of European jobs and driving up the price of TVs for British consumers.

Digital Europe, an association representing Europe's tech industry, has written to the European Commission twice in recent months warning that EU TVs could face UK import tariffs that would more than wipe out profit margins after Brexit on a business worth more than €900m. The group represents manufacturers including Samsung, Panasonic and LG.

Most televisions sold in the UK are made in the EU. EU27 countries exported 3.7m of them to the UK in 2019, according to data from Eurostat, products worth some €931m.

Industry representatives told the Financial Times that this business was under threat, in part because of the EU's own stance in the post-divorce trade negotiations.

Brussels has pushed a tough line on the percentage of a product that must be either European or British for the good to qualify for the benefits of any deal, a restriction known as "rules of origin".

Brussels' general stance in the negotiations has been that content from outside the UK and EU used in a manufactured good should be limited to 45 per cent of the total, if the product is to benefit from the future trade agreement. TV manufacturers are concerned their products would not qualify, upending supply chains and the model of assembling in Europe to export to the UK.

> 'EU-UK negotiations are hugely significant for the future of Europe's digital and tech sectors'

"The EU-UK negotiations . . . are hugely significant for the future of Europe's digital and tech sectors," Digital Europe said in a letter to EU chief negotiator Michel Barnier, dated October 9 and seen by the FT.

The letter notes that appropriate rules of origin "will be vital to allow tech products assembled in Europe, such as TVs, to take advantage of zero tariff trade between the EU and the UK".

It calls for an approach that will allow "the widest possible use of the preferential terms of the [Free Trade Agreement]".

Digital Europe declined to comment when contacted by the FT. The commission has also rejected British proposals to allow content from other countries with which Britain and the EU both have trade deals to count as local, despite support from the tech industry for such an approach because of the volume of components sourced from Asia.

EU customs rules allow some television components, notably LED display panels, to be imported tariff-free into the bloc where assembly of the TVs then takes place, often at plants located in central and eastern Europe. Samsung has factories in Hungary and Slovakia, for example, while Panasonic has one in the Czech Republic.

The industry's concerns have also been fuelled by the UK's decision to set a 14 per cent tariff on imported TVs — a relatively high duty for an industrial product — despite limited local manufacturing of televisions. The UK has one domestic manufacturer for LED TVs: Cello Electronics, which has a production line in County Durham.

Aerospace concerns see Companies

Interview. Arancha González

Madrid to tap EU recovery fund for growth boost

Foreign minister tells of plans to borrow against future grants from pot before bloc approval

DANIEL DOMBEY — MADRID
MEHREEN KHAN — BRUSSELS

Arancha González: minister rebuffs suggestions the administration will not be able to manage the recovery fund effectively
Virginia Mayo/AFP

Spain is seeking to use its share of the EU's €750bn coronavirus recovery fund to revitalise its stalled economy, with the government likening it to the country's 1986 entry into the bloc or the creation of the European single market.

Madrid plans to borrow €27bn against future grants from the fund, long before they are formally approved by the EU. Prime Minister Pedro Sánchez's minority administration hopes to use the money to push through a 2021 budget and consolidate power, while boosting an economy hit hard by coronavirus.

"We are now in the second wave of this pandemic and we need to counter it with a clear sense of the EU working to ensure the recovery happens as soon as possible," Arancha González, Spain's foreign minister, said in an interview with the Financial Times. "Having a plan and a budget on the table is part of providing certainty to the uncertainty that surrounds us."

But some analysts have raised doubts about the government's ability to manage the recovery fund billions.

"The real key of the recovery plan is not the total amount but our ability to choose the right kind of projects," said Rafael Doménech, head of economic analysis at BBVA, the Spanish bank. "It is not going to be much help if we get €140bn and then show ourselves incapable of spending it well."

Spain, which hopes to qualify for €70bn of grants and €70bn in loans over the fund's 2021-2026 lifetime, is perhaps the EU country worst hit by the pandemic.

More than 3m people have been infected and Mr Sánchez has warned of difficult months ahead. The IMF expects Spain's economy to shrink 12.8 per cent this year, and the budget deficit to rise to 14.1 per cent of gross domestic product.

At a time of such economic strain, the plan to take a €27bn "advance" from the fund would allow Spain to speed ahead even though the EU programme is still snarled up in the European Parliament and will also need to be endorsed by member states' legislatures.

By incorporating the €27bn into his government's imminent budget, Mr Sánchez is also making it more difficult for opposition parties to vote down his spending plans.

The prime minister has been unable to pass a budget since taking power in 2018. Doing so now would help secure his government in office for the current parliament's three remaining years.

Ms González argued that advance spending of the kind that Spain plans was "part and parcel" of EU leaders' agreement in July to set up the fund. "The ultimate guarantee for all European stakeholders . . . is that there is going to be [EU] scrutiny," she added.

But one EU diplomat cautioned that Spain's plans to allocate such a large proportion of the funds ahead of authorisation would be keenly watched by northern European governments.

Member states have until the end of April to submit their plans. The European Commission will then have a further two months to assess them and EU finance ministers another month before projects can get the nod.

Ms González fought back against suggestions that Mr Sánchez's administration would not be able to manage the recovery fund effectively.

She likened it to the large transfers that allowed Spain to invest heavily in infrastructure in the early decades of its EU membership, suggesting that other southern European countries had been less efficient.

"I see the plan that we are building now as a version on steroids of the cohesion funds that led to the big transformation of the Spain of the 1980s and 1990s," she said.

"Compare how Spain used the cohesion funds to how Italy or Greece or Portugal used them and you can see the difference. We had a very clear plan to invest: we basically renewed the rail, road, airport and port infrastructure of this country, which is the basis on which we have built the competitiveness of our economy."

Mr Sánchez's government has already set out the 30 areas in which it plans to invest the fund, following EU guidance to focus on digitalisation and clean energy.

> 'We need a clear sense of the EU working to ensure the recovery happens as soon as possible'

Most would be spent on education and training, modernisation of business and the health system and rural development and infrastructure.

The prime minister has summoned the leaders of Spain's 17 regions to discuss their plans for the recovery fund at a teleconference today with Ursula von der Leyen, commission president.

But rather than accede to opposition demands to set up an agency to administer the resources — which the government says would take too long — he is set to retain tight control.

The Socialist-led coalition plans to allocate the €70bn of recovery fund grants during the 2021-2023 period and would only seek to access the equivalent amount of loans after 2023.

"We should not be refusing to use any of the opportunities that the recovery fund is affording the country," Ms González said.

"But we should also be intelligent enough to use the grants part first."

Coronavirus

Italy and Spain unveil tough rules after surge in infections

MILES JOHNSON — ROME
DANIEL DOMBEY — MADRID

The governments of Italy and Spain, the European countries hardest hit by the first wave of the coronavirus pandemic, announced sweeping measures yesterday to combat a surge in the number of new cases.

Italy said it would introduce the harshest public health restrictions since the end of its first national lockdown in May as new coronavirus cases hit a fresh daily record. Spain announced a nationwide curfew and triggered emergency powers after the country's infection rate jumped by almost a third over the past week.

Giuseppe Conte, Italian prime minister, said that starting from today all bars and restaurants across the country would have to close by 6pm. Under the proposed measures, to remain in place for a month, schools and workplaces will remain open.

Gyms, swimming pools, theatres and cinemas will close, and Italians are "strongly recommended" not to leave their immediate areas apart from for studying, work or health reasons.

"The stress on the national health system has reached worrying levels," Mr Conte said in a televised address announcing the new measures.

Spanish premier Pedro Sánchez said the nationwide curfew between 11pm and 6am would be imposed immediately, following requests by 10 of the country's 17 regions.

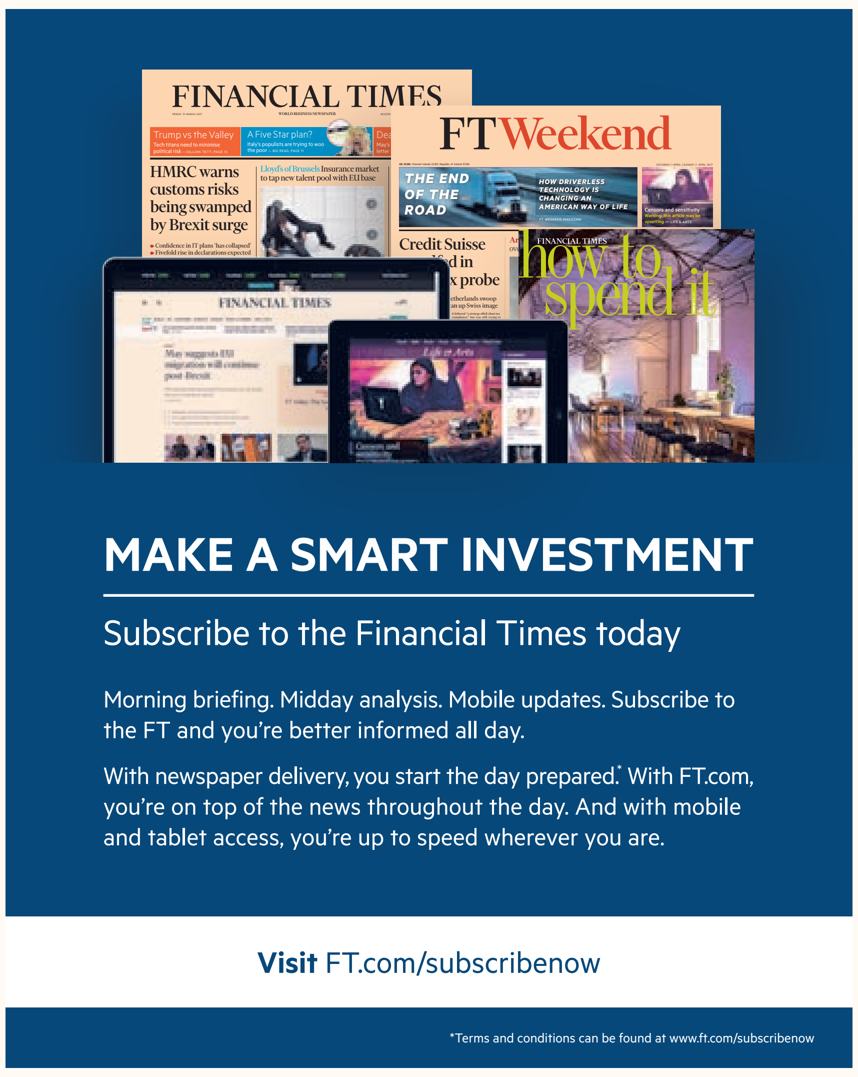
He said the government would activate a so-called state of alert, which grants the state emergency powers, to permit the curfew, allow territorial restrictions and ban meetings of more than six people across the country. He added that he would seek parliamentary approval this week from all of Spain's political parties to prolong the extraordinary legal order until May 9.

"All of Europe is now taking measures to limit mobility and personal contacts," Mr Sánchez said. "We have never confronted something like this as a society before."

Mr Sánchez previously invoked a state of alert in March, in response to the first wave. But the measure lapsed in June, after it became increasingly difficult to win parliamentary support, which the government then sought at two weekly intervals. Some of the country's regions also pushed hard for restrictions to be lifted more quickly.

The Spanish premier said that the new state of alert would differ from the previous measure because the emergency powers would be wielded by regional administrations. He added that the government sought to avoid another nationwide lockdown, as was imposed during the first wave, but pleaded with citizens to stay at home as much as possible to keep infections under control.

In Italy, Mr Conte has so far insisted that there will not be a new national lockdown, despite newly diagnosed Covid-19 cases surging over the past two weeks. Italian authorities said on Saturday that confirmed new cases had risen by 19,664 in 24 hours, a new daily record, while 151 people had died, up from 91 a day earlier. The number of Covid-19 patients in intensive care rose by 79 to 1,128.



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Independent journalism

Poland's Law and Justice party trains sights on private media

JAMES SHOTTER — WARSAW

Since the re-election of Andrzej Duda as president in July, politicians from Poland's conservative-nationalist ruling camp have made clear that reshaping the country's private media is one of their priorities for the final three years of their term in office.

Law and Justice (PiS) politicians claim changes are needed because foreign media companies, including German, Swiss and US groups, own a string of Polish titles, and too few groups wield too much power. "The media in Poland should be Polish," Jaroslaw Kaczynski, founder of Law and Justice, and Poland's de facto leader, said shortly after Mr Duda's re-election.

But PiS's critics say that, with a couple of exceptions such as regional newspapers, Poland's media are not over-concentrated. They see the plans as an attempt to stifle independent journalism. Since taking office in 2015, PiS has already sought to co-opt the public media.

Executives fear that talk of reforming the private media is a shorthand for squeezing out critical reporting, as Viktor Orban's government has done in Hungary.

During PiS's first term, officials repeatedly raised the prospect of "repolonising" the foreign-owned media, or introducing caps on the share of Polish groups that could be owned by international entities. Since Mr Duda's re-election, they have emphasised "deconcentration", or imposing limits on the market share of a single group.

So far, however, no legislation has been put forward, amid divisions in the ruling camp about how to proceed. One problem is that such legislation would be hard to reconcile with EU law. Another is that the US, PiS's most important ally, has made clear that it will vehemently oppose any changes that damage American interests, including those of TVN, an independent broadcaster that is PiS's bête noire and which is owned by US media conglomerate Discovery.

Yet media executives worry that even if no single "deconcentration law" emerges, PiS will find other ways to put pressure on the independent media, such as withholding state advertising or tweaking existing media rules. "Deconcentration is a programme. It doesn't have to be necessarily one single bill. At the end it's about concentrating the media in the hands of PiS. This can be achieved in many ways," said one senior media executive.

"What I think is that there will be a more piecemeal strategy of deconcentration on many fronts, to make it very difficult for independent media companies to thrive, or even survive . . . the blueprint is Hungary."

Another possibility is that Law and Justice could use state-owned companies to buy independent media. The Economist reported earlier this month that PKN Orlen, the state-controlled energy group, was in talks with Verlagsgruppe Passau to buy Polska Press which owns Polish regional newspapers.

Making headlines: fears are growing that critical reporting will be at risk

Media executives told the Financial Times they expected that Sigma Bis, a marketing agency owned by Orlen and the state-owned insurer PZU, could be used to buy up media groups. Orlen declined to comment. PZU did not respond to a request for comment.

Grzegorz Hajdarowicz, the founder and main shareholder of Gremi International, which owns the centrist newspaper Rzeczpospolita, said that he thought the noise around a possible deconcentration bill was designed to encourage owners to think twice about their holdings. "I think that . . . what [the government] want to do in the end is make an offer and buy," he said. "They want to make an offer and say — the situation is not stable . . . something can happen . . . why don't you sell?"

Piotr Glinski, Poland's culture minister, said earlier this month that state-owned groups "should" buy up media. But he insisted that this would not be "destructive for the media market".

Population decline

Japan PM floats fertility treatment to help birth rate

Suga offers support for IVF to be paid for by national health insurance

ROBIN HARDING — TOKYO

Japan has spent 50 years fretting about its low birth rate and declining population but new prime minister Yoshihide Suga has hit on a different solution: fertility treatment.

In his leadership campaign, Mr Suga called for in vitro fertilisation to be covered on national health insurance. The prime minister wants to make it affordable in a country where the average age of first-time mothers is above 30 and nearly one in five couples has had tests or treatment for infertility.

Mr Suga hopes the policy will raise Japan's fertility rate, which stood at 1.36 children per woman in 2019. The fertility rate has been below the replacement level of 2.1 since the 1970s, locking in decades of future population decline with profound consequences for Japan's society, economy and national security.

But while subsidies for fertility treatment reflect a slow shift in Japan towards supporting parents rather than criticising the childless, experts said it still did little to address the economic insecurity and gender inequality that discouraged marriage and raising children.

"To lower the hurdle even a little bit for any family that wants a child, we should work rapidly to include fertility treatment on health insurance," said Mr Suga last week, framing the policy explicitly as a "countermeasure to the falling birth rate".

Infertile couples struggled in Japan, said Akiko Matsumoto, who campaigns on their behalf as head of a charity called Fine. "There are four burdens: body, mind, money and time."

Not only is the treatment physically draining and psychologically stressful but there is little financial support, and employers grudge the time off for medical appointments.

"If someone tries three or four rounds of treatment, it can easily run to ¥4m ($38,000)," she said. Ms Matsumoto has lobbied the government to provide insurance coverage for fertility treatment but said the details were critical.

A cost cap limiting available treatments "would harm patients", she said.

Family bond: a mother and her baby visit Shinjuku Gyoen National Garden in Tokyo
Issei Kato/Reuters

Even if the insurance cover is generous, analysts are cautious about how much it will affect birth rates. "It's very hard to estimate but in 2018 there were around 57,000 births due to IVF. That could increase to 100,000 [if covered on insurance]," said Isao Takumi, senior researcher at the Meiji Yasuda Research Institute. One in every 16 children born in Japan is a result of IVF and the figure has risen fivefold in the past 20 years. "I think covering fertility treatment is an excellent idea but it depends a lot on the details of the policy," said Mr Takumi.

An extra 43,000 children a year would make a difference, but Japan was shocked last year when the number of births in the country fell to 865,234, compared with 918,400 in 2018 and more than 2m at the early 1970s peak.

After reaching a trough of 1.26 in 2005, Japan's fertility rate recovered to 1.45 by 2015, but it has since fallen for four years in a row. Current fertility is well below that assumed in projections that Japan's population will decline from 127m in 2015 to 88m by 2065.

Sumio Saruyama of the Japan Center for Economic Research, who co-wrote a proposal to stabilise the population by matching French levels of childcare and family spending, said that being able to combine work and family was a necessary condition for Japanese women to have more children.

"The fundamental cause of the falling birth rate is the rise in women's economic power," he said. Nations around the world have experienced the same phenomenon as the opportunity cost of having children rises for well-educated, high-earning women. But Japan's culture of long hours makes it difficult to work and look after children.

Although Mr Suga does not hide his ambition of raising the birth rate, he is also careful to avoid any suggestion of state interference in private decisions about whether to have children. The subject is a taboo in Japan since the militarist government of the 1930s suppressed birth control and made an ideology out of increasing the population.

Communist party

China leaders meet to debate direction of long-term policy

YUAN YANG — BEIJING

China's leadership will start discussions today to set the country's long-term priorities, with Beijing expected to focus on boosting technological self-sufficiency and domestic demand.

The Fifth Plenum, the country's most important goal-setting exercise which will include a broad plan for the next 15 years, will run until Thursday against the backdrop of a worsening global economy and US sanctions. The goals are likely to endure for at least the rest of President Xi Jinping's rule.

The process typically reveals the biggest worries and priorities for the Chinese leadership. This year's meeting comes as the deadline for meeting the previous overarching goal of *xiaokang shehui*, a term often translated as achieving a "moderately prosperous society", is due to expire in 2021, the centenary of the founding of the Chinese Communist party.

Beijing has hinted it would broaden out its focus on economic growth to include targets for environmental protection, innovation and self-sufficient development, such as in food, energy, and in chips.

Mr Xi will also probably use the exercise to further consolidate his influence over the party and the party's influence over governance, said Holly Snape, a fellow in Chinese politics at the University of Glasgow. "It's useful to understand these broad goals in the context of an expression Xi seems fond of: the party, government, military, people, education, east, west, south, north, and centre — the party leads everything," she said.

In recent months, Mr Xi has reiterated a "dual circulation" economy in which China's focus will be on developing domestic demand and self-sufficiency as the rest of the world remains stalled by the coronavirus.

China has for decades valued technological self-sufficiency but "there's an important shift coming in the next five years", said Samm Sacks, cyber security policy fellow at New America, a Washington-based think-tank. US sanctions on Huawei, the technology group, have shown Beijing how easily a national champion can be brought down by a blockade on US technology. "The government is now looking to keep more of the advances of its homegrown tech sector inside China, especially R&D and expertise gleaned from foreign companies," added Ms Sacks.

Beijing has set an average annual gross domestic product growth rate target in every five-year plan since 1986. But this year, as the economy was pummeled by Covid-19, China did not achieve the target for the first time. Economists at Macquarie Group expect that the target will be lowered from the 6.5 per cent set in the current plan to 5 per cent in the next five-year plan.

Chip self-sufficiency see Companies

Middle East

Foreign debt investors reverse outflows with return to Egypt

HEBA SALEH — CAIRO

Foreign debt investors have flocked back to Egypt, reversing billions of dollars of outflows in spring sparked by the coronavirus pandemic, according to the country's finance minister.

Mohamed Maait told the Financial Times that foreign investors held more than $20bn in Egyptian debt, reflecting confidence in the only regional economy that has grown this year despite damage to key sectors such as tourism. Analysts had reported that international holdings of Egyptian debt fell to $7bn in May.

"We see this in the reaction of investors when we go to international financial markets and in the way they receive issuances of Egyptian treasury bills," said Mr Maait in an interview in which he hailed the government's economic record despite the health crisis. The IMF reported growth of 3.5 per cent in the fiscal year that ended in June

Although Egypt imposed a relatively loose lockdown, the pandemic has slowed growth and damaged the tourism industry, which brought in $13bn last year. Remittances from Egyptians working abroad, chiefly in Gulf oil-exporters hit by the drop in crude prices as Covid-19 curbed demand, are also expected to plunge. Unemployment rose from 7.7 per cent to 9.6 per cent in the second quarter this year, according to official figures.

But Egypt is the only country in the Middle East and north Africa region to have avoided a contraction in 2020, the IMF said this month.

"Growth is still positive and can be considered very good at a time of corona and in comparison with others," said Mr Maait, who forecasts an expansion of 2.8 per cent to 3.5 per cent in the current fiscal year.

Egypt's agricultural sector, which accounts for a quarter of gross domestic product, was not affected by the pandemic. The swift resumption of public investment, mostly in infrastructure, after a brief pause until April, also boosted growth, according to Mohamed Abu Basha, head of Macroeconomic Analysis at EFG-Hermes.

> 'Growth is still positive and can be considered very good at a time of corona'

Even before the pandemic Egypt had been able to lure international debt investors with some of the highest yields in the world. Interest rates on the country's six-month treasury bill sold on Thursday averaged 13.45 per cent.

Foreign investors pulled more than half of their money from the Egyptian debt market after coronavirus struck, with their holdings of Egyptian treasuries falling to $7bn in May from a peak of $20bn in February, said Moody's Investor Service, the rating agency, in August. Sentiment improved after the country secured $8bn in IMF funding, including $3bn in emergency finance.

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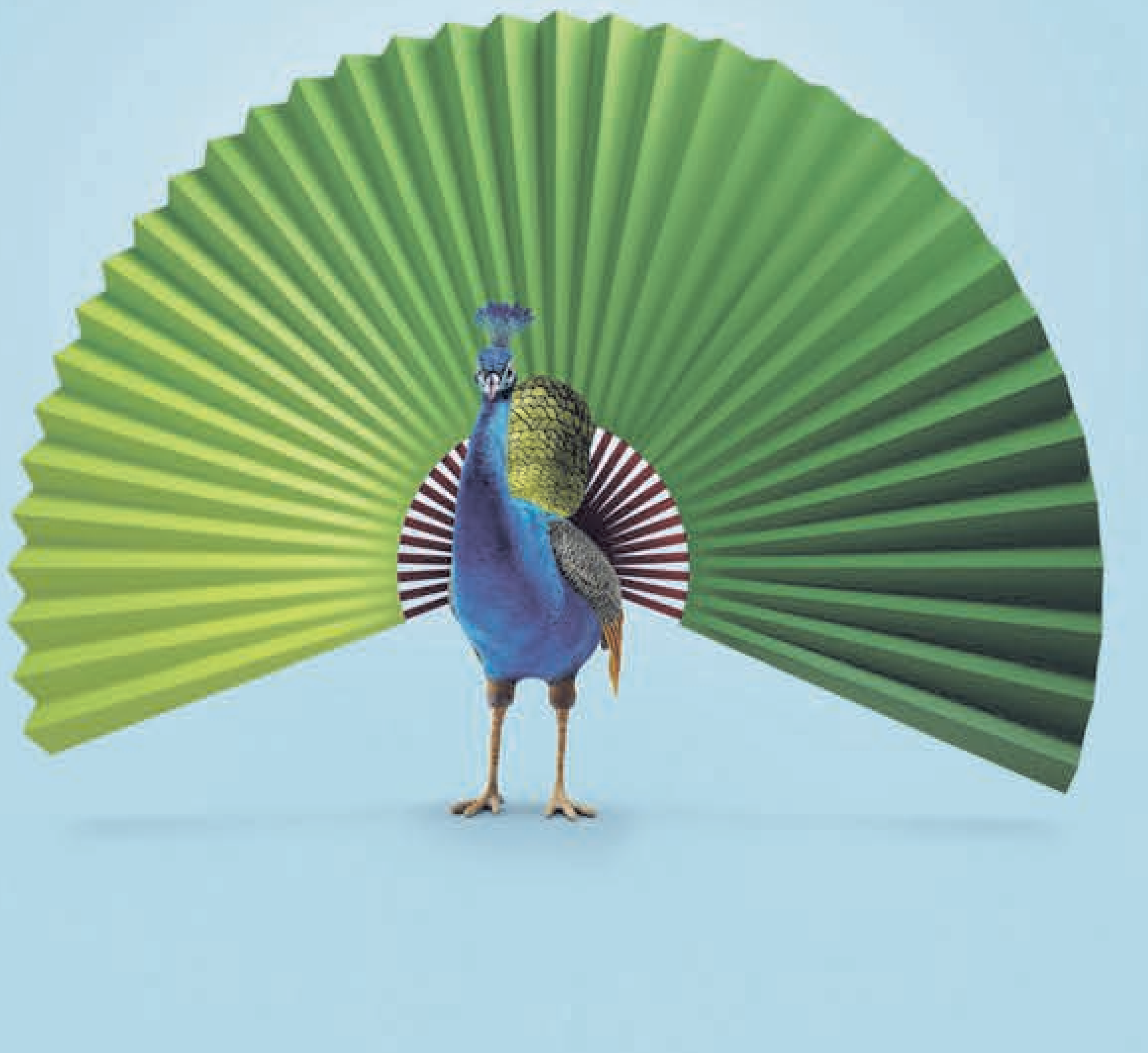


Europe's regions chafe at curbs as second wave hits

Municipal leaders battle restrictions imposed by national governments

BEN HALL — LONDON
GUY CHAZAN — BERLIN
DANIEL DOMBEY — MADRID

Cooking up a storm: restaurateurs protest against restaurant and bar closures in Marseille, France — Daniel Cole/AP

First Madrid, then Marseille, and now Manchester and Munich.

Political leaders in big European cities have resisted restrictions imposed by national governments in a sign of how disagreements between central, regional and local authorities are weighing on efforts to contain the pandemic.

The UK joined countries where tensions between levels of government have boiled over. Each has its own structural and historical quirks, but uniting them is the challenge of balancing co-ordination and decentralisation against a backdrop of often febrile politics.

"This is an absolutely central question everywhere in Europe," said Nicolas Bauquet, associate director of the Institut Montaigne, a Paris-based think-tank, who has been researching the interaction between national and local authorities during the pandemic.

In France, Italy and Spain as well as the UK, some local leaders have railed against the perceived insensitivity of strict central government mandates.

But in regions including Scotland and Wales it is the other way round: leaders are frustrated that other administrations have refused to follow their calls for tougher measures.

The same is true in Munich, the Bavarian capital, in a country that has been praised for its decentralised management of the pandemic. Echoing concern over the absence of a unified German policy, Markus Söder, the Bavarian premier, said last week that "federalism is increasingly reaching its limits".

Responsibility for healthcare is devolved to regional executives in many parts of Europe, creating strains between layers of government.

These were exacerbated when national authorities acquired emergency powers to restrict freedoms and business activity. Now the second wave is making frictions even harder to manage, as policymakers favour localised controls over nationwide lockdowns. Such controls seem insufficient to some. To others they are punitive.

Andy Burnham, mayor of Greater Manchester, accused Britain's Conservative government of "playing poker with people's lives" after it imposed tighter controls on his region against the wishes of municipal leaders.

Mr Burnham, a Labour politician, had been negotiating for additional financial support for businesses and employees when Boris Johnson's government, as he put it, "walked away".

Civic leaders in Marseille were furious last month when it became the first big French city to face tighter second-wave restrictions imposed from Paris, including the closure of bars and restaurants. The Association of French Mayors accused the government of adding a "crisis of trust to a crisis of health".

In Belgium, which is fighting one of the highest infection rates per capita, the crisis has renewed questions about co-ordination in a decentralised nation.

Its struggles were underscored last week when Sophie Wilmès, who led the country's pandemic response as prime minister until a new government was formed this month, was admitted to intensive care with Covid-19.

Italian PM Giuseppe Conte has sought to pre-empt skirmishing between Rome and northern regional presidents from the nationalist opposition League by devolving decisions over fresh restrictions to the regional level. Critics have accused him of an absence of leadership.

In Spain, tensions between the socialist-led central government and the regions have been building. The biggest clash has been with the conservative regional administration of Madrid, which has disputed the severity of the second wave and the measures needed.

> 'The UK, Spain and . . . Italy are examples of where regionalism was not working well'

Pedro Sánchez, prime minister, invoked emergency powers to impose exit and entry restrictions on the capital region. Isabel Díaz Ayuso, the conservative leader of Madrid's administration, denounced the move.

As contagion rates have risen, the central government and the regions have agreed on a common "traffic lights" system to decide when to tighten restrictions. The Madrid and national administrations have also adopted more conciliatory stances towards each other.

But critics claim Spain's devolved governance model remains broken. Others blame the country's political culture.

In Britain the pandemic has highlighted the asymmetric nature of devolution, with Scotland, Wales and Northern Ireland enjoying a degree of autonomy while England remains centralised bar a few directly elected metropolitan mayors. The metro mayorships outside London were created from 2017 and the pandemic has become the starkest test yet of their influence.

In the UK and Spain, the devolution settlement is still contested, with secessionist forces in Scotland and Catalonia. Cristina Fasone, assistant professor of comparative public law at Rome's Luiss university, said: "The UK, Spain and to a lesser extent Italy are examples of where regionalism was not working well before the coronavirus crisis."

The UK and Spain lacked the features of a federal system like Germany that created a culture of negotiation, Ms Fasone said. Germany's 16 states, or *Länder*, have the same powers and are represented in the upper chamber of the federal parliament. It is the states that are responsible for protecting Germans from infection, so policy was hammered out in meetings between state governors and Chancellor Angela Merkel.

Yet the benefits of Germany's decentralised system have been less obvious recently. Earlier this month a regular conference of the governors and Ms Merkel failed to come up with a new set of rules to deal with infections.

Mr Söder, the Bavarian premier, said central government needed more power to issue federal regulations, such as a requirement to wear masks.

"But the others just didn't want to listen," said Ursula Münch, head of the Academy for Political Education in Tutzing. "They didn't want to follow him, and so there was no agreement. And that's when Germany's federal approach doesn't really work."

Additional reporting by Michael Peel

See FT series/Editorial Comment/ Opinion/Lex

Radical Islamism

French goods boycott grows after Macron crackdown

SIMEON KERR — DUBAI
DAVID KEOHANE — PARIS

A boycott of French goods in Kuwait and Qatar is gathering momentum in reaction to popular disquiet at President Emmanuel Macron's crackdown on radical Islamism.

Calls for Muslims to stop buying French produce have been escalating across social media, prompting supermarket chains in the two conservative Gulf states to pull items from their shelves.

Earlier this month, Mr Macron denounced "separatism" in France and announced plans for strict new controls on religious, cultural and sporting associations.

Following the murder on October 16 of a teacher who had shown caricatures of the Prophet Mohammed in a class about freedom of expression, Gérald Darmanin, French interior minister, proposed a ban on several organisations deemed "separatist".

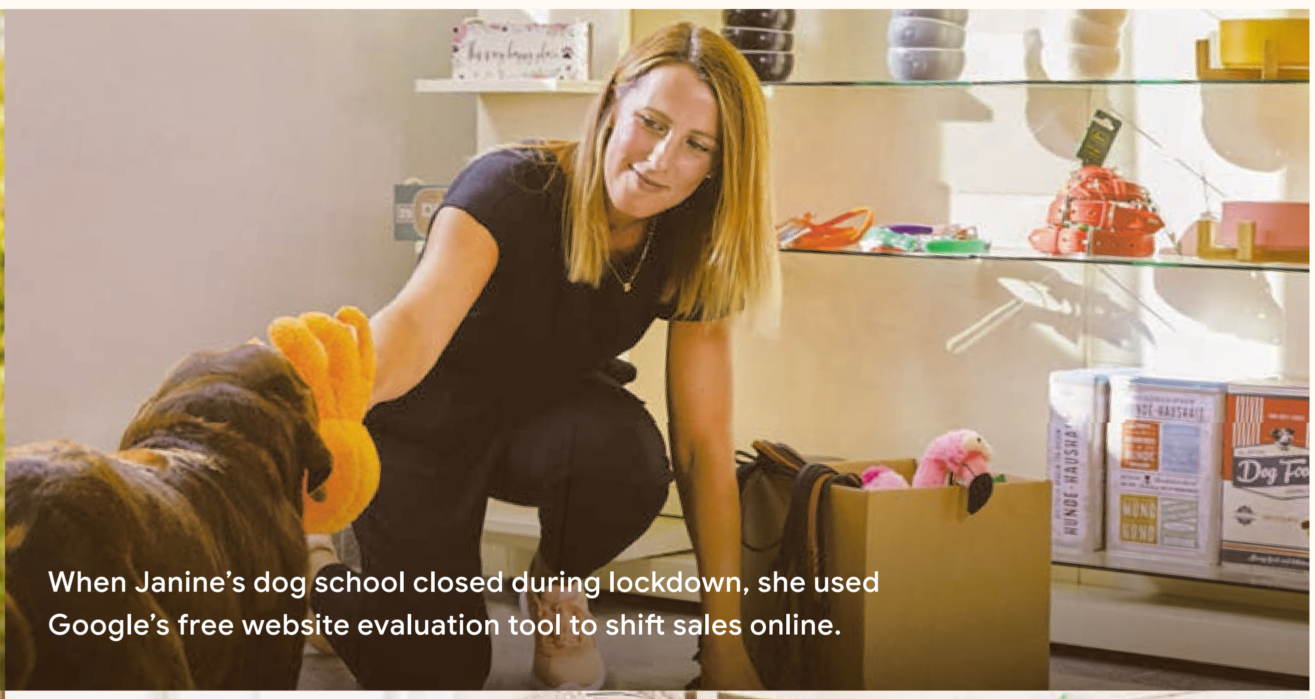
Yesterday the French foreign ministry recalled its ambassador in Ankara a day after Turkish president Recep Tayyip Erdogan said Mr Macron needed mental treatment over his attitude towards Muslims.

The ministry said that Turkey, after failing to condemn the murder of the teacher, had engaged in "slanderous propaganda" against France and "direct insults" against the president. "This behaviour is unacceptable, especially on the part of an allied country," said Jean-Yves Le Drian, foreign affairs minister.

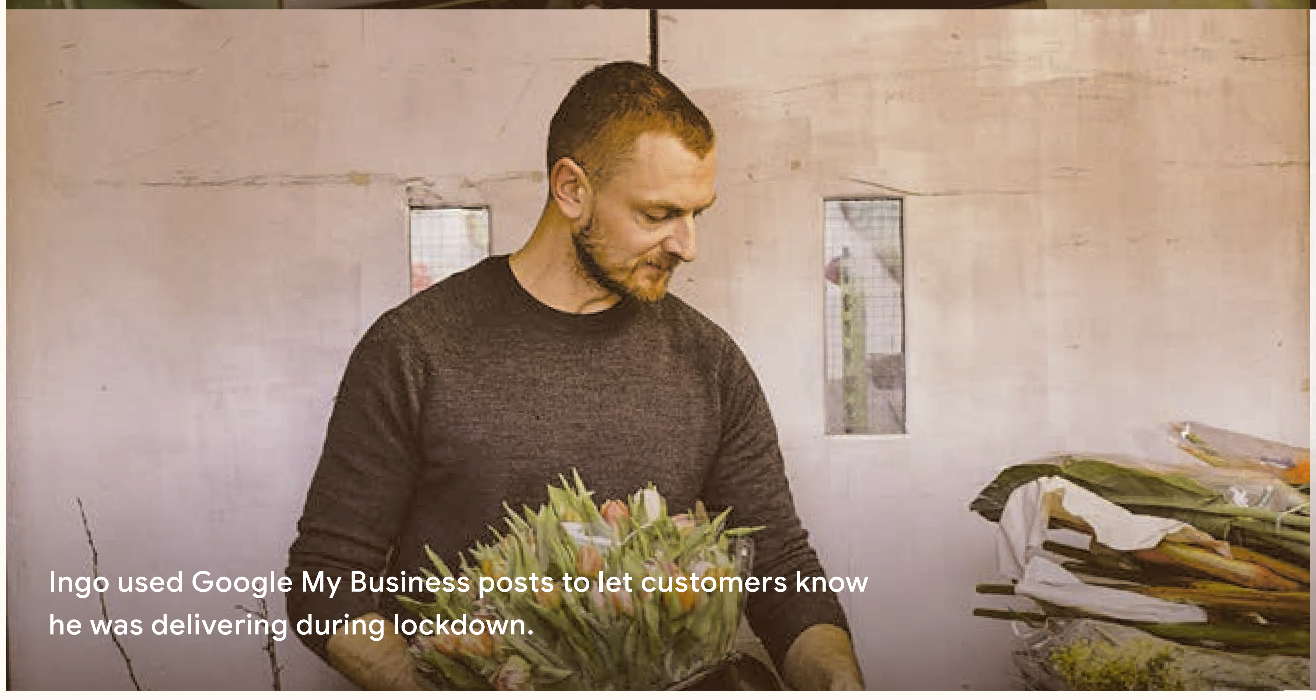
Mr Macron's drive to clamp down on Islamists in France has sparked a wave of anger in the Middle East.

"For the messenger of God, no to French products," read signs above refrigerators cleared of French butter in Kuwait. Social media users also posted pictures of Mr Macron with a footprint on his face below Quranic verses promising "painful punishment" for those who abused the Prophet.

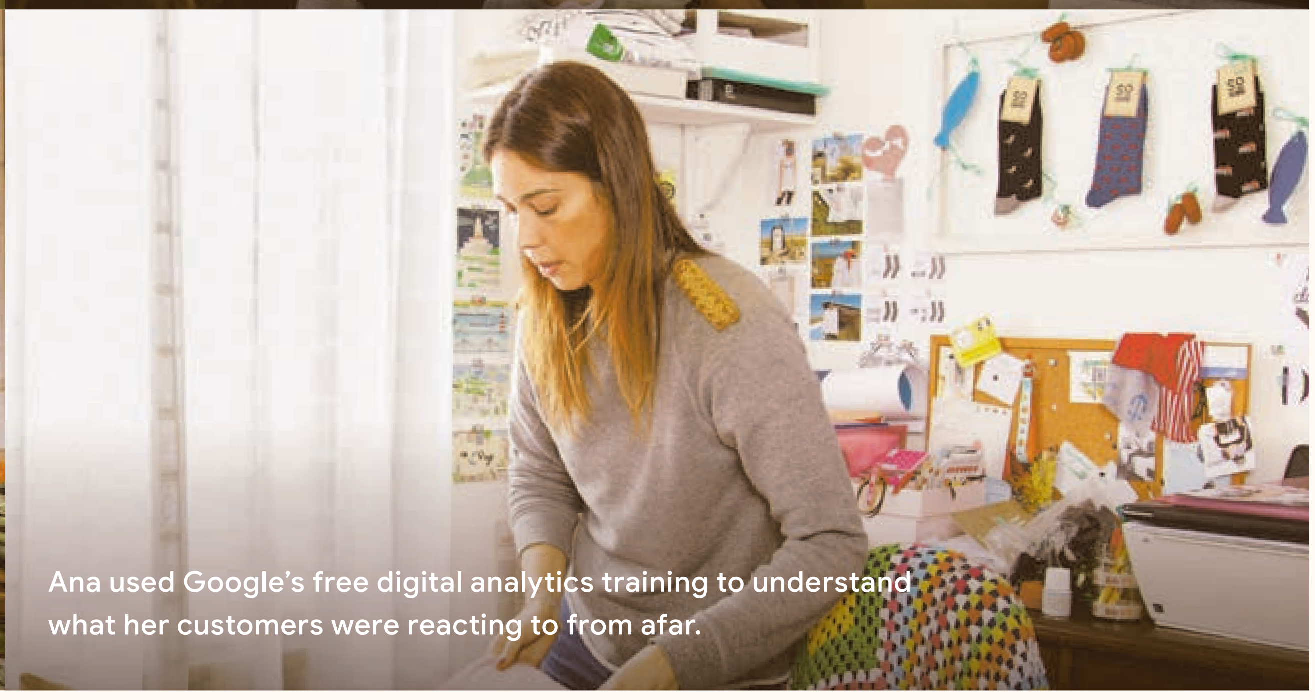
Korina and Kyriakos used Google's free digital training to launch a jobseekers' platform matching farmers with workers.



When Janine's dog school closed during lockdown, she used Google's free website evaluation tool to shift sales online.



Ingo used Google My Business posts to let customers know he was delivering during lockdown.



Ana used Google's free digital analytics training to understand what her customers were reacting to from afar.

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US election. Wisconsin

Trump and racial justice rally black voters

Protests sharpen resolve of residents who usually back Democrats to go to the polls

CLAIRE BUSHEY — CHICAGO

It was President Donald Trump who inspired Wisconsin high school student Courvosia Cotton to vote.

Mr Cotton lives in Milwaukee, a city in a battleground county in a battleground state. He turned 18 on June 1, days after the country erupted into protest after a white police officer killed Minnesota resident George Floyd. The black teenager, who participated in a march this month, did not appreciate the president's impulse to protect officers who "fight back" against protesters.

"When Donald Trump gave police the green light to do whatever they need to handle their obligations that really inspired me to register to vote," he said.

This summer's protests for racial justice appear to be one factor motivating black voters in Wisconsin to head to the polls. Mr Trump won the state four years ago by just 23,000 votes after Hillary Clinton did not campaign there and a restrictive voter ID law depressed voter turnout. Milwaukee, in particular, accounted for more than half the state's drop, with voter participation falling more in black areas than white.

Mr Trump has used the civil unrest to advance a message of "law and order", which is appealing to some Republican Wisconsin voters. But for many black residents, who usually vote Democrat, the protests have sharpened their resolve to vote.

Marchers walked 33 miles from Kenosha to Milwaukee on Tuesday last week, the first day of early, in-person voting in Wisconsin, to encourage voting. The journey took about 18 hours.

Kenosha police officers shot and paralysed Jacob Blake, a black man, in August. The shooting led to protests and riots, where an Illinois man shot and killed two protesters. Members of the Blake family participated in the march.

"We have got to turn our anger and grief and frustration into our votes," Gwen Moore, a Democratic congresswoman representing Milwaukee, said at the rally that concluded the march.

Democratic voter registration spiked nationwide in early June after the George Floyd protests began, said Tom Bonier, chief executive of Democratic data company TargetSmart.

Across the country "voters of colour are turning out at higher rates and are very engaged . . . There's not one single impetus, but it's reasonable to assume that [George Floyd] is an important motivating factor."

As of Thursday morning, the number of African Americans who voted nationwide had increased 144 per cent over the same point in 2016, according to TargetSmart's data. The number of white early voters grew 133 per cent.

Defiant: Jacob Blake Sr, whose son was shot and paralysed by police in Wisconsin, addresses a rally this month. Left, Ruby Lenora casts her ballot on her 73rd birthday at a polling station in Milwaukee
Kevin Hagen/AP; Bing Guan/Reuters

Lower turnout among black voters in 2016 contributed to Mr Trump's victory, said Lilly Goren, a political-science professor at Carroll University in Wisconsin. Turnout among black Wisconsin voters fell from 74 per cent in 2012 to 55 per cent in 2016, while turnout dropped 2 percentage points among white voters, according to a 2017 study from the liberal think-tank Center for American Progress.

Democrats want to ensure the voters activated during Barack Obama's two successful presidential campaigns show up again in 2020. Party strategists and social justice activists are trying to channel the energy from the protests into electoral politics.

Wisconsin required registered voters to show current identification for the first time in 2016, which low-income and minority citizens are less likely to have. The state, which ranks high nationally for voter participation, had turnout drop by 41,000 in Milwaukee.

A 2017 study from the University of Wisconsin-Madison found that for the counties containing the state's largest cities, 11 per cent of registered voters were deterred from voting by the new requirements. That translated to as many as 23,000 people.

Inattention from the Clinton campaign and a lack of funding for get-out-the-vote efforts was also a missed opportunity, said Greg Lewis, executive director of Milwaukee organisation Souls to the Polls. Of the 23,000-vote gap between Mrs Clinton and Mr Trump, he said: "We could have got that with 12, 14, 15 churches. The Democratic party takes the black vote for granted, and the Republicans, they don't even bother."

Mr Lewis said low-income, black residents in Milwaukee were more concerned with personal struggles than either presidential candidate, and many distrusted the existing power structure, he said, adding it was hard to persuade them their vote mattered.

> 'It's reasonable to assume that [George Floyd] is an important motivating factor'

Souls to the Polls is attempting to harness the energy from the protests and to excite potential voters by focusing its message on building power at the local level. "We certainly will be voting for a candidate on November 3, but on November 4 the work really starts."

Democratic presidential candidate Joe Biden has visited the state twice, and vice-presidential candidate Kamala Harris has met black female business owners in Milwaukee.

Not everyone is impressed. A survey of black voters in swing states, including Wisconsin, found that among 18- to 29-year-olds, 47 per cent planned to vote for Mr Biden, a sharply lower percentage than older voters. Another 21 per cent said they would not vote at all.

JoHanna Skildum, a black Milwaukee resident in graduate school in Iowa, attended several protests this summer. She and her peers feel as if Mr Biden has been foisted upon them by their parents and grandparents, but they plan to vote for him. "Honestly, that Joe Biden campaign shirt 'Settle for Biden'? It resonates with all of us," she said.

KC Williams teaches music in Milwaukee public schools and heads Capita Productions, a non-profit company that seeks to foster racial harmony through community theatre. In December, the organisation decided to offer rides to the polls to city residents on election day. Six months later, Mr Williams said, "the protests confirmed our decision".

Mr Williams, who is black and lives in the Milwaukee suburbs, plans to have no more than four people at once in his seven-person van, to maintain social distancing, and he has bought masks and gloves for passengers.

"People are saying, 'If my life is on the line to vote out the current administration so that my grandkids could live with equality, then I'm going to put my life on the line, because I am going to vote'," he said. "If my van runs out of gas, we're going to push it to the polls."

See Opinion

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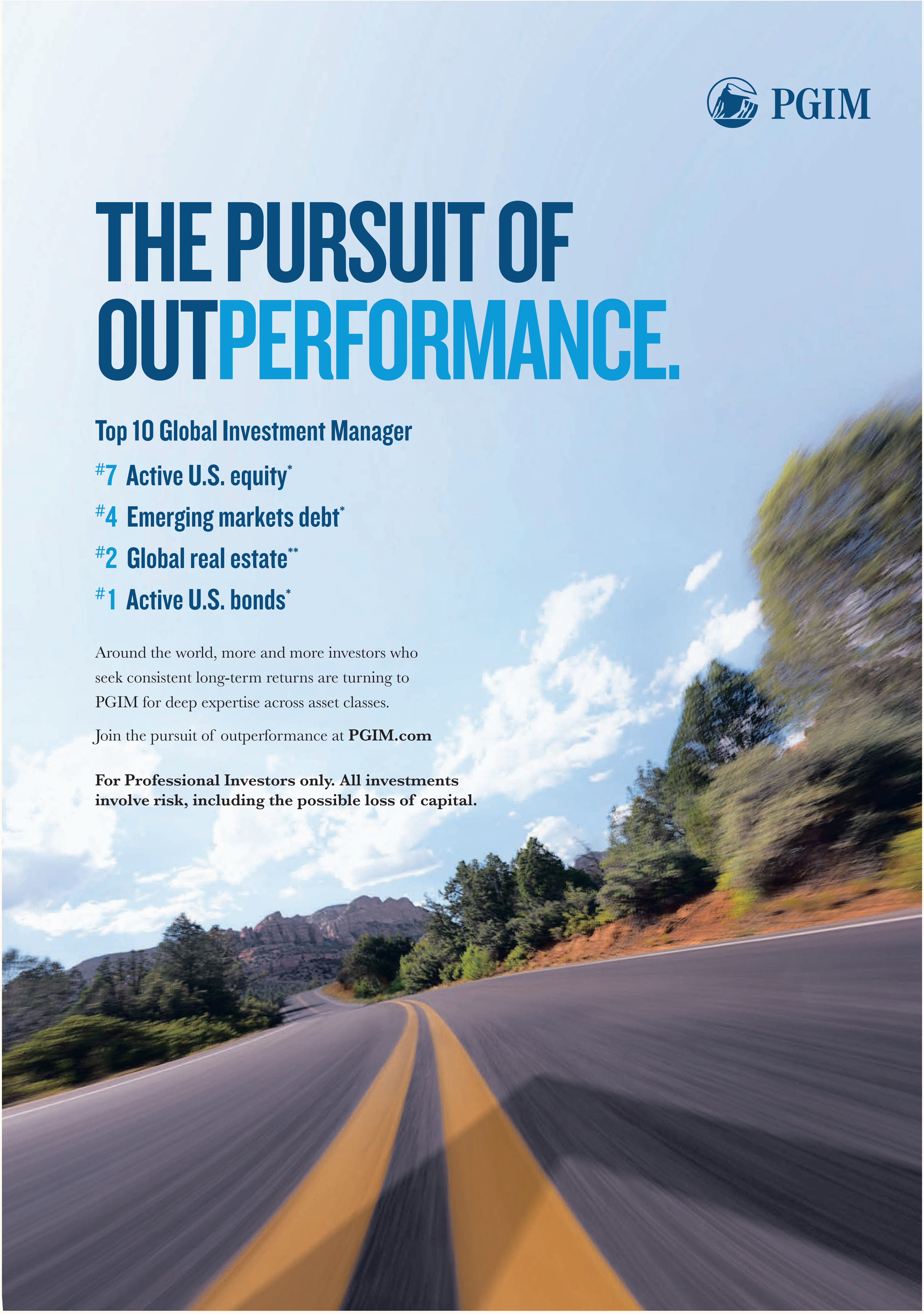
Huawei and ZTE were in the 1990s, a



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Martin Sandbu In uncertain times, long-term goverment spending plans offer an anchor in the storm ➔ OPINION, PAGE 25

Companies & Markets

Cenovus buys Canada rival Husky Energy in $7.8bn deal

- Oil producers join M&A wave
- New entity will be worth C$24bn

DEREK BROWER — NEW YORK
ARASH MASSOUDI — LONDON

Cenovus Energy is to buy rival Canadian oil producer Husky Energy, controlled by Hong Kong billionaire Li Ka-shing, in a C$10.2bn ($7.8bn) deal as the wave of consolidation sweeping North America's battered oil and gas sector gathers speed.

The new company will be worth C$23.6bn, Cenovus said, making it Canada's third-largest oil and gas producer with an output of 750,000 barrels a day concentrated in the bitumen-rich oil sands of northern Alberta, the biggest single source of US crude imports.

The transaction is the latest in a string of North American oil mergers as operators seek to consolidate and cut costs.

> 'We will be a more integrated company, well suited to weather the current environment'

The largest came last week when ConocoPhillips agreed to buy Concho Resources in a deal worth $9.7bn, marking another big bet on the future of US shale. Other deals include the $7.6bn takeover of US shale group Parsley Energy by Pioneer Natural Resources, Chevron's $13bn plan to buy Noble Energy and Devon Energy's $12bn deal to combine with rival WPX Energy.

The plummeting oil price had caused shares in Cenovus to fall by more than 60 per cent since the start of January, and Husky's by almost 70 per cent.

The deal was conceived as a nil-premium merger, but because of the divergence in share prices, Cenovus has agreed to pay a 21 per cent premium, or 23 per cent including warrants, to Husky shareholders. The transaction values Husky's shares at about $3.8bn, or $10.2bn including debt.

"We will be a leaner, stronger and more integrated company, exceptionally well suited to weather the current environment and be a strong Canadian energy leader in the years ahead," said Alex Pourbaix, Cenovus chief executive.

The new company will be 61 per cent owned by Cenovus shareholders, with the remainder held by Husky's investors. Two entities controlled by Mr Li, which own about 70 per cent of Husky at present, will emerge with more than 27 per cent of the new company's common stock.

After the withdrawal of several international oil companies from the Alberta oil sands — where the high cost of producing bitumen, environmental opposition, and slow progress in building new pipeline infrastructure have deterred investors — the Cenovus deal points to the sector's further consolidation in the hands of local companies.

Both companies were among oil-sands operators forced to shut some production this year as prices fell.

Canada's production of bitumen — ultra heavy oil that must be upgraded before refining into fuels — has attracted environmental opposition because of its carbon intensity and its vast ecological footprint in northern Alberta.

Insufficient pipeline capacity to ship growing volumes of oil-sands production to markets beyond North America has periodically forced deep discounts on Canadian exports. The low quality of Alberta's oil also makes it cheaper. While US oil has traded at about $40 a barrel in recent weeks, the benchmark for Canadian oil has been priced at about $30 a barrel.

A new 12-person board will comprise eight directors from Cenovus and the remainder from Husky.

Green expectations Xi's carbon pledge puts wind in the sails of 'clean energy' shares

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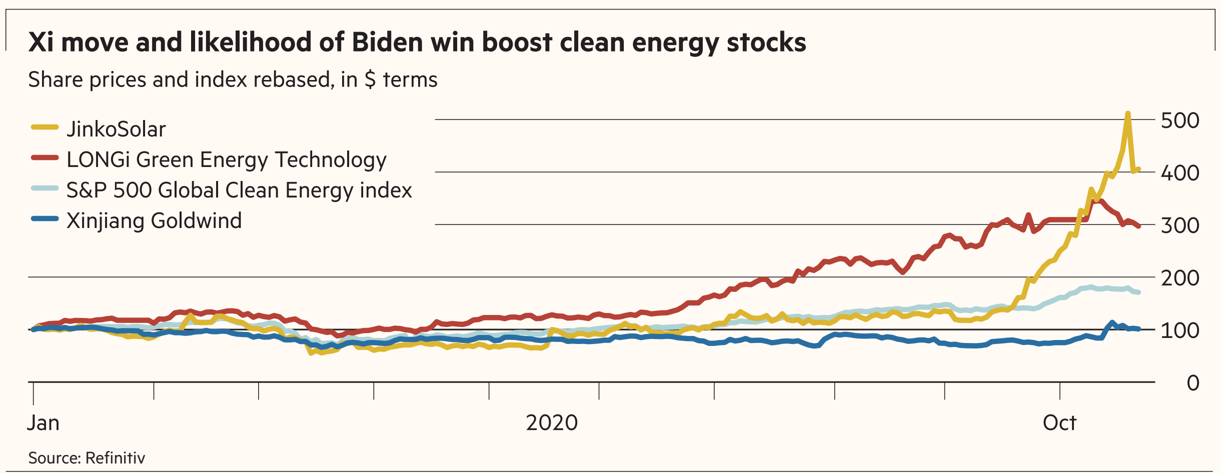
职位: 超净员工

Qilai Shen/Bloomberg



Xi move and likelihood of Biden win boost clean energy stocks

Share prices and index rebased, in $ terms

Source: Refinitiv

HENRY SANDERSON

President Xi Jinping's vow last month that China will be carbon neutral by 2060 and expectations that the US election could reshape America's energy sector have fuelled a rally in global solar and wind producers.

Shares in the S&P Global Clean Energy index are up 71 per cent since the start of the year and by 22 per cent since Mr Xi's speech on September 22, while Hong Kong shares of Chinese wind turbine maker Xinjiang Goldwind — the world's third-largest such group — have surged 46 per cent since the speech.

In July, US presidential hopeful Joe Biden put clean energy at the centre of a $2tn plan to revive the US economy. The candidate, who leads incumbent Donald Trump in national polls, is pledging to reduce emissions to net zero by 2050.

Mr Xi's address to the UN two months later gave green energy stocks a further boost. "We aim to have CO2 emissions peak before 2030 and achieve carbon neutrality before 2060," he told the General Assembly.

In early October, the world's largest solar and wind power generator surpassed oil and gas heavyweight ExxonMobil in stock market value. NextEra Energy, a Florida-based utility and power producer, rose to a market capitalisation of $138.6bn, exceeding Exxon's by $700m.

This year NextEra's shares are up 25 per cent while Exxon's shares have lost 50 per cent of their value. In China, meanwhile, shares in solar company Longi Green Energy Technology have more than tripled in value this year, valuing the company at more than $38bn.

Solar and wind companies will be the "biggest and most obvious beneficiaries" from the shift to cleaner forms of energy in China, according to analysts at Citi.

Chinese solar stocks would benefit the most in the next 12-18 months as development of solar projects accelerated, analysts at JPMorgan said. Wind power, however, could see a downturn next year before recovering towards the end of China's 14th five-year economic plan, which runs from 2021 to 2025, they added.

Alibaba's Ma rails at global financial regulations

YUAN YANG — BEIJING

Alibaba founder Jack Ma has blasted international financial regulations and said China needs to chart its own path, days before Ant Group launches the world's biggest initial public offering.

"The Basel Accords are like an old people's club . . . we can't use yesterday's methods to regulate the future," Mr Ma said at a conference in Shanghai at the weekend, referring to the international banking supervision framework.

Mr Ma said the challenges that the rules were designed to resolve were not relevant to China's phase of development. "Many of the world's problems" stemmed from "only talking about risk control, not talking about development, not thinking about young people's or developing countries' opportunities", he said.

The dual listing in Hong Kong and Shanghai of Ant, the financial services group, is expected to raise at least $30bn, in an IPO that would top the previous record of $29.4bn in 2019 by Saudi Aramco, the state-owned oil company.

The Chinese group is controlled by Mr Ma, who has kept a low profile since retiring from his position as chair of Alibaba in 2019. Ant has been valued at $318bn by some analysts and Mr Ma has pledged to reduce his direct and indirect stakes to 8.8 per cent.

Ant runs Alipay, one of China's two biggest mobile payment platforms, as well as a host of fintech services including the Sesame Credit personal credit rating system.

China has roughly 460m people without formal bank credit histories. Small and medium-sized enterprises have struggled to obtain loans from the traditional banking sector, which is dominated by big state-owned banks that like to lend to large companies and state-owned groups.

Mr Ma said the financial system should rely less on big banks and more on an ecosystem of "lakes, ponds, streams and brooks" that carries capital into different corners of the economy.

He also suggested moving away from a "pawnshop" mentality of banks taking collateral for loans and towards credit-ratings based on big data. The Basel Accords require banks internationally to keep sufficient collateral to absorb potential losses.

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Technology. Semiconductors

China puts its chips on the table

Beijing's push to build sector takes on added urgency as Washington sanctions tighten

KATHRIN HILLE — TAIPEI
QIANER LIU — SHENZHEN

When China's Communist party delegates meet today to thrash out their economic plan for the next five years, the chip industry will be high on the agenda.

Beijing's 30-year push to build a homegrown semiconductor sector has taken on a new urgency as the Trump administration tightens its chokehold on China's technology groups.

Washington has barred companies worldwide from manufacturing chips for Huawei, the telecoms business, in what is a potential death sentence for its affiliate, HiSilicon, China's largest chip designer. The US has also restricted American companies from supplying Semiconductor Manufacturing International Corporation (SMIC), China's most advanced chipmaker, with the machines needed for making chips.

Experts and industry executives believe that even with China set to pour another $1.4tn into its technology sector by 2025, this targeted US effort to strangle the country on supplies of semiconductors and the means to fabricate them makes Beijing's push to develop the domestic chip sector more difficult.

China's efforts to develop its semiconductor sector in the past prioritised "basic building blocks" such as chip manufacturing, packaging and testing, said Randy Abrams, head of Asian technology research at Credit Suisse. "But now they need to try to become less reliant on the US where they can."

Beijing's priorities include boosting its technological prowess in electronic design automation (EDA) — the software used in chip design — and in making the machines deployed in chip fabrication plants. US EDA tool makers Cadence and Synopsys have a stranglehold on the global market for advanced chips, while Applied Materials, Lam Research and KLA Tencor dominate critical segments of cutting-edge chip manufacturing equipment.

Analysts said China was today where Huawei and ZTE were in the 1990s, a low-cost provider behind overseas peers in technology. "The gap is not only about a certain dollar amount, you also need the time to develop the experience and talent," Mr Abrams said.

The tools offered by Huada Empyrean, China's most advanced EDA company, are significantly behind the capabilities required by SMIC, China's biggest chipmaker, and chip industry leader Taiwan Semiconductor Manufacturing Corporation to make their most advanced products.

"Making a breakthrough in semiconductor equipment is the biggest hurdle," said Zeng Guan-wei, an analyst at research firm Trendforce, who added that fewer than 10 per cent of these machines used in China are made by domestic companies.

Equipment makers were no more than an afterthought in Beijing's past spending sprees for the sector — and those were vast. According to the Semiconductor Industry Association, Chinese chipmakers have been handed about $50bn in subsidies just from the central government over the past 20 years. That is 100 times the amount received by companies in Taiwan, which alongside South Korea is the world's largest chip manufacturing hub.

An OECD study of 21 chipmakers worldwide identified four Chinese companies among the largest recipients of state funding. The OECD found SMIC and Tsinghua Unigroup, one of China's top chip design houses which has invested in production, received state support totalling more than 30 per cent of their revenues between 2014-18.

Despite that, China's chip production has fallen far short of meeting the country's needs. According to the China Semiconductor Industry Association, only 27 per cent of chips sold in the country were made domestically, with the remainder covered by imports.

Beijing has vowed to invest heavily as part of its response to pressure from Washington, in addition to new tax incentives for chipmakers. The 14th Five-Year Plan is expected to bring more support. But some warn China needs to recalibrate how it supports the industry.

"I think funding is not a problem now," said an engineer at SMIC. "But how will these support funds be distributed? Will some of the relatively backward but key parts for the chip industry in China get more attention, such as EDA or manufacturing equipment?"

For example, he said, software experts could make more money working at internet companies than at EDA ones.

The industry has also suffered because of inefficiency. Over the past three decades, hundreds of chip projects have failed because of investors lacking the required technical knowledge or after having redirected subsidies into unrelated property projects.

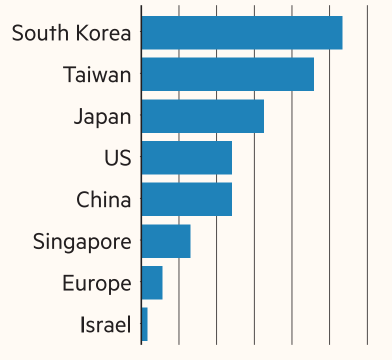
The promise of more government support for the industry could worsen the situation. In the first nine months of 2020, more than 13,000 Chinese enterprises registered as chip companies, even though many had no experience.

The National Development and Reform Commission, China's chief state planning body, said this week the latest push should focus on preventing such waste. "There seems to be a tendency in China that enterprising people seize upon the opportunity to cast themselves as patriotic investors when there is nationalist rhetoric," said Douglas Fuller, a professor at City University of Hong Kong and an expert on China's industrial policy in the chip sector.

"I am hearing again and again how bad things are in most other sectors, so the prospect of big funding in the chip sector works like a magnet."

Semiconductor manufacturing capacity by country

300mm, 2019 (%)



Source: Semiconductor Industry Association

Gupta steel swoop threatens German old order

British tycoon's bid for Thyssenkrupp is likely to face obstacles as concerns surface over his business empire

MICHAEL POOLER, JOE MILLER AND ROBERT SMITH

Hot metal: with excess production capacity dragging down prices and profits, experts say consolidation is key to strengthening the steel sector — Wolfgang Rattay/Reuters

From a makeshift command centre deep in Germany's rustbelt region, Sanjeev Gupta sketched a plot to seize control of one of the country's oldest — and most symbolic — industrial concerns.

The British tycoon this month tabled an offer for Thyssenkrupp's ailing steel unit, which traces its roots to a foundry built by Friedrich Krupp in the Ruhr Valley in 1811.

The approach by Liberty Steel, a privately owned company that five years ago was hardly known and has no real presence in Europe's top economy, kick-started a process that could see the unit fall into foreign hands for the first time.

If the move underlined the faded fortunes of the German group, it showed the opposite of Liberty's founder.

The former commodities trader has rapidly assembled a metals-to-energy $20bn metals powerhouse through acquisitions around the world. Clinching Europe's second-largest steelmaker would be a crowning moment — and his biggest deal yet.

But for that to happen, the 49-year-old entrepreneur must overcome a number of obstacles — even if Thyssenkrupp's management proves amenable — including a possible backlash from unionised workers and doubts over his credibility.

"We see value where others don't," Mr Gupta said of his latest target, which is set to lose €1bn this year. "And when we do, we invest and change what needs to be changed."

He added that he was "in it for the long run" and would be able to plough enough money into the new entity to transform it into a low-carbon steelmaker. Others are less convinced. "It's his ego talking here," said one industry adviser. "Why would you take on a big company with massive overheads and a significant challenge in the future in the transition to decarbonisation?"

Not least among the obstacles is how a self-styled industrialist whose rise has attracted scepticism will fund a business, worth almost €3bn according to some analysts, that is bleeding cash and will require huge investments to remain competitive.

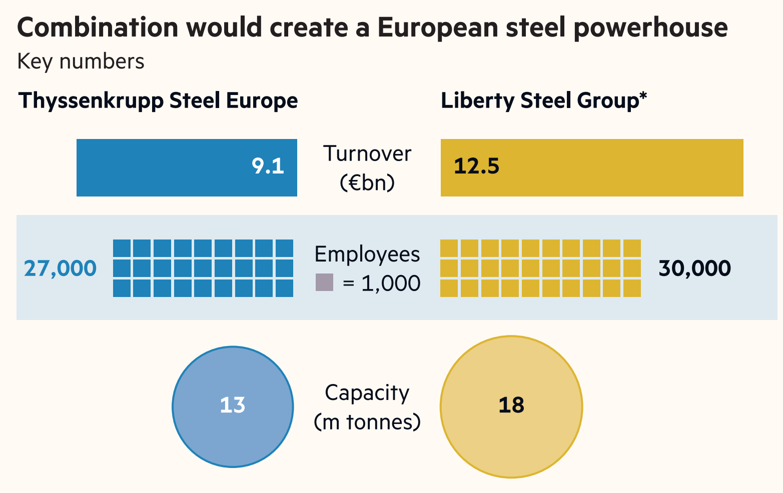
A lack of transparency over Liberty's finances has provoked questions over the sustainability of its growth and strategy, while its owner's borrowing arrangements have piqued regulators' attention. A tie-up would result in a producer with $25bn in turnover and a workforce of more than 50,000, encompassing both companies' European sites and Liberty's production facilities in Australia, the US and India.

But this could dilute the importance of Thyssenkrupp's steel operations, which are largely based in the state of North Rhine-Westphalia, home to all three candidates to succeed Angela Merkel as head of the ruling Christian Democrat party.

"Thyssenkrupp is a very important employer in the region and it also emits some 2 per cent of all sorts of German carbon emissions, so in many areas, it's very political," said Ingo Schachel, an analyst at Commerzbank.

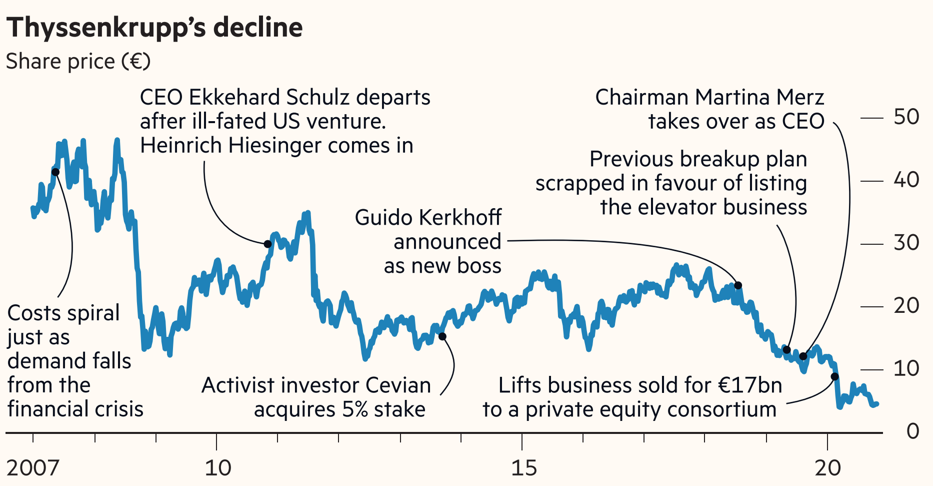
The powerful IG Metall union is opposed to a foreign takeover and is lobbying for the German state to take a stake, fearing further job losses on top of 6,000 announced across the group.

"To solve its many problems, Thyssenkrupp steel needs capital, not a new owner," said Jürgen Kerner, head treasurer of IG Metall and a member of the company's supervisory board.



Combination would create a European steel powerhouse

Key numbers



Thyssenkrupp's decline

Share price (€)

Sources: FT research; Refinitiv * Figures include Liberty facilities outside Europe

Liberty will also be mindful of the Krupp Foundation, Thyssenkrupp's biggest shareholder with almost 21 per cent, which has the task of "preserving the integrity" of the historic enterprise, but maintains it will not interfere with day-to-day management of the group.

With excess production capacity dragging down prices and profits, experts say consolidation is key to strengthening the steel sector. The industry in Europe in particular faces challenges from the impact of Covid-19, high levels of imports and pressure to meet EU climate change targets.

Yet rather than rationalise, Mr Gupta plans to increase output. Liberty says its assets complement Thyssenkrupp's with little overlap, making it less likely that Brussels would reject the deal on competition grounds. But this also limits the scope for cost cuts.

> 'To solve its many problems, Thyssenkrupp steel needs capital, not a new owner'

Even if there is a logic to the combination, Mr Gupta's record is likely to receive close examination in Germany.

Since reopening a Welsh steel rolling mill in 2015, the Indian-born UK national has snapped up struggling furnaces, aluminium smelters, engineering plants and mines under the banner of GFG Alliance, a loose collection of Gupta family interests that include Liberty.

Mr Gupta's turnround tactics have included seeking support from public authorities eager to secure jobs. As GFG Alliance is not a legal entity itself but a loose collection of dozens of individual businesses, there is little insight into its overall finances and performance.

A year after pledging to incorporate its steel ventures into a single company and publish consolidated financial statements, Liberty has blamed the pandemic for delays and promised the accounts by the end of 2020.

Liberty said its non-binding indicative bid included "a number of letters from financial institutions" about the potential provision of funds "with no commitments at this stage as is typical for this phase of the offer process". It only named Credit Suisse, which declined to comment.

Until now, GFG's expansion has relied on forms of finance linked to customer payments that are more expensive than standard corporate debt.

Billions of euros have come this way from Greensill Capital, a start-up backed by Japan's SoftBank that specialises in supply chain finance. In effect, this means paying suppliers early for a fee, or providing upfront cash for client invoices not due to be paid for months.

A German bank owned by Greensill has been probed by the country's financial regulator, BaFin, over its level of exposure to companies connected to GFG, as first reported by Bloomberg.

Greensill said it did not comment on work for clients, adding it was in compliance with all regulatory requirements in the jurisdictions where it operates.

And a lender owned by Mr Gupta, Wyelands Bank, has come under scrutiny by the UK's banking watchdog over its loans to shell companies that finance GFG entities.

If instead Liberty tries to raise conventional acquisition finance secured against the Thyssenkrupp assets, it will have to convince lenders there will be no repeat of its first big foray into traditional corporate borrowing.

Within a year of securing a $350m term loan from a club of lenders to fund its purchase of a big aluminium smelter in France in 2018, the borrower fell into technical default. While no scheduled payments were missed, the issues included delayed filing of audited accounts and a requirement for Mr Gupta to put more cash in the venture.

However he funds the bid, there is no reason to believe Mr Gupta will benefit from being a frontrunner, according to people close to Thyssenkrupp.

His approach could encourage other suitors, such as SSAB or Salzgitter, as well as Tata Steel Europe, whose proposed merger with Thyssenkrupp's unit was blocked by Brussels last year.

But Martina Merz, chief executive of Thyssenkrupp will know that finding a solution for the storied business will become much harder once campaigning for Germany's election begins next year.

Aerospace & defence

Industry body warns over EU talks

PEGGY HOLLINGER
INTERNATIONAL BUSINESS EDITOR

Ministers' failure to prioritise agreement on aircraft certification standards in Brexit negotiations is threatening the future of the UK's £34bn-a-year aerospace sector, according to the head of an industry trade body.

"We are now at that critical point where political decisions on the negotiating priorities with Europe need to be made," said Tony Wood, president of British trade association ADS and chief executive of aerospace supplier Meggitt.

He added that the aerospace industry "absolutely requires a comprehensive bilateral agreement with Europe if we are to preserve our position at the top table and number two position in the world".

Aerospace executives are frustrated that the government has focused on fishing rights in Brexit negotiations, which has hindered a wider trade agreement that would help protect the industry's more than £30bn in exports.

Mr Wood said that there appeared to be "higher political priorities in other industries".

"But it is time to choose," he added. "The aerospace and defence industries underpin 375,000 jobs in the UK and they are some of the best paid jobs in engineering and advanced manufacturing."

Many in the sector fear that failure to strike a bilateral agreement will add cost and complexity to the certification process, just as the industry reels from the effects of the coronavirus pandemic and embarks on the biggest technological change since the invention of the jet engine.

Thrust: a Rolls-Royce engine is displayed at the Singapore Airshow

Aircraft and aero-engine makers are investing heavily in hybrid-electric and hydrogen-powered flight, in an effort to achieve the industry's pledge to be net carbon neutral by 2050. Airbus has said it aims to launch a green aircraft by 2030.

Currently, responsibility for certification lies with the European Union Aviation Safety Agency, which has mutual recognition agreements with regulators around the world. If there is no deal, however, all UK designed parts, components and systems for aircraft will become invalid in the EU on January 1.

Big companies such as Rolls-Royce have already shifted design functions out of the UK to the EU to avoid the extra cost. But smaller companies in the supply chain do not have the resources to set up EU-based design offices.

The industry is anxious that once the transition period for Brexit ends on December 31, the UK's Civil Aviation Authority will not yet have sufficient competence to certify both the existing and new technologies.

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LDN CITY AIRPORT

Financials

BlackRock and Vanguard in climate storm

Hohn calls for big asset managers to challenge groups on global warming

ATTRACTA MOONEY
INVESTMENT CORRESPONDENT

Billionaire hedge fund manager Christopher Hohn has accused BlackRock and Vanguard of acting like sheep when it comes to climate change, arguing that large asset managers are taking "insufficient and ineffective action" on global warming.

Sir Christopher, through his charity The Children's Investment Fund Foundation, has written to seven of the world's biggest asset managers, calling on them to force companies around the world to set out transition plans towards a low-carbon world.

His letters are the latest example of the intense scrutiny facing the $89tn asset management industry over its role in tackling climate change. Many large fund managers, which have immense sway over the world's biggest businesses, have warned that global warming could hit investment returns.

But Sir Christopher accused "most asset managers" of "total greenwash", arguing they were far too complacent about the risks of global warming.

"The asset management industry is a joke in respect to what they are actually doing [around climate change]," he said. "They talk but they don't actually do anything effective."

In the letters, Sir Christopher and CIFF chairman Graeme Sweeney said asset managers such as BlackRock should "show leadership", calling on them to file shareholder resolutions at annual meetings that ask companies to prepare transition plans to reduce their carbon emissions.

Sir Christopher's hedge fund, TCI, is already taking this approach, including at Spanish airport operator Aena, which this week agreed to back his demands for an annual shareholder vote on its climate plans.

> 'A lot of them will say "we will vote for someone's else's resolution", but why aren't they filing their own'

However, only a handful of big asset managers have filed motions over climate change at annual meetings in recent years, despite the investment industry becoming increasingly outspoken about the risks of global warming. Coalitions of smaller investors have instead filed the majority of shareholder resolutions on climate change.

"Asset managers are sheep," Sir Christopher said. "A lot of them will say 'we will vote for someone's else's resolution', but why aren't they filing their own resolutions?"

Mr Sweeney added: "The major breakthrough with Aena shows that this approach is possible. It is not difficult for leading investors to table such resolutions. They are choosing not to do so."

The pair said the voting records of BlackRock, Vanguard, Capital Group, Fidelity Investments, Goldman Sachs Asset Management and State Street Global Investors on big climate resolutions were appalling. They added that JPMorgan Asset Management's voting record was weak. "Pension funds should fire asset managers that fail to use their voting rights to ensure companies produce credible transition plans for net zero [carbon emissions]," Sir Christopher said. "Pension consultants also need to wake up to this."

Vanguard said it "cares deeply about the long-term impact of climate change and we continue to engage with company leaders and boards on this important issue".

BlackRock has begun voting against directors over climate concerns and is reviewing its engagement priorities, which includes looking at how it votes on shareholder resolutions.

Travel & leisure

Curzon boss urges cinemas to embrace streaming

ALICE HANCOCK

The boss of the UK's Curzon cinema chain has criticised what he calls the industry's "outdated" model and said movie theatres will not survive unless they embrace streaming services and make deals with studios that will see their exclusive hold on new film releases cut.

Philip Knatchbull, Curzon's chief executive, said the pandemic had "released an enormous pent-up demand for change that had been held up by outdated business models predicated on a large number of admissions". After the crisis, the industry would be much smaller but "healthier", he said.

Covid-19 has accelerated an existential crisis for cinema chains as they struggle to compete with streaming platforms. With audience levels at record lows due to the virus, Hollywood studios have postponed the release of films to 2021 or put them directly online, leaving cinema operators with few titles to show.

Cineworld, the world's second-largest cinema company, put 45,000 jobs at risk after it closed all of its US and UK screens earlier this month, blaming the delay of a string of hit releases expected this autumn, including the latest James Bond film. The biggest cinema operator, AMC, has fought to stay open but has cut its hours and warned investors it could run out of cash by the end of the year.

> 'Cineworld was looking down a dark space because it was trying to control the theatrical window'

In the UK, industry trade body UK Cinema Association said that at least two-fifths of cinemas were closed and it was in "active discussion" with the government for more financial support.

But Mr Knatchbull said that multiplex owners had relied too heavily on driving footfall by holding on to a long theatrical window — the exclusive period that cinemas have to show new releases before they are sold on streaming platforms or DVD.

"It isn't that James Bond was the final straw for Cineworld. It's that Cineworld was looking down a dark space anyway because it was relying on trying to control the theatrical window," he said, adding that a spate of debt-fuelled deals before the pandemic added to the precariousness of its position.

He argued that the window should be smaller, allowing consumers to watch new releases online soon after they debut in cinemas, he said: "We need to give consumers what they want, when they want, how they want."

Curzon, which operates 13 cinemas, runs an online film service with a pay-per-watch model, and a distribution arm, which was responsible for the Oscar-winning Korean film *Parasite* last year. It has also done a deal with Netflix, allowing the chain to show a selection of the streaming giant's films on its screens as they are released.

While admissions at Curzon cinemas are only 20 per cent of their 2019 level since reopening, the company's streaming service experienced a 500 per cent rise in user numbers during lockdown, a figure that has since fallen back but is still up 300 per cent compared to last year. Curzon has cut around 20 per cent of its head office and cinema jobs this year.

Market questions. Global economy

Europe's central bankers face rocky time while BoJ focuses on outlook and US expects GDP lift

FT REPORTERS

How will the ECB address mounting economic challenges?

When European Central Bank president Christine Lagarde and other top policymakers meet on Thursday, they will be uncomfortably aware of the mounting challenges to the eurozone economy.

Deflation has tightened its grip on the bloc, the second wave of coronavirus infections threatens to drag it into a double-dip recession, talks on the EU's recovery fund have stalled and time is running out for a post-Brexit trade deal.

Add to this the potential for financial markets to take a hit if the US election leads to a disputed result next month, and it means there are a rocky few months ahead for Europe's central bankers.

Yet most ECB watchers expect Ms Lagarde to say the central bank is keeping its main monetary policies on hold for now, while sending a clear signal that it is preparing for more easing at its next meeting in December.

"The ECB could pave the way for more stimulus in December without showing its cards," said Carsten Brzeski, economist at ING.

Members of the ECB governing council expect it to debate how much one-off factors, such as Germany's temporary cut in value added tax, are to blame for the two consecutive months of deflation. The council's more conservative members will argue that since there is still more than €750bn of firepower left in the ECB's emergency €1.35tn bond-buying programme the bank does not need to act urgently.

Most economists predict the ECB will expand its bond-buying plans by as much as €500bn in December, when Morgan Stanley analysts also expect it to extend a programme of ultra-cheap loans for banks at rates as low as minus 1 per cent until the end of next year. *Martin Arnold*

Most ECB watchers expect Christine Lagarde to say the central bank is keeping its main monetary policies on hold for now — Hannibal Hanschke/Reuters

Will the Bank of Japan lower its economic forecasts?

The focus of the two-day policy meeting of the Bank of Japan that begins on Wednesday will not be on action but on its outlook.

Analysts expect that the BoJ's policy board members will agree the pandemic will continue to negatively affect the economy, but market consensus firmly holds that they will decide that current policy is appropriate. Since its last policy meeting in September, the BoJ has only deemed it necessary to step into equity markets with large purchases of ETFs on six occasions.

The real question, say traders, will be the tone of the central bank's outlook report, due on Thursday, which was last released in July when the principal threat to the economy appeared to be a second wave of Covid-19 infections threatening a second shutdown of schools, restaurants and other measures that proved so damaging in April.

Many now expect the BoJ to lower its forecasts for gross domestic product growth for the financial year that ends in March 2021. The mood after July, note Capital Economics analysts, was not good: companies revised down their spending plans and the hoped for recovery in consumption slowed. The more critical part of the question is whether the BoJ also lowers its forecasts for the following financial year, and the likely effect this might have on the pace of its asset expansion. *Leo Lewis*

Will US GDP figures affect the presidential race?

On Thursday — just days before the US presidential election — preliminary figures for the nation's third-quarter GDP will be released by the Bureau of Economic Analysis.

Economists expect GDP will rise 7 per cent on a quarter-over-quarter basis, according to FT calculations based on a forecast compiled by Bloomberg. That would mark a sharp rebound from the 9 per cent contraction seen between April and June. Such a resurgence would provide a positive talking point for Donald Trump at a time when he trails Democratic opponent Joe Biden in national polls. Mr Biden's wide lead and other polling have led investors to price in the prospects of a so-called blue wave in which Republicans cede control of both houses of Congress.

Voters have recently soured on Mr Trump's handling of the economy, with an FT poll this month finding that 46 per cent of Americans believe Mr Trump's policies have hurt the recovery. Economists have also become more worried about the outlook for growth in the coming quarters, given the inability of policymakers to reach a compromise on a stimulus bill. The delay has provoked much concern among Fed officials as well, who have stressed the limits of their monetary policy tools to shore up the recovery.

"Apart from the course of the virus itself, the most significant downside risk to my outlook would be the failure of additional fiscal support to materialise," said Fed governor Lael Brainard last week. *Colby Smith*

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Obituary

Visionary who made Samsung world leader in technology

Lee Kun-hee
Businessman
1942-2020

Lee Kun-hee, who transformed South Korea's Samsung into one of the world's biggest technology groups, died yesterday at the age of 78.

Lee had remained out of the public eye since suffering a heart attack in 2014, with his 52-year-old son, Lee Jae-yong, officially taking over management of the sprawling South Korean technology group. But the elder Lee is credited with turning Samsung into a world leader in sectors ranging from technology and construction to shipping and mobile phones.

"Chairman Lee was a true visionary who transformed Samsung into the world-leading innovator and industrial powerhouse from a local business," Samsung said yesterday.

Lee was known simply as "the chairman" among the company's employees, who rarely caught sight of him. But for 26 years, the publicity-shy South Korean held unchallenged authority over the group.

Lee's vast wealth and connections to South Korean elite led some to deem him the country's most powerful man, with more enduring influence than presidents. A string of lawsuits provoked concerns about how he wielded this power. He was convicted several times for crimes related to the succession process but was pardoned by a number of former presidents.

Yet even Lee's critics respect his achievements at Samsung, which pulled away from Hyundai to become the biggest of South Korea's *chaebol*, or industrial groups, by a wide margin. The company is the largest maker of memory chips, smartphones and electronic displays, Samsung C&T built the world's tallest building in Dubai and Samsung Heavy Industries is the world's third-largest shipbuilder by sales. Other subsidiaries range from theme parks to insurance.

It is for the transformation of Samsung Electronics, however, that Lee will be most remembered. Samsung was a minor player in the global technology industry when he took the helm in December 1987, succeeding Lee Byung-chul, his father and the group's founder.

Lee's university education in Japan and the US focused on economics and business, but he worked to master the science of semiconductors, giving him the confidence to authorise major investments in the field. Within five years, Samsung was the world's biggest producer of memory chips underpinned by billions of dollars of annual investment, even during downturns.

Despite this success, shoppers around the world continued to view Samsung's consumer electronics as poorly designed and undesirable. Lee's aggressive interventions to change this perception have become legend.

The most famous came in 1995, after the humiliation of finding that Samsung mobile phones he had given as gifts did not work. Two thousand Samsung employees at a phone manufacturing factory south of Seoul were instructed to don headbands marked "quality first" and gather outside. Thousands of phones and other electronic devices — with an estimated total value of $50m — were incinerated on a bonfire.

Despite Lee's admonitions to executives to "change everything but your wife and kids", the results of the quality drive took years to materialise. But from early this century, Samsung began to win substantial global market share in consumer electronics with a more reliable and attractive range of products, backed by a huge increase in marketing expenditure. In 2006, it became the world's biggest television producer by unit sales, having capitalised on the rise of flatscreen sets faster than rivals such as Sony.

Lee Kun-hee: was known simply as 'the chairman' among employees

> For 26 years, the publicity-shy Lee held unchallenged authority over the group

Lee's project was badly disrupted by a scandal that began in 2007, after Samsung's former general counsel alleged massive bribery and corruption at the company. Lee resigned from Samsung in 2008 before being convicted of tax evasion and breach of trust. But he was cleared of bribery and a presidential pardon opened the door for his return in March 2010.

The saga added to controversy over Lee's ability to exert control over all Samsung companies through a complex web of cross-shareholdings, despite the fact that his only formal position was chairman of Samsung Electronics.

Lee was born on January 9 1942. His success in business contrasted with his poor health for the last decade of his life and he was dogged by family trauma, including the suicide of his youngest daughter in New York in 2005.

Most analysts say his son will find it almost impossible to oversee growth matching that of the past two decades. That is a tribute, of sorts, to his father's record.
Simon Mundy and Song Jung-a

Banks

Lenders seek help from debt collectors

Outsourcers contacted to deal with expected wave of bounce back loan defaults

NICHOLAS MEGAW, STEPHEN MORRIS AND DANIEL THOMAS

Banks have asked specialist debt collectors to help lead the recovery of tens of billions of pounds of government-backed small business loans, as they prepare for an expected wave of defaults and fraud cases.

UK Finance, the trade group, is leading discussions to create a centralised "utility" that will deal with defaults on government-backed bounce back loans. It has contacted several potential outsourcers including London-listed Arrow Global to see if they would have enough capacity to support such a scheme, according to people involved in the discussions.

The task is expected to be too onerous to be handled by a single company because of the large number of small businesses forecast to run into trouble, one of the people added.

Banks have lent around £40bn through the bounce back scheme, providing loans of up to £50,000 to more than 1.3m companies. The loans are backed by a 100 per cent government guarantee, but banks have to prove they have made a thorough effort to recover the cash before claiming the money from the government.

One executive at a high street bank said: "Access to a shared operational utility is a good thing to do in terms of cost efficiency. More importantly, it gives consistency for customer treatment and conduct outcomes."

Another stressed that they did not expect to save much money through the utility, but said it would help shield individual lenders from criticism. The issue is particularly sensitive for banks such as Lloyds and NatWest, which have been accused of mistreating small businesses in the past.

Executives do not want to be accused by the government of making insufficient effort to collect on the loans, but at the same time are wary of being seen to aggressively pursue small and micro-business owners who are struggling to stay afloat during the pandemic.

Chris Leslie, the former Labour MP who recently took over as chief executive of the Credit Services Association trade body, said: "The sheer scale of bounce back loan recoveries will be so significant for the taxpayer and the wider economy that the Treasury and the banks — as their agents in this policy — will have to come to a consensus approach.

"It makes most sense to utilise the existing expertise in the UK recoveries sector, where specialist firms are well versed in the sensitive task of offering appropriate forbearance and understanding stresses and vulnerabilities," he added.

> 'It makes most sense to utilise the existing expertise in the UK recoveries sector'

The Financial Conduct Authority supervises around 230 companies in the debt collection industry.

UK Finance declined to comment.

Retail & Consumer. Takeover

Asda brothers pressed to explain financing of bid

Issas also have unflattering spotlight being cast on the company behind their rise

KAYE WIGGINS, ARASH MASSOUDI AND ROBERT SMITH

After two brothers from Blackburn in northern England beat the Wall Street behemoth Apollo in the race to buy Asda this month, they were riding high.

Mohsin and Zuber Issa — who partnered with buyout group TDR Capital for the £6.8bn deal — were praised by Chancellor Rishi Sunak for returning the Walmart-owned grocery chain to UK ownership and named in the Queen's Birthday honours list.

But the public elation hid private turmoil. Last week, Deloitte resigned from auditing EG Group, the acquisitive and highly-leveraged petrol stations business run by the brothers and their backers, because of concerns over its governance and internal controls.

Now, the Issas and TDR, which an adviser called "one of the most secretive private equity firms I know", must set out a plan to finance the most ambitious UK grocery deal in decades just as an unflattering spotlight is cast on the company that has fuelled their rise.

"The question is, have they bitten off more than they can chew?" a senior dealmaker said. "Is this ego over sense, and have they gone too far?"

The Asda purchase will be the UK's largest leveraged buyout since KKR bought Boots in 2007, handing the buyers control of the UK's third-largest supermarket, with its 145,000 staff and 14 per cent of the grocery market.

"[The brothers and TDR] have managed to do a good job of being under the radar," one adviser said. "Going for Asda will bring them into the public eye more than they are used to, which is going to be quite challenging."

Financing the deal

So far the buyers have not explained, publicly or even on a call with EG's debt investors, how they plan to finance the supermarket bid, and bankers involved have said they are not able to share enough information about the deal's structure to drum up early interest from potential investors.

EG is not a party to the Asda takeover but its investors questioned what such a large deal by the group's owners could mean for them. "[The] problem is we don't get replies," said one EG investor.

The Financial Times has talked to several insiders with direct knowledge of the deal to piece together how it has been assembled. Those conversations revealed a complex structure that involves offshore vehicles and financial engineering. The takeover has not completed so the financing plan is subject to change, the people warned.

One likely component is the sale of Asda's petrol stations to EG, two people with knowledge of the matter said. EG's owners have set up a vehicle, Bellis Forecourts, and a separate vehicle, Bellis Property NewCo in Jersey, where only limited information is public. Petrol station sales were not discussed on the investor call, the person said.

Because the groups are private, such a transaction would face less scrutiny than listed groups would under "related party transaction" rules, which seek to ensure assets are transferred at a fair price.

But the Competition and Markets Authority may demand that EG dispose of some sites.

The largest component of the financing for the Asda deal will be a £4bn debt package led by Barclays, a combination of high-yield bonds and leveraged loans.

Bankers on the deal hope it will achieve a BB rating, below investment grade but still far from the lowest reaches of the junk bond market. It would leave Asda with leverage of 3.5 times its £1.2bn earnings before interest, tax, depreciation and amortisation, according to a person familiar with the matter. EG Group has net debt of more than 10 times its adjusted earnings.

Big deal: the Asda purchase will be the UK's largest leveraged buyout since KKR bought Boots in 2007
Simon Dawson/Bloomberg

Limit the cash

The Issas' playbook on previous, smaller deals has been to fund the equity component of new acquisitions without putting their hands in their pockets, most recently by using preference shares.

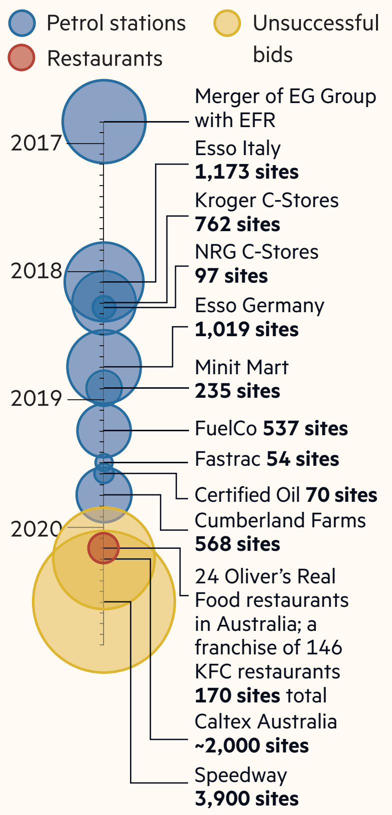
Those, or "payment in kind" notes, which can pay interest with further debt rather than cash, would, if used, allow the brothers and TDR to cut their costs further. That would allow them to fund their equity stakes in a £6.8bn group with a few hundred million pounds each. TDR's most recent fund is worth €3.5bn and it is rare for private equity groups to commit more than 10 to 15 per cent of a fund to a single deal.

Walmart, the US-listed retailer that has owned Asda for 20 years, will continue to own a stake in the British grocer, but has declined to say what the size or structure would be. Three people with knowledge of the process said it was expected to be about 25 per cent.

"All future plans for Asda were discussed in detail with Asda and Walmart during the sale process," EG said. "The capital structure that we will put in place for Asda will provide a strong platform to enable investment, accelerate the strategy and develop the business.".

EG Group's appetite for debt-funded acquisitions

Deals by number of sites



Source: company

Governance issues

EG has grown rapidly. But its governance structure has not kept pace. The company's board has no external members — it consists of the brothers and two TDR executives — which was a key concern for Deloitte according to one person briefed on the matter.

"Given their size you'd expect a good list of non-execs and a heavyweight chairman," one person who has worked with the company said.

The way the company will be set up is expected to bring tax advantages. Two people involved said the grocer would be owned by a vehicle based in Jersey — one of 12 TDR and the brothers set up for the deal, with help from Appleby, the law firm at the centre of the Paradise Papers leaks. The Jersey structure would allow its owners to avoid a 0.5 per cent stamp duty when they sell the company, said a senior tax lawyer.

One EG debt investor expected Asda's debts after the deal to eat into its statutory profits, also reducing its corporation tax bill. Against that backdrop, the investor said: "I'm not sure why the government is cheering this."

Additional reporting by Tabby Kinder

INSIDE BUSINESS

Jonathan Ford

Pension buyouts carry needless credit risks financiers can exploit

Imagine you are a banker and a customer approaches you for a loan of £850,000 to buy a £1m house. Would you be willing to lend the money on an unsecured basis, or would you first insist on taking a charge over the property?

It seems a silly question. Of course you'd do the latter. But let's park that for a moment and imagine our customer has even more extravagant demands. Not only do they refuse to put up any collateral, they want the loan to be "non-accelerable". So even if they miss an interest payment, the lender cannot demand immediate repayment of the loan in full.

Sounds like an interesting proposition? I think most lending institutions would tell that customer to take a hike.

Now let's look at what happens when defined benefit pension schemes insure their liabilities to pay future retirement incomes. It's increasingly common. In the past 12 years, schemes with liabilities worth £175bn have sought insurance protection through so-called buyouts, according to consultants Lane Clark Peacock. That's almost a tenth of the £2tn plus of scheme liabilities outstanding in the UK.

Under the traditional pension arrangement, an average scheme funds roughly 90 per cent of its liabilities with assets and relies on its sponsoring company to make good the shortfall.

With buyout deals, that same scheme transfers all of those assets plus a premium to an insurance company. In the process it surrenders title to the assets and control over how they might subsequently be invested. What it receives in return is a piece of paper promising to pay the insured pension payments as they fall due.

One way to think about this is that the scheme has lent money to the insurer which it has used to buy the scheme's assets. In the process, the trustees have contrived to forfeit any security and the right to foreclosure. Even if the insurer defaults on a payment, they cannot recover their investment.

> Schemes are being unusually trusting with members' hard-earned savings

It is easy to see the appeal to the insurer. Just as our demanding bank borrower wanted, it gets no-strings, long-term money. Even better, it only has to pay a few basis points over government bond rates.

No wonder so many clever financiers have homed in on pension buyouts — insurers such as PIC and Rothesay. After all, they get to reinvest some of the assets they inherit from insured schemes in higher yielding instruments, keeping much of the surplus earned over the rock-bottom funding cost.

Meanwhile many of these insurers put up very little tangible capital. As they switch some of the transferred funds out of boring gilts into higher-return instruments, the regulator permits them to discount scheme liabilities at that higher rate. This essentially manufactures equity (a practice known as "Matching Adjustment") by recognising upfront future profits deemed to be risk free.

For many of the specialist performers this is pretty much all their equity. Take the three most focused operators, PIC, Rothesay and Just Group. Collectively they had £13.7bn of regulatory net assets, according to their 2019 Solvency and Financial Condition Reports. Strip out Matching Adjustment and that fell to just £172m.

Anyway, goes the salesman's patter, insurers are as safe as houses. The regulator applies tough rules that prevent insurers from acting recklessly. And the Financial Services Compensation Scheme offers 100 per cent protection for retirement incomes.

Yet how much credence these assurances deserve is debatable. While the UK's insurance regime is sound on paper, recent financial history suggests regulators are never infallible. Meanwhile, the FSCS is essentially an unfunded scheme. In the event of large losses, much would depend on a future government being willing to use taxpayers' funds to bail out wealthier UK citizens.

It is hard to avoid the conclusion that pension schemes are being unusually trusting with their members' hard-earned savings. Neither a bank nor a fund manager would lend on anything like these lax terms. Nor is there any compelling reason why pension trustees have to do so simply to insure future liabilities. Scheme members might usefully ask them why they so compliantly play along.

jonathan.ford@ft.com

Support services

Royal Mail chair urges pivot towards parcels

MICHAEL POOLER

The chairman of Royal Mail has warned that its duty to deliver the post six days a week is "not economic" as it stands.

Keith Williams suggested reform was necessary to reflect how Britons are sending fewer letters and more parcels, a long-running trend in the postal market that has accelerated during the Covid-19 pandemic.

Under the universal service obligation (USO), Royal Mail has to deliver letters from Monday to Saturday at a uniform price throughout the country. While the requirement is five days a week for parcels, the FTSE 250 company already runs a six-day operation and Mr Williams said this would probably shift to seven days in future to meet consumer demand.

"We should be pivoting towards parcels, as well as keeping the basic tenets of the USO — one service that goes everywhere in the country at one price point — but recognise that people want parcels equally if not more than they want letters," he told the Financial Times. "We need to deliver what customers want, as long as it's economic. In its current form, [the USO] is not economic, because if you look at the regulated business . . . profitability has been in decline year after year".

His comments come as a regulatory review takes place into what users need from the former state-owned monopoly.

Watchdog Ofcom is expected to report its findings in the coming weeks and Royal Mail has previously hinted it may seek to drop Saturday letter rounds. However, any proposed changes to the USO are likely to face resistance from union leaders worried about the potential impact on jobs.

Executives are under pressure to overhaul the 500-year-old organisation, which has disappointed investors since its 2013 stock market flotation and risks losing further ground to delivery rivals such as DPD and Hermes.

As coronavirus spurs an online shopping boom and hastens the decline of paper-based correspondence, Royal Mail has forecast a "material loss" at its main UK operation this year despite higher revenues.

It blamed extra overheads from elevated staff absences and protective equipment, and the higher costs of handling parcels compared with letters.

Mr Williams stepped up to an interim executive role in May following the departure of former boss Rico Back.

Technology

Imagination chief orders strategic review

NIC FILDES

The new chief executive of Imagination Technologies has kicked off a strategic review of the UK chip designer after a period of boardroom upheaval this year prompted the departure of its former head and top executives.

Simon Beresford-Wylie, a former Nokia executive who most recently ran UK towers company Arqiva, took over as chief executive of the graphics chip specialist three weeks ago.

The review, which aims to bolster the company's growth in emerging chip technologies such as the open source Risc-V, begins as the management and ownership of tech companies come under greater scrutiny in a period of frostier relations with Beijing.

"The company has been wandering a little bit. We need to tighten the focus," Mr Beresford-Wylie said in an interview with the Financial Times, adding that the review was not targeting cost cuts but looking at the products the group offers. It is hoped it will be completed by the end of the year. "I'm not the Grim Reaper coming with a scythe," he added.

Imagination was thrown into crisis in April when the UK government intervened to ward off an attempt to install four directors linked to Chinese state-controlled fund China Reform Holdings, which is an investor in the British chip company's parent, Canyon Bridge.

The upheaval triggered an exodus of company executives including Ron Black, the then chief executive, who had warned the board move would damage the British company, "perhaps fatally".

Ray Bingham, chairman of Canyon Bridge, has previously told the FT that Mr Black had become "frustrated" with the pace at which Imagination was investing in developing its technology.

Mr Beresford-Wylie said there had been a "revolving door of CEOs" in recent years and a deeper analysis was needed to be justify the "leap of faith" in new technologies.

Mr Beresford-Wylie refused to be drawn on any potential ownership changes but said that both Canyon Bridge and China Reform backed his plans to expand the business, which has not released its accounts for 2019 yet.

The UK government is facing pressure to take a more proactive approach to the country's semiconductor sector after the Imagination boardroom drama provoked fears of a technology and jobs transfer to China.

Nvidia's $40bn takeover of Cambridge's Arm Holdings has also triggered calls to intervene.

How to Lead. Steve Vamos, chief executive, Xero

A holistic approach for the common good

Head of the accountancy software group prioritises mental health to benefit both staff and customers, writes *Jonathan Moules*

Steve Vamos: 'As a leader you have to stay calm because [the pandemic] will pass and there is no great benefit in panic' Russell Kleyn/FT

When I interview tech veteran Steve Vamos over a video call, he is conducting business from his apartment. But unlike many of us who have been working from home since the beginning of the year, he does not have to be away from the office.

The chief executive of Xero, the online accountancy software business that has become the crown jewel of New Zealand's tech sector, is based in Wellington, where Covid-19 rates are near zero and life has pretty much returned to normal.

He has spent the New Zealand day at his office in the city, as he now does every day. But he is entering a second working phase as he prepares for a round of meetings with staff in the company's UK operation. "It is better for me to do this stuff at home," he says.

When we talk over a conference call, Mr Vamos, 62, looks relaxed in a black T-shirt and jeans, but has made his home look like an office by erecting a Xero banner behind him. More than half of Xero's 3,000 employees worldwide now work from home, he says.

"This way of working is not alien to us because of the way we are set up. We are fortunate to have the tools to enable us to work this way," he says.

"Before lockdown I would be travelling 60 per cent of my time to our operations in the US, the UK and Australia. But I have barely travelled outside New Zealand since Covid hit.

"There is less jet lag. But you know at the end of a week you have spent more time on a screen. So I think the work week is more intense when it comes to the meetings involving technology, but it hasn't fundamentally changed the nature of my role and the way I work."

The pandemic has been a mixed blessing for Xero, which was founded in 2006 and reported its first full-year net profit after tax in the year to March 31 on the back of a 30 per cent increase in revenues to NZ$718m and a 26 per cent growth in subscribers to almost 2.3m accounts, boosted by people looking for online financial services during lockdown.

It added 6,139 subscribers during the second quarter of the calendar year 2020 after the pandemic took hold, 3.6 per cent more than the same period in 2019 and the largest second quarter year-on-year increase for the business since 2012.

Instead of furloughing or cutting staff, Xero increased its headcount by 21 per cent in the previous financial year and has added more employees since that finished in March. "We have got people who have been with us for a few months now who have never been in the office," Mr Vamos says. "We consider ourselves fortunate."

Xero's small business clients, however, have been bearing the brunt of the economic crisis created by the health emergency. The company's response has been to allow customers in distress to downgrade or suspend their subscriptions until the pandemic passes, which means Xero's finances have taken a hit, Mr Vamos says.

He believes that being empathetic to your customers and staff is vital — as is engaging with them to allow them to be honest about things that are not going well. "My leadership style is very much centred around a mental model that I have of what's important to making sure that you create an environment where your people do great work," he says.

"At the centre of that model is making it safe. Making it safe for people to challenge you, but also challenge the way things are done. Some people call it psychological safety. That you can be you, you can say what you think, and you can do that comfortably."

The second element, Mr Vamos adds, "is to encourage really good challenging conversations and to make choices, which are often trade-offs between good things. The toughest choices are between bad and badder, not good and bad, right?"

Mr Vamos became Xero's chief executive two and a half years ago, having been hired as a consultant to advise Xero's founder Rod Drury about the next steps for the company.

He has a deep knowledge of the tech sector, having spent 14 years with IBM before moving to become Apple's vice-president for Asia Pacific in the 1990s, witnessing the return of Steve Jobs as chief executive. His last executive role before Xero was as a vice-president at Microsoft, where he ran the software group's worldwide MSN online services group.

'The intensity of how people are working is what we want to address. It is important to rest'

"I had a 40-year career in tech and by that point what I was really interested in doing was coaching and mentoring executives who were running fast-changing and growing businesses because of the experiences I had had over the years running businesses at IBM, Apple and Microsoft," he says.

"I got introduced to Rod through a mutual connection — and Rod said 'Steve, I want to take Xero to the next phase and we need someone who has experienced global tech scale businesses to help me'. So we worked together for 18 months, and at that point Rod called me and we had a chat . . . Basically, he got to interview me for 18 months, which I think . . . is a pretty good way to see whether I am compatible with the company."

Covid-19 is forcing businesses to think and work differently, which means being more attentive to staff needs, in particular their mental health, Mr Vamos says. "As a leader you have to stay calm because we all know, as tough as things are, it will pass and there is no great benefit in panic and becoming caught up in the emotion of it.

"You must also make sure your people feel safe, make sure they feel connected to you — so I try to provide a lot of communication — and make sure that they feel you are there."

One way Xero has done this was by offering all staff an extra day off for World Mental Health day on October 10.

"We know our people in the broader context of their lives are experiencing different stresses," he says. "The intensity of how people have been working is what we want to address. It is important to rest."

For several years Xero has funded a telephone and online support and counselling service, called Xero Assistance Programme, for its staff in New Zealand. Last year, it extended this free service to its subscribers, as well as their staff and families, in New Zealand, reaching an estimated 850,000 people.

"Going into uncertain times you need to constantly review your priorities. But you have got to distinguish between short-term issues and your longer-term aspirations," Mr Vamos says, saying he started taking lunchtime walks around Wellington as a result of thinking more about his mental health in the wake of the coronavirus outbreak.

"In the short term, we might pivot a bit," he adds. For example, the company has created a business dashboard to make it easier to see a whole company's performance, and there is a new starter subscription package to make it less expensive to sign up to Xero.

"However, if you say to me: 'Has our aspiration for 2030 changed as a result of Covid?' The answer is no. We still have the same aspirations for 2030, to become the global leader in accountancy services for small businesses."

FT **Leadership**
More interviews illuminating the personalities of high-profile leaders by focusing on the issues they faced ft.com/howtolead

The remaking of capitalism and the office reimagined

FT journalists recommend the best business reads

'The Long Win: The Search for a Better Way to Succeed', by Cath Bishop

The timing of this book could hardly be better. It comes in the midst of an extraordinary US presidential election campaign, featuring an incumbent for whom winning — against his political opponents, against China, against coronavirus — is all-important. But as Cath Bishop points out, this zero-sum approach to winning isn't working. Our fixation with brute competition often fails to solve complex problems, and can lead to disillusionment, cheating and mental breakdown. Bishop draws on her experience as an Olympic oarswoman — who finished, in the words of a BBC commentator, "only" in silver medal position — a diplomat and a leadership coach, to lay out an alternative approach.

There is a "better way to succeed", she writes, based on an alliterative "three Cs": developing clarity about what matters; employing a "constant learning" approach, based on personal growth rather than scoreboards, metrics and gold-medal finishes; and forging connections with colleagues, partners, friends and others, in collaboration rather than competition. The lesson can be summed up in the mindset change she achieved to come out of retirement and prepare for one final Olympic appearance: to tap into the joy of her chosen pastime rather than obsess about the goal.

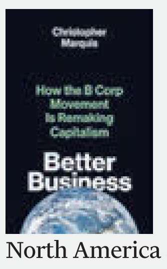
These are lessons for the ages but Bishop gives them a deft topical twist, asking, for instance, why it took a pandemic for big businesses to roll out online mindfulness and counselling sessions, and reminding readers of the silver lining in the postponement of the Tokyo Olympics. True, she writes, those athletes with nothing else in their lives struggled, but "for many, there was space for the first time to contemplate the wider meaning in their sporting journey". This is a deep and rewarding exploration of human motivation in sport, politics, business and our personal lives.

'Better Business: How the B Corp Movement is Remaking Capitalism', by Christopher Marquis

The idea that capitalism needs reforming is becoming uncontroversial, but there is less agreement on what should replace the business model that puts the pursuit of profit above all else.

If you think that angst about shareholder primacy began in reaction to the global financial crisis, it is worth remembering that it was 2006 when three Stanford graduates set out to design a different system. B Lab, the group they founded to certify companies that marry a profit motive with a social purpose, christened its first B Corp the next year.

Christopher Marquis, a Cornell management professor, writes that he has considered the B Corp the most impressive business innovation he has encountered for more than a decade. But that timeline points to a problem: slow adoption.



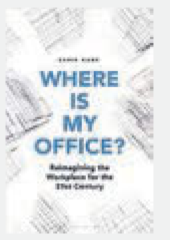
There are more than 3,500 B Corps in 74 countries, including Danone North America and some Unilever subsidiaries, but most are far smaller companies. Even Marquis admits most consumers have little idea what B Corps are "because it is difficult to properly express the complexity of the B brand".

B Lab is now stepping up its efforts to persuade US lawmakers to make "benefit governance" mandatory across the private sector but bipartisan support seems scant.

Marquis runs through case studies to tout the virtues of the B Corp model but doesn't really explain why there are still few publicly traded benefit corporations. Is the B Corp movement remaking capitalism, as Marquis contends? The book doesn't entirely convince that B Corps are on the brink of becoming the new prevailing model, but Better Business is a valuable guide to an important force in that reformation.

'Where is My Office: Reimagining the Workplace for the 21st Century', by Chris Kane

About the only thing we know about the workplace of the 21st century is that we have not got there yet. Coronavirus has created the largest global experiment in homeworking. And although many people appreciate the advantages, not least the shorter commute, it has also shown how office life still has great value. The question is what sort of workplaces we would like to create when we do finally return to them.



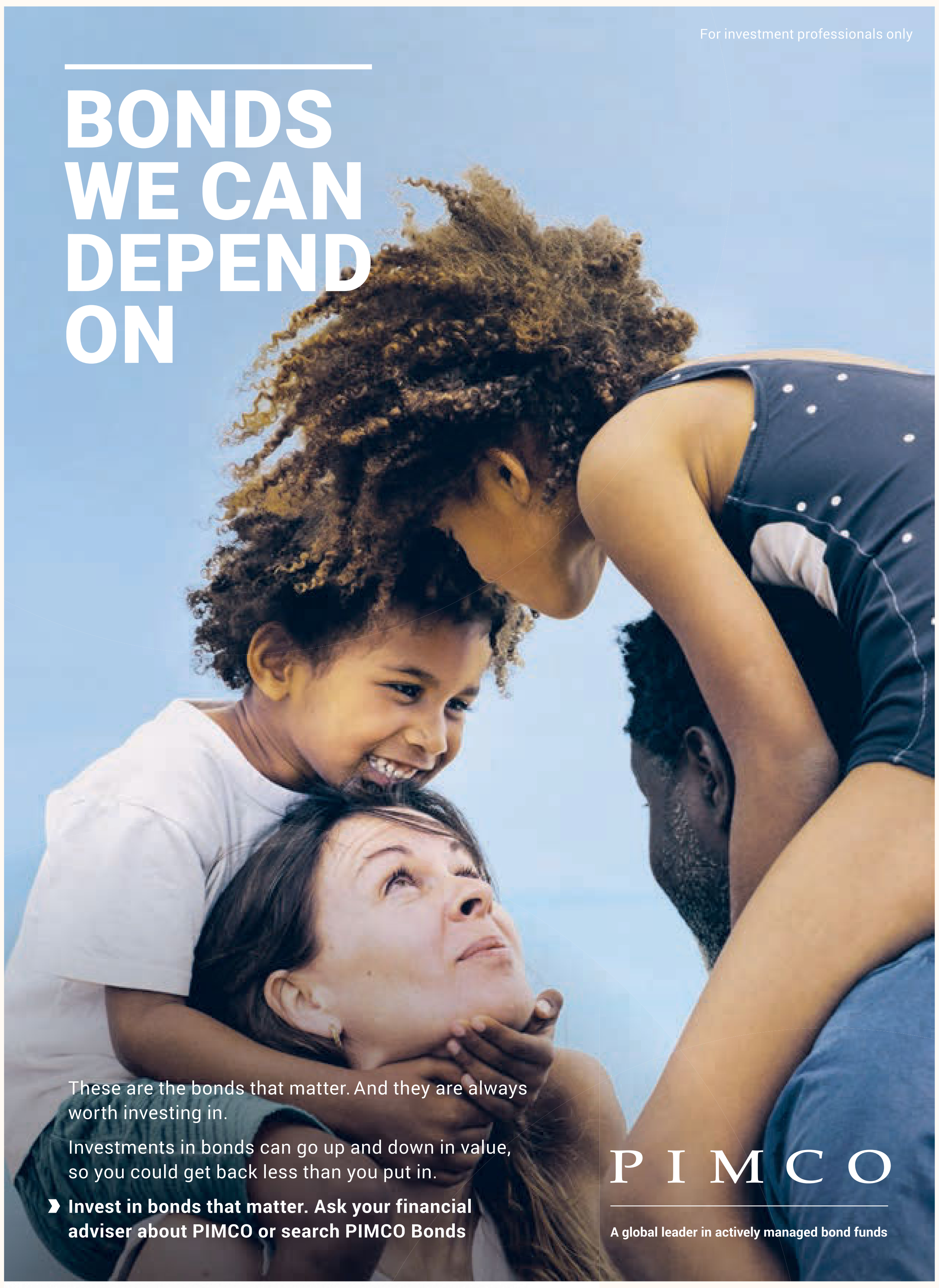
This book offers some answers from a man who has more experience than most. Chris Kane has worked in corporate property management for more than 30 years, including a spell as vice-president of international corporate real estate at Walt Disney before being headhunted to transform the property portfolio of the BBC.

This book is a call for radical change in the way the property industry operates and treats the end users of their product, the organisations with a need for workspace.

It summarises that the many problems of the commercial property sector cause new office concepts to fail and offers some solutions, notably his attempt to create spaces that bring together complementary organisations as he did with the BBC's White City estate in west London.

Whether or not this book provides all the answers, it is timely for those considering the value of office spaces in the post-pandemic world.

By Andrew Hill, Andrew Edgecliffe-Johnson and Jonathan Moules



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MARKET DATA

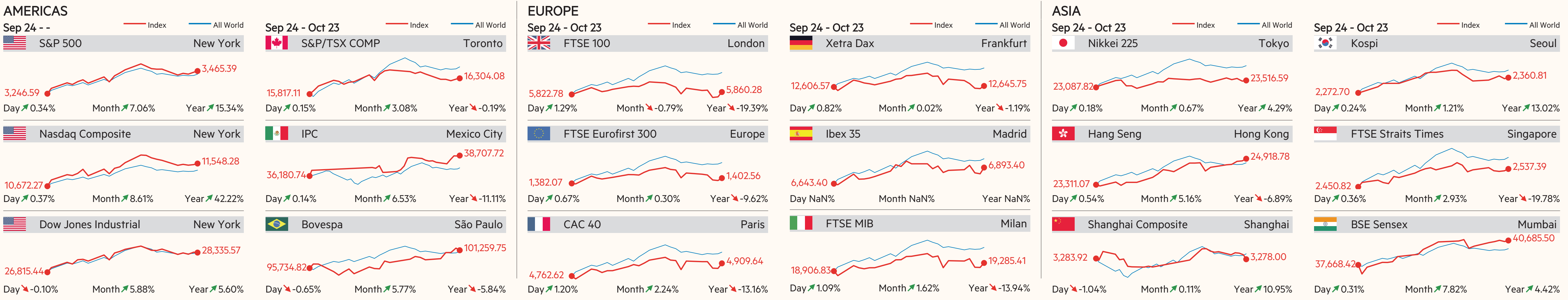
WORLD MARKETS AT A GLANCE

FT.COM/MARKETSDATA

Change during previous day's trading (%)

S&P 500	Nasdaq Composite	Dow Jones Ind	FTSE 100	FTSE Eurofirst 300	Nikkei	Hang Seng	FTSE All World $	$ per €	$ per £	¥ per $	£ per €	Oil Brent $ Sep	Gold $
0.34%	0.37%	-0.10%	1.29%	0.67%	0.18%	0.54%	0.34%	0.085%	-0.382%	0.029%	0.443%	-2.24%	-1.21%

Stock Market movements over last 30 days, with the FTSE All-World in the same currency as a comparison



Country	Index	Latest	Previous
Argentina	Merval	52512.60	51671.56
Australia	All Ordinaries	6373.70	6383.70
	S&P/ASX 200	6167.00	6173.80
	S&P/ASX 200 Res	4481.50	4512.40
Austria	ATX	2193.74	2166.41
Belgium	BEL 20	3246.45	3202.19
	BEL Mid	7537.88	7511.45
Brazil	IBovespa	101259.75	101917.73
Canada	S&P/TSX 60	972.54	970.52
	S&P/TSX Comp	16304.08	16279.36
	S&P/TSX Div Met & Min	532.37	535.62
Chile	S&P/CLX IGPA Gen	19176.36	19188.24
China	FTSE A200	12449.37	12573.72
	FTSE B35	9000.71	8988.96
	Shanghai A	3435.57	3471.68
	Shanghai B	247.06	251.70
	Shanghai Comp	3278.00	3312.50
	Shenzhen A	2303.08	2347.81
	Shenzhen B	942.08	945.98
Colombia	COLCAP	1177.89	1177.92
Croatia	CROBEX	2013.05	2011.29

Country	Index	Latest	Previous
Cyprus	CSE M&P Gen	68.46	68.68
Czech Republic	PX	863.10	857.82
Denmark	OMXC Copenahgen 20	1378.47	1375.53
Egypt	EGX 30	10987.43	11101.63
Estonia	OMX Tallinn	1181.81	1178.92
Finland	OMX Helsinki General	10245.82	10208.63
France	CAC 40	4909.64	4851.38
	SBF 120	3894.66	3850.72
Germany	M-DAX	27279.59	27189.17
	TecDAX	3028.89	3052.11
	XETRA Dax	12645.75	12543.06
Greece	Athens Gen	612.32	608.90
	FTSE/ASE 20	1443.47	1435.89
Hong Kong	Hang Seng	24918.78	24786.13
	HS China Enterprise	10125.59	10085.18
	HSCC Red Chip	3677.32	3654.87
Hungary	Bux	33655.10	33696.73
India	BSE Sensex	40685.50	40558.49
	Nifty 500	9780.35	9745.05
Indonesia	Jakarta Comp	5112.19	5091.82
Ireland	ISEQ Overall	6574.40	6523.65
Israel	Tel Aviv 125	1394.26	1400.37

Country	Index	Latest	Previous
Italy	FTSE Italia All-Share	21050.96	20853.79
	FTSE Italia Mid Cap	33207.60	33346.49
	FTSE MIB	19285.41	19076.95
Japan	2nd Section	6328.85	6302.83
	Nikkei 225	23516.59	23474.27
	S&P Topix 150	1348.65	1342.85
	Topix	1625.32	1619.79
Jordan	Amman SE	1558.28	1559.81
Kenya	NSE 20	1805.26	1809.66
Kuwait	KSX Market Index	6633.44	6603.51
Latvia	OMX Riga	1120.41	1126.83
Lithuania	OMX Vilnius	789.16	786.62
Luxembourg	LuxX	1090.57	1083.49
Malaysia	FTSE Bursa KLCI	1494.64	1498.80
Mexico	IPC	38707.72	38652.19
Morocco	MASI	10374.82	10331.94
Netherlands	AEX	554.34	554.20
	AEX All Share	798.76	799.27
New Zealand	NZX 50	12470.34	12407.29
Nigeria	SE All Share	28563.87	28449.49
Norway	Oslo All Share	925.50	913.56
Pakistan	KSE 100	41266.00	41199.02

Country	Index	Latest	Previous
Philippines	Manila Comp	6484.06	6344.63
Poland	Wig	47846.25	47910.38
Portugal	PSI 20	4139.40	4118.13
	PSI General	3188.43	3178.11
Romania	BET Index	8795.07	8756.94
Russia	Micex Index	2816.70	2803.17
	RTX	1164.06	1155.24
Saudi-Arabia	TADAWUL All Share Index	8505.18	8496.85
Singapore	FTSE Straits Times	2537.39	2528.41
Slovakia	SAX	350.75	354.88
Slovenia	SBI TOP	873.85	-
South Africa	FTSE/JSE All Share	55339.58	54796.42
	FTSE/JSE Res 20	52561.57	52819.20
	FTSE/JSE Top 40	50692.28	50276.84
South Korea	Kospi	2360.81	2355.05
	Kospi 200	314.79	313.77
Spain	IBEX 35	6893.40	6796.60
Sri Lanka	CSE All Share	5768.94	5771.89
Sweden	OMX Stockholm 30	1819.94	1816.29
	OMX Stockholm AS	724.77	724.14
Switzerland	SMI Index	10023.90	9999.05

Country	Index	Latest	Previous
Taiwan	Weighted Pr	12898.82	12917.03
Thailand	Bangkok SET	1213.61	1216.48
Turkey	BIST 100	116840.94	116315.98
UAE	Abu Dhabi General Index	4556.74	4543.69
UK	FT 30	2166.00	2124.80
	FTSE 100	5860.28	5785.65
	FTSE 4Good UK	5500.01	5428.80
	FTSE All Share	3310.38	3268.54
	FTSE techMARK 100	5737.85	5678.92
USA	DJ Composite	9576.20	9549.86
	DJ Industrial	28335.57	28363.66
	DJ Transport	11880.13	11748.55
	DJ Utilities	893.68	891.28
	Nasdaq 100	11692.57	11662.91
	Nasdaq Cmp	11548.28	11506.01
	NYSE Comp	13199.86	13145.92
	S&P 500	3465.39	3453.49
	Wilshire 5000	35793.37	35660.56
Venezuela	IBC	553045.88	555263.19
Vietnam	VNI	961.26	949.90

Country	Index	Latest	Previous
Cross-Border	DJ Global Titans ($)	404.54	403.71
	Euro Stoxx 50 (Eur)	3198.86	3171.41
	Euronext 100 ID	979.97	972.55
	FTSE 4Good Global ($)	8504.39	8488.99
	FTSE All World ($)	383.26	381.96
	FTSE E300	1402.56	1393.27
	FTSE Eurotop 100	2616.86	2597.68
	FTSE Global 100 ($)	2261.28	2257.38
	FTSE Gold Min ($)	2594.97	2653.02
	FTSE Latibex Top (Eur)	4440.00	4432.20
	FTSE Multinationals ($)	2425.79	2425.32
	FTSE World ($)	679.12	676.64
	FTSEurofirst 100 (Eur)	3519.92	3488.93
	FTSEurofirst 80 (Eur)	4383.11	4347.33
	MSCI ACWI Fr ($)	579.92	579.35
	MSCI All World ($)	2421.00	2417.83
	MSCI Europe (Eur)	1461.08	1462.29
	MSCI Pacific ($)	2703.34	2730.63
	S&P Euro (Eur)	1481.94	1469.74
	S&P Europe 350 (Eur)	1439.14	1429.32
	S&P Global 1200 ($)	2688.35	2675.74
	Stoxx 50 (Eur)	2867.39	2849.59

(c) Closed. (u) Unavaliable. † Correction. ♥ Subject to official recalculation. For more index coverage please see www.ft.com/worldindices. A fuller version of this table is available on the ft.com research data archive.

STOCK MARKET: BIGGEST MOVERS

AMERICA

ACTIVE STOCKS	stock traded m's	close price	Day's change
Amazon.com	107.8	3204.40	28.00
Apple	94.2	115.04	-0.71
Facebook	49.6	284.79	6.67
Intel	46.9	48.20	-5.70
Microsoft	40.2	216.23	1.34
Advanced Micro Devices	37.9	81.96	2.54
Nvidia	31.6	543.61	9.17
Alphabet	24.8	1632.98	26.32
Netflix	23.2	488.28	3.05
Alphabet	22.3	1641.00	25.67

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Nordstrom	14.33	0.76	5.60
Svb Fin	296.38	11.32	3.97
Flowserve	31.75	1.20	3.93
Dexcom	411.00	15.21	3.84
Kohl's	23.97	0.87	3.77
Downs			
Intel	48.20	-5.70	-10.58
Robert Half Int	51.67	-4.65	-8.26
Technipfmc	6.47	-0.39	-5.69
American Airlines	12.60	-0.55	-4.18
American Express	100.98	-3.81	-3.64

Based on the constituents of the S&P500

LONDON

ACTIVE STOCKS	stock traded m's	close price	Day's change
Hsbc Holdings	120.1	321.40	14.45
Barclays	108.7	111.54	7.26
Bp	106.2	205.50	4.10
Rio Tinto	94.8	4578.00	31.50
Astrazeneca	94.4	7943.00	-12.00
Glaxosmithkline	88.0	1343.80	10.60
Unilever	87.7	4694.00	-27.00
Lloyds Banking	86.1	29.29	1.37
Royal Dutch Shell	74.1	971.80	23.40
Vodafone	73.1	112.60	3.84

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Provident Fin	228.20	22.00	10.67
Shaftesbury	454.80	34.80	8.29
Rolls-royce Holdings	243.70	16.80	7.40
Barclays	111.54	7.26	6.96
Ao World	363.00	22.50	6.61
Downs			
Computacenter	2408.00	-92.00	-3.68
Greencore	100.40	-2.50	-2.43
Cls Holdings	193.20	-4.20	-2.13
Cranswick	3378.00	-68.00	-1.97
C&c	175.00	-3.40	-1.91

Based on the constituents of the FTSE 350 index

EURO MARKETS

ACTIVE STOCKS	stock traded m's	close price	Day's change
Inditex	596.3	24.19	0.30
Airbus	231.2	68.03	3.58
Sap Se O.n.	218.1	124.90	0.40
Asml Holding	204.0	316.60	-3.50
Daimler Ag Na O.n.	175.7	48.40	0.50
Kering	174.1	556.00	-18.10
Total	172.5	28.08	0.46
Iberdrola	169.6	10.71	-0.03
Ferrovial	167.2	20.66	0.22
Lvmh	159.1	428.00	0.80

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Norsk Hydro	2.55	0.16	6.59
Bureau Veritas	20.46	1.26	6.53
Safran	96.58	5.16	5.64
Lufthansa Ag Vna O.n.	8.49	0.45	5.59
Airbus	68.03	3.58	5.55
Downs			
Kering	556.00	-18.10	-3.15
Dassault Systemes	148.15	-4.35	-2.85
Skanska Ab Ser. B	17.47	-0.35	-1.95
Assa Abloy Ab Ser. B	19.85	-0.37	-1.81
Telecom Italia	0.32	-0.01	-1.64

Based on the constituents of the FTSEurofirst 300 Eurozone index

TOKYO

ACTIVE STOCKS	stock traded m's	close price	Day's change
Softbank .	660.8	7082.00	-6.00
Toyota Motor	276.4	6973.00	7.00
Ntt Docomo,.	253.2	3889.00	2.00
Sony	246.8	7820.00	4.00
Fast Retailing Co.,	239.5	72660.00	280.00
Fanuc	220.1	21540.00	285.00
Tokyo Electron	213.3	28450.00	-800.00
Softbank	194.4	1200.00	-10.00
M3,.	177.2	6910.00	-60.00
Hitachi Construction Machinery Co.,	174.8	3050.00	-615.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Mitsubishi Heavy Industries,	2370.00	146.00	6.56
Bridgestone	3618.00	205.00	6.01
Yokohama Rubber Co Ltd	1592.00	75.00	4.94
Dai-ichi Life Holdings	1677.00	65.00	4.03
Citizen Holdings Co.,	287.00	10.00	3.61
Downs			
Hitachi Construction Machinery Co.,	3050.00	-615.00	-16.78
Z Holdings	722.00	-23.00	-3.09
Tokyo Electron	28450.00	-800.00	-2.74
Cyberagent,.	6570.00	-150.00	-2.23
Nh Foods Ltd	4360.00	-80.00	-1.80

Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Oct 23 price(p)	%Chg week	%Chg ytd
Winners			
Int Consolidated Airlines S.a.	109.00	13.8	-57.5
Informa	449.00	10.4	-48.2
Rolls-royce Holdings	243.70	9.8	-64.2
Barclays	111.54	9.6	-39.8
Natwest	122.80	8.5	-49.7
Lloyds Banking	29.29	8.4	-54.0
Standard Chartered	399.40	8.0	-44.5
Whitbread	2386.00	7.3	-43.3
British Land	380.20	6.5	-39.5
Evraz	384.20	6.4	-5.4
Land Securities	555.20	5.7	-44.1
Hsbc Holdings	321.40	4.9	-46.0
Losers			
Fresnillo	1218.50	-9.3	89.2
Just Eat Takeaway.com N.v.	9174.00	-8.1	-
Ocado	2313.00	-6.0	83.6
Dcc	5028.00	-6.0	-23.9
Pearson	512.40	-5.8	-21.2
Gvc Holdings	1004.00	-5.8	9.2
Smith (ds)	295.30	-5.7	-23.6
Avast	495.40	-5.5	4.4
Bae Systems	458.00	-5.3	-20.2
Hikma Pharmaceuticals	2549.00	-5.1	28.4
Reckitt Benckiser	7000.00	-4.8	12.9
Glaxosmithkline	1343.80	-4.7	-24.4

FTSE 250	Oct 23 price(p)	%Chg week	%Chg ytd
Winners			
Mitchells & Butlers	159.00	20.5	-65.2
Wetherspoon (J.d.)	923.50	19.4	-45.0
Ao World	363.00	18.0	323.1
Cineworld	29.18	17.9	-86.7
Tui Ag	322.90	17.3	-67.4
Easyjet	548.40	16.5	-61.7
Provident Fin	228.20	14.2	-50.8
Carnival	1027.50	13.3	-71.8
Signature Aviation	263.20	11.9	-16.9
St.modwen Properties	352.50	11.2	-29.8
Wh Smith	1040.00	10.3	-60.4
Ibstock	179.20	10.1	-44.3
Losers			
Alternative Credit Investments	870.00	-	-
Network Int Holdings	240.00	-20.9	-62.2
Centamin	133.75	-17.3	5.6
Trainline	290.00	-12.5	-42.5
Biffa	208.00	-9.0	-22.8
Gamesys	1188.00	-8.3	65.0
Sdl	688.00	-7.0	19.9
Petropavlovsk	27.45	-6.2	116.1
Domino's Pizza	318.20	-5.7	-2.2
Pz Cussons	242.50	-5.1	16.9
Moneysupermarket.com	254.20	-5.1	-24.2
Serco	131.40	-4.8	-20.1

FTSE SmallCap	Oct 23 price(p)	%Chg week	%Chg ytd
Winners			
Pendragon	15.96	59.0	24.5
Mccarthy & Stone	115.80	55.4	-22.6
Tullow Oil	21.63	36.1	-63.7
Reach	104.00	30.7	-24.7
Pharos Energy	14.40	22.2	-73.2
Hammerson	19.84	21.1	-84.4
Marston's	50.20	19.8	-61.3
Luceco	261.00	19.7	99.2
Ao World	363.00	18.0	323.1
Senior	60.85	17.1	-67.3
Int Personal Finance	65.50	15.7	-59.5
Superdry	174.50	15.3	-65.6
Losers			
Countrywide	157.60	-15.0	-54.8
Biffa	208.00	-9.0	-22.8
Premier Oil	13.03	-8.9	-86.9
Amigo Holdings	9.55	-8.5	-86.5
Gamesys	1188.00	-8.3	65.0
Petra Diamonds	1.46	-7.8	-83.5
Hyve	56.90	-7.3	-80.3
Riverstone Energy	255.00	-7.1	-40.8
Sdl	688.00	-7.0	19.9
Clipper Logistics	468.00	-7.0	60.3
Schroder Real Estate Investment Trust	32.10	-6.6	-43.1
On The Beach	216.50	-6.5	-55.7

Industry Sectors	Oct 23 price(p)	%Chg week	%Chg ytd
Winners			
Industrial Metals	3797.26	6.8	0.6
Banks	2047.91	6.3	-
Industrial Transportation	2166.18	5.1	-
Oil Equipment & Services	4175.06	4.6	-
Automobiles & Parts	2838.84	4.4	-
Real Estate Investment Trusts	2518.38	3.4	-
Fixed Line Telecommunication	1304.90	3.2	-
Mobile Telecommunications	2578.08	2.9	-
Real Estate & Investment Servic	2443.08	2.8	-
Nonlife Insurance	2763.65	0.8	-
General Retailers	2504.46	0.5	-0.1
Industrial Engineering	13875.95	0.2	3.1
Losers			
Pharmaceuticals & Biotech.	16476.95	-3.8	-7.7
Personal Goods	38762.70	-3.6	1.5
Construction & Materials	6319.89	-3.2	-10.7
Chemicals	12774.78	-2.7	-4.3
Household Goods	16812.57	-2.5	-6.6
Tobacco	26773.15	-2.5	-
Software & Computer Services	1980.76	-2.3	-
Forestry & Paper	17938.82	-1.9	-
General Industrials	5870.93	-1.7	-8.7
Health Care Equip.& Services	6308.00	-1.6	-
Food & Drug Retailers	4069.47	-1.6	-3.2
Aerospace & Defense	3126.59	-1.3	-

Based on last week's performance. †Price at suspension.

CURRENCIES

Oct 23	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Argentina	Argentine Peso	78.0812	0.0117	92.4125	0.0761	101.8419	-0.3821
Australia	Australian Dollar	1.4080	0.0014	1.6664	0.0028	1.8364	-0.0054
Bahrain	Bahrainin Dinar	0.3771	-	0.4463	0.0003	0.4918	-0.0019
Bolivia	Bolivian Boliviano	6.9100	-	8.1783	0.0055	9.0128	-0.0352
Brazil	Brazilian Real	5.6195	0.0418	6.6509	0.0539	7.3296	0.0261
Canada	Canadian Dollar	1.3152	0.0026	1.5566	0.0041	1.7154	-0.0034
Chile	Chilean Peso	777.8200	-2.1350	920.5842	-1.9046	1014.5170	-6.7542
China	Chinese Yuan	6.6696	0.0001	7.8938	0.0054	8.6992	-0.0338
Colombia	Colombian Peso	3776.8200	1.6400	4470.0329	4.9518	4926.1375	-17.0749
Costa Rica	Costa Rican Colon	603.4700	0.3950	714.2333	0.9487	787.1108	-2.5541
Czech Republic	Czech Koruna	23.0151	0.0335	27.2394	0.0580	30.0188	-0.0733
Denmark	Danish Krone	6.2870	-0.0039	7.4409	0.0003	8.2001	-0.0372
Egypt	Egyptian Pound	15.7047	0.0255	18.5872	0.0427	20.4838	-0.0465
Hong Kong	Hong Kong Dollar	7.7500	0.0000	9.1725	0.0062	10.1085	-0.0394
Hungary	Hungarian Forint	308.8801	0.8691	365.5732	1.2744	402.8748	-0.4340
India	Indian Rupee	73.6125	0.0725	87.1236	0.1445	96.0134	-0.2797

Oct 23	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Indonesia	Indonesian Rupiah	14660.0000	-	17350.7790	11.7029	19121.1901	-74.5838
Israel	Israeli Shekel	3.3789	-0.0042	3.9990	-0.0023	4.4071	-0.0228
Japan	Japanese Yen	104.8350	0.0300	124.0768	0.1191	136.7371	-0.4943
..One Month		104.8350	0.0299	124.0769	0.1192	136.7371	-0.4943
..Three Month		104.8349	0.0297	124.0769	0.1193	136.7370	-0.4945
..One Year		104.8345	0.0289	124.0772	0.1199	136.7371	-0.4947
Kenya	Kenyan Shilling	108.8500	0.1500	128.8288	0.2643	141.9739	-0.3576
Kuwait	Kuwaiti Dinar	0.3056	0.0002	0.3617	0.0005	0.3986	-0.0013
Malaysia	Malaysian Ringgit	4.1550	0.0090	4.9176	0.0140	5.4194	-0.0094
Mexico	Mexican Peso	20.8935	-0.1015	24.7284	-0.1034	27.2516	-0.2392
New Zealand	New Zealand Dollar	1.5015	0.0034	1.7771	0.0052	1.9584	-0.0032
Nigeria	Nigerian Naira	383.5000	-	453.8891	0.3060	500.2022	-1.9518
Norway	Norwegian Krone	9.2624	0.0485	10.9625	0.0648	12.0810	0.0164
Pakistan	Pakistani Rupee	161.3750	-0.4250	190.9944	-0.3739	210.4827	-1.3778
Peru	Peruvian Nuevo Sol	3.6040	0.0029	4.2655	0.0063	4.7007	-0.0145
Philippines	Philippine Peso	48.4900	-0.1050	57.3900	-0.0855	63.2459	-0.3843

Oct 23	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
Poland	Polish Zloty	3.8634	-0.0012	4.5725	0.0017	5.0391	-0.0212
Romania	Romanian Leu	4.1181	-0.0023	4.8740	0.0005	5.3713	-0.0240
Russia	Russian Ruble	76.2450	-0.2700	90.2393	-0.2585	99.4470	-0.7416
Saudi Arabia	Saudi Riyal	3.7504	-	4.4388	0.0030	4.8917	-0.0191
Singapore	Singapore Dollar	1.3596	0.0030	1.6091	0.0046	1.7733	-0.0031
South Africa	South African Rand	16.2200	0.0175	19.1971	0.0336	21.1559	-0.0596
South Korea	South Korean Won	1133.0000	0.2500	1340.9555	1.1997	1477.7811	-5.4391
Sweden	Swedish Krona	8.7757	0.0114	10.3865	0.0205	11.4463	-0.0297
Switzerland	Swiss Franc	0.9064	-0.0007	1.0727	0.0000	1.1822	-0.0055
Taiwan	New Taiwan Dollar	28.6470	0.0080	33.9050	0.0323	37.3645	-0.1353
Thailand	Thai Baht	31.2700	-	37.0094	0.0250	40.7857	-0.1591
Tunisia	Tunisian Dinar	2.7487	-0.0002	3.2532	0.0019	3.5852	-0.0143
Turkey	Turkish Lira	7.9647	0.0337	9.4266	0.0463	10.3885	0.0037
United Arab Emirates	UAE Dirham	3.6732	-	4.3473	0.0029	4.7909	-0.0187
United Kingdom	Pound Sterling	0.7667	0.0030	0.9074	0.0041	-	-
..One Month		0.7667	0.0030	0.9074	0.0041	-	-

Oct 23	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
..Three Month		0.7668	0.0030	0.9073	0.0041	-	-
..One Year		0.7670	0.0030	0.9068	0.0041	-	-
United States	United States Dollar	-	-	1.1835	0.0008	1.3043	-0.0051
..One Month		-	-	1.1835	-0.1259	1.3043	-0.0051
..Three Month		-	-	1.1833	-0.1259	1.3044	-0.0051
..One Year		-	-	1.1826	-0.1259	1.3046	-0.0051
Venezuela	Venezuelan Bolivar Fuerte	-	-	-	-	-	-
Vietnam	Vietnamese Dong	23177.0000	-	27431.0042	18.4229	30230.0202	-117.8882
European Union	Euro	0.8449	-0.0006	-	-	1.1020	-0.0050
..One Month		0.8448	-0.0006	-	-	1.1020	-0.0050
..Three Month		0.8447	-0.0006	-	-	1.1019	-0.0050
..One Year		0.8439	-0.0006	-	-	1.1015	-0.0051

Rates are derived from WM Reuters Spot Rates and MorningStar (latest rates at time of production). Some values are rounded. Currency redenominated by 1000. The exchange rates printed in this table are also available at www.FT.com/marketsdata

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	£ Strlg Oct 23	Day's chge%	Euro Index	£ Strlg Oct 22	£ Strlg Oct 21	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	5860.28	1.29	5032.01	5785.65	5776.50	7328.25	4.51	1.18	18.85	176.58	5572.92
FTSE 250 (250)	18109.57	1.20	15550.05	17894.42	17787.82	20152.15	3.37	1.21	24.56	282.93	14327.33
FTSE 250 ex Inv Co (182)	18251.23	1.34	15671.69	18010.71	17905.73	21318.56	3.69	1.38	19.64	254.90	14734.83
FTSE 350 (350)	3338.89	1.27	2866.99	3296.89	3289.04	4090.93	4.30	1.18	19.68	91.79	6329.70
FTSE 350 ex Investment Trusts (281)	3246.16	1.30	2787.36	3204.36	3197.10	4043.10	4.43	1.19	18.99	91.11	3175.64
FTSE 350 Higher Yield (146)	2487.57	1.85	2135.99	2442.50	2434.51	3575.62	6.75	1.03	14.38	100.00	5169.59
FTSE 350 Lower Yield (204)	4065.49	0.75	3490.90	4035.34	4029.04	4270.43	2.02	1.65	29.97	68.52	4803.05
FTSE SmallCap (261)	5281.34	1.46	4534.90	5205.25	5204.74	5474.76	4.31	-1.16	-19.96	107.65	8360.33
FTSE SmallCap ex Inv Co (143)	3980.07	2.42	3417.54	3886.17	3873.33	4453.94	5.32	-0.69	-27.05	60.53	6592.58
FTSE All-Share (611)	3310.38	1.28	2842.51	3268.54	3261.01	4033.51	4.30	1.10	21.12	90.14	6339.62
FTSE All-Share ex Inv Co (424)	3185.32	1.32	2735.13	3143.69	3136.50	3959.58	4.44	1.15	19.60	88.61	3164.95
FTSE All-Share ex Multinationals (542)	1056.43	1.48	751.83	1041.01	1036.02	1203.06	3.57	0.83	33.95	19.85	2107.07
FTSE Fledgling (92)	8929.88	0.32	7667.77	8901.54	8884.53	9449.22	3.10	0.00	-7196.30	182.31	18307.66
FTSE Fledgling ex Inv Co (43)	10483.16	0.36	9001.52	10445.47	10479.06	11398.89	3.60	3.69	7.54	154.87	21020.82
FTSE All-Small (353)	3663.35	1.40	3145.59	3612.77	3612.06	3802.21	4.25	-1.12	-21.08	74.73	7440.02
FTSE All-Small ex Inv Co (186)	2978.28	2.33	2557.35	2910.34	2901.48	3326.65	5.25	-0.58	-32.95	45.21	6249.18
FTSE AIM All-Share (717)	980.45	1.18	841.88	969.01	972.60	892.80	1.12	0.59	151.79	5.67	1123.90
FTSE Sector Indices											
Oil & Gas (12)	3607.10	2.43	3097.29	3521.60	3492.98	8818.62	10.72	1.29	7.21	257.00	4006.09
Oil & Gas Producers (9)	3490.39	2.42	2997.08	3407.84	3379.40	8561.12	10.83	1.29	7.13	252.79	4018.76
Oil Equipment Services & Distribution (3)	4119.44	2.75	3537.22	4009.17	4028.46	8144.35	4.10	1.15	21.30	11.22	3551.21
Basic Materials (22)	6007.79	0.82	5158.68	5959.17	5994.82	5896.85	5.23	2.21	8.66	249.65	7215.49
Chemicals (7)	13903.50	1.41	11938.45	13710.78	13833.51	13415.51	1.97	3.00	16.95	190.80	13335.70
Forestry & Paper (1)	19574.55	0.16	16807.98	19543.84	19457.85	19230.60	2.76	3.27	11.10	540.55	23845.44
Industrial Metals & Mining (2)	4090.25	2.13	3512.15	4005.10	3968.57	3742.18	10.95	1.60	5.71	453.68	5502.64
Mining (12)	17160.93	0.76	14735.49	17031.49	17142.25	16904.52	5.62	2.17	8.18	759.08	10885.63
Industrials (101)	5482.32	1.50	4707.47	5401.41	5428.31	5544.01	2.29	0.69	62.98	67.40	6083.15
Construction & Materials (14)	6569.41	1.29	5640.92	6486.05	6558.34	6675.11	2.46	0.11	354.29	128.12	7585.61
Aerospace & Defense (9)	3295.48	3.79	2829.72	3175.24	3248.90	5059.13	3.88	-1.87	-13.78	99.51	3845.67
General Industrials (8)	4724.68	1.65	4056.91	4647.86	4653.65	4693.69	3.47	0.51	56.54	62.99	5899.71
Electronic & Electrical Equipment (10)	11373.84	1.13	9766.32	11246.46	11344.04	8811.09	1.23	1.86	43.76	75.90	10903.97
Industrial Engineering (12)	14954.08	1.63	12840.55	14714.95	14817.02	12781.05	2.18	1.56	29.39	158.27	19525.96
Industrial Transportation (6)	3298.02	1.50	2831.90	3249.31	3225.84	3759.49	6.32	0.61	25.79	9.26	3346.83
Support Services (42)	8943.84	1.01	7679.77	8854.78	8853.49	8513.09	1.51	2.25	29.34	64.41	9899.98
Consumer Goods (42)	17502.26	0.98	15028.58	17332.76	17279.74	18910.76	4.67	1.55	13.78	558.55	14763.05
Automobiles & Parts (2)	2853.39	1.92	2450.11	2799.65	2744.34	4361.25	0.78	2.98	43.05	0.00	2919.64
Beverages (6)	20713.29	1.49	17785.78	20408.94	20184.57	24968.08	2.75	1.63	22.27	528.83	15903.37
Food Producers (10)	6112.57	0.73	5248.65	6068.57	6072.39	7059.20	2.92	2.09	16.36	73.60	5661.48
Household Goods & Home Construction (14)	14069.81	1.56	12081.26	13853.28	13882.03	13713.20	3.86	1.55	16.74	272.34	11297.15
Leisure Goods (2)	27212.65	1.82	23366.55	26726.61	26307.94	12562.98	2.00	0.99	50.51	303.75	28442.05
Personal Goods (6)	33511.08	-0.45	28774.79	33661.72	33592.50	34292.55	3.08	2.86	11.36	682.57	24918.46
Tobacco (2)	26773.20	1.05	22989.21	26495.60	26450.28	30410.51	9.17	1.15	9.49	1765.51	21522.39
Health Care (15)	11692.74	0.24	10040.15	11664.55	11683.87	12356.91	3.60	1.22	22.69	363.07	10131.91
Health Care Equipment & Services (6)	6392.90	0.63	5489.36	6353.03	6279.31	8032.00	2.11	1.00	47.42	120.44	5890.71
Pharmaceuticals & Biotechnology (9)	16418.64	0.20	14098.11	16385.61	16435.37	17009.18	3.76	1.24	21.52	530.70	12777.21
Consumer Services (82)	4480.21	0.87	3847.00	4441.75	4436.01	5342.56	2.89	1.47	23.46	64.97	4579.73
Food & Drug Retailers (5)	4227.38	0.76	3629.90	4195.37	4262.28	4172.64	3.23	1.13	27.43	115.41	5358.26
General Retailers (27)	2356.49	0.96	2023.44	2334.12	2328.69	2188.36	2.28	1.33	32.95	8.19	2944.40
Media (15)	7201.01	0.85	6183.26	7140.01	7167.18	8711.59	2.35	2.35	18.15	125.67	4853.20
Travel & Leisure (35)	6460.99	0.87	5547.82	6405.50	6317.95	9600.83	3.59	1.21	23.13	82.90	6630.90
Telecommunications (6)	1612.47	3.31	1384.57	1560.86	1533.48	2447.19	8.39	-0.44	-27.23	43.50	2180.52
Fixed Line Telecommunications (3)	1352.78	3.11	1161.58	1311.96	1298.19	2494.13	13.14	1.27	6.01	3.51	1482.36
Mobile Telecommunications (3)	2574.18	3.37	2210.35	2490.21	2440.64	3620.80	6.79	-1.54	-9.55	90.67	3138.57
Utilities (8)	7263.67	1.15	6237.06	7181.11	7165.02	7263.28	5.81	0.90	19.11	275.61	10030.97
Electricity (3)	7816.04	1.41	6711.36	7707.26	7765.10	7718.88	5.94	0.81	20.83	462.14	14332.87
Gas Water & Multiutilities (5)	6729.05	1.07	5778.00	6657.67	6623.54	6752.98	5.76	0.93	18.65	212.92	9160.45
Financials (308)	3845.36	1.78	3301.87	3778.12	3747.47	4939.26	3.68	0.40	67.80	76.01	4001.29
Banks (11)	2019.61	4.90	1734.17	1925.26	1892.00	3722.53	4.69	-0.13	-169.30	0.99	1664.24
Nonlife Insurance (8)	3163.54	0.09	2716.42	3160.60	3130.55	3541.46	4.13	1.57	15.46	95.57	6254.03
Life Insurance/Assurance (7)	5920.96	1.18	5084.12	5852.16	5794.62	7893.07	4.06	2.15	11.49	230.43	6705.64
Real Estate Investment & Services (17)	2298.67	0.30	1973.79	2291.87	2265.43	2650.65	2.23	2.05	21.87	25.63	6589.20
Real Estate Investment Trusts (39)	2240.29	1.12	1923.66	2215.57	2217.55	2848.73	4.24	-0.97	-24.41	53.65	3173.04
General Financial (39)	9191.92	0.41	7892.78	9154.45	9087.76	10053.99	3.62	0.93	29.82	286.59	11858.33
Equity Investment Instruments (187)	11670.13	0.72	10020.73	11587.12	11558.08	10505.94	2.44	0.01	5292.22	228.80	6956.30
Non Financials (303)	4007.36	1.11	3440.98	3963.38	3962.13	4792.02	4.51	1.30	17.07	119.38	6742.56
Technology (15)	2101.23	0.11	1804.25	2098.86	2098.62	2042.92	3.27	0.11	273.23	31.14	2929.08
Software & Computer Services (13)	2232.14	0.16	1916.66	2228.62	2228.76	2249.85	3.48	-0.01	-4513.46	33.59	3291.73
Technology Hardware & Equipment (2)	5693.19	-0.32	4888.54	5711.57	5701.16	3577.69	1.22	3.38	24.15	69.78	7067.17

Hourly movements	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	High/day	Low/day
FTSE 100	5794.18	5849.35	5845.86	5869.46	5875.09	5878.47	5872.93	5865.32	5855.31	5885.37	5794.18
FTSE 250	17956.53	18042.09	18069.30	18078.85	18067.77	18089.63	18099.16	18100.93	18084.14	18115.61	17945.66
FTSE SmallCap	5217.11	5240.54	5250.44	5257.77	5260.56	5260.59	5265.62	5267.89	5271.67	5281.34	5217.11
FTSE All-Share	3274.59	3302.46	3302.00	3312.99	3315.20	3317.42	3315.36	3312.07	3307.14	3320.52	3274.59

Time of FTSE 100 Day's high:10:49:45 Day's Low07:03:00 FTSE 100 2010/11 High: 7674.56(17/01/2020) Low: 4993.89(23/03/2020)
Time of FTSE All-Share Day's high:10:50:00 Day's Low07:03:00 FTSE 100 2010/11 High: 4257.93(17/01/2020) Low: 2727.86(23/03/2020)

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FT 30 INDEX

	Oct 23	Oct 22	Oct 21	Oct 20	Oct 19	Yr Ago	High	Low
FT 30	2166.00	2124.80	2113.40	2155.00	2141.40	0.00	3314.70	1337.80
FT 30 Div Yield	-	-	-	-	-	0.00	3.93	2.74
P/E Ratio net	-	-	-	-	-	0.00	19.44	14.26

FT 30 since compilation: 4198.4 high: 19/07/1999; low49.4 18/02/1900Base Date: 1/7/35

FT 30 hourly changes

8	9	10	11	12	13	14	15	16	High	Low
2124.8	2154.8	2154.8	2153.9	2399.1	2395.8	2394.3	2414	2426.7	2439.2	2366.1

FT30 constituents and recent additions/deletions can be found at www.ft.com/ft30

FX: EFFECTIVE INDICES

	Oct 22	Oct 21	Mnth Ago		Oct 23	Oct 22	Mnth Ago
Australia	-	-	-	Sweden	-	-	-
Canada	-	-	-	Switzerland	-	-	-
Denmark	-	-	-	UK	77.85	78.00	76.47
Japan	-	-	-	USA	-	-	-
New Zealand	-	-	-	Euro	-	-	-
Norway	-	-	-				

Source: Bank of England. New Sterling ERI base Jan 2005 = 100. Other indices base average 1990 = 100. Index rebased 1/2/95. for further information about ERIs see www.bankofengland.co.uk

FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Leisure Goods	63.63	Technology	-7.16	FTSE 100 Index	-22.30
Tech Hardware & Eq	30.85	Pharmace & Biotech	-7.22	Tobacco	-22.36
Electronic & Elec Eq	11.17	Industrials	-8.54	Media	-22.45
Equity Invest Instr	3.79	Health Care	-9.16	Mobile Telecomms	-22.80
Industrial Eng	1.42	Software & Comp Serv	-9.92	Food Producers	-24.30
Personal Goods	1.16	Forestry & Paper	-10.10	Health Care Eq & Srv	-24.35
Industrial Metals &	0.49	Construct & Material	-11.06	Financials	-25.27
Support Services	-1.91	FTSE SmallCap Index	-11.25	Real Est Invest & Tr	-25.70
Chemicals	-2.03	Consumer Goods	-13.08	Life Insurance	-27.91
General Retailers	-2.15	Nonlife Insurance	-14.67	Telecommunications	-29.06
Food & Drug Retailer	-3.07	Financial Services	-15.66	Travel & Leisure	-36.14
Basic Materials	-5.36	Industrial Transport	-16.16	Aerospace & Defense	-36.80
Mining	-5.60	FTSE 250 Index	-17.25	Fixed Line Telecomms	-42.77
Gas Water & Multi	-5.66	Beverages	-18.42	Banks	-45.94
Utilities	-5.93	NON FINANCIALS Index	-19.58	Automobiles & Parts	-48.10
Household Goods & Ho	-6.55	FTSE All{HY-}Share Index	-21.12	Oil Equipment & Serv	-52.49
Electricity	-6.82	Consumer Services	-21.15	Oil & Gas	-56.82
		Real Est Invest & Se	-21.73	Oil & Gas Producers	-56.88

FTSE GLOBAL EQUITY INDEX SERIES

Oct 23 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	9036	651.52	0.3	5.6	2.4	1001.38	4.2	2.1
FTSE Global All Cap	9035	649.27	0.1	3.7	2.0	997.88	3.9	2.1
FTSE Global Large Cap	1742	587.84	0.3	4.9	3.6	930.59	5.6	2.1
FTSE Global Mid Cap	2236	814.50	0.6	7.0	-1.8	1177.36	-0.2	2.1
FTSE Global Small Cap	5058	861.65	0.4	8.6	-0.4	1198.23	1.1	1.9
FTSE All-World	3978	383.26	0.3	5.3	2.7	623.41	4.6	2.1
FTSE World	2569	679.12	0.4	5.2	2.2	1482.48	4.1	2.1
FTSE Global All Cap ex UNITED KINGDOM In	8745	690.16	0.3	5.7	3.7	1041.77	5.6	2.0
FTSE Global All Cap ex USA	7285	494.98	0.3	2.9	-4.6	830.54	-2.3	2.7
FTSE Global All Cap ex JAPAN	7637	673.19	0.3	6.1	2.7	1044.27	4.5	2.1
FTSE Global All Cap ex Eurozone	8392	687.91	0.3	5.9	3.4	1035.44	5.2	2.0
FTSE Developed	2140	623.22	0.4	5.3	2.9	965.65	4.8	2.1
FTSE Developed All Cap	5638	649.99	0.4	5.7	2.6	992.99	4.4	2.0
FTSE Developed Large Cap	836	585.36	0.3	4.8	3.8	923.09	5.8	2.1
FTSE Developed Europe Large Cap	226	346.64	0.7	1.7	-9.7	646.57	-7.4	3.0
FTSE Developed Europe Mid Cap	345	600.44	0.6	4.5	-5.0	979.58	-3.4	2.5
FTSE Dev Europe Small Cap	697	808.51	0.4	4.5	-10.0	1270.89	-8.5	2.4
FTSE North America Large Cap	224	764.56	0.3	6.6	9.7	1112.77	11.4	1.7
FTSE North America Mid Cap	411	952.25	0.6	9.2	0.6	1277.59	2.0	1.9
FTSE North America Small Cap	1297	972.66	0.6	11.8	1.9	1260.08	3.1	1.5
FTSE North America	635	495.96	0.3	7.1	8.1	737.52	9.7	1.7
FTSE Developed ex North America	1505	254.97	0.5	1.7	-6.3	460.80	-4.1	2.8
FTSE Japan Large Cap	181	394.46	0.3	-0.6	-0.6	553.24	1.7	2.3
FTSE Japan Mid Cap	335	593.88	0.3	-1.0	-5.5	789.83	-3.6	2.2
FTSE Global wi JAPAN Small Cap	883	663.24	0.0	-0.8	-4.7	913.50	-2.7	2.2
FTSE Japan	516	164.54	0.3	-0.7	-1.6	258.33	0.7	2.3
FTSE Asia Pacific Large Cap ex Japan	935	771.11	0.0	5.1	6.1	1331.93	8.4	2.4
FTSE Asia Pacific Mid Cap ex Japan	901	886.13	-0.1	4.1	2.3	1468.29	4.5	3.0
FTSE Asia Pacific Small Cap ex Japan	1889	571.01	-0.3	2.4	5.1	925.58	7.4	2.6
FTSE Asia Pacific Ex Japan	1836	601.08	0.0	5.0	5.8	1102.87	8.1	2.4
FTSE Emerging All Cap	3398	795.69	-0.1	5.3	0.7	1306.86	3.1	2.4
FTSE Emerging Large Cap	906	771.92	-0.1	5.7	1.9	1276.00	4.3	2.3
FTSE Emerging Mid Cap	932	901.90	0.2	4.1	-7.4	1479.72	-4.9	3.3
FTSE Emerging Small Cap	1560	751.24	-0.2	3.4	-0.6	1183.42	1.9	2.9
FTSE Emerging Europe	76	295.49	0.6	-1.1	-32.9	558.28	-29.4	6.5
FTSE Latin America All Cap	240	660.53	-0.7	7.1	-32.9	1125.43	-31.5	2.9
FTSE Middle East and Africa All Cap	321	596.89	0.4	5.5	-13.5	1029.59	-11.0	3.4
FTSE Global wi UNITED KINGDOM All Cap In	291	272.95	0.9	2.5	-23.7	519.07	-21.7	4.4
FTSE Global wi USA All Cap	1751	853.36	0.4	7.7	8.1	1198.77	9.6	1.6
FTSE Europe All Cap	1419	410.98	0.7	2.3	-9.6	736.99	-7.5	2.9
FTSE Eurozone All Cap	644	401.70	0.8	3.1	-7.6	718.05	-5.6	2.4
FTSE EDHEC-Risk Efficient All-World	3978	423.27	0.5	6.0	-2.2	635.67	-0.4	2.3
FTSE EDHEC-Risk Efficient Developed Europe	571	325.21	0.6	3.9	-3.8	541.12	-2.0	2.5
Oil & Gas	128	209.28	0.3	-1.4	-42.5	387.73	-40.0	6.4
Oil & Gas Producers	93	193.85	0.5	-2.2	-45.1	367.16	-42.7	6.7

Oct 23 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil Equipment & Services	24	167.36	-0.8	-0.8	-37.5	279.81	-34.8	6.5
Basic Materials	356	525.46	0.1	0.1	2.2	890.25	5.1	3.1
Chemicals	163	770.54	0.4	0.4	2.7	1292.73	5.3	2.6
Forestry & Paper	21	268.09	-0.6	-0.6	-3.6	508.23	-0.8	2.7
Industrial Metals & Mining	93	355.18	0.9	0.9	-6.1	606.44	-3.3	3.7
Mining	79	775.63	-0.7	-0.7	6.4	1344.33	10.0	3.6
Industrials	747	465.42	0.4	0.4	3.7	715.56	5.3	1.8
Construction & Materials	147	552.17	0.3	0.3	-0.4	891.67	1.5	2.0
Aerospace & Defense	36	630.79	1.5	1.5	-29.5	954.64	-28.6	2.3
General Industrials	71	218.56	0.2	0.2	-4.1	368.07	-2.0	2.6
Electronic & Electrical Equipment	140	569.51	0.3	0.3	11.9	795.01	13.6	1.5
Industrial Engineering	148	925.88	0.6	0.6	11.7	1416.75	13.7	1.6
Industrial Transportation	122	858.16	0.3	0.3	13.3	1326.91	15.1	1.8
Support Services	83	576.08	0.3	0.3	14.2	835.72	15.5	1.2
Consumer Goods	532	536.84	0.2	0.2	5.2	864.35	7.3	2.3
Automobiles & Parts	128	464.43	0.2	0.2	21.9	729.88	24.3	1.9
Beverages	67	653.15	0.2	0.2	-7.8	1059.33	-6.1	2.5
Food Producers	132	689.69	0.1	0.1	1.1	1133.68	3.4	2.4
Household Goods & Home Construction	62	567.41	0.8	0.8	12.0	908.85	14.4	2.2
Leisure Goods	43	275.28	0.2	0.2	13.7	379.18	14.9	1.1
Personal Goods	87	954.49	0.2	0.2	5.9	1419.04	7.2	1.5
Tobacco	13	825.61	0.1	0.1	-17.2	2060.36	-12.6	7.5
Health Care	306	643.84	0.2	0.2	5.4	989.81	7.2	1.8
Health Care Equipment & Services	111	1321.91	0.4	0.4	12.7	1591.03	13.5	0.7
Pharmaceuticals & Biotechnology	195	413.88	0.0	0.0	0.8	676.00	3.1	2.5
Consumer Services	441	646.58	0.6	0.6	15.9	904.82	17.0	1.1
Food & Drug Retailers	69	275.45	0.2	0.2	-6.6	417.01	-4.3	2.6
General Retailers	145	1251.67	0.6	0.6	38.3	1683.61	39.1	0.6
Media	87	392.74	0.4	0.4	2.2	553.45	3.2	1.2
Travel & Leisure	140	439.58	1.0	1.0	-15.1	628.77	-14.1	1.9
Telecommunication	98	143.72	0.2	0.2	-10.4	312.16	-6.7	4.8
Fixed Line Telecommuniations	43	110.65	0.1	0.1	-18.3	270.02	-14.3	6.0
Mobile Telecommunications	55	168.08	0.4	0.4	0.8	319.08	3.9	3.4
Utilities	191	310.57	0.4	0.4	-2.3	677.80	0.5	3.4
Electricity	131	350.47	0.3	0.3	-1.6	754.13	1.3	3.4
Gas Water & Multiutilities	60	308.85	0.5	0.5	-3.8	695.57	-1.2	3.3
Financials	866	219.60	0.6	0.6	-17.0	397.44	-14.8	3.2
Banks	272	153.71	1.0	1.0	-28.1	305.33	-25.8	4.3
Nonlife Insurance	74	266.24	0.7	0.7	-13.8	417.56	-11.8	2.3
Life Insurance	54	199.58	1.0	1.0	-17.3	356.58	-14.5	3.6
Financial Services	208	366.33	0.0	0.0	-1.1	537.61	0.6	1.9
Technology	313	472.95	0.2	0.2	31.5	605.63	32.7	0.9
Software & Computer Services	164	804.32	0.8	0.8	32.3	962.00	32.9	0.5
Technology Hardware & Equipment	149	363.72	-0.6	-0.6	30.8	496.68	32.6	1.4
Alternative Energy	11	192.19	0.3	0.3	51.9	273.16	54.1	0.8
Real Estate Investment & Services	160	324.97	-0.1	-0.1	-12.0	597.55	-9.4	3.0
Real Estate Investment Trusts	98	429.33	0.6	0.6	-13.4	938.74	-11.0	3.9
FTSE Global Large Cap	1742	586.12	0.0	0.0	3.3	927.81	5.3	2.1

The FTSE Global Equity Series, launched in 2003, contains the FTSE Global Small Cap Indices and broader FTSE Global All Cap Indices (large/mid/small cap) as well as the enhanced FTSE All-World index Series (large/mid cap) - please see www.ftse.com/geis. The trade names Fundamental Index® and RAFI® are registered trademarks and the patented and patent-pending proprietary intellectual property of Research Affiliates, LLC (US Patent Nos. 7,620,577; 7,747,502; 7,778,905; 7,792,719; Patent Pending Publ. Nos. US-2006-0149645-A1, US-2007-0055598-A1, US-2008-0288416-A1, US-2010- 0063942-A1, WO 2005/076812, WO 2007/078399 A2, WO 2008/118372, EPN 1733352, and HK1099110). "EDHEC™" is a trade mark of EDHEC Business School As of January 2nd 2006, FTSE is basing its sector indices on the Industrial Classification Benchmark - please see www.ftse.com/icb. For constituent changes and other information about FTSE, please see www.ftse.com. © FTSE International Limited. 2013. All Rights reserved. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under licence.

FTSE 100 SUMMARY

FTSE 100	Closing Price	Week's Change
3I Group PLC	1067	12.00
Admiral Group PLC	2780	26.00
Anglo American PLC	1984.4	29.40
Antofagasta PLC	1038	5.00
Ashtead Group PLC	2975	6.00
Associated British Foods PLC	1732	-17.50
Astrazeneca PLC	7943	-274.00
Auto Trader Group PLC	591.00	9.00
Avast PLC	495.40	-29.10
Aveva Group PLC	4602	92.00
Aviva PLC	278.10	-3.80
B&M European Value Retail S.A.	499.80	-9.80
Bae Systems PLC	458.00	-25.40
Barclays PLC	111.54	9.74
Barratt Developments PLC	541.00	4.20
Berkeley Group Holdings (The) PLC	4268	-58.00
Bhp Group PLC	1608.8	-27.60
BP PLC	205.50	-3.90
British American Tobacco PLC	2572	-72.00
British Land Company PLC	380.20	23.20
Bt Group PLC	104.55	4.15
Bunzl PLC	2466	-91.00
Burberry Group PLC	1488	-46.50
Coca-Cola Hbc AG	1974	43.00
Compass Group PLC	1150	-28.50
Crh PLC	2845	-125.00
Croda International PLC	6264	-200.00
Dcc PLC	5028	-320.00
Diageo PLC	2628.5	-26.00
Evraz PLC	384.20	23.10
Experian PLC	2970	-114.00
Ferguson PLC	8072	-44.00
Flutter Entertainment PLC	12730	-545.00
Fresnillo PLC	1218.5	-125.00
Glaxosmithkline PLC	1343.8	-66.20
Glencore PLC	167.48	3.92
Gvc Holdings PLC	1004	-61.50
Halma PLC	2444	-31.00
Hargreaves Lansdown PLC	1414	-4.50
Hikma Pharmaceuticals PLC	2549	-136.00
Homeserve PLC	1167	-37.00
HSBC Holdings PLC	321.40	15.05
Imperial Brands PLC	1300	-15.00
Informa PLC	449.00	42.20
Intercontinental Hotels Group PLC	4201	27.00
Intermediate Capital Group PLC	1293	-40.00
International Consolidated Airlines Group S.A.	109.00	13.22
Intertek Group PLC	5996	-152.00
Jd Sports Fashion PLC	822.40	22.80
Johnson Matthey PLC	2375	-51.00
Just Eat Takeaway.Com N.V.	9174	-806.00

FTSE 100	Closing Price	Week's Change
Kingfisher PLC	320.10	8.90
Land Securities Group PLC	555.20	30.00
Legal & General Group PLC	197.40	7.05
Lloyds Banking Group PLC	29.29	2.28
London Stock Exchange Group PLC	8438	-398.00
M&G PLC	168.80	0.45
Melrose Industries PLC	132.85	3.25
Mondi PLC	1593.5	-28.00
Morrison (Wm) Supermarkets PLC	172.75	-0.15
National Grid PLC	945.00	0.80
Natwest Group PLC	122.80	9.65
Next PLC	6328	296.00
Ocado Group PLC	2313	-148.00
Pearson PLC	512.40	-31.60
Pennon Group PLC	1023	-4.50
Persimmon PLC	2593	83.00
Phoenix Group Holdings PLC	694.40	-5.20
Polymetal International PLC	1760	-10.00
Prudential PLC	1079	-19.50
Reckitt Benckiser Group PLC	7000	-354.00
Relx PLC	1635	-75.50
Rentokil Initial PLC	554.00	14.80
Rightmove PLC	672.00	6.80
Rio Tinto PLC	4578	-68.50
Rolls-Royce Holdings PLC	243.70	21.80
Royal Dutch Shell PLC	940.60	-6.20
Royal Dutch Shell PLC	971.80	-2.00
Rsa Insurance Group PLC	443.60	13.80
Sage Group PLC	694.00	-17.60
Sainsbury (J) PLC	208.70	5.10
Schroders PLC	2800	-35.00
Scottish Mortgage Investment Trust PLC	1031	-40.00
Segro PLC	936.00	13.60
Severn Trent PLC	2532	20.00
Smith & Nephew PLC	1456.5	-49.00
Smith (Ds) PLC	295.30	-17.90
Smiths Group PLC	1423.5	24.50
Smurfit Kappa Group PLC	3124	-96.00
Spirax-Sarco Engineering PLC	11465	-85.00
Sse PLC	1337	-7.00
St. James's Place PLC	937.00	-7.80
Standard Chartered PLC	399.40	29.60
Standard Life Aberdeen PLC	242.50	-4.70
Taylor Wimpey PLC	119.40	2.75
Tesco PLC	214.10	-0.20
Unilever PLC	4694	-172.00
United Utilities Group PLC	890.40	2.00
Vodafone Group PLC	112.60	3.24
Whitbread PLC	2386	162.00
Wpp PLC	665.40	8.20

UK STOCK MARKET TRADING DATA

	Oct 23	Oct 22	Oct 21	Oct 20	Oct 19	Yr Ago
	-	-	-	-	-	-
Order Book Turnover (m)	45.53	40.03	155.71	34.05	37.44	37.44
Order Book Bargains	844183.00	838525.00	772144.00	686037.00	830934.00	830934.00
Order Book Shares Traded (m)	1590.00	1322.00	1240.00	1179.00	1276.00	1276.00
Total Equity Turnover (£m)	6934.52	4109.55	3648.87	3903.54	5127.37	5127.37
Total Mkt Bargains	1063519.00	1061688.00	982721.00	885406.00	1059314.00	1059314.00
Total Shares Traded (m)	9503.00	9229.00	11065.00	9747.00	8501.00	8501.00

† Excluding intra-market and overseas turnover. *UK only total at 6pm. ‡ UK plus intra-market turnover. (u) Unavaliable. (c) Market closed.

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Issue price	Amount paid up	Latest renun. date	High	Low	Stock	closing Price p	+or-

There are currently no rights offers by any companies listed on the LSE.

UK COMPANY RESULTS

Company		Turnover		Pre-tax		EPS(p)		Div(p)		Pay day	Total	
Airtel Africa	Int	1815.000	1640.000	281.000	316.000	0.030	0.063	0.00000	3.00000	-	3.000	6.000
Avation	Pre	135.274	119.055	14.640	25.559	0.154	0.403	0.00000	8.50000	-	2.100	10.500
Barclays	3rd	16825.000	16331.000	2419.000	3260.000	7.600	10.400	0.00000	0.00000	-	0.000	7.000
BlackRock Greater Europe Investment Trust	Pre			53.950	19.478	66.210	22.220	4.40000	4.10000	Dec 9	6.150	5.850
Dukemount Capital	Pre	2.388	0.622	0.332L	0.246L	0.090L	0.071L	0.00000	0.00000	-	0.000	0.000
ITM Power	Pre	3.291	4.589	29.523L	9.318L	7.400L	2.900L	0.00000	0.00000	-	0.000	0.000
Mercantile Investment Trust (The)	Int			482.427L	186.663	61.020L	23.500	1.35000	1.35000	Nov 2	3.886	3.900
Papillon Holdings	Int	0.000	0.000	0.165L	0.198L	0.125L	0.150L	0.00000	0.00000	-	0.000	0.000

Figures in £m. Earnings shown basic. Figures in light text are for corresponding period year earlier.
For more information on dividend payments visit www.ft.com/marketsdata

UK RECENT EQUITY ISSUES

Issue date	Issue price(p)	Sector	Stock code	Stock	Close price(p)	+/-	High	Low	Mkt Cap (£m)
10/05	48.00	AIM	CLX	Calnex Solutions PLC	52.00	-0.97	57.00	48.00	4550.0
10/05	50.00		MODE	Mode Global Holdings PLC	50.50	-1.50	52.00	43.00	4067.1
09/29	5.00		CRTM	Critical Metals PLC	5.10	0.00	5.90	4.75	154.5
09/25	73.00	AIM	VARE	Various Eateries PLC	66.00	-1.00	74.00	65.00	5874.6
09/16	500.00		THG	THG Holdings PLC	666.60	41.60	669.80	565.30	647033.0

§Placing price. *Intoduction. ‡When issued. Annual report/prospectus available at www.ft.com/ir
For a full explanation of all the other symbols please refer to London Share Service notes.

MARKET DATA

FT500: THE WORLD'S LARGEST COMPANIES

Stock	Price	+/-Week	52 Week High	52 Week Low	Yld	P/E	MCap m
Australia (A$)							
ANZ	19.78	0.42	28.10	14.10	7.33	13.70	39844.86
BHPBilltn	36.00	-0.77	41.47	24.05	5.83	15.43	75322.74
CmwBkAu	69.90	0.62	91.05	53.44	6.31	16.87	87886.46
CSL	294.82	-6.17	342.75	242.67	1.02	42.85	95257.89
NatAusBk	19.53	0.30	29.23	13.20	7.70	19.28	45637.55
Telstra	2.73	-0.13	3.94	2.72	3.75	17.44	23060.99
Wesfarmers	46.92	-1.02	49.67	29.75	3.34	32.00	37785.28
Westpc	18.78	0.00	29.10	13.47	8.40	15.55	48174.6
Woolworths	38.82	-0.38	43.96	32.12	2.72	41.15	34826.05
Belgium (€)							
AnBshInBv	48.51	1.09	83.01	29.03	2.65	-98.89	97215.33
KBC Grp	45.68	1.32	73.56	33.44	2.19	12.91	22512.08
Brazil (R$)							
Ambev	13.89	0.62	19.58	10.36	3.82	22.89	38893.28
Bradesco	20.40	1.74	32.45	14.05	1.23	6.55	16100.41
Cielo	3.75	0.19	9.07	3.23	2.24	13.50	1812.99
ItauHldFin	23.41	1.72	32.79	19.46	3.73	11.17	20655.49
Petrobras♦	20.49	1.19	33.65	10.50	2.76	-	27136.9
Vale	63.45	1.21	63.89	32.45	3.29	42.79	59667.22
Canada (C$)							
BCE	56.20	-0.01	65.28	46.03	5.89	20.27	38642.95
BkMontrl	84.09	3.10	104.75	55.76	4.87	11.47	41111.97
BkNvaS♦	57.18	1.00	76.75	46.38	6.14	10.43	52667.92
Brookfield	44.52	0.04	60.48	31.35	1.41	-325.02	53271.73
CanadPcR♦	413.50	-15.24	432.27	252.00	0.82	23.99	42610.09
CanImp♦	102.50	1.49	115.96	67.52	5.52	12.22	34720.35
CanNatRs	22.43	-0.80	42.57	9.80	7.27	733.34	20141.95
CanNatRy	137.98	-9.44	149.11	92.01	1.64	26.80	74642.25
Enbridge	37.99	-0.87	57.32	33.06	8.31	39.65	58498.42
GtWesLif	28.28	0.60	35.60	18.88	6.13	10.53	19947.48
ImpOil	17.71	1.35	35.80	10.27	5.07	-434.33	9884.81
Manulife	19.21	0.40	27.78	12.58	5.62	9.62	28332.9
Nutrien	54.57	1.59	66.74	34.80	4.58	26.92	23614.88
RylBkC♦	96.29	-1.05	109.68	72.00	4.32	12.68	104209.12
Suncor En	16.49	0.82	45.12	14.02	9.36	-4.60	19122.37
ThmReut	107.63	-1.51	110.55	75.91	1.91	24.77	40635.83
TntoDom♦	60.53	0.11	77.72	49.01	4.93	12.02	83017.75
TrnCan♦	55.36	-1.35	76.58	47.05	5.37	12.94	39563.36
ValeantPh	30.80	0.74	36.02	14.01	-	-3.78	8158.48
China (HK$)							
AgricBkCh	2.82	0.24	3.50	2.38	7.47	4.43	11184.94
Bk China	2.61	0.13	3.39	2.33	8.49	4.10	28161.47
BkofComm	4.06	0.21	5.68	3.66	8.99	3.82	18341.66
BOE Tech	0.61	-0.03	0.80	0.47	-	-4.19	15.66
Ch Coms Cons	4.15	0.15	6.63	3.97	6.49	3.82	2370.84
Ch Evrbrght	2.94	0.22	3.97	2.40	8.40	4.46	4809.68
Ch Rail Cons	5.49	0.36	9.99	4.90	4.42	3.62	1470.81
Ch Rail Gp	3.64	0.16	5.05	3.45	4.07	3.22	1976.08
ChConstBk	5.80	0.54	6.85	4.93	6.38	5.12	179923.51
China Vanke	24.95	1.50	34.75	21.65	4.86	6.13	6095.92
ChinaCitic	3.44	0.30	4.79	2.93	8.09	3.63	6605.75
ChinaLife	19.08	1.26	22.90	11.64	4.43	9.17	18319.58
ChinaMBank	43.85	5.00	44.65	29.80	3.17	10.59	25975.46
ChinaMob	50.90	0.65	70.00	45.20	6.77	8.53	134476.83
ChinaPcIns	26.75	3.25	32.50	17.90	5.24	8.14	9579.2
ChMinsheng	4.48	0.39	6.06	3.85	9.56	3.49	4809.63
ChMrchSecs	22.18	0.08	26.04	13.10	0.98	22.72	24682.17
Chna Utd Coms	4.92	0.00	6.24	4.82	1.22	28.74	15860.05
ChShenEgy	14.08	0.12	16.88	11.94	10.44	6.11	6174.41
ChShpbldng	4.28	-0.07	5.65	3.98	0.21	-153.75	11733.15
ChStConEng	5.11	-0.01	6.20	4.76	3.60	5.29	31606.86
ChUncHK	5.53	0.11	8.15	3.84	3.12	11.96	21832.99
CNNC Intl	4.47	-0.09	5.25	4.02	2.67	14.49	10432.13
CSR	3.21	0.01	6.10	3.03	5.41	7.50	1810.45
Daqin	6.50	0.02	8.26	6.32	7.35	8.59	14488.73
Gree Elec Apl	0.10	0.00	0.37	0.01	-	-0.03	4.31
GuosenSec	13.71	-0.40	16.14	10.38	1.45	22.96	16855.92
HaitongSecs	6.92	0.26	9.58	5.79	-	7.21	3044.4
Hngzh HikVDT	39.15	-0.25	40.75	27.00	1.78	28.26	47519.3
Hunng Pwr	2.94	-0.12	4.24	2.24	5.42	23.12	1783.09
IM Baotou Stl	1.16	-0.01	1.47	1.04	0.60	-129.47	5509.3
In&CmBkCh	4.77	0.53	6.11	3.96	6.38	5.09	53420
IndstrlBk	18.32	1.31	20.42	14.93	-	6.37	53878.98
Kweichow	1715.33	-9.67	1828	960.10	0.99	49.37	323076.97
Midea	0.64	-0.03	1.17	0.58	-	-2.20	17.76
New Ch Life Ins	32.30	2.70	37.30	20.45	2.76	7.13	4309.87
PetroChina♦	2.30	0.10	4.23	2.16	5.68	-28.84	6261.52
PingAnIns	86.35	3.65	101.00	69.00	2.78	11.03	82979.86
PngAnBnk	18.13	1.57	18.78	11.91	-	13.70	52750.66
Pwr Cons Corp	4.11	0.18	4.88	3.40	3.33	9.10	6867.51
SaicMtr	21.25	0.79	25.39	16.90	10.02	12.33	37224.68
ShenwanHong	0.06	0.01	0.13	0.03	-	-0.20	62.19
ShgPdgBk	9.70	0.08	13.24	9.35	-	5.63	40873.05
Sinopec Corp■	3.20	0.19	4.85	2.95	11.33	79.14	10534.5
Sinopec Oil	1.84	0.00	2.59	1.67	-	50.00	3322.33
Denmark (kr)							
DanskeBk	93.76	2.44	123.60	68.04	-	8.86	12858.13
MollerMrsk	10285	-385.00	11040	4976	1.43	29.80	15430.97
NovoB	445.25	-6.85	467.90	331.70	1.88	25.34	128368.14
Finland (€)							
Nokia	3.60	0.19	4.35	2.08	1.39	33.11	24096.52
SampoA	35.39	-0.25	42.46	21.34	4.25	23.87	23210.99
France (€)							
Airbus Grpe	68.03	3.69	139.40	48.12	-	-11.83	63130.15
AirLiquide	133.35	-1.45	143.90	94.86	2.03	27.91	74737.78
AXA	14.97	-0.18	25.62	11.84	4.88	12.90	42842.27
BNP Parib	33.50	1.30	54.22	24.51	-	6.03	49552.91
ChristianDior	394.80	-15.60	484.60	252.40	1.22	39.02	84344.51
Cred Agr	7.52	0.17	13.80	5.70	-	5.51	25660.81
Danone	51.12	-2.18	75.66	49.56	-	17.54	41542.99
EDF	10.44	0.12	13.61	5.98	1.44	19.65	38330.59
Engie SA	11.37	-0.38	16.80	8.63	-	-25.21	32756.97
EssilorLuxottica	115.70	-0.70	145.00	86.76	-	-3849.93	59921.09
Hermes Intl	825.00	35.00	825.00	516.00	0.55	77.99	103080.49
LOreal	288.60	-2.80	297.20	196.00	1.34	49.84	191075.02
LVMH	428.00	-4.60	440.30	278.70	1.12	48.61	255688.28
Orange	9.52	0.01	15.38	8.63	5.26	9.70	29965.46
PernodRic	147.90	6.40	171.70	112.25	1.97	28.69	45840.49
Renault	24.77	0.91	50.32	12.77	-	-0.80	8669.51
Safran	96.58	5.84	152.30	51.10	-	61.80	48835.92
Sanofi	82.94	-3.09	95.82	67.65	3.80	9.35	123581.2
Sant Gbn	35.37	-1.36	39.57	16.41	3.51	14.68	22801.52
Schneider	110.20	1.55	111.75	61.72	2.32	27.85	73960.8
SFR Group	34.50	0.00	34.56	21.87	-	-23.02	17905.81
SocGen	12.75	0.69	32.23	10.77	-	-14.30	12877.54
Total	28.08	-0.38	50.93	21.12	9.45	-24.60	88173.71
UnibailR	190.00	0.35	236.45	177.35	2.94	-7.05	22215.04
Vinci	72.84	0.44	107.35	54.76	2.81	25.42	52795.08
Vivendi	25.43	0.57	26.42	16.60	2.36	16.72	35681.37
Germany (€)							
Allianz	163.42	-0.28	232.60	117.10	5.88	10.18	80687.39
BASF	52.27	-1.33	72.17	37.36	6.32	45.47	56820.63
Bayer	42.43	-2.39	78.34	41.51	6.61	-5.71	49329.33
BMW	63.93	0.81	77.06	36.60	3.92	13.03	45549.35
Continental	101.15	0.00	133.10	51.45	-	-7.39	23943.81
Daimler	48.40	-1.00	54.50	21.02	-	-172.56	61284.07
Deut Bank	8.12	0.26	10.37	4.45	-	-6.38	19862.48
Deut Tlkm	13.47	-0.58	16.75	10.41	4.46	17.23	75880.6
DeutsPost	40.61	-0.66	42.11	19.11	-	22.65	59431.11
E.ON	9.53	-0.21	11.56	7.60	4.84	30.68	29785.65
Fresenius Med	68.64	-2.78	81.10	53.50	-	15.64	24731.98
Fresenius SE	34.37	-2.16	51.54	24.25	-	10.46	18390.35
HenkelKgaA	83.25	1.80	90.30	54.65	2.20	20.42	25597.7
Linde	198.80	-0.30	221.70	130.45	1.65	53.07	123611.2
MuenchRkv	211.50	1.50	284.20	141.10	4.64	15.69	35069.5
SAP	124.90	-7.94	143.32	82.13	1.27	32.64	181603.21
Siemens	109.66	-1.30	112.90	53.02	3.56	19.34	110319.32
Volkswgn	147.10	0.00	185.00	99.16	-	14.03	51374.94
Hong Kong (HK$)							
AIA	78.15	-0.20	87.80	60.05	1.70	21.20	121948.4
BOC Hold	22.05	0.90	28.90	20.05	7.36	7.33	30081.04
Ch OSLnd&Inv	19.62	0.20	31.00	19.02	5.48	4.56	27735.16
ChngKng	37.55	0.00	57.20	33.40	5.90	6.46	17895.01
Citic Ltd♦	5.92	0.29	10.74	5.57	8.29	3.44	22221.18
Citic Secs	18.04	0.52	21.45	12.60	3.21	13.22	5303.33
CK Hutchison	46.40	0.00	76.00	45.05	7.21	4.91	23087.55
CNOOC	7.67	0.38	14.04	6.24	10.78	7.21	44186.25
HangSeng	121.70	7.90	173.80	110.00	6.85	11.05	30021.9
HK Exc&Clr	368.00	6.00	397.80	206.00	1.92	46.73	60201.41
MTR	39.05	0.10	47.80	36.20	3.32	37.37	31129.72
SandsCh	29.35	2.35	45.45	25.15	3.55	116.09	30635.7
SHK Props	98.00	-0.25	124.00	87.60	4.95	7.28	36642.66
Tencent	561.50	9.50	574.00	314.60	0.23	45.29	694280.03
India (Rs)							
Bhartiartl	434.40	32.75	612.00	325.50	-	-4.88	32194.17
HDFC Bk	1235.8	36.45	1305.5	738.75	-	24.22	92386
Hind Unilevr	2143.85	-6.70	2614.3	1757.3	1.20	67.18	68427.18
HsngDevFin	2059.7	98.00	2499.9	1473.45	0.87	15.87	50197.82
ICICI Bk	416.95	20.85	552.20	268.30	0.25	26.17	39057.98
Infosys	1122.5	-5.00	1186	509.25	1.64	26.26	64950.54
ITC	170.75	5.05	266.30	134.60	6.12	14.10	28541.81
L&T	941.25	47.15	1491.95	661.00	3.06	16.41	17951.45
OilNatGas	69.00	1.75	149.65	50.00	8.58	19.78	11792
RelianceIn	2113.05	-62.75	2369.35	867.40	0.63	30.83	194104.56
SBI NewA	202.80	6.85	351.00	149.45	-	8.15	24587.04
SunPhrmInds	484.50	-2.40	564.75	312.00	1.22	155.89	15791.85
Tata Cons	2686.8	-76.50	2885	1506.05	1.26	31.38	136959.19
Indonesia (Rp)							
Bk Cent Asia	22300	200.00	24700	16800	-	-	38879.26
Israel (ILS)							
TevaPha	31.92	0.41	46.45	24.30	-	890.69	10338.79
Italy (€)							
Enel	7.57	0.04	8.61	5.15	3.97	41.98	91075.56
ENI	6.44	-0.12	14.42	6.19	13.37	-2.65	27717.06
Generali	12.06	-0.08	19.63	10.20	4.15	10.38	22495.84
IntSPaolo	1.56	0.01	2.63	1.31	-	8.22	35595.16
Unicred	6.95	0.08	14.44	6.01	-	-7.43	18363
Japan (¥)							
AstellasPh	1483.5	4.00	1987	1406	2.77	14.43	26345.8
Bridgestne	3618	255.00	4734	2861.5	3.69	14.75	24630.71
Canon	1730.5	74.00	3117	1627	7.11	24.77	22016.29
CntJpRwy	13795	-845.00	23100	12380	1.12	13.61	27107.07
Denso	4935	126.00	5174	3021	2.91	-47.12	37091.7
EastJpRwy	5838	-457.00	10325	5711	2.90	-44.55	21046.11
Fanuc	21540	1225	22030	12020	1.09	68.06	41488.07
FastRetail	72660	2240	74160	39910	0.68	76.55	73518.5
Fuji Hvy Ind	2096.5	62.50	3167	1671.5	4.89	19.98	15382.05
Hitachi	3650	97.00	4693	2524	2.67	17.90	33698.49
HondaMtr	2580	52.50	3259	2120	3.78	21.80	44579.43
JapanTob	1993.5	-9.00	2555	1796.5	7.92	11.72	38031.2
KDDI	2770.5	26.50	3451	2604	4.26	9.46	60893.11
Keyence	48730	-850.00	50800	28905	0.32	61.23	113049.18
MitsbCp	2457.5	-41.00	2960.5	2094.5	5.51	8.85	34827.73
MitsubEst	1608	-17.00	2283	1291	2.11	14.07	21340.74
MitsubishiEle	1365.5	-16.00	1658	1096.5	3.00	14.50	27967.79
MitsuiFud	1881.5	-19.00	3035	1538	2.40	10.88	17577.31
MitUFJFin	425.80	5.80	603.00	380.00	6.00	17.76	55164.9
Mizuho Fin	1322	26.00	1731	1084	0.58	296.93	320206.78
Murata Mfg	7230	-21.00	7389	4602	1.38	25.66	46606.26
NipponTT	2214	-34.00	2908	2127	4.40	9.34	82380.37
Nissan Mt	387.90	11.30	714.80	311.20	2.64	-1.54	15617.07
Nomura	497.80	14.30	586.40	367.40	4.12	5.09	16588.87
Nppn Stl	1119	59.00	1786.5	798.10	4.59	5.69	10143.65
NTTDCMo	3889	10.00	3895	2678	3.17	20.76	119770.5
Panasonic	894.30	26.80	1264	691.70	3.44	12.25	20930.25
Seven & I	3430	-5.00	4419	2937.5	2.95	16.39	29002.68
ShnEtsuCh	14445	160.00	14590	8751	1.56	19.57	57411.11
Softbank	7082	66.00	7300	2609.5	0.64	-8.86	141174.84
Sony	7820	63.00	8920	5297	0.59	14.41	94066.67
SumitomoF	3002	45.00	4145	2507.5	6.47	19.04	39346.28
Takeda Ph	3500	-87.00	4562	2894.5	5.28	44.63	52628.97
TokioMarine	4888	43.00	6317	4167	3.99	13.54	32731.21
Toyota	6973	58.00	8026	5771	3.24	11.92	217035.18
Mexico (Mex$)							
AmerMvl	13.67	0.19	16.82	12.33	2.44	35.05	29659.44
FEMSA UBD	120.83	-1.14	185.00	114.17	1.15	77.07	12498.39
WalMrtMex	52.95	2.04	62.71	47.76	1.50	30.15	44252.08
Netherlands (€)							
Altice	4.24	0.01	6.86	2.26	-	-3.82	5300.67
ASML Hld	316.60	-14.00	355.50	177.52	0.76	45.80	159498.96
Heineken	81.16	2.18	105.00	68.82	2.07	50.32	55328.75
ING	6.59	0.26	11.26	4.23	3.65	9.27	30427.78
Unilever	51.10	-1.54	55.39	38.42	3.22	22.77	88342.72
Norway (Kr)							
DNB	140.00	5.25	178.10	94.26	-	10.98	23732.21
Equinor	131.65	-2.20	187.20	95.20	7.77	-19.24	46302.75
Telenor	153.70	1.95	181.05	130.75	5.07	43.03	23222.56
Qatar (QR)							
QatarNtBk	17.80	-0.10	21.25	15.71	3.57	12.44	45154.77
Russia (RUB)							
Gzprm neft	185.71	1.03	272.68	158.17	9.34	10.45	58976.64
Lukoil	4745.5	125.50	6810	3663	7.64	12.47	44107.51
MmcNrlskNckl	20150	432.00	23656	13352	11.57	14.96	42774.79
Novatek♦	973.20	15.40	1382.2	682.80	3.47	6.59	39639.58
Rosneft	324.00	10.10	489.90	229.80	10.77	12.36	46063.6
Sberbank	188.91	-2.89	270.80	172.15	-	5.33	54705
Surgutneftegas	35.13	0.77	54.89	24.06	1.93	2.10	16833.73
Saudi Arabia (SR)							
AlRajhiBnk	67.00	0.10	68.90	51.00	4.74	16.01	44661.9
NatnlcombnK	40.25	-1.35	50.70	30.50	6.05	10.88	32196.57
SaudiBasic	97.60	1.50	100.00	61.90	4.78	-90.31	78071.67
SaudiTelec	106.00	2.00	106.60	72.30	4.00	18.70	56527.3
Singapore (S$)							
DBS	21.55	0.48	26.80	16.65	6.02	11.64	40244.88
JardnMt US$	44.00	2.18	59.68	37.37	4.13	-80.16	32018.8
JardnStr US$	21.68	1.35	33.50	17.81	1.73	-26.00	24028.12
OCBC	8.81	0.18	11.23	7.80	6.19	9.84	28544.23
SingTel	2.12	-0.05	3.48	2.08	8.29	32.17	25460.98
UOB	20.08	0.62	27.02	17.28	5.64	11.15	24656.05
South Africa (R)							
Firstrand	43.46	5.96	69.90	31.13	6.76	14.53	15030.12
MTN Grp	57.53	2.05	101.11	26.25	9.42	6.40	6683.24
Naspers N	3012.93	-122.89	3367.26	1843.8	0.27	25.26	80897.93
South Korea (KRW)							
HyundMobis	234500	0.00	268500	126000	1.27	12.69	19673.72
KoreaElePwr	21300	0.00	29500	15550	-	-14.93	12068.7
SK Hynix	83900	-3200.00	106000	65800	1.19	25.26	53909.44
SmsungEl	60200	200.00	62800	42300	2.34	18.94	317194.07
Spain (€)							
BBVA	2.50	0.16	5.34	2.13	10.44	-35.58	19689.87
BcoSantdr	1.74	0.10	4.04	1.50	5.74	-3.56	34301.45
CaixaBnk	1.72	0.04	2.94	1.50	4.08	9.16	12155.18
Iberdrola	10.71	-0.36	11.52	7.76	1.57	18.81	80454.26
Inditex	24.19	0.69	32.28	18.51	0.87	31.56	89229.53
Repsol	5.82	-0.18	15.67	5.37	15.76	-1.21	11210.57
Telefonica	3.08	0.02	7.26	2.85	12.80	-153.48	19392.32
Sweden (SKr)							
AtlasCpcoB	352.50	-11.70	388.30	223.20	1.88	27.46	15674.13
Ericsson	108.45	13.45	110.15	59.54	0.69	129.84	37968.42
H & M	158.05	3.30	214.35	98.13	3.02	53.24	26306.5
Investor	565.60	-2.00	591.40	370.10	2.29	6.03	29356.11
Nordea Bk	70.55	1.04	86.73	48.00	-	24.22	32558.37
SEB	83.64	-0.74	104.90	59.80	-	11.11	20682.04
SvnskaHn	77.82	-0.62	113.80	71.80	-	9.77	17245.54
Swedbank	149.50	2.32	162.70	99.14	-	13.78	19284.37
Telia Co♦	36.18	-2.29	43.80	30.29	5.72	50.53	16860.41
Volvo	183.45	0.70	188.55	95.00	-	20.25	33075.59
Switzerland (SFr)							
ABB	23.61	-0.88	24.73	14.11	3.38	36.83	56479.26
CredSuisse	9.88	0.47	13.80	6.18	1.42	5.93	26677.17
Nestle	106.56	-1.30	112.62	83.37	2.56	22.60	338720.52
Novartis	76.48	-2.47	96.38	65.09	3.81	25.46	208176.55
Richemont	63.00	0.48	81.66	44.64	3.06	36.59	36284
Roche	297.40	-14.85	357.85	265.75	3.06	19.70	230531.41
Swiss Re	67.98	-0.24	117.05	52.68	8.52	-15.28	23813.61
Swisscom	469.80	-16.50	577.80	446.70	4.73	14.80	26851.16
Syngent	453.40	1.40	471.20	402.50	-	28.99	43035.76
UBS	11.26	0.65	13.28	7.00	3.07	9.57	47942.82
Zurich Fin	315.10	6.50	439.90	248.70	6.33	15.02	52308.71
Taiwan (NT$)							
Chunghwa Telecom	107.50	1.00	123.50	103.00	8.30	24.80	29110.36
Formosa PetChem	81.20	0.10	107.00	66.10	3.66	879.83	27001.33
HonHaiPrc	80.70	2.60	101.50	65.70	5.08	10.65	39052.74
MediaTek	678.00	-11.00	763.00	273.00	2.95	40.04	37624.89
TaiwanSem	452.00	-1.00	466.50	235.50	2.15	24.66	409136.55
Thailand (THB)							
PTT Explor	32.25	-0.75	47.75	23.60	6.65	18.23	29458.16
United Arab Emirates (Dhs)							
Emirtestele	17.08	0.18	17.08	11.04	6.51	15.80	40439.56
United Kingdom (p)							
AscBrFd	1732	-17.50	2730	1554	2.68	19.37	17884.41
AstraZen	7943	-274.00	10120	5871	2.80	59.84	131205.61
Aviva	278.10	-3.80	439.40	205.70	3.42	5.07	14557.15
Barclays	111.54	9.74	192.99	73.04	2.69	16.87	24824.88
BP	205.50	-3.90	521.50	194.76	16.20	-2.34	53421.13
BrAmTob	2572	-72.00	3507	2362.5	5.99	9.29	62546.36
BSkyB	1727.5	0.50	1740	893.50	0.76	36.60	38843.72
BT	104.55	4.15	209.20	1.02	14.73	4.80	13530
Compass	1150	-28.50	2084	865.80	3.48	17.72	24668.09
Diageo	2628.5	-26.00	3297	2050.6	2.66	43.88	86307.44
GlaxoSmh	1343.8	-66.20	1857	1324.4	5.95	10.11	86196.68
Glencore	167.48	3.92	264.12	109.76	4.77	-8.28	31510.27
HSBC	321.40	15.05	617.60	281.50	5.00	-198.52	84051.16
Imperial Brands	1300	-15.00	2072	1218	15.89	14.40	16171.57
LlydsBkg	29.29	2.28	73.66	23.59	3.82	73.21	27528.66
Natl Grid	945.00	0.80	1073.8	8.90	5.06	25.82	41372.08
Natwest Group	122.80	9.65	265.00	90.54	1.63	37.21	19165.81
Prudential	1079	-19.50	1509	682.80	3.44	26.56	36412.09
ReckittB	7000	-354.00	8191.3	5130	2.49	-18.10	64295.01
RELX	1635	-75.50	1613685	1382.86	2.80	24.92	41199.75
RioTinto	4578	-68.50	5175	2954	6.68	12.84	80085.73
RollsRoyce	243.70	21.80	792.00	1.57	1.89	-0.81	5911.69
RylDShlA	971.80	-2.00	2356	905.70	12.89	-8.11	58269.94
Shire#	4690	0.00	4780	2944	0.58	11.63	56567.13
StandCh	399.40	29.60	740.80	334.25	1.42	11.11	17174.29
Tesco	214.10	-0.20	260.40	203.70	3.15	22.44	22864.36
Vodafone	112.60	3.24	169.46	92.76	6.81	-40.65	39174.48
WPP♦	665.40	8.20	1085.5	450.00	3.41	-3.58	10988.41
United States of America ($)							
21stC Fox A	27.08	0.22	39.74	19.81	1.79	15.84	9306.83
3M	169.80	-1.17	182.55	114.04	3.62	18.26	97808.1
AbbottLb♦	107.79	-1.88	114.20	61.61	1.33	59.37	190845.43
Abbvie♦	84.34	-1.93	101.28	62.55	5.63	17.48	148846.04
Accenture♦	229.70	-0.35	247.82	137.15	1.10	28.50	152452.99
Adobe	488.50	-14.32	536.88	255.13	-	63.16	234316.47
AEP	91.88	0.36	104.97	65.14	3.18	22.73	45586.76
Aetna	-	-	-	-	-	-	-
Aflac	37.85	0.64	55.07	23.07	3.07	8.96	26983.73
AirProd♦	294.00	-4.14	310.74	167.43	1.80	32.31	64942.95
Alexion	121.61	-2.52	128.57	72.67	-	30.72	26653.63
Allergan	193.02	-	202.22	114.27	1.54	-25.19	63659.11
Allstate	91.25	-1.33	125.92	64.13	2.41	6.50	28498.85
Alphabet	1632.98	65.28	1726.1	1008.87	-	34.04	490663.39
Altria	39.08	-0.45	51.78	30.95	9.08	-77.13	72626.16
Amazon	3204.4	-68.31	3552.25	1626.03	-	116.66	1605050.8
AmerAir	12.60	0.14	31.67	8.25	2.51	-1.46	6407.87
AmerExpr	100.98	-3.93	138.13	67.00	1.80	19.81	81305.17
AmerIntGrp	32.38	2.09	56.42	16.07	4.17	-5.67	27893.23
AmerTower	237.72	-5.00	272.20	174.32	1.84	52.25	105444.95
Amgen	227.16	-8.56	264.97	177.05	2.83	17.57	133046.2
Anadarko	72.77	-	76.23	40.40	1.50	-63.37	36563.54
Anthem	310.76	13.89	311.75	171.03	1.19	12.78	78158.15
Aon Cp	207.31	-5.57	238.19	143.93	0.90	26.12	48023.43
Apple	115.04	-3.98	137.98	53.15	0.72	33.05	1994487.59
ArcherDan	51.87	2.08	52.05	28.92	2.89	15.65	28821.4
AT&T	27.82	0.49	39.70	26.08	7.85	16.07	198217.5
AutomData	149.20	0.78	182.32	103.11	2.49	24.80	64150.84
Avago Tech	372.72	-5.93	387.80	155.67	3.31	70.37	150765.74
BakerHu	22.08	0.28	31.26	20.09	3.39	-1.35	11412.93
BankAm	24.90	0.66	35.72	17.95	3.05	11.40	215736.03
Baxter	81.09	-0.73	95.19	69.10	1.18	42.92	41050.33
BB & T	54.24	-0.48	55.66	40.68	3.52	16.82	41564.3
BectonDick	240.28	3.29	286.72	197.75	1.38	80.43	69649.62
BerkshHat	319344.42	840.42	347400	239440	-	22.40	210098.61
Biogen	265.00	-15.01	374.99	257.60	-	7.37	41953.07
BkNYMeln	37.67	-0.35	51.60	26.40	3.47	7.72	33370.41
BlackRock	637.31	-20.07	666.64	323.98	2.30	21.26	97179.3
Boeing	167.36	0.01	375.60	89.00	3.89	-31.52	94466.14
Booking Holdings	1823.55	155.68	2094	1107.29	-	29.49	74671.88
BrisMySq♦	60.13	-1.11	68.34	45.76	3.09	-196.43	136055.53
CapOne	77.99	-1.23	107.59	38.00	2.17	-199.68	35613.02
CardinalHlth	49.34	0.55	60.69	39.05	4.13	-3.71	14429.19
Carnival	15.36	1.28	51.94	7.80	10.30	-3.51	10752.44
Caterpillar	168.59	-0.16	171.26	87.50	2.58	21.32	91292.59
Celgene	108.24	-	110.70	58.59	-	12.71	77035.98
CharlesSch	40.35	1.06	51.65	28.00	1.83	15.99	51996.7
Charter Comms	593.28	-40.64	663.70	345.67	-	53.89	121562.58
Chevron Corp	72.57	-0.32	122.94	51.60	7.21	-14.82	135507.63
Chubb	129.02	9.76	167.74	87.35	2.48	25.52	58235.23
Cigna	184.49	6.59	224.64	118.50	0.02	12.43	67744.84
Cisco	38.82	-1.34	50.28	32.40	3.64	14.80	164341.57
Citigroup	43.95	0.76	83.11	32.00	4.90	7.18	91497.96
CME Grp	163.86	-4.13	225.36	131.80	2.06	23.41	58764.09
Coca-Cola	50.52	0.49	60.13	36.27	3.38	22.57	217005.57
Cognizant	74.12	0.76	75.32	40.01	1.20	23.72	40190.88
ColgtPlm♦	79.34	-0.97	80.99	58.49	2.30	25.14	68026.13
Comcast♦	45.06	-0.50	47.74	31.71	2.06	17.14	205413.05
ConocPhil	32.54	-1.23	67.13	20.84	5.08	15.02	34896.71
Corning	35.56	0.38	35.83	17.44	2.49	240.63	27088.77
Costco	374.60	-6.94	384.87	271.28	0.75	42.47	165394.78
CrownCstl	158.47	-8.43	180.00	114.18	3.15	86.28	66504.83
CSX	81.29	1.18	84.81	46.81	1.30	20.70	62191.12
CVS	60.25	0.66	77.03	52.04	3.50	9.07	78849.38
Danaher♦	232.66	5.21	236.55	119.60	0.32	55.66	165051.06
Deere♦	239.53	-0.53	243.40	106.14	1.26	28.09	75062.66
Delphi	17.02	-	18.51	5.39	-	-7.42	1469.67
Delta	34.00	2.53	62.48	17.51	3.75	-5.53	21687.13
Devon Energy	9.36	0.41	26.98	4.70	4.29	-1.49	3583.01
DiscFinServ	68.00	2.52	87.43	23.25	2.73	20.32	20836.64
Disney	128.35	1.54	153.41	79.07	0.72	-139.76	231936.58
DominRes	81.14	-0.27	90.89	57.79	4.83	118.26	68168.62
DowDupont	30.52	-0.56	48.38	30.06	4.01	-8.62	68559.76
DukeEner	92.78	0.41	103.79	62.13	4.30	31.17	68233.39
Eaton	109.81	0.55	111.65	56.42	2.77	27.96	43934.98
eBay	53.79	-2.04	61.06	26.02	1.18	18.60	37646.61
Ecolab	204.87	0.34	231.36	124.60	0.96	40.86	58466.78
Emerson	70.02	-0.26	78.38	37.75	3.00	20.73	41843.39
EOG Res♦	37.51	0.09	89.54	27.00	3.48	59.22	21839.96
EquityResTP	51.31	-0.54	89.55	49.62	4.81	16.10	19098.1
Exelon	42.20	0.11	50.54	29.28	3.73	14.75	41124.06
ExpScripts	92.33	-	101.73	66.93	-	11.10	52061.19
ExxonMb	34.16	0.06	73.12	30.11	10.75	19.26	144436.45
Facebook	284.79	18.86	304.67	137.10	-	32.98	684715.5
Fedex	283.56	-0.31	293.30	88.69	0.97	54.85	74460.59
FordMtr	8.16	0.49	9.58	3.96	5.82	-14.32	31885.5
Franklin	23.22	-0.27	29.17	14.91	3.64	10.73	11502.18
GenDyn♦	140.70	-1.54	190.08	100.55	3.18	11.84	40371.39
GenElectric♦	7.63	0.34	13.26	5.48	0.55	19.02	66787.6
GenMills♦	61.78	-0.59	66.14	46.59	3.09	16.96	37742.51
GenMotors	36.83	3.38	38.96	14.33	3.27	33.23	52707.28
GileadSci	60.79	-1.21	85.97	59.65	4.55	-274.22	76213.9
GoldmSchs	205.04	-1.17	250.46	130.85	2.57	14.75	70549.38
Halliburton	13.31	1.06	25.47	4.25	4.64	-2.73	11692.44
HCA Hold	136.59	1.47	151.97	58.38	0.95	13.35	46171.97
Hew-Pack	19.12	-0.48	23.93	12.54	3.58	10.81	26261.26
HiltonWwde	94.61	5.11	115.48	44.30	0.50	689.45	26236.24
HomeDep	283.00	-4.66	292.95	140.63	2.01	26.05	304636.91
Honywell	175.54	0.68	184.06	101.08	2.12	20.45	123191.02
HumanaInc♦	444.31	6.59	449.43	208.25	0.56	16.00	58778.91
IBM	116.00	-9.93	158.75	90.56	5.91	12.46	103307.13
IllinoisTool	206.70	0.06	208.08	115.94	2.19	28.80	65350.94
Illumina	323.55	-2.76	404.20	196.78	-	65.63	47238.3
Intcntl Exch	98.95	-2.35	106.99	63.51	1.23	24.22	53718.69
Intel	48.20	-5.96	69.29	43.63	2.83	8.42	204994.6
Intuit	334.42	-6.73	360.00	187.68	0.63	48.63	87207.15
John&John	145.24	-2.86	157.00	109.16	2.81	24.18	382391.28
JohnsonCn	44.40	1.38	44.76	22.78	2.47	43.36	33035.71
JPMrgnCh♦	103.81	2.30	141.10	76.91	3.66	13.24	316371.82
Kimb-Clark	136.88	-16.45	160.16	110.66	3.24	17.41	46682.53
KinderM	12.78	-0.08	22.58	9.42	8.36	172.96	28927.99
Kraft Heinz	31.37	-0.79	36.37	19.99	5.38	-185.74	38352.29
Kroger	32.76	-1.31	37.22	24.09	1.94	10.05	25484.85
L Brands	34.76	1.46	35.41	8.00	2.57	-12.23	9612.3
LasVegasSd	50.68	5.31	74.29	33.30	4.85	109.11	38709.55
LibertyGbl	20.65	-1.16	25.71	15.24	-	-35.57	3763.91
Lilly (E)	142.38	-3.74	170.75	101.36	2.05	22.00	136182.25
Lockheed	374.33	-12.17	442.53	266.11	2.65	15.54	104640.98
Lowes♦	172.14	-5.56	180.67	60.00	1.27	22.94	130092.4
Lyondell	76.90	-0.11	98.91	33.71	5.77	12.00	25672.24
Marathon Ptl	29.89	0.52	69.65	15.26	7.84	-2.39	19449.29
Marsh&M♦	113.70	-1.24	120.97	74.34	1.69	27.20	57592.38
MasterCard♦	329.61	-9.79	367.25	199.99	0.47	43.25	327149.72
McDonald's	228.71	-0.66	231.91	124.23	2.27	34.34	170183.69
McKesson	156.41	-0.26	172.18	112.60	1.11	27.24	25368.1
Medtronic	111.42	1.29	122.15	72.13	1.96	34.39	149669.59
Merck	79.83	0.00	92.64	65.25	3.15	18.40	201909.31
Metlife	40.94	1.66	53.28	22.85	4.59	5.02	37159.7
Microsoft	216.23	-3.43	232.86	132.52	0.97	35.56	1636353.59
Mnstr Bvrg	80.39	-0.37	87.05	50.06	-	35.92	42397.4
MondelezInt	56.61	-1.36	59.96	41.19	2.13	23.02	80858.23
Monsanto	127.95	-	127.97	114.19	1.64	23.62	56462.29
MorganStly	51.87	0.02	57.57	27.20	2.85	8.89	81786.59
MylanNV	15.69	-0.02	23.11	12.75	-	28.04	8110.9
Netflix	488.28	-42.51	575.37	266.63	-	78.14	215339.02
NextEraE	303.07	-2.53	308.06	174.80	1.85	39.66	148397.55
Nike	129.99	1.99	131.38	60.00	0.78	77.01	161820.82
NorfolkS	215.40	-3.35	224.99	112.62	1.84	25.38	59327.63
Northrop	308.43	-7.81	385.01	263.31	1.85	20.48	51419.62
NXP	137.18	-0.05	145.15	58.41	1.15	-2165.87	38303.98
Occid Pet	10.02	-0.07	47.58	9.00	25.07	-0.73	9320.02
Oracle	59.90	-0.39	62.60	39.71	1.56	19.40	180352.19
Pepsico	139.56	-2.17	147.20	101.42	2.94	26.98	193239.36
Perrigo	45.62	-1.76	63.86	40.01	2.01	24.70	6226.19
Pfizer	38.18	0.23	40.97	27.88	4.09	14.30	212161.67
Phillips66	50.48	-0.10	119.92	40.04	7.53	-17.20	22044.45
PhilMorris	74.45	-4.82	90.17	56.01	6.64	15.10	115940.04
PNCFin	114.81	3.33	161.79	79.41	4.23	16.91	48737.17
PPG Inds	134.27	-2.89	138.40	69.77	1.60	30.14	31684.68
Praxair	164.50	-0.44	169.75	140.00	2.34	37.33	47306.22
ProctGmbl	142.38	-2.01	145.87	94.34	2.25	27.19	354472.3
Prudntl	68.73	2.46	97.24	38.62	6.45	-105.02	27148.35
PublStor	235.72	2.72	241.98	155.37	3.58	31.90	41204.51
Qualcomm	128.88	-0.15	132.42	58.00	2.06	51.52	145410.9
Raytheon	116.96	-	233.48	103.00	2.98	10.60	32566.46
Regen Pharm	579.81	-19.93	664.64	299.22	-	21.29	60615.32
S&P Global	337.43	-10.74	379.87	186.06	0.78	30.13	81320.63
Salesforce	250.52	-8.03	284.50	115.29	-	100.84	225718.52
Schlmbrg	15.40	0.43	41.14	11.87	11.14	-0.93	21376.77
Sempra Energy	133.86	5.75	161.87	88.00	3.17	17.47	38720.3
Shrwin-Will	683.31	-12.01	725.91	325.43	0.76	33.94	62215.14
SimonProp	66.88	2.06	158.40	42.25	9.94	11.13	20457.74
SouthCpr	51.95	4.01	52.19	23.43	2.84	32.59	40161.16
Starbucks	90.80	2.28	94.13	50.02	1.85	76.80	106145.2
StateSt	65.31	-1.27	85.89	42.10	3.36	9.90	23014.15
Stryker♦	221.90	-2.15	227.39	124.54	1.07	49.93	83174.38
Sychrony Fin	27.75	-1.63	38.18	12.15	3.35	8.04	16199.2
T-MobileUS	112.38	-2.58	123.42	63.50	-	41.26	139104.97
Target	160.23	-4.69	167.42	90.17	1.64	23.33	80117.48
TE Connect	106.30	-1.46	109.27	48.62	1.85	-296.18	35083.09
Tesla Mtrs	420.63	-19.04	502.49	50.27	-	962.49	389863.24
TexasInstr	149.96	-3.16	155.88	93.09	2.44	26.65	137354.93
TheTrvelers	125.97	12.65	141.87	76.99	2.77	16.98	31894.49
ThrmoFshr	480.17	11.58	485.00	250.21	0.18	49.23	189950.16
TimeWrnr	98.77	-	103.89	85.88	1.54	15.09	77269.69
TJX Cos	57.02	0.37	64.95	32.72	1.20	102.46	68302.95
UnionPac	188.14	-21.71	210.95	105.08	2.18	22.14	127716.73
UPS B	171.90	-2.54	178.01	82.00	2.42	32.37	121547.26
USBancorp	40.66	1.52	61.11	28.36	4.36	12.11	61248.7
UtdHlthcre	330.60	0.70	335.65	187.72	1.43	17.60	314181
UtdTech	86.01	-18.63	158.44	69.02	3.12	60.04	74498.84
ValeroEngy	41.97	1.75	101.99	31.00	9.46	15.53	17113.57
Verizon♦	57.96	-0.09	62.22	48.84	4.48	11.88	239841.6
VertexPharm	211.58	-6.50	306.08	186.41	-	25.34	55109.68
VF Cp	74.83	-0.99	100.25	45.07	2.64	101.27	29157.41
ViacomCBS	29.28	1.34	43.04	10.10	3.24	12.78	16507.23
Visa Inc	198.01	-2.25	217.35	133.93	0.61	35.66	333846.28
Walgreen	38.04	0.63	64.50	33.88	5.08	42.42	32962.96
WalMartSto	143.85	-0.86	151.33	102.00	1.48	23.09	407635.36
WellsFargo	23.28	0.42	54.75	22.00	9.25	24.50	95914.7
Williams Cos	19.96	0.69	24.17	8.41	8.25	171.89	24222.63
Yum!Brnds	101.28	2.75	110.72	54.95	1.86	28.81	30525.75
Venezuela (VEF)							
Bco de Vnzla	15500	500.00	16799.99	700.00	634.42	-	123.05
Bco Provncl	749999	-1001.00	787000	72000	-	34.78	176.04
Mrcntl Srvcs	795000	-12000.00	815000	71500	0.02	11.96	105.36

Closing prices and highs & lows are in traded currency (with variations for that country indicated by stock), market capitalisation is in USD. Highs & lows are based on intraday trading over a rolling 52 week period.

♦ ex-dividend

■ ex-capital redistribution

price at time of suspension

FT 500: TOP 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
ShenwanHong	0.06	0.06	0.00	-1.79	0.01	27.9	29.27
Firstrand	43.46	41.97	1.49	3.55	5.96	15.9	10.73
Ericsson	108.45	109.00	-0.55	-0.50	13.45	14.2	12.15
ChinaPcIns	26.75	25.75	1.00	3.88	3.25	13.8	18.54
ChinaMBank	43.85	43.95	-0.10	-0.23	5.00	12.9	14.49
In&CmBkCh	4.77	4.71	0.06	1.27	0.53	12.5	14.66
LasVegasSd	50.68	49.81	0.87	1.75	5.31	11.7	12.37
TheTrvelers	125.97	126.14	-0.17	-0.13	12.65	11.2	17.19
ChConstBk	5.80	5.79	0.01	0.17	0.54	10.3	9.89
GenMotors	36.83	37.41	-0.58	-1.55	3.38	10.1	25.53
Bradesco	20.54	20.44	0.10	0.49	1.88	10.1	13.34
RollsRoyce	243.70	226.90	16.80	7.40	21.80	9.8	46.55
Barclays	111.54	104.28	7.26	6.96	9.74	9.6	19.54
ChinaCitic	3.44	3.36	0.08	2.38	0.30	9.6	10.29
ChMinsheng	4.48	4.39	0.09	2.05	0.39	9.5	3.00
PngAnBnk	18.13	17.56	0.57	3.25	1.57	9.5	16.44
Booking Holdings	1823.55	1792.02	31.53	1.76	155.68	9.3	11.30
AgricBkCh	2.82	2.78	0.04	1.44	0.24	9.3	13.65
ItauHldFin	23.67	23.65	0.02	0.08	1.98	9.1	10.13
New Ch Life Ins	32.30	30.90	1.40	4.53	2.70	9.1	6.10

Based on the FT Global 500 companies in local currency

FT 500: BOTTOM 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
Intel	48.20	53.90	-5.70	-10.58	-5.96	-11.0	-1.47
Kimb-Clark	136.88	138.09	-1.21	-0.88	-16.45	-10.7	-5.05
UnionPac	188.14	187.14	1.00	0.53	-21.71	-10.3	-3.18
Netflix	488.28	485.23	3.05	0.63	-42.51	-8.0	3.62
IBM	116.00	115.76	0.24	0.21	-9.93	-7.9	-2.44
EastJpRwy	5838.00	5730.00	108.00	1.88	-457.00	-7.3	-13.09
Charter Comms	593.28	599.91	-6.63	-1.11	-40.64	-6.4	-3.74
CanNatRy	137.98	137.36	0.62	0.45	-9.44	-6.4	-1.70
PhilMorris	74.45	74.86	-0.41	-0.55	-4.82	-6.1	-1.23
SAP	124.90	124.50	0.40	0.32	-7.94	-6.0	-5.98
Telia Co	36.18	35.65	0.53	1.49	-2.29	-6.0	0.92
Fresenius SE	34.37	33.87	0.50	1.48	-2.16	-5.9	-5.91
CntJpRwy	13795.00	13540.00	255.00	1.88	-845.00	-5.8	-13.13
Sychrony Fin	27.75	27.96	-0.21	-0.75	-1.63	-5.5	10.56
Biogen	265.00	266.80	-1.80	-0.67	-15.01	-5.4	-2.65
Bayer	42.43	42.33	0.10	0.22	-2.39	-5.3	-5.32
LibertyGbl	20.65	20.39	0.26	1.28	-1.16	-5.3	0.87
CrownCstl	158.47	156.25	2.22	1.42	-8.43	-5.1	1.83
ReckittB	7000.00	6966.00	34.00	0.49	-354.00	-4.8	-99.08
Roche	297.40	297.25	0.15	0.05	-14.85	-4.8	-11.04

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

Oct 23	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
High Yield US$										
HCA Inc.	04/24	8.36	BB-	Ba2	BB	113.75	4.24	0.00	0.12	-
High Yield Euro										
Aldesa Financial Services S.A.	04/21	7.25	-	-	B	71.10	28.23	0.00	0.64	25.98
Emerging US$										
Peru	03/19	7.13	BBB+	A3	BBB+	104.40	2.60	-	-	0.34
Colombia	01/26	4.50	-	Baa2	BBB-	111.00	2.17	0.05	-0.08	1.84
Brazil	04/26	6.00	-	Ba2	BB-	117.25	2.58	0.07	-0.12	2.25
Poland	04/26	3.25	-	A2	A-	112.78	0.84	-0.01	-0.03	0.51
Mexico	05/26	11.50	-	Baa1	BBB-	148.00	2.25	-0.01	-0.38	1.92
Turkey	10/26	4.88	-	B2	BB-	92.10	6.50	0.16	-0.13	6.17
Turkey	03/27	6.00	-	Ba2	BB+	101.26	5.82	0.00	0.17	3.07
Peru	08/27	4.13	BBB+	A3	BBB+	103.50	3.66	0.01	-0.02	0.80
Russia	06/28	12.75	-	Ba1	BBB	171.63	2.44	-0.01	0.00	-
Brazil	02/47	5.63	-	Ba2	BB-	111.70	4.83	0.05	-0.19	-
Emerging Euro										
Brazil	04/21	2.88	BB-	Ba2	BB-	103.09	0.05	0.01	-0.09	-1.19
Mexico	04/23	2.75	-	Baa1	BBB-	105.88	0.37	-0.01	-0.22	0.21
Mexico	04/23	2.75	BBB+	A3	BBB+	107.76	0.76	0.00	-0.07	-1.56
Bulgaria	03/28	3.00	BBB-	Baa2	BBB	117.04	1.00	0.02	-0.15	-1.42

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

BONDS: GLOBAL INVESTMENT GRADE

Oct 23	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
US$										
FleetBoston Financial Corp.	01/28	6.88	BBB+	Baa1	A-	129.00	2.54	-0.01	-0.05	-
The Goldman Sachs Group, Inc.	02/28	5.00	BBB+	A3	A	117.21	2.47	0.00	0.32	-
NationsBank Corp.	03/28	6.80	BBB+	Baa1	A-	127.69	2.72	-0.01	0.06	-
GTE LLC	04/28	6.94	BBB+	Baa2	A-	128.27	2.80	0.00	-0.11	-
United Utilities PLC	08/28	6.88	BBB	Baa1	A-	130.43	2.62	-0.07	-0.22	-
Barclays Bank plc	01/29	4.50	A	A1	A+	96.46	5.02	0.00	0.02	-
Euro										
Electricite de France (EDF)	04/30	4.63	A-	A3	A-	137.45	0.82	-0.01	0.10	-
The Goldman Sachs Group, Inc.	02/31	3.00	BBB+	A3	A	124.42	0.68	0.00	-0.11	-
The Goldman Sachs Group, Inc.	02/31	3.00	BBB+	A3	A	121.70	0.93	0.00	0.02	-
Finland	04/31	0.75	AA+	Aa1	AA+	111.08	-0.27	0.00	-0.05	-0.87
Yen										
Mexico	06/26	1.09	-	Baa1	BBB-	96.00	1.84	0.00	0.00	1.51
£ Sterling										
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	137.45	2.19	-0.03	0.02	-
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	128.68	3.20	0.00	-0.01	0.40

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

INTEREST RATES: OFFICIAL

Oct 23	Rate	Current	Since	Last	Mnth Ago	Year Ago
US	Fed Funds	1.50-1.75	27-09-2018	1.00	1.75-2.00	1.25-1.50
US	Prime	3.25	27-09-2018	3.25	5.00	4.25
US	Discount	2.25	27-09-2018	0.75	2.50	1.75
Euro	Repo	0.00	16-03-2016	0.00	0.00	0.00
UK	Repo	0.10	02-08-2018	0.10	0.50	0.25
Japan	O'night Call	0.00-0.10	01-02-2016	0.00	0.00--0.10	0.00--0.10
Switzerland	Libor Target	-1.25-0.25	15-01-2015	-0.75--0.25	-1.25--0.25	-1.25--0.25

INTEREST RATES: MARKET

Oct 23 (Libor: Oct 22)	Over night	Change Day	Change Week	Change Month	One month	Three month	Six month	One year
US$ Libor	0.08413	0.004	0.003	0.001	0.14925	0.21475	0.24600	0.33513
Euro Libor	-0.58343	0.001	0.002	0.000	-0.56486	-0.53071	-0.50800	-0.45929
£ Libor	0.05013	0.000	-0.001	0.000	0.04600	0.04888	0.07063	0.12938
Swiss Fr Libor				-0.001	-0.79940	-0.76760	-0.72740	-0.61900
Yen Libor				-0.002	-0.08333	-0.09967	-0.05850	0.04833
Euro Euribor				-0.014	-0.55300	-0.51100	-0.49800	-0.46700
Sterling CDs				-	-	-	-	
US$ CDs				-	-	-	-	
Euro CDs				-	-	-	-	

Oct 23	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	-0.74	-0.44	-0.73	-0.43	-0.68	-0.38	-0.65	-0.35	-0.66	-0.36	-0.66	-0.36
Sterling			0.45	0.55	0.70	0.80	0.78	0.88	0.82	0.97	0.89	1.04
Swiss Franc	-	-	-	-	-	-	-	-	-	-	-	-
Canadian Dollar	-	-	-	-	-	-	-	-	-	-	-	-
US Dollar	0.07	0.37	-0.02	0.28	0.01	0.31	0.07	0.37	0.12	0.42	0.19	0.49
Japanese Yen	-0.20	-0.05	-0.20	-0.05	-0.15	0.15	-0.20	0.10	-0.25	0.05	-0.20	0.10

Libor rates come from ICE (see www.theice.com) and are fixed at 11am UK time. Other data sources: US $, Euro & CDs: Tullett Prebon; SDR, US Discount: IMF; EONIA: ECB; Swiss Libor: SNB; EURONIA, RONIA & SONIA: WMBA.

BOND INDICES

	Index	Day's change	Month's change	Year change	Return 1 month	Return 1 year
Markit IBoxx						
ABF Pan-Asia unhedged	219.23	-0.13	1.60	5.61	1.36	7.90
Corporates(£)	394.86	0.12	0.41	4.92	0.35	5.50
Corporates($)	331.89	-0.18	-0.01	6.52	-0.01	6.52
Corporates(€)	241.37	0.02	0.81	1.56	0.76	1.42
Eurozone Sov(€)	261.54	0.12	0.46	4.23	0.51	2.30
Gilts(£)	373.54	0.01	-1.02	7.20	-0.90	5.34
Global Inflation-Lkd	302.29	-0.47	0.55	8.13	0.94	8.82
Markit iBoxx £ Non-Gilts	383.77	0.09	0.21	4.75	0.17	4.99
Overall ($)	281.25	-0.19	-0.61	7.34	-0.61	7.34
Overall(£)	372.48	0.03	-0.68	6.26	-0.61	5.07
Overall(€)	252.08	0.08	0.49	3.30	0.53	1.91
Treasuries ($)	261.92	-0.20	-1.11	8.15	-1.11	8.15
FTSE						
Sterling Corporate (£)	-	-	-	-	-	-
Euro Corporate (€)	104.47	-0.05	-	-	0.54	-1.73
Euro Emerging Mkts (€)	617.16	-9.18	-	-	4.88	37.70
Eurozone Govt Bond	110.04	-0.19	-	-	-0.34	-0.64

CREDIT INDICES	Index	Day's change	Week's change	Month's change	Series high	Series low
Markit iTraxx						
Crossover 5Y	327.54	-5.87	0.82	-4.53	370.75	307.25
Europe 5Y	54.95	-1.14	1.37	-3.21	62.86	50.61
Japan 5Y	65.48	0.12	-0.41	-1.56	70.25	64.87
Senior Financials 5Y	72.50	-1.43	0.88	-4.14	82.84	66.59
Markit CDX						
Emerging Markets 5Y	202.65	0.48	-4.91	-39.85	245.71	199.98
Nth Amer High Yld 5Y	375.32	-0.38	3.68	-	412.45	362.70
Nth Amer Inv Grade 5Y	57.28	0.17	0.76	-1.03	60.42	52.55

Websites: markit.com, ftse.com. All indices shown are unhedged. Currencies are shown in brackets after the index names.

VOLATILITY INDICES

	Oct 23	Day Chng	Prev	52 wk high	52 wk low
VIX	27.55	-0.56	28.11	85.42	11.42
VXD	25.56	-0.77	26.33	71.05	2.47
VXN	33.45	-0.83	34.28	84.67	13.58
VDAX	30.10	-0.78	30.88	93.30	-

† CBOE. VIX: S&P 500 index Options Volatility, VXD: DJIA Index Options Volatility, VXN: NASDAQ Index Options Volatility. ‡ Deutsche Borse. VDAX: DAX Index Options Volatility.

BONDS: BENCHMARK GOVERNMENT

	Red Date	Coupon	Bid Price	Bid Yield	Day chg yield	Wk chg yield	Month chg yld	Year chg yld
Australia	11/22	2.25	104.38	0.13	0.00	-0.01	-0.04	-0.66
	05/32	1.25	103.71	0.91	0.01	0.06	-0.01	-
Austria		-	-	-	-	-	-	-
	02/47	1.50	136.83	0.08	0.03	0.06	-0.03	-0.36
Belgium	09/22	1.00	103.09	-0.65	0.00	0.01	-0.05	-0.09
Canada	11/22	2.00	103.62	0.23	0.01	0.02	0.02	-1.41
	06/30	1.25	105.65	0.64	0.05	0.10	0.09	-0.91
Denmark	11/22	0.25	101.86	-0.64	0.00	0.02	-0.05	0.05
	11/29	0.50	108.74	-0.44	0.03	0.05	-0.04	-0.11
Finland	04/23	1.50	105.53	-0.71	0.03	0.02	-0.04	-0.15
	04/31	0.75	111.82	-0.36	0.03	0.05	-0.04	-0.31
France	10/22	2.25	105.98	-0.71	0.01	0.01	-0.08	-0.11
	05/26	0.50	106.19	-0.59	0.03	0.03	-0.04	-0.24
Germany		-	-	-	-	-	-	-
	02/23	1.50	105.36	-0.79	0.01	0.01	-0.06	-0.11
	02/26	0.50	106.94	-0.78	0.02	0.03	-0.06	-0.20
	08/50	0.00	104.40	-0.14	0.04	0.06	-0.05	-0.29
Greece	02/26	3.65	117.34	0.91	0.03	0.11	-0.09	-0.41
Ireland	10/22	0.00	101.21	-0.61	0.01	0.00	-0.06	-0.13
	05/30	2.40	125.64	-0.25	0.03	0.05	-0.05	-0.36
	05/30	2.40	125.64	-0.25	0.03	0.05	-0.05	-0.36
Italy	08/22	0.90	102.14	-0.31	0.00	-0.02	-0.10	-0.28
	02/25	0.35	101.16	0.08	0.01	0.04	-0.09	-0.31
	05/30	0.40	101.85	0.20	0.03	0.03	-0.19	-0.18
	03/48	3.45	139.49	1.65	0.04	0.15	-0.05	-0.33
Japan	04/23	0.05	99.95	0.07	0.00	0.02	0.01	-
	04/25	0.05	99.99	0.05	0.00	0.02	0.01	-
	12/29	0.10	100.92	0.00	0.00	0.01	0.01	-
	12/49	0.40	94.42	0.61	0.00	0.00	0.02	-
Netherlands	07/22	2.25	105.14	-0.71	0.01	0.01	-0.06	-0.04
	07/26	0.50	106.80	-0.66	0.02	0.03	-0.04	-0.23
New Zealand	04/25	2.75	112.03	0.06	-0.01	0.00	0.03	-0.97
	05/31	1.50	109.37	0.58	-0.01	0.03	0.07	-0.92
	05/31	1.50	109.37	0.58	-0.01	0.03	0.07	-0.92
Norway	08/30	1.38	106.14	0.72	0.03	0.08	0.11	-
	08/30	1.38	106.14	0.72	0.03	0.08	0.11	-
Portugal	10/22	2.20	105.44	-0.53	0.03	0.04	0.02	-0.14
	02/26	3.30	118.77	-0.20	0.03	0.04	-0.05	-0.19
Spain	10/22	0.45	101.98	-0.52	0.01	0.01	-0.05	-0.17
	10/29	0.60	104.28	0.12	0.03	0.08	-0.02	-0.14
Sweden	06/22	0.25	110.37	-0.93	-0.34	0.00	-0.21	1.16
	06/26	0.13	116.90	-1.37	-0.10	0.03	-0.13	0.62
	06/30	0.13	116.62	-1.45	0.01	0.06	-0.05	-
Switzerland	05/22	2.00	104.51	-0.82	0.01	0.01	-0.01	-0.03
	05/30	0.50	109.89	-0.50	0.01	0.04	-0.01	0.01
United Kingdom		-	-	-	-	-	-	-
	07/22	0.50	100.92	-0.03	0.02	0.02	0.00	-0.49
	07/26	1.50	108.61	0.00	0.03	0.06	0.04	-0.48
	07/47	1.50	115.61	0.85	0.05	0.13	0.08	-0.38
United States	03/22	0.38	100.31	0.16	0.01	0.02	0.03	-
	03/25	0.50	100.74	0.33	0.02	0.05	0.09	-
	02/30	1.50	106.31	0.80	0.04	0.12	0.17	-
	02/50	0.25	114.92	-	-	-	-	-

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company.

GILTS: UK CASH MARKET

Oct 23	Price £	Red Yield	Change in Yield Day	Change in Yield Week	Change in Yield Month	Change in Yield Year	52 Week High	52 Week Low	Amnt £m
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Tr 1.5pc '21	100.37	-0.04	33.33	33.33	0.00	-106.78	101.22	100.37	32.84
Tr 4pc '22	105.50	-0.03	50.00	-50.00	-40.00	-107.32	108.34	105.50	38.77
Tr 5pc '25	122.09	-0.05	0.00	-54.55	-54.55	-111.63	124.55	121.74	35.84
Tr 1.25pc '27	107.83	0.09	0.00	200.00	350.00	-80.85	109.23	103.96	36.34
Tr 4.25pc '32	143.61	0.40	0.00	37.93	21.21	-45.95	148.26	137.84	38.71
Tr 4.25pc '36	153.50	0.60	0.00	25.00	15.38	-34.78	160.46	145.12	30.41
Tr 4.5pc '42	175.27	0.79	0.00	19.70	12.86	-26.17	186.37	162.55	27.21
Tr 3.75pc '52	181.56	0.82	-1.20	18.84	12.33	-23.36	198.36	164.59	24.10
Tr 4pc '60	207.74	0.80	0.00	21.21	15.94	-21.57	231.12	186.33	24.12

Gilts benchmarks & non-rump undated stocks. Closing mid-price in pounds per £100 nominal of stock.

COMMODITIES

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Energy		Price*	Change	Agricultural & Cattle Futures		Price*	Change
Crude Oil†	Nov	39.76	-0.91	Corn♦	Dec	420.00	4.25
Brent Crude Oil‡		41.70	-0.75	Wheat♦	Dec	634.50	13.00
RBOB Gasoline†	Oct	1.14	-0.02	Soybeans♦	Nov	1086.75	15.50
Heating Oil†		-	-	Soybeans Meal♦	Dec	386.80	5.30
Natural Gas†	Oct	2.95	-0.04	Cocoa (ICE Liffe)✠	Dec	1692.00	5.00
Ethanol♦		-	-	Cocoa (ICE US)♥	Dec	2481.00	9.00
Uranium†	Jul	33.80	-	Coffee(Robusta)✠	Nov	1271.00	-15.00
Carbon Emissions‡		-	-	Coffee (Arabica)♥	Dec	105.35	-1.20
Diesel†		-	-	White Sugar✠		396.20	-3.40
Base Metals (♠ LME 3 Months)				Sugar 11♥		14.73	-0.07
Aluminium		1842.50	-5.50	Cotton♥	Dec	71.30	-0.67
Aluminium Alloy		1590.00	-10.00	Orange Juice♥	Nov	115.35	3.80
Copper		6862.00	-47.00	Palm Oil♣		-	-
Lead		1776.50	-18.00	Live Cattle♣	Dec	103.80	0.63
Nickel		15575.00	-220.00	Feeder Cattle♣	Nov	134.88	-
Tin		18410.00	-225.00	Lean Hogs♣	Dec	67.18	0.98
Zinc		2547.00	-18.00				
Precious Metals (PM London Fix)							
Gold		1900.95	-23.20		Oct 22	% Chg Month	% Chg Year
Silver (US cents)		2491.50	-10.50	S&P GSCI Spt	358.77	-1.05	-
Platinum		870.00	-24.00	DJ UBS Spot	73.57	0.25	-
Palladium		2362.00	-43.00	TR/CC CRB TR	160.08	2.00	-14.44
Bulk Commodities				M Lynch MLCX Ex. Rtn	231.14	-9.84	-33.05
Iron Ore		115.55	-4.20	UBS Bberg CMCI TR	13.20	4.85	-4.74
GlobalCOAL RB Index		60.00	0.75	LEBA EUA Carbon	25.25	-7.91	0.40
Baltic Dry Index		1415.00	14.00	LEBA CER Carbon	0.29	0.00	38.10
				LEBA UK Power	972.00	-45.55	-68.95

Sources: † NYMEX, ‡ ECX/ICE, ♦ CBOT, ✠ ICE Liffe, ♥ ICE Futures, ♣ CME, ♠ LME/London Metal Exchange.* Latest prices, $ unless otherwise stated.

BONDS: INDEX-LINKED

	Price Oct 22	Yield Oct 22	Yield Prev	Month return	Value stock	Market	No of stocks
Can 4.25%' 21	105.08	-0.333	-0.328	0.02	8.41	95970.95	8
Fr 0.10%' 21	104.34	-0.873	-0.904	0.51	11.35	243595.76	15
Swe 0.25%' 22	110.37	-0.912	-0.580	0.17	26.51	198791.03	7
UK 1.875%' 22	110.36	-2.914	-2.929	-0.37	15.74	792771.86	28
UK 2.5%' 24	359.19	-2.873	-2.899	-0.43	6.82	792771.86	28
UK 2%' 35	305.32	-2.743	-2.776	0.21	9.08	792771.86	28
US 0.625%' 21	-	-	-	-	-	-	-
US 3.625%' 28	136.31	-1.033	-1.045	-0.24	16.78	1599051.04	42

Representative stocks from each major market Source: Merill Lynch Global Bond Indices † Local currencies. ‡ Total market value. In line with market convention, for UK Gilts inflation factor is applied to price, for other markets it is applied to par amount.

BONDS: TEN YEAR GOVT SPREADS

	Bid Yield	Spread vs Bund	Spread vs T-Bonds		Bid Yield	Spread vs Bund	Spread vs T-Bonds
Australia	0.91	-	0.11	Netherlands	-0.66	-	-
Austria	-	-	-	New Zealand	0.58	-	-0.22
Canada	0.64	-	-0.16	Norway	0.72	-	-0.08
Denmark	-0.44	-	-1.24	Portugal	-0.20	-	-
Finland	-0.36	-	-1.16	Spain	0.12	-	-0.68
Germany	-	-	-	Sweden	-1.45	-	-2.25
Ireland	-0.25	-	-1.05	Switzerland	-0.50	-	-1.30
Italy	0.20	-	-0.60	United Kingdom	-	-	-
Japan	0.00	-	-0.80	United States	0.80	-	0.00

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GILTS: UK FTSE ACTUARIES INDICES

Price Indices Fixed Coupon	Oct 23	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
1 Up to 5 Years	89.60	0.01	2488.60	-0.09	1.30	-0.05
2 5 - 10 Years	187.07	0.00	3811.98	-0.30	3.12	0.16
3 10 - 15 Years	226.24	0.01	4891.00	-0.55	4.62	0.43
4 5 - 15 Years	195.85	0.00	4075.18	-0.40	3.61	0.28
5 Over 15 Years	394.69	0.03	6464.25	-1.54	7.88	0.79
7 All stocks	192.65	0.02	4113.41	-0.84	5.00	0.66

Index Linked	Oct 23	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	304.55	0.00	-0.58	-1.53	2508.34	-0.58	-0.06
2 Over 5 years	837.42	0.56	0.53	6.86	6326.42	0.53	7.26
3 5-15 years	519.63	0.06	-0.55	2.18	4133.69	-0.55	2.91
4 Over 15 years	1104.17	0.75	0.94	8.56	8123.50	0.94	8.83
5 All stocks	744.06	0.51	0.43	5.95	5723.51	0.43	6.47

Yield Indices	Oct 23	Oct 22	Yr ago		Oct 23	Oct 22	Yr ago
5 Yrs	-0.04	-0.04	0.36	20 Yrs	0.81	0.82	1.15
10 Yrs	0.33	0.33	0.67	45 Yrs	0.77	0.77	1.08
15 Yrs	0.65	0.65	0.99				

Real yield	inflation 0% Oct 23	inflation 0% Dur yrs	inflation 0% Previous	inflation 0% Yr ago	inflation 5% Oct 23	inflation 5% Dur yrs	inflation 5% Previous	inflation 5% Yr ago
Up to 5 yrs	-2.63	2.98	-2.62	-2.25	-3.05	2.97	-3.05	-2.79
Over 5 yrs	-2.28	24.18	-2.26	-1.95	-2.31	24.24	-2.29	-1.98
5-15 yrs	-2.80	9.63	-2.79	-2.41	-2.90	9.63	-2.90	-2.49
Over 15 yrs	-2.22	29.31	-2.19	-1.91	-2.24	29.32	-2.21	-1.93
All stocks	-2.29	22.35	-2.26	-1.96	-2.32	22.43	-2.29	-1.99

See FTSE website for more details www.ftse.com/products/indices/gilts

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FINANCIAL TIMES SHARE SERVICE

Main Market

			52 Week				Vol
	Price	+/-Week	High	Low	Yld	P/E	000s
Aerospace & Defence							
Avon Rubber	4075	-75.00	4465	1684	0.51	97.94	49.8
BAE Sys♦	458.00	-25.40	672.80	428.60	2.05	12.12	11017.5
Chemring	270.00	20.00	288.00	145.80	1.33	21.43	368.1
Meggitt	305.50	12.70	701.80	196.15	1.82	-13.17	2046.7
RollsRoyce✠	243.70	21.80	792.00	1.57	1.89	-0.81	20933.1
Automobiles & Parts							
FordMtr $✠	8.16	0.49	9.58	3.96	5.82	-14.32	61424.9
Banks							
ANZ A$✠	19.78	0.42	28.10	14.10	7.33	13.70	5636.4
BcoSant	159.48	10.36	348.40	137.80	5.70	-3.59	129040.3
BnkGeorgia	920.00	29.00	1845	690.00	-	5.43	72.9
BankIre Grp €	1.99	0.14	5.51	1.28	-	-3.76	1149.8
BkNvaS C$✠♦	57.18	1.00	76.75	46.38	6.14	10.43	2690.3
Barclays✠	111.54	9.74	192.99	73.04	2.69	16.87	97495.6
CanImp C$✠♦	102.50	1.49	115.96	67.52	5.52	12.22	1066.6
HSBC✠	321.40	15.05	617.60	281.50	5.00	-198.52	37356.6
LlydsBkg✠	29.29	2.28	73.66	23.59	3.82	73.21	293985.3
NWG✠	122.80	9.65	265.00	90.54	1.63	37.21	17923.3
PermTSB €	0.48	-0.01	1.28	0.40	-	-3.85	5.0
RylBkC C$✠♦	96.29	-1.05	109.68	72.00	4.32	12.68	12953.2
Secure Trust Bank	741.00	111.00	1730	524.93	2.70	6.80	55.8
StandCh✠	399.40	29.60	740.80	334.25	1.42	11.11	8609.7
..7.375%Pf	117.40	0.65	129.00	93.50	6.28	-	36.0
..8.25%Pf	129.80	0.60	138.95	105.00	6.36	-	0.2
TntoDom C$✠♦	60.53	0.11	77.72	49.01	4.93	12.02	4253.3
Westpc A$✠	18.78	0.00	29.10	13.47	8.40	15.55	7382.2
Basic Resource (Ex Mining)							
Ferrexpo	184.00	13.40	212.40	94.88	7.26	3.50	1054.8
Mondi	1593.5	-28.00	1794	1156.5	1.55	12.19	1146.8
Chemicals							
Carclo	18.25	-0.25	26.50	3.05	-	-7.02	34.4
Croda	6264	-200.00	6510	3814	1.44	38.88	367.5
Elemntis	75.90	-2.45	185.70	18.07	2.90	-12.18	1347.1
Johnsn Mtthey	2375	-51.00	3294	1614	3.65	17.98	468.8
Victrex	1948	-48.00	2574	1645	3.06	18.89	161.2
Construction & Materials							
Alumasc♦	104.00	25.00	133.45	56.54	4.23	19.26	119.4
Boot(H)	244.00	-1.00	351.00	180.00	2.05	13.48	70.9
CRH	2845	-125.00	3119	1500	2.61	16.91	590.2
GalfrdT	77.94	0.44	887.00	71.01	74.42	0.72	596.1
KierGp	47.28	3.80	154.60	42.06	10.36	-0.33	951.8
Kingsp €	76.25	-0.50	107.30	37.30	0.17	40.32	84.5
MorgSdl	1196	10.00	1980	990.01	1.76	10.33	17.7
Norcros	173.00	-5.00	305.00	119.00	5.03	12.81	28.9
Tyman	279.00	-4.00	292.00	133.00	1.38	24.56	174.7
Electronic & Electrical Equip							
Dialight	290.00	-2.50	340.00	157.50	-	-5.89	6.5
Discoverie PLC	626.00	-6.00	690.00	330.29	1.55	37.94	89.6
Halma	2444	-31.00	2510	1660	0.66	50.23	437.2
Morgan Ad	265.00	13.00	339.40	168.80	1.51	94.64	262.2
OxfordIn	1660	-34.00	1760	724.00	0.64	30.02	70.3
Renishaw	5780	-35.00	6020	2234.51	0.80	14450.00	56.7
Spectris♦	2605	-18.00	3072	2058	0.84	14.00	269.1
TT Elect	205.00	7.00	285.00	135.75	1.02	82.00	451.9
XP Power	4380	60.00	4926	2062.05	0.87	46.90	6.9
Financial General							
3i	1067	12.00	1186	529.80	3.51	48.28	1034.7
BrewDlph	247.00	9.50	377.20	130.00	6.64	15.83	339.0
CtyLonInv♦	407.00	14.50	479.52	264.00	6.88	13.80	10.7
CloseBrs♦	1098	79.00	1663	849.00	6.01	8.60	456.3
DBAG €	31.20	-0.35	42.50	22.20	4.82	54.64	12.8
Hargr Lans	1414	-4.50	2186	1147	2.45	21.46	809.2
Indvardn SKr	241.70	3.80	255.00	167.70	-	41.48	372.3
ICG	1293	-40.00	1896	452.00	3.87	33.85	417.1
Investec	166.85	13.35	367.09	122.55	14.68	9.64	1611.2
Jupiter	233.80	2.80	437.80	161.65	7.31	12.71	743.6
Liontrust	1280	15.00	1495	678.45	2.27	53.62	87.1
LSE Gp	8438	-398.00	9287.87	5300	0.83	75.07	434.6
M&G Plc	168.80	0.45	252.56	86.40	7.06	4.01	3649.4
Paragon	329.20	9.20	555.50	217.00	6.44	7.57	395.2
Providnt	228.20	28.30	492.70	126.87	3.94	15.96	1019.0
RathbnBr	1508	8.00	2295	1194	4.64	25.82	27.2
Record	38.90	-4.70	45.00	25.00	5.91	11.93	32.0
S & U	1685	15.00	2500	1420	7.12	7.04	1.2
Schroder	2800	-35.00	3465	1711	4.07	17.24	190.0
..N/V	1844	-64.00	2645	1424	6.18	11.35	33.8
Shires Income	206.00	-2.00	299.46	157.85	6.41	-4.53	56.8
Strd Life Aber	242.50	-4.70	338.25	170.30	8.91	-6.05	4373.3
TP ICAP♦	204.20	-8.60	425.00	160.25	8.25	20.84	1238.9
WlkrCrip	26.50	0.00	30.00	18.00	3.51	15.68	0.2
Food & Beverages							
AngloEst	493.50	-3.50	680.00	336.00	0.08	8.62	1.8
AscBrFd✠	1732	-17.50	2730	1554	2.68	19.37	928.3
Barr(AG)	501.00	32.50	641.00	369.00	0.80	26.88	166.5
Britvic	802.00	56.50	1027	536.00	3.74	25.22	800.0
CarrsGroup	106.00	5.75	165.00	83.53	4.48	7.68	68.2
Coca-Cola HBC	1974	43.00	2933	1393.1	2.85	19.05	652.7
Cranswk	3378	-22.00	4126	2688	1.68	21.30	151.6
Devro	156.60	-3.00	195.40	116.76	1.72	-6.34	42.4
Diageo✠	2628.5	-26.00	3297	2050.6	2.66	43.88	2644.0
Grncore	100.40	4.35	282.20	83.40	6.18	7.72	1345.5
HiltonFd	1204	34.00	1352	711.00	1.78	26.76	133.2
Kerry €♦	108.30	-1.20	126.50	88.55	0.73	35.47	54.4
PremFds	94.90	0.90	102.69	17.86	-	17.57	1675.4
REA	54.75	-0.25	186.00	25.00	-	-4.94	0.3
StckSpirit	230.00	-5.00	258.06	119.80	3.44	14.02	488.3
Tate&Lyl	641.80	-4.20	811.40	493.83	4.61	12.32	645.1
Unilever	4694	-172.00	4944	3583.5	3.15	22.95	1868.4
..NV €	53.40	-0.40	55.40	45.30	3.12	23.46	7.9
Health Care Equip & Services							
ConvaTec	185.90	2.60	225.80	142.40	2.41	153.51	2808.6
GNStre kr	479.70	-30.70	525.00	217.40	0.30	62.78	386.5
Mediclinic	307.40	23.40	419.40	232.40	2.57	-7.08	376.8
Smith & Nephew♦	1456.5	-49.00	2023	1055.01	2.07	40.35	838.5
UDGHlthC	737.50	6.00	846.00	423.40	1.84	25.63	466.3
House, Leisure & Pers Goods							
BarrttDev	541.00	4.20	889.20	349.40	3.60	13.91	2739.1
Bellway	2548	-61.00	4336	1735.5	5.90	6.02	382.0
Berkeley	4268	-58.00	5709.54	3041	2.80	13.62	408.5
Burberry Gp	1488	-46.50	2340	1017	2.88	49.93	2147.3
Cairn Homes €	0.86	0.02	1.35	0.60	2.91	20.01	155.9
CtrySide	343.60	6.80	544.00	248.80	4.74	10.54	632.8
Crest Nicholson	243.20	6.20	524.00	159.85	4.61	-62.36	2704.9
GamesWk	10800	160.00	11000	3564	1.34	49.59	106.7
Gleeson	574.00	28.00	1010	512.00	6.01	12.25	34.5
Headlam	279.00	1.00	560.00	235.00	2.71	-25.14	67.1
McBride	61.60	0.00	88.00	55.10	-	17.60	287.9
McCarthy&S	115.80	41.30	160.20	36.51	4.66	15.24	53498.0
Persimn	2593	83.00	3328	1367.5	-	12.25	713.5
Philips €	42.17	0.66	46.38	26.92	-	38.52	1874.4
PZCusns♦	242.50	-13.00	265.24	149.00	3.41	27.28	621.4
ReckittB✠	7000	-354.00	8191.3	5130	2.49	-18.10	786.4
Redrow	474.80	29.40	850.76	293.00	4.32	14.48	1521.3
Superdry Plc	174.50	23.10	529.00	60.10	6.59	-1.14	1021.9
TaylorWm	119.40	2.75	237.70	98.12	3.22	9.79	14505.4
TedBaker	110.80	6.20	397.85	59.57	35.64	-0.86	1009.9
Vistry Group	602.50	20.00	1491.8	503.50	9.71	5.94	1022.5
Industrial Engineering							
Bodycote	703.50	27.00	975.00	378.40	0.85	30.32	187.4
Castings	327.00	7.00	443.76	274.00	4.55	14.17	60.0
Goodwin	3090	-130.00	3660	1730	3.11	29.91	0.0
Hill&Sm	1248	46.00	1534	844.00	0.85	26.67	60.2
IMI	1120	6.00	1214.5	619.80	1.33	19.82	280.3
MelroseInd	132.85	3.25	309.40	72.00	1.28	-17.03	9828.8
Renold	10.25	-1.15	22.39	4.00	-	6.83	116.8
RHIM	2840	60.00	3989.85	1419	1.60	20.69	46.3
Rotork	308.00	0.60	344.70	177.05	0.75	29.06	1449.1
Severfd	57.80	3.70	96.00	51.20	5.02	8.70	135.3
Trifast	122.00	6.00	193.00	89.00	3.48	-642.11	80.5
Vitec	722.00	-22.00	1280	485.98	1.70	-240.67	29.2
Weir	1568	-17.00	1670.5	608.60	1.05	-10.55	1285.8
Industrial General							
Calisen	165.00	-1.00	253.95	95.00	-	-0.02	82.9
Coats Group	61.00	3.20	80.90	35.90	0.73	28.77	1405.3
JardnMt $✠	44.00	2.18	59.68	37.37	4.13	-80.16	154.6
Jard Str $✠	21.68	1.35	33.50	17.81	1.73	-26.00	231.9
Macfrlne	86.50	6.50	116.50	61.00	0.80	14.44	188.8
Smith DS	295.30	-17.90	397.80	244.80	3.73	14.06	3115.8
Smiths♦	1423.5	24.50	1778.5	790.00	3.22	57.63	1535.7
SmurfKap	3124	-96.00	3410	1831	0.81	19.46	140.7
Vesuvius	432.80	21.80	514.50	284.00	1.43	23.27	173.9
Industrial Transportation							
Braemar	146.00	-3.00	230.00	92.00	10.27	10.26	15.7
Clarkson	2285	-80.00	3135	1936	1.09	-60.13	45.9
Eurotunnl €	12.85	0.94	17.04	8.62	-	256.55	1108.4
Fisher J♦	1288	24.00	2190	1098	0.88	26.29	38.9
OceanWil	627.50	-12.50	1040	509.90	3.91	276.92	39.3
RoyalMail	249.50	5.70	258.60	118.86	9.82	15.50	3771.4
Signature Aviation	263.20	28.00	394.91	129.40	1.62	-78.85	964.2
Insurance							
Admiral	2780	26.00	2846	1858.5	3.53	16.56	420.7
Aviva✠	278.10	-3.80	439.40	205.70	3.42	5.07	9307.0
Beazley	326.80	-3.60	611.50	294.20	3.84	25.56	1408.9
Chesnar	264.50	-8.00	350.50	200.00	7.90	5.04	1935.7
Direct Line	282.20	0.70	355.00	225.40	2.55	10.11	1967.4
Eccles prf	158.00	-1.00	167.00	111.00	5.46	-	87.8
Hansard♦	30.70	-4.00	48.00	23.40	14.50	9.59	6.4
Hiscox	875.60	6.00	1524	305.80	1.27	-12.85	478.3
Lancashire	665.00	-12.00	852.50	481.00	1.81	31.60	424.9
Leg&Gen	197.40	7.05	324.70	138.00	8.90	9.64	13845.0
Old Mut	52.10	6.39	110.20	42.76	11.46	-23.06	2462.8
PhoenixGrp	694.40	-5.20	806.00	459.05	6.74	9.46	1651.2
Prudntl✠	1079	-19.50	1509	682.80	3.44	26.56	3892.8
RSA Ins	443.60	13.80	736.84	321.20	1.69	14.45	4796.4
SagicFin	117.50	0.00	135.00	87.00	1.72	241.77	0.0
StJmsPl	937.00	-7.80	1777.5	614.00	4.11	18.02	1007.8
LEISURE							
PhotoMe International Plc	52.40	2.50	99.90	32.50	16.11	5.90	65.7
Media							
4imprint	2160	140.00	3540	1067.31	0.94	27.42	14.2
Auto Trader Group PLC	591.00	9.00	747.00	308.60	1.18	26.77	2338.7
DlyMailA	725.00	34.00	960.00	538.00	3.30	12.79	96.1
Hyve Group	56.90	-4.50	317.88	33.58	33.91	-4.38	766.9
Informa	449.00	42.20	875.40	326.70	1.68	-8.41	3995.2
ITV	74.74	0.92	165.90	50.06	3.48	9.97	11041.7
Pearson	512.40	-31.60	712.60	412.08	3.81	14.98	1971.6
RELX PLC✠	1635	-75.50	1613685	1382.86	2.80	24.92	3018.0
Rightmove PLC	672.00	6.80	710.60	373.10	0.42	43.64	1324.5
STV Grp	260.00	-13.00	455.00	210.00	2.42	20.80	4.6
ThmReut C$✠	107.63	-1.51	110.55	75.91	1.91	24.77	272.6
WPP✠♦	665.40	8.20	1085.5	450.00	3.41	-3.58	2267.6
Mining							
AngloAmer	1984.4	29.40	2266	1018.2	4.46	14.59	2514.1
AngloPacif	109.60	6.00	206.00	98.00	8.33	-15.77	735.4
AnGoldA R	404.84	-40.07	637.35	209.79	0.39	16.08	1604.7
Antofagasta	1038	5.00	1148.5	575.00	1.38	37.83	845.8
BHP Group	1608.8	-27.60	1932	939.80	5.14	12.66	3588.7
BisichMg	55.00	5.00	128.00	40.00	1.82	-1.99	10.0
EVRAZ	384.20	23.10	433.50	200.60	15.69	13.19	2090.2
Fresnillo	1218.5	-125.00	1379.5	456.51	0.97	55.76	1370.7
Glencore✠	167.48	3.92	264.12	109.76	4.77	-8.28	18940.4
Harmony R	86.35	-8.60	126.76	31.06	-	-28.68	2666.4
KAZ Minerals PLC	590.00	21.60	600.00	256.20	1.61	6.63	1204.1
Petropvlsk	27.45	-1.80	41.60	9.32	-	36.36	10210.9
PolymtIntl	1760	-10.00	2085	990.20	2.88	14.72	1116.9
Rio Tinto✠	4578	-68.50	5175	2954	6.68	12.84	2070.9
Troy Res A$	0.15	-0.01	0.20	0.06	-	-2.14	1403.8
Oil & Gas							
BP✠	205.50	-3.90	521.50	194.76	16.20	-2.34	51659.2
CairnEng	144.10	-0.70	210.00	57.35	-	9.42	1304.1
ExxonMb $✠	34.16	0.06	73.12	30.11	10.75	19.26	27356.4
Gazprom PJSC ADR $	4.26	0.11	8.50	2.55	11.14	8.45	16754.4
GeoPark $	7.99	-0.07	22.53	5.44	1.09	-4.47	20.3
HellenPet €	4.49	-0.04	8.83	4.40	11.16	-4.62	61.0
Hunting	143.00	7.80	444.80	120.10	4.53	-1.48	382.9
ImpOil C$✠	17.71	1.35	35.80	10.27	5.07	-434.33	1879.5
Pharos Energy	14.40	2.62	62.00	10.00	-	-0.25	1559.4
PJSC Lukoil ADR $	57.66	0.00	108.45	46.86	8.92	10.68	25.6
PremOil	13.03	-1.28	120.70	10.02	-	-0.22	8201.3
RylDShlA✠	971.80	-2.00	2356	905.70	12.89	-8.11	7622.2
..B	940.60	-6.20	2348.1	884.05	13.32	-7.85	4697.5
Seplat	60.20	-0.80	130.00	37.30	17.02	12.40	14.9
TrnCan C$✠♦	55.36	-1.35	76.58	47.05	5.37	12.94	2427.7
Tullow Oil PLC	21.63	5.74	221.03	7.17	8.61	-0.12	25032.1
Wood Group (John) PLC	224.50	9.00	426.40	2.14	4.11	44.03	1409.1
Pharmaceuticals & Biotech							
AstraZeneca✠	7943	-274.00	10120	5871	2.80	59.84	1188.3
CathayIn	1.15	-0.13	3.15	0.26	-	-1.69	17.1
Dechra	3566	88.00	3586	2030	0.91	108.85	109.7
Genus	4136	28.00	4204	2464.6	0.65	347.56	110.8
GlaxoSmh✠	1343.8	-66.20	1857	1324.4	5.95	10.11	6550.3
HikmaPhm	2549	-136.00	2737	1596	1.49	14.92	825.5
Oxfd Bio	819.00	7.00	899.00	356.73	-	-51.32	107.1
RichterG $	22.00	0.80	24.80	16.50	0.98	17.92	0.0
VecturGp	104.60	0.80	121.00	59.10	-	-95.09	1108.4
Real Estate							
REITs							
Assura	78.10	2.70	88.00	46.80	3.54	23.67	6783.1
BigYellw	1121	84.00	1245.3	630.00	3.00	20.16	143.8
BritLand	380.20	23.20	648.40	309.40	6.24	-3.46	4386.2
Cap&Reg	35.20	-1.80	302.50	32.30	59.66	-0.18	78.7
Civitas SH	106.00	4.20	115.40	74.20	5.00	17.49	2094.0
Countrywd	157.60	-27.85	361.70	38.60	-	-1.38	259.9
DrwntLdn	2792	140.00	4362	2334	2.59	22.01	209.8
Great Portland	620.00	13.80	971.80	518.60	2.03	31.00	466.8
Green Reit €	1.84	-0.09	1.93	1.30	3.12	13.44	1922.5
Hammersn	19.84	3.46	133.89	14.05	25.55	-0.25	8822.5
Hibernia €	1.07	0.02	1.48	0.75	3.43	12.42	2734.9
LandSecs	555.20	30.00	1019.5	474.75	6.28	-4.94	2130.5
LondonMtrc	224.40	8.20	245.40	132.90	3.79	-320.57	1241.3
McKaySec	187.00	-5.00	286.00	136.00	5.45	21.82	92.9
Palace Cap	190.75	2.75	347.34	158.37	7.47	-16.17	143.1
PrimyHth	147.40	5.60	167.60	114.70	4.90	19.92	1982.2
RDI REIT	90.70	-2.30	143.22	41.55	11.03	-3.86	38.6
SEGRO	936.00	13.60	996.60	641.80	2.21	15.24	1963.8
Shaftbry	454.80	-14.20	966.08	407.00	3.89	-4.66	1665.2
Town Ctr	87.00	5.25	235.94	80.50	13.51	-11.60	20.4
TritaxBBOX	162.20	-0.20	168.40	79.00	4.13	15.73	4951.8
Wkspace	620.50	29.00	1317	420.88	5.47	15.63	172.2
Real Estate Inv & Services							
Cap&Count	110.00	-1.20	271.85	99.55	1.36	-1.91	4393.4
CLS	193.20	-0.60	322.50	153.00	3.83	8.90	286.3
Grainger	293.20	7.00	341.80	189.76	1.77	17.05	962.7
Harworth Grp	94.00	0.60	160.22	83.66	1.00	11.90	3242.2
Helical	337.00	8.00	540.00	200.43	3.03	10.63	46.2
HK Land $	3.77	-0.02	5.90	3.46	6.16	-4.08	2674.1
Lon&Assc	11.00	0.00	22.87	9.00	1.64	-1.55	10.4
MacauPrp	73.00	2.50	123.00	51.00	-	-2.09	13.4
Mntview	10700	-50.00	12850	8600	3.74	14.74	0.1
Raven Property Group Ltd	25.50	-0.60	51.80	25.00	-	-8.56	143.3
RavenR CNV	85.50	0.00	110.00	63.00	-	-	1.6
RavenR Prf	118.00	1.00	137.00	75.00	-	132.14	2.8
Safestre	835.50	46.50	886.89	501.00	2.09	9.43	176.5
Savills	855.00	9.00	1268	620.00	0.58	17.07	122.0
SiriusRE	78.20	0.00	93.50	44.35	3.88	9.36	479.7
Smart(J)	113.50	1.00	126.00	107.50	2.81	8.17	8.0
StModwen	352.50	35.50	539.00	294.46	1.02	-7.30	353.9
U+I	64.00	0.20	189.00	50.97	9.22	-1.44	37.3
Unite Gp	886.00	42.00	1351	577.00	1.16	-8.42	285.8
Urban&C	215.00	8.00	375.00	183.00	1.81	7.00	62.9
Retailers							
AA	25.30	-1.25	62.01	13.32	7.91	1.85	5148.6
AO World	363.00	55.50	380.50	46.67	-	981.08	1397.5
Caffyns	270.00	0.00	445.10	200.00	8.33	-28.72	0.5
Dairy Fm $	3.76	-0.04	6.50	3.48	5.90	18.46	1785.8
Dignity	525.00	38.00	648.00	210.50	-	-11.46	52.6
Dunelm	1487	45.00	1601.48	596.50	1.88	26.74	144.4
Halfords	238.50	3.50	251.00	49.42	7.79	27.41	368.9
Inchcape	505.00	26.20	725.00	383.85	1.76	202.00	1457.6
JDSportsF	822.40	22.80	890.00	274.70	0.03	42.24	829.5
Kingfisher	320.10	8.90	326.20	101.00	1.04	43.85	8585.5
Marks&Sp	97.84	6.68	236.50	73.90	11.24	81.53	12581.9
Morrison (Wm)♦	172.75	-0.15	210.00	157.55	3.92	15.88	5306.9
Next	6328	296.00	7358	3311	0.91	24.67	407.2
Ocado	2313	-148.00	2914	994.01	-	-134.87	1087.0
Saga	145.80	18.16	2400	118.50	1.58	-5.23	1321.6
Sainsbury (J)	208.70	5.10	236.70	171.19	5.37	35.98	5082.4
Studio Retail Group	239.00	0.00	265.00	140.00	-	29.43	17.3
Tesco✠	214.10	-0.20	260.40	203.70	3.15	22.44	14161.0
Support Services							
Aggreko	474.00	15.40	881.00	285.90	1.98	-21.18	725.6
AshtdGp	2975	6.00	3020	1010	1.37	20.59	779.3
Bunzl	2466	-91.00	2710	1242	0.63	21.69	434.2
Capita	24.85	-1.00	185.25	19.84	-	-4.82	7695.2
DCC	5028	-320.00	7548	3463	2.84	20.18	428.4
DeLaRue	146.80	-3.20	189.35	36.86	10.41	4.86	511.4
Diploma	2302	26.00	2342	1191	1.26	41.33	115.4
DWF Group PLC♦	77.10	6.10	143.00	45.00	4.54	14.55	71.4
Elctrcmp	730.00	7.00	751.50	397.30	2.11	21.10	437.5
Essentra PLC	266.80	16.80	459.13	206.80	2.36	50.34	226.6
Experian	2970	-114.00	3153.61	1823.5	1.29	49.50	2055.9
Ferguson	8072	-44.00	8204	3700	1.95	24.75	285.2
G4S	210.50	1.80	223.50	69.92	1.71	191.36	6585.9
Hays	113.80	1.50	186.00	85.25	3.49	11.68	1998.0
Homesve	1167	-37.00	1371	755.81	1.89	37.05	737.0
HowdenJny	691.80	43.00	736.80	394.00	0.56	30.34	2841.4
Intertek	5996	-152.00	6492	3786	1.76	36.76	191.9
Kin and Carta	76.40	-0.20	112.00	46.00	2.55	-44.68	58.2
MearsGp	109.00	-1.00	323.00	74.25	3.35	99.09	1066.2
MenziesJ	120.00	7.20	489.50	66.90	17.08	11.11	89.0
Mitie	30.20	-1.80	85.97	28.42	6.83	5.38	581.0
Renewi	21.85	-0.15	45.90	17.66	4.39	-3.21	845.1
Rentokil	554.00	14.80	578.00	289.20	0.27	42.52	4762.9
Ricardo	373.00	-3.00	846.00	286.93	5.71	10.94	35.3
RbrtWlts	413.00	-9.00	614.00	214.00	1.09	14.39	40.2
RPS	51.30	1.10	185.60	29.86	4.72	-2.68	26.2
SIG	26.38	0.16	134.32	14.38	13.69	-1.30	2133.9
Vp	656.00	26.00	1040	499.00	4.64	14.21	6.4
Tech - Hardware							
SpirentCM	293.50	-3.50	311.09	146.81	1.46	23.91	386.9
Tech - Software & Services							
Computcnt	2408	-60.00	2550	900.00	0.42	23.82	141.6
MicroFoc	258.50	8.80	1148.4	233.50	17.44	-1.11	1253.2
NCC Grp♦	194.00	-1.00	236.00	125.40	2.40	46.19	57.4
RM	180.00	7.00	310.00	110.00	1.11	10.84	13.2
Sage	694.00	-17.60	794.60	515.60	2.44	22.69	2102.9
SDL	688.00	-52.00	870.00	367.00	-	29.28	86.6
TriadGp	24.00	-1.50	44.99	23.00	12.50	-5.04	18.0
Telecommunications							
BT✠	104.55	4.15	209.20	1.02	14.73	4.80	24289.9
TalkTalk	99.15	1.15	124.84	67.20	2.52	7.51	628.7
TelePlus	1324	28.00	1585	907.00	4.08	28.97	61.3
Vodafone Gp✠	112.60	3.24	169.46	92.76	6.81	-40.65	64940.4
Tobacco							
BrAmTob✠	2572	-72.00	3507	2362.5	5.99	9.29	2035.7
Imperial Br✠	1300	-15.00	2072	1218	15.89	14.40	1798.8
Travel & Leisure							
888 Hldg	265.50	-1.00	273.50	68.40	2.58	31.13	376.8
Carnival	1027.5	120.70	3732	581.00	11.87	-3.06	1178.5
Compass✠	1150	-28.50	2084	865.80	3.48	17.72	3254.6
Dalata Hotel	220.75	6.50	502.00	147.37	1.44	-25.30	7.4
easyJet	548.40	77.70	1570	410.00	8.01	9.03	3689.5
FirstGrp	51.65	2.89	134.20	25.00	-	-1.91	1770.5
Flutter Entertainment	12730	-545.00	13535	4921.54	0.52	125.79	162.3
Fuller A	602.00	25.00	1090	486.00	3.35	-332.60	4.8
Go-Ahead	602.50	36.00	2308.91	390.20	16.94	4.29	106.2
IntCon Htels Gp	4201	27.00	5297	2161	0.75	-71.60	957.4
Intl Cons Air	109.00	13.22	275.54	0.94	12.09	-0.82	60519.0
MandarO $	1.80	0.00	1.87	1.06	0.88	-12.82	186.2
Marstons	50.20	8.28	133.80	18.40	14.94	-5.34	3836.6
Natl Exp	155.00	8.70	485.00	66.30	3.33	-53.45	3065.7
PPHE Htl	1080	100.00	2160	700.00	1.57	-135.00	4.9
Restaurt	43.80	0.30	167.70	20.26	8.15	-5.32	1850.0
Ryanair Holdings PLC	266.80	16.80	459.13	206.80	2.36	50.34	226.6
TUI	322.90	47.60	1090	218.00	15.20	-1.33	3060.0
Whitbrd	2386	162.00	4462.28	1551.15	3.59	19.15	596.5
Willim H	279.00	4.50	313.00	28.63	0.95	16.32	7618.4
Utilities							
Centrica	41.18	1.05	95.32	29.10	3.64	-3.58	18287.1
Drax	302.40	5.00	364.60	118.90	5.26	-20.30	1004.2
Natl Grid✠	945.00	0.80	1073.8	8.90	5.06	25.82	4303.5
Pennon	1023	-4.50	1210.5	865.70	4.09	37.07	438.2
Severn Trent	2532	20.00	2716	1994.5	3.79	38.19	286.0
SSE	1337	-7.00	1703	1057.5	6.90	32.93	1163.6
UtdUtils	890.40	2.00	1104	625.00	4.69	57.08	1051.2

AIM

			52 Week				Vol
	Price	+/-Week	High	Low	Yld	P/E	000s
Aerospace & Defence							
Cohort	580.00	2.00	738.00	416.85	1.63	24.96	5.1
Velocity Composites PLC	16.00	0.00	44.96	12.00	-	-6.40	18.3
Banks							
Caribbean Inv	36.00	-6.00	64.45	13.12	-	2.77	5.0
Basic Resource (Ex Mining)							
CropperJ	935.00	35.00	1480	580.00	1.44	18.48	15.0
Chemicals							
Directa Plus PLC	67.00	-1.00	92.00	46.25	-	-9.21	46.6
Scapa	134.00	3.20	295.00	82.50	2.16	-4.20	248.7
Versarien PLC	31.53	-1.08	114.40	21.20	-	-11.72	991.6
Construction & Materials							
Abbey	1550	0.00	1600	1060	0.62	14.21	0.1
AccsysTch	87.00	0.70	106.62	59.80	-	49.15	32.7
Aukett	1.23	0.00	3.16	0.75	-	2.66	100.0
Electronic & Electrical Equip							
CeresPow	734.00	39.00	795.00	206.00	-	-239.87	307.2
Checkit	45.00	1.00	65.00	22.00	-	-3.98	38.0
LPA	92.50	13.50	117.00	56.00	1.19	33.27	18.4
ThorpeFW	292.00	-3.00	363.32	225.00	1.89	22.90	25.6
Zytronic	117.50	2.50	258.50	70.00	19.40	9.87	15.0
Financial General							
Appreciate Grp	26.50	0.00	66.46	24.00	8.11	8.95	136.5
Arbuthnot	730.00	0.00	1400	600.00	2.19	28.63	0.7
BP Marsh	259.00	-10.00	276.02	133.00	1.84	7.42	38.1
Burford Capital Ltd	722.00	-3.00	987.68	250.43	1.35	9.90	608.7
Gresham House	737.50	5.00	767.00	450.00	0.61	-87.32	23.3
Leeds	12.50	1.50	20.00	7.50	-	-1.22	110.0
MattioliWds	655.00	2.50	865.00	291.00	3.20	17.48	20.4
Numis	296.00	4.00	324.00	165.00	4.05	34.42	179.9
PolarCap	524.00	8.00	614.92	282.00	6.30	12.69	134.6
Premier Miton Group	120.50	17.00	192.00	65.00	8.63	11.54	106.4
STM Group♦	26.50	-0.50	43.50	18.00	5.66	16.35	46.9
Food & Beverages							
Camellia	6550	-225.00	9900	6250	0.64	-31.73	1.2
Fevertree Drinks	2197	39.00	2437	888.40	0.69	53.65	1467.0
FinsbryFd	52.30	-0.70	105.00	50.00	6.69	6.97	3602.8
Nichols	1070	-37.50	1760	858.00	1.16	22.41	18.6
Health Care Equip & Services							
AVO	37.00	0.00	43.00	20.00	-	-3.76	96.7
CareTech♦	476.00	19.00	502.00	285.00	2.46	21.61	279.7
Tristel	500.00	2.00	534.00	271.00	1.11	49.46	35.1
House, Leisure & Pers Goods							
Airea	27.00	0.00	46.99	18.11	2.96	16.88	5.2
ChurchIl	1055	20.00	2060	605.00	0.98	22.03	0.7
Frontier Developments PLC	2595	-120.00	2790	952.00	-	65.86	33.5
Portmern	396.00	0.00	888.43	229.59	2.02	12.54	11.5
WalkerGb	62.50	-3.00	91.75	22.00	4.91	12.02	15.6
Industrial Engineering							
600 Grp	8.25	-0.50	19.20	6.75	9.14	2.73	50.0
MS Intl	112.50	0.00	216.00	100.00	7.33	-7.45	5.0
Pres Tech	60.50	-0.50	147.00	53.00	-	-6.30	0.2
IT							
Keywords Studios	2210	38.00	2314	1069	0.03	125.71	145.9
Learning Technologies Group♦	132.50	12.70	174.40	99.60	0.19	103.19	1603.4
LEISURE							
Codemasters Group Holdings PLC	400.00	14.00	420.00	202.00	-	50.00	583.5
Sumo Group PLC	260.00	2.00	273.00	121.54	-	51.28	763.9
Media							
Mission Group	60.50	-0.50	110.00	33.25	3.59	18.85	66.3
YouGov	1042.5	92.50	1055.6	393.00	0.38	73.94	442.8
Mining							
AMC	2.20	-0.26	3.92	0.85	-	-9.07	9917.3
Arkle Resources	1.35	0.23	1.70	0.10	-	-6.65	16226.8
BotswanaD	0.68	-0.08	1.39	0.40	-	-5.19	5.0
CentAsiaM	172.40	8.20	233.00	100.20	3.75	9.01	175.1
HighldGld	299.60	0.60	314.00	150.00	4.61	8.00	973.2
Oil & Gas							
BorSthnPet	0.60	-0.02	2.63	0.10	-	-2.86	655.2
ClontarfEn	0.43	0.05	1.98	0.31	-	-10.63	1059.6
Egdon Res	1.70	0.00	6.95	1.50	-	-1.19	12.1
Hurricane Energy	2.54	-0.01	46.88	2.26	-	-0.25	21207.5
PetrelRes	3.95	0.00	27.00	3.01	-	-2.80	107.7
Phoenix Global	6.23	-1.10	23.00	5.88	-	-2.06	14.8
Rockhop	5.50	-0.46	22.45	4.00	-	-0.13	1024.4
Sound Energy	1.25	-0.23	8.00	0.74	-	-2.55	741.4
UnJackOil	0.16	0.00	0.32	0.08	-	-7.85	156755.3
United O&G	2.65	0.00	4.19	1.00	-	-5.66	183.8
Pharmaceuticals & Biotech							
Abcam	1441	126.00	1584	943.00	0.84	68.62	1602.0
AllcePharm	75.40	0.00	88.90	52.17	0.71	36.08	403.5
Clinigen Group	570.00	-61.50	1000.00	350.40	1.18	55.88	829.9
e-Thera	14.35	-0.28	23.00	1.25	-	-16.49	424.8
Mereo Bio	37.50	1.50	61.75	13.00	-	-0.96	27.1
Reneuron	92.50	-1.00	179.00	71.00	-	-2.58	1.1
Sareum	1.77	0.49	1.90	0.22	-	-44.13	134515.8
Real Estate							
InlandHms	52.00	0.80	94.40	32.00	4.23	7.03	220.7
Lok'nStor	545.00	-20.00	740.00	335.00	2.20	52.15	14.8
PnthrSec	175.00	-20.00	400.00	155.00	6.86	-7.58	2.5
SIR	262.00	7.00	476.00	104.20	6.41	-23.19	1152.7
Retailers							
ASOS	4665	-45.00	5548	975.20	-	87.52	285.5
Boohoo Group PLC	279.00	-36.60	433.50	133.10	-	52.15	17222.6
CVS Group PLC	1248	4.00	1300	670.00	0.44	154.07	46.0
Support Services							
Begbies♦	91.60	1.40	117.00	57.33	2.95	130.86	246.5
Christie	80.00	-1.50	132.00	54.00	3.75	5.38	23.3
Empres	43.00	0.00	64.00	28.00	-	-7.41	120.0
Gattaca	45.50	-7.00	133.50	29.40	-	-6.32	12.4
Impellam	230.00	-2.00	394.00	210.00	-	-4.09	1.1
JhnsnSrv	96.80	7.20	226.00	76.50	1.19	121.00	4685.1
LonSec	2300	-10.00	2400	1800	2.61	19.52	2.2
NWF	205.00	12.50	218.00	113.00	3.22	11.33	70.5
Petards	8.38	0.38	16.00	3.75	-	-6.59	62.9
Renew	474.00	-11.00	570.00	304.00	2.43	16.16	35.9
Restore	300.00	-24.00	560.00	295.00	0.80	200.00	1234.0
Smart Metering Systems	570.00	-18.00	742.00	436.60	1.21	3.27	130.1
Tech - Hardware							
AminoTech	120.50	-1.50	155.00	100.00	1.37	77.19	36.8
IQE	54.70	-0.20	76.30	18.86	-	-14.43	532.3
Telit Communications PLC	136.00	3.00	174.00	64.76	-	22.11	33.1
Tech - Software & Services							
BoBlue Prism Group PLC	1436	51.00	1890	774.25	-	-13.47	228.7
Eckoh	67.00	1.50	72.00	40.00	0.91	55.83	45.6
IDE Group Holdings	1.13	-0.13	5.80	1.00	-	-0.53	164.4
Ingenta♦	82.00	-2.50	96.00	40.00	-	-20.06	1.8
Iomart	315.50	-8.50	409.00	219.50	2.41	25.86	156.5
Oxford Metrics	76.50	-3.50	127.40	70.00	2.35	32.42	76.6
WANdisco	478.00	38.00	834.00	330.00	-	-10.94	6.3
Travel & Leisure							
Celtic	105.00	-2.50	166.65	85.00	-	10.74	0.1
..6%CvPf	123.00	-2.00	170.00	120.00	-	-	0.5
..Cv Pf	224.00	-11.00	339.50	220.00	-	-	0.4
gamingrealms	22.80	-0.60	26.20	4.40	-	-22.57	473.3
Jet2	930.00	161.00	1950	182.50	1.12	12.43	1025.1
MinoanGp	1.20	-0.15	2.50	0.68	-	-3.00	353.5

Investment Companies

Conventional (Ex Private Equity)			52 Week				Dis(-)
	Price	+/-Week	High	Low	Yld	NAV	or Pm
3i Infra	299.00	6.00	317.79	184.96	2.98	249.9	19.6
AbnAsianIn	198.50	0.50	223.00	140.59	4.66	220.0	-9.8
Abrdn Div I&G	88.40	-2.40	116.00	66.20	6.09	113.9	-22.4
AbnEmgMkts	607.50	12.50	638.00	420.05	3.50	712.1	-14.7
AbnJapInv	662.50	10.00	664.90	456.00	1.72	774.6	-14.5
AbnLatAmIn	48.35	0.05	75.00	38.00	7.24	59.0	-18.1
AbnNewDn	284.00	4.50	287.00	179.59	1.51	319.6	-11.1
AbnNewIndia♦	465.00	10.50	494.00	296.00	-	541.6	-14.1
AbnNewThai	406.00	-4.00	593.00	322.00	4.68	448.4	-9.5
AbnSmlInCo	267.00	2.00	350.00	175.00	3.17	318.0	-16.0
AbnStdAsia	1025	15.00	1125	696.00	1.37	1192.9	-14.1
AStd Eqt Inc	256.00	-1.00	427.84	194.36	8.13	295.6	-13.4
Abf Sml	910.00	18.00	1547.68	608.25	3.52	1031.9	-11.8
Abf Spl Inc	43.75	-1.35	96.35	34.50	9.65	52.3	-16.3
Alliance	851.00	4.00	880.00	536.00	1.65	893.2	-4.7
AllianzTech	2655	-85.00	2820	1176	-	2623.2	1.2
Art Alpha	303.00	18.50	352.00	205.00	1.68	361.1	-16.1
Asia Dragon	449.00	5.00	452.72	302.50	1.06	510.0	-12.0
Aurora Inv	168.50	2.50	242.00	130.00	2.67	175.4	-3.9
AVI Global Trust	758.00	7.00	802.00	493.00	2.18	843.3	-10.1
AVI JapOpp♦	108.50	-0.25	120.63	73.40	-	108.6	-0.1
Axiom	85.50	-0.50	95.00	68.00	7.02	91.0	-6.0
BG Euro	1315	10.00	1335	594.00	2.36	1293.3	1.7
BG Japan	950.00	12.00	955.00	514.00	0.37	947.9	0.2
BG Shin	251.00	-2.50	263.50	105.06	-	237.6	5.6
Baillie Gifford UK	190.50	0.50	206.34	111.00	1.55	200.1	-4.8
Bankers	1030	-10.00	1058	689.00	2.05	1007.7	2.2
BB Healthcare Trust	170.00	-3.50	175.50	98.68	2.85	168.5	0.9
BH Global	1822.5	-40.00	1950	1460	-	1866.0	-2.3
..USD $	19.80	-0.25	21.00	15.20	-	19.2	3.1
BH Macro	3660	30.00	3729.09	2530	-	3225.0	13.5
..USD $	37.80	-1.30	42.17	25.40	-	33.6	12.5
BiotechGth	1404	-76.00	1518	648.00	-	1377.6	1.9
BlckRCom	61.30	-1.70	72.54	36.20	6.53	72.1	-15.0
BlckRFrnt	100.20	3.90	136.00	77.44	6.23	104.7	-4.3
BlckRGtEur	472.50	-3.00	485.00	271.14	1.24	490.9	-3.7
BlckR I&G	157.50	-9.00	214.00	117.00	4.57	172.3	-8.6
BlckRckLat	323.00	5.50	509.20	250.00	7.77	364.1	-11.3
BlckRckNrAm	152.00	-3.00	196.50	106.53	5.26	165.3	-8.0
BlckRSmlr	1330	10.00	1806	770.00	2.41	1458.0	-8.8
BlckRThrmt	648.00	16.00	724.00	315.60	1.57	654.2	-0.9
BlckRWld	422.50	3.50	428.50	208.50	5.21	470.9	-10.3
BMO Cp&I	254.00	0.50	358.00	181.50	4.53	256.4	-0.9
BMOGblSmlr	128.00	0.40	150.00	76.65	1.33	139.4	-8.2
BMOMgdT	236.00	2.00	239.00	150.05	-	237.0	-0.4
BMOMgdT	116.50	0.00	146.00	85.00	5.24	119.7	-2.7
BMO UK HIT A♦	76.50	-0.50	103.00	57.00	5.12	85.3	-10.3
BMO UK HIT B♦	77.00	-1.00	103.00	56.00	5.09	85.5	-9.9
BMO UK HIT UNIT	304.00	-2.00	406.00	224.00	-	341.0	-10.9
Brunner	807.00	1.00	926.00	550.00	2.48	914.0	-11.7
Caledonia Inv	2800	155.00	3195	1920	2.14	3536.6	-20.8
CanGen C$	28.10	0.07	28.50	16.22	2.97	43.3	-35.1
City Merch♦	176.00	-0.50	199.50	118.00	5.68	184.7	-4.7
City Lon	330.50	0.50	448.50	269.00	5.75	320.9	3.0
CQSNatRs	91.20	-1.70	96.88	49.00	6.14	113.0	-19.3
Dun Inc	256.50	0.50	307.00	180.12	4.95	274.5	-6.6
EcofinGlobal	175.00	-0.50	188.00	102.63	3.66	173.4	0.9
Edin Inv	464.50	5.50	644.00	335.50	6.09	525.5	-11.6
Edin WWd	299.50	-7.50	314.30	124.60	-	292.3	2.5
EP Global	258.00	7.00	392.00	214.00	2.33	286.1	-9.8
EuroAsset	106.50	-0.75	112.00	62.40	6.41	116.7	-8.7
F&C Inv Trust♦	729.00	7.00	789.02	463.00	1.19	779.8	-6.5
FidAsian	361.00	3.00	417.45	243.00	2.44	396.3	-8.9
FidChiSpS	372.50	8.50	379.00	180.20	1.03	371.8	0.2
Fid Euro♦	264.50	-2.50	277.00	177.40	2.45	282.5	-6.4
Fid Jap	208.00	-1.50	212.00	104.25	-	223.1	-6.8
Fid Spec	182.40	0.80	280.50	128.16	3.15	201.0	-9.3
FinsG&I♦	825.00	-16.00	928.00	595.00	2.01	819.7	0.6
FstPacfic HK HK$	2.42	0.27	3.10	1.10	5.86	-	-
GenEmer	809.00	16.00	820.00	540.00	1.78	895.4	-9.6
GRIT#	2.75	0.00	5.50	0.65	-	1.4	96.4
GoldenPros	58.20	0.20	75.00	20.00	-	72.9	-20.2
Gulf Invest $	1.34	0.00	1.36	0.85	2.20	1.4	-4.3
HAN	165.50	1.50	202.00	123.77	2.42	266.5	-37.9
HANA	171.00	1.00	200.00	125.00	2.34	266.5	-35.8
Hend Alt	287.00	-1.00	309.00	170.00	0.87	312.7	-8.2
Hen Div Inc Tr	90.50	0.90	96.00	55.47	4.86	90.6	-0.1
HenEuroF	1292.5	-10.00	1350	860.72	2.42	1465.1	-11.8
HenEuro	1292.5	-22.50	1342.12	804.00	2.40	1420.6	-9.0
HenFarEs	306.00	0.00	374.00	236.30	7.39	302.9	1.0
HenHigh♦	131.75	1.25	195.00	100.03	7.51	143.8	-8.4
HenInt Inc	141.50	-3.50	178.00	99.30	4.10	152.2	-7.0
Hen Opp	881.00	20.00	1130	499.93	2.95	1095.9	-19.6
HenSmlr	829.00	11.00	1104	470.00	2.83	930.8	-10.9
Herald	1866	4.00	1880	877.00	-	2038.0	-8.4
HICL Infra	176.00	6.00	183.00	133.80	4.66	148.2	18.8
Highbridge Tactical	210.00	-2.00	214.00	154.00	-	238.7	-12.0
Impax Env.	392.50	3.50	399.00	226.00	0.76	365.2	7.5
Ind IT	451.00	6.00	600.00	264.00	2.88	509.3	-11.4
IGC	72.40	3.10	77.80	32.20	-	88.2	-17.9
IntBiotech	802.00	-32.00	856.44	451.00	3.29	791.4	1.3
Intl PP♦	171.00	3.20	172.20	122.80	4.20	145.5	17.5
Inv AsiaTr	321.00	9.50	337.00	198.00	3.08	356.3	-9.9
Inv IncGro	226.50	-1.00	308.00	180.59	5.19	261.1	-13.3
IP EnInc♦	64.30	0.70	78.00	38.50	7.78	71.9	-10.6
IPST BalR	139.00	0.00	147.60	124.00	-	146.5	-5.1
IPST Gbl Eq	185.50	-3.00	218.00	140.00	3.80	189.3	-2.0
IPST Mngd	101.50	0.00	104.00	96.00	1.58	105.3	-3.6
IPST UK Eq	143.50	0.00	190.25	104.00	4.60	148.2	-3.2
IP UKSmall	411.50	5.50	640.00	285.17	4.57	488.3	-15.7
JPM Amer	532.00	-10.00	546.58	328.50	1.22	559.5	-4.9
JPM Asia	448.00	4.00	455.00	272.00	3.59	439.5	1.9
JPM Brazil	64.75	1.75	80.75	35.00	1.24	70.7	-8.4
JPM China	630.00	8.00	644.00	284.50	0.40	592.3	6.4
JPMElct MC	102.50	0.00	106.00	99.00	0.39	103.5	-1.0
..MG	827.50	-2.50	929.85	565.20	2.04	871.2	-5.0
..MI	82.50	0.00	114.00	64.00	5.64	85.5	-3.5
JPM Emrg	1200	22.00	1208	726.78	1.17	1257.5	-4.6
JPM EurGth	277.00	4.50	305.00	170.89	3.19	320.3	-13.5
JPM EurInc	116.00	-2.00	166.00	78.80	5.78	135.9	-14.6
JPM EuSm	428.00	-11.00	446.00	209.00	1.57	472.6	-9.4
JPM Clavr	566.00	-1.00	798.00	446.00	5.17	584.1	-3.1
JPMGblCoreRa	102.50	-1.50	112.50	70.00	0.73	91.0	12.6
JPM GEI	121.00	2.75	141.50	82.00	4.21	133.3	-9.2
JPM Gl Gr&Inc	357.00	-3.00	365.59	218.00	3.58	345.2	3.4
JPM Ind	601.50	0.50	766.00	398.00	-	725.8	-17.1
JPM JpSm	532.00	-10.00	550.00	275.00	3.38	561.3	-5.2
JPM Jap	656.00	-4.00	666.02	323.00	0.76	679.7	-3.5
JPM Mid♦	956.00	30.00	1430	598.00	3.09	1101.9	-13.2
JPM MIti-As♦	84.30	1.00	107.00	63.00	4.74	94.3	-10.6
JPMRussian♦	577.00	13.00	804.00	404.00	6.07	657.0	-12.2
JPM Smlr	280.50	2.50	325.92	126.00	1.96	309.3	-9.3
JPM US Sml	320.00	0.00	372.18	191.31	0.78	348.0	-8.0
KeystoneInv	261.00	1.00	364.00	161.00	5.21	313.6	-16.8
Law Deb♦	521.00	-15.00	656.00	366.00	6.24	550.5	-5.4
LinTrain £	1170	80.00	1640.88	400.00	2.38	1101.7	6.2
Lowland♦	925.00	9.00	1489.65	696.00	6.49	1016.7	-9.0
Majedie	197.50	-2.00	268.00	134.00	5.77	245.7	-19.6
Man&Lon	655.00	5.00	704.00	420.00	2.14	652.4	0.4
Marwyn Val	116.00	0.50	122.00	71.00	-	156.9	-26.1
MercantIT♦	208.50	13.10	279.10	116.68	3.17	214.6	-2.8
MrchTst	359.00	1.75	569.00	293.00	7.49	361.0	-0.6
Mid Wynd♦	656.00	-16.00	688.00	420.00	1.04	652.7	0.5
Miton Global	251.50	4.00	284.00	180.00	-	264.4	-4.9
Monks	1200	-16.00	1233.56	618.00	0.15	1151.4	4.2
MontanSm	1500	-5.00	1526.5	645.00	0.62	1446.8	3.7
Mur Inc	750.00	-14.00	945.34	552.00	4.57	800.8	-6.3
Mur Int♦	951.00	-5.00	1288	760.08	5.63	997.9	-4.7
NewCityHY	47.00	-0.85	61.80	22.90	9.47	45.9	2.4
New Star IT	113.00	0.00	121.25	88.00	1.24	163.5	-30.9
NorthAmer♦	221.00	-7.00	315.00	187.50	4.34	252.1	-12.3
NthAtSml	2855	-45.00	3570.6	2190	1.05	4196.5	-32.0
Oryx Int	1085	0.00	1124	550.00	-	1252.0	-13.3
PacAsset	290.00	6.50	302.67	198.09	1.03	314.5	-7.8
PacHorzn	634.00	0.00	644.00	232.50	-	575.2	10.2
PerpInc&Gr	220.00	-1.00	342.00	157.20	6.80	236.5	-7.0
PerAsset	45300	-400.00	47000	37650	1.24	44729.6	1.3
PolarHealth	237.00	-6.00	258.00	163.00	0.89	272.3	-13.0
PolarFins	109.00	2.00	154.50	77.20	4.04	122.3	-10.9
PolarTech	2165	-50.00	2314.7	1134.3	-	2269.3	-4.6
RIT Cap♦	1924	42.00	2185	1252	1.79	2000.5	-3.8
Ruffer Inv Pr	244.50	0.00	250.00	202.00	0.76	246.8	-0.9
Schroder ToRt	452.50	1.50	461.58	244.00	1.44	442.7	2.2
SchdrAsiaP	549.00	12.00	549.00	345.00	1.77	594.0	-7.6
SchdrEurReE	77.60	3.80	120.87	56.60	8.48	120.4	-35.5
Schdr Inc	239.00	-2.50	320.00	171.17	5.23	243.9	-2.0
SchdrJap	180.50	2.00	203.00	126.09	2.60	212.2	-14.9
SchdrOrient	237.50	4.00	267.00	151.50	4.29	249.4	-4.8
SchdrRealEst	32.10	-2.25	58.10	27.65	8.48	57.3	-44.0
SchdrUKMd	519.00	20.00	700.00	271.93	3.56	593.1	-12.5
SchdrUKPubPriv	28.83	-0.48	40.92	18.89	-	45.4	-36.5
ScotAmer	444.00	-4.00	453.64	243.80	2.69	426.1	4.2
Scottish Inv♦	705.00	-6.00	847.00	550.00	3.29	777.6	-9.3
ScottMort	1031	-40.00	1092	451.80	0.30	1010.2	2.1
ScottOrtll	893.00	-9.00	1040	600.00	1.29	1052.6	-15.2
Seneca I&G	144.25	0.00	181.89	107.50	4.66	147.6	-2.3
Smithson	1574	-10.00	1600.26	890.00	-	1531.1	2.8
StrategicEq	188.00	-0.75	259.00	112.28	0.80	236.2	-20.4
Temp Bar	726.00	24.00	1495.6	563.00	7.08	828.3	-12.4
TempEmerg	869.00	6.00	886.70	570.00	1.84	979.3	-11.3
Tetragon $	8.90	0.00	12.60	6.78	7.80	24.3	-63.4
TRIG	135.40	0.40	140.60	95.79	4.93	111.3	21.7
TREurGth	1015	-10.00	1050	530.00	2.17	1160.1	-12.5
TroyInc&G	72.00	0.00	87.00	58.69	3.85	70.8	1.7
Utilico Emerging Market	174.50	1.50	252.00	135.00	4.27	203.2	-14.1
UIL Inv	160.00	0.00	258.00	109.75	4.69	290.0	-44.8
VEIL	476.00	6.00	507.00	288.00	-	554.4	-14.1
Witan	200.00	4.80	235.50	130.00	2.76	209.9	-4.7
WwideHlth	3555	-115.00	3734.75	2159.52	0.75	3504.9	1.4

Conventional - Private Equity			52 Week				Dis(-)
	Price	+/-Week	High	Low	Yld	NAV	or Pm
BGUSGROWTH	274.00	-12.00	289.00	111.00	-	253.3	8.2
BMO PvtEq♦	290.00	10.50	415.36	219.00	4.00	376.5	-23.0
Electra	182.25	0.75	427.00	121.81	-	372.5	-51.1
HVPE	1736	20.00	1919	857.00	-	2204.0	-21.2
HgCapital♦	287.50	2.50	306.00	148.40	1.67	280.2	2.6
ICG Ent Tr	848.00	4.00	1015	460.00	2.00	1122.0	-24.4
Pantheon International Plc ORDs	2205	100.00	2620	1268.53	-	2846.2	-22.5
PrincssPE €	10.15	0.15	12.25	6.64	4.29	12.5	-18.8
StdLfPv	310.00	-7.00	402.00	186.00	4.16	466.5	-33.5

Discretionary Unit Fund Mngrs (1000)F			52 Week				Dis(-)
	Price	+/-Week	High	Low	Yld	NAV	or Pm
Right &ISS	1850	5.00	2341	1251	1.74	1921.1	-3.7

Conventional - Property ICs			52 Week				Dis(-)
	Price	+/-Week	High	Low	Yld	NAV	or Pm
Direct Property							
AEW UK REIT	78.80	2.50	102.10	53.00	10.15	92.7	-15.0
BMO ComPrp	62.30	1.30	122.20	43.50	9.63	120.0	-48.1
BMORealE	57.00	3.20	89.80	38.72	8.77	94.8	-39.9
CustdnREIT	89.00	3.00	116.55	76.00	7.44	94.8	-6.1
GCP Student	119.00	2.60	212.50	90.00	5.29	170.3	-30.1
Longbow	73.25	-0.50	99.50	64.19	8.19	95.3	-23.1
SLIPropInc	51.20	1.40	99.30	43.51	9.30	78.9	-35.1
TR Prop	371.00	6.00	497.83	217.50	3.72	400.5	-7.4
Tritax EuroBEUR €	1.04	0.01	1.13	0.67	-	1.2	-13.3
Tritax EuroBGBP	93.00	0.20	102.00	65.20	-	-	-
UKComPrp	68.80	1.80	91.70	47.35	4.68	83.4	-17.5

VCTs			52 Week				Dis(-)
	Price	+/-Week	High	Low	Yld	NAV	or Pm
ArtemisVCT	15.00	-0.50	51.79	14.25	26.67	-	-
Baronsmead 2nd VT	69.00	0.00	79.50	40.00	9.42	73.4	-6.0
BSC VCT	60.00	0.00	73.67	54.00	6.67	63.6	-5.7
..VCT2	44.20	0.00	53.00	40.00	7.92	46.9	-5.8
Inc&GthVCT	59.50	0.00	72.00	52.00	10.08	65.5	-9.2
Nthn 2 VCT	50.05	0.00	61.90	42.00	7.99	53.5	-6.4
Nthn 3 VCT	75.00	0.00	91.00	63.00	5.33	79.2	-5.3
NthnVent	55.50	0.00	67.00	46.00	7.21	59.2	-6.2
ProVenGI	50.80	0.00	61.50	44.00	6.89	54.4	-6.6
ProVenVCT	62.50	0.00	73.00	55.00	7.20	66.0	-5.3
UnicornAIM	150.00	8.00	152.00	104.00	4.33	186.2	-19.4

Zero Dividend Preference Shares			52 Week		HR		
	Price	+/-Week	High	Low	SP	WO	TAV 0%
Abf Spl Inc	107.00	0.00	111.00	97.50	-23.6	-61.6	127.3
UIL ZDP 2026	90.75	-0.50	110.90	80.00	-26.1	-30.2	151.5
UIL Limited 2024 ZDP	106.50	0.50	119.94	73.00	-34.6	-41.6	138.4
UILFn20	154.00	-1.50	154.50	132.00	-100.0	-100.0	154.9
UIL Finance 2022 ZDPs	131.00	-1.00	134.50	92.00	-49.6	-65.7	147.0

Investment Companies - AIM

			52 Week				Dis(-)
	Price	+/-Week	High	Low	Yld	NAV	or Pm
BB Biotech AG SFr	57.00	-4.60	67.30	39.55	4.9	-	-
CrysAmber	79.50	-1.50	185.00	50.87	6.3	107.5	-26.0
Gresham House Strategic	985.00	0.00	1355	830.00	2.2	1227.6	-19.8
Infra India	2.30	0.58	4.43	0.60	-	22.0	-89.5

Guide to FT Share Service

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Trading volumes are end of day aggregated totals, rounded to the nearest 1,000 shares.

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- ✠ FT Global 500 company
- ♦ trading ex-dividend
- ■ trading ex-capital distribution
- # price at time of suspension from trading

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MANAGED FUNDS SERVICE

Aberdeen Standard Capital (JER)
PO Box 189, St Helier, Jersey, JE4 9RU 01534 709130
FCA Recognised
Aberdeen Standard Capital Offshore Strategy Fund Limited

Fund	Bid	Offer	+/-	Yield
Bridge Fund	£ 2.1305	-	0.0093	1.77
Global Equity Fund	£ 3.0160	-	0.0151	1.09
Global Fixed Interest Fund	£ 0.9551	-	-0.0015	4.21
Income Fund	£ 0.6073	-	0.0040	-
Sterling Fixed Interest Fund	£ 0.8975	-	-0.0006	3.00
UK Equity Fund	£ 1.7837	-	0.0255	3.07

Aegon Asset Management UK ICVC (UK)
3 Lochside Crescent, Edinburgh, EH12 9SA
0800 358 3009 www.aegonam.com
Authorised Funds

Fund	Bid	Offer	+/-	Yield
Diversified Monthly Inc B Acc	141.51	-	0.41	4.83
Diversified Monthly Inc B Inc	101.12	-	0.30	4.97
Diversified Growth B Acc	£ 1.74	-	-0.01	2.58
Ethical Cautious Managed B Acc	£ 1.40	-	0.00	1.59
Ethical Cautious Managed B Inc	£ 1.21	-	0.00	1.60
Ethical Corporate Bond B Acc	£ 2.13	-	0.00	2.69
Ethical Corporate Bond B Inc	£ 1.08	-	0.00	2.69
Ethical Equity B Acc	£ 2.28	-	0.00	1.53
Global Equity GBP B Acc	£ 2.84	-	0.02	0.00
High Yield Bond B Acc	£ 2.98	-	0.00	5.06
High Yield Bond B Inc	£ 0.93	-	0.00	5.06
Investment Grade Bond B Acc	198.23	-	-0.05	1.51
Investment Grade Bond B Inc	£ 1.31	-	0.00	2.26
Sterling Corporate Bond B Acc	£ 0.94	-	0.00	2.74
Sterling Corporate Bond B Inc	£ 0.35	-	0.00	2.74
Strategic Bond B Acc	£ 1.46	-	0.00	3.54
Strategic Bond B Inc	£ 1.37	-	0.00	3.54
UK Equity B Acc	£ 2.95	-	0.02	2.34
UK Equity Absolute Return B Acc	£ 1.24	-	-0.01	0.00
UK Equity Income B Acc	£ 2.24	-	0.03	4.34
UK Equity Income B Inc	£ 1.41	-	0.02	4.47
UK Opportunities B Acc	£ 2.21	-	0.01	1.11
UK Smaller Companies B Acc	£ 3.97	-	0.02	0.87

Aegon Asset Management UK Investment Portfolios ICVC (UK)
3 Lochside Crescent, Edinburgh, EH12 9SA
0800 358 3009 www.aegonam.com
Authorised Funds

Fund	Bid	Offer	+/-	Yield
Property Income B Acc	117.86	117.86	0.01	4.33
Property Income B Inc	87.93	87.93	0.00	4.43

Aegon Asset Management Investment Company (Ireland) (IRL)
1 North Wall Quay Dublin 1, Ireland +35 3162 24493
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Absolute Return Bond B GBP Acc	1144.57	-	0.45	1.61
High Yield Global Bond A GBP Inc	492.76	-	0.28	4.49
High Yield Global Bond B GBP Inc	1053.85	-	0.64	5.23
Global Equity Income B GBP Acc	1945.99	-	13.20	0.00
Global Equity Income B GBP Inc	1455.44	-	-8.32	3.19
lobal Equity Market Neutral Fund - B Acc GBP	£ 12.03	-	-0.02	0.00
Global Sustainable Equity B Acc GBP	£ 24.83	-	0.09	-
Global Sustainable Equity C Acc GBP	£ 25.17	-	0.10	-
Inv Grd Gbl Bond A Inc GBH	615.67	-	-1.08	1.81
Short Dated High Yld Bd B Acc GBP	£ 10.71	-	0.01	0.00
Short Dated High Yld Bd C Acc GBP (Hdg)	£ 10.81	-	0.01	0.00
Strategic Global Bond A GBP Inc	1270.79	-	0.24	2.70
Strategic Global Bond B GBP Inc	721.94	-	0.15	3.45

Algebris Investments (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Algebris Financial Credit I EUR	€ 179.66	-	0.10	-
Algebris Financial Credit R EUR	€ 156.47	-	0.08	-
Algebris Financial Credit Rd EUR	€ 105.31	-	0.05	4.97
Algebris Financial Income I EUR	€ 132.01	-	0.74	0.00
Algebris Financial Income R EUR	€ 122.43	-	0.67	0.00
Algebris Financial Income Rd EUR	€ 80.89	-	0.45	4.58
Algebris Financial Equity B EUR	€ 85.15	-	0.84	-
Algebris IG Financial Credit B EUR	€ 106.73	-	-0.07	-
Algebris IG Financial Credit R EUR	€ 106.03	-	-0.08	-
Algebris Global Credit Opportunities I EUR	€ 123.29	-	-0.49	0.00
Algebris Global Credit Opportunities R EUR	€ 121.23	-	-0.48	0.00
Algebris Global Credit Opportunities Rd EUR	€ 121.23	-	-0.48	0.00
Algebris Core Italy I EUR	€ 104.51	-	-0.55	-
Algebris Core Italy R EUR	€ 97.85	-	-0.51	-
Algebris Allocation I EUR	€ 96.39	-	-0.09	-

The Antares European Fund Limited
Other International

Fund	Bid	Offer	+/-	Yield
AEF Ltd Usd	$ 575.16	-	0.88	0.00
AEF Ltd Eur	€ 538.33	-	0.77	0.00

Arisaig Partners
Other International Funds

Fund	Bid	Offer	+/-	Yield
Arisaig Asia Consumer Fund Class A (Ex-Alcohol) shares	$ 117.87	-	-0.07	0.00
Arisaig Asia Consumer Fund Limited	$ 116.84	-	-0.08	0.00
Arisaig Global Emerging Markets Consumer Fund	$ 14.91	-	-0.10	0.00
Arisaig Global Emerging Markets Consumer UCITS	€ 12.85	-	-0.01	-
Arisaig Global Emerging Markets Consumer UCITS STG	£ 14.50	-	-0.10	-
Arisaig Latin America Consumer Fund	$ 22.73	-	-0.06	0.00

Artemis Fund Managers Ltd (1200)F (UK)
57 St. James's Street, London SW1A 1LD 0800 092 2051
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Artemis Capital I Acc	£ 14.60	-	0.21	4.13
Artemis Corporate Bond I Acc	£ 1.10	-	0.00	-
Artemis European Growth I Acc	£ 3.10	-	0.03	3.09
Artemis European Opps I Acc	£ 1.14	-	0.01	1.65
Artemis Global Emerging Mkts I Acc	134.13	-	1.09	-
Artemis Global Growth I Acc	£ 2.92	-	0.02	2.50
Artemis Global Income I Inc	£ 0.87	-	0.01	3.65
Artemis Global Select I Acc	£ 1.45	-	0.00	-
Artemis High Income I Q Inc	£ 0.76	-	0.00	4.91
Artemis Income I Inc	£ 2.07	-	0.03	-
Artemis Monthly Dist I Inc	£ 0.67	-	0.00	3.71
Artemis Strategic Assets I Acc	£ 0.75	-	0.01	0.09
Artemis Strategic Bond I Q Acc	£ 1.09	-	0.00	2.53
Artemis Target Return Bond I Acc	£ 1.04	-	0.00	-
Artemis UK Select Fund Class I Acc	£ 5.48	-	0.08	3.46
Artemis UK Smaller Cos I Acc	£ 14.06	-	0.21	3.15
Artemis UK Special Sits I Acc	£ 5.85	-	0.09	2.69
Artemis US Abs Return I Hdg Acc	112.18	-	-0.18	0.39
Artemis US Extended Alpha I Acc	267.61	-	2.66	0.00
Artemis US Select I Acc	262.37	-	1.64	0.18
Artemis US Smlr Cos I Acc	286.82	-	3.88	0.02

Ashmore Investment Management Limited (LUX)
2 rue Albert Borschette L-1246 Luxembourg
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Ashmore SICAV Emerging Market Debt Fund	$ 88.28	-	-0.29	5.35
Ashmore SICAV Emerging Market Frontier Equity Fund	$ 149.22	-	0.13	1.61
Ashmore SICAV Emerging Market Total Return Fund	$ 77.49	-	-0.19	4.62
Ashmore SICAV Global Small Cap Equity Fund	$ 181.65	-	1.88	0.03
EM Active Equity Fund Acc USD	$ 141.70	-	0.63	0.00
EM Equity Fund Acc USD	$ 128.00	-	0.53	0.00
EM Mkts Corp.Debt USD F	$ 87.55	-	0.00	6.36
EM Mkts Loc.Ccy Bd USD F	$ 74.16	-	-0.03	5.09
EM Short Duration Fund Acc USD	$ 116.66	-	-0.31	0.00

Atlantas Sicav (LUX)
Regulated

Fund	Bid	Offer	+/-	Yield
American Dynamic	$ 5863.77	5863.77	-81.77	0.00
American One	$ 5839.44	5839.44	-135.58	-
Bond Global	€ 1510.69	1510.69	2.55	0.00
Eurocroissance	€ 1195.13	1195.13	-19.25	0.00
Far East	$ 1116.69	-	-11.89	0.00

Barclays Investment Funds (CI) Ltd (JER)
39/41 Broad Street, St Helier, Jersey, JE2 3RR Channel Islands 01534 812800
FCA Recognised
Bond Funds

Fund	Bid	Offer	+/-	Yield
Sterling Bond F	£ 0.49	-	-0.01	2.18

Brown Advisory Funds plc (IRL)
http://www.brownadvisory.com Tel: 020 3301 8130
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Global Leaders Sustainable Fund USD C	$ 11.26	-	0.03	-
US Equity Growth Fund USD B	$ 52.33	-	-0.14	0.00
American Fund USD B	$ 27.71	-	0.11	0.15
US Smaller Companies Fund USD B	$ 33.42	-	0.32	0.00
US Small Cap Blend Fund USD B	$ 18.21	-	0.24	0.00
US Flexible Equity Fund USD B	$ 20.60	-	0.03	0.00
Global Leaders Fund USD C	$ 18.49	-	0.03	0.00
Latin American Fund USD B	$ 9.33	-	0.03	1.19
US Sustainable Growth Fund USD C	$ 22.30	-	0.05	0.00
US Mid-Cap Growth Fund USD C	$ 18.04	-	0.02	0.00

CCLA Investment Management Ltd (UK)
Senator House 85 Queen Victoria Street London EC4V 4ET
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Diversified Income 1 Units GBP Inc	£ 1.52	1.52	0.00	0.03
Diversified Income 2 Units GBP Inc	£ 1.47	1.47	0.01	0.03
Diversified Income 3 Units GBP Inc	£ 1.47	1.47	0.00	0.03

The Public Sector Deposit Fund

Fund	Bid	Offer	+/-	Yield
The Public Sector Deposit Fund-share class 1 ♦ F *	100.00	-	0.00	0.15
The Public Sector Deposit Fund-share class 4 ♦ F *	100.00	-	0.00	0.08

CCLA Investment Management Ltd (UK)
Senator House 85 Queen Victoria Street London EC4V 4ET
Property & Other UK Unit Trusts
CBF Church of England Funds

Fund	Bid	Offer	+/-	Yield
Investment Inc	1983.76	1992.83	-20.76	2.93
Investment Acc	4779.86	4801.70	-50.02	0.00
Global Equity Inc	255.14	255.57	-3.65	2.85
Global Equity Acc	449.10	449.86	-6.43	0.00
UK Equity Inc	183.37	183.98	-1.43	-
UK Equity Acc	325.87	326.95	-2.54	-
Fixed Interest Inc	168.67	169.69	1.57	3.31
Fixed Interest Acc	621.64	625.41	5.80	0.00
Property Fund Inc	125.74	129.95	-1.35	5.19

CCLA Fund Managers Ltd (UK)
Senator House 85 Queen Victoria Street London EC4V 4ET
Property & Other UK Unit Trusts
COIF Charity Funds (UK)

Fund	Bid	Offer	+/-	Yield
Investment Inc	1725.11	1733.00	-25.98	3.02
Investment Acc	19646.54	19736.34	-295.89	0.00
Ethical Invest Inc	266.23	267.45	-4.09	3.10
Ethical Invest Acc	407.56	409.42	-6.25	0.00
Global Equity Inc	234.66	235.06	-5.12	2.84
Global Equity Acc	417.45	418.16	-9.10	0.00
Fixed Interest Inc	140.84	141.69	-0.10	3.16
Fixed Interest Acc	957.44	963.24	-0.70	0.00
Property Inc	108.53	112.17	0.13	4.04

Local Authorities Property Fd (LAMIT) (UK)

Fund	Bid	Offer	+/-	Yield
Property	279.04	302.56	0.82	4.81

CG Asset Management Limited (IRL)
25 Moorgate, London, EC2R 6AY
Dealing: Tel. +353 1434 5098 Fax. +353 1542 2859
FCA Recognised
CG Portfolio Fund Plc

Fund	Bid	Offer	+/-	Yield
Absolute Return Cls M Inc	£ 129.14	129.14	0.19	1.43
Capital Gearing Portfolio GBP P	£ 35002.90	35002.90	41.71	0.52
Capital Gearing Portfolio GBP V	£ 170.23	170.23	0.20	0.20
Dollar Fund Cls D Inc	£ 174.09	174.09	0.71	1.78
Dollar Hedged GBP Inc	£ 106.62	106.62	-0.11	1.77
Real Return Cls A Inc	£ 212.12	212.12	0.72	2.05

Candriam Investors Group (LUX)
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Candriam Eqts L Australia Cap	A$ 1407.54	-	4.68	0.00
Candriam Qt-Eqts Europe Cap	€ 2466.39	-	-0.34	0.00
Candriam Qt-Eqts USA Cap	$ 3678.27	-	-0.63	0.00

Candriam Investors Group
Other International Funds

Fund	Bid	Offer	+/-	Yield
Candriam Eqts L Emerging Mkts Cap	€ 960.27	-	-1.13	0.00
Candriam Bonds Credit Opportunities	€ 201.42	-	0.03	0.00
Candriam Bds Euro High Yield Cap	€ 1212.54	-	-0.28	0.00
Candriam Bds Euro Sh.Term Cap	€ 2081.14	-	-1.83	0.00

Chartered Asset Management Pte Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
CAM-GTF Limited	$ 297250.50	297250.50	-222.91	0.00
CAM GTi Limited	$ 889.21	-	24.41	-
Raffles-Asia Investment Company	$ 1.45	1.45	-0.05	2.06

Consistent Unit Tst Mgt Co Ltd (1200)F (UK)
Stuart House, St John's Street, Peterborough, PE1 5DD
Dealing & Client Services 0345 850 8818
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Consistent UT Inc	48.06	49.69	0.50	1.42
Consistent UT Acc	128.10	132.50	1.40	1.42
Practical Investment Inc	208.80	224.50	2.20	3.70
Practical Investment Acc	1217.00	1309.00	12.00	3.70

CP Global Asset Management Pte. Ltd.
www.cpglobal.com.sg, Tel: +65 6466 6990
International Mutual Funds

Fund	Bid	Offer	+/-	Yield
CP Multi-Strategy Fund	$ 241.32	-	-2.86	-

CP Capital Asset Management Limited
www.cpgbl.com, email: fundservices@cpgbl.com
International Mutual Funds

Fund	Bid	Offer	+/-	Yield
CPS Master Private Fund	$ 330.22	-	-5.29	-
CP Global Alpha Fund	$ 273.88	-	-2.95	-

DWS (LUX)
Tel: +44 (0) 20 7541 8999 www.dws.com
FCA Recognised

Fund	Bid	Offer	+/-	Yield
DWS Invest Top Dividend	£ 130.80	130.80	-0.86	3.11
DWS Invest Top Euroland	£ 143.72	143.72	-1.70	1.46
DWS Invest Multi Opportunities	£ 100.70	100.70	-0.46	0.00
DWS Invest Global Bonds	£ 102.44	102.44	-0.02	0.00

Dodge & Cox Worldwide Funds (IRL)
6 Duke Street,St.James,London SW1Y 6BN
www.dodgeandcox.worldwide.com 020 3713 7664
FCA Recognised
Dodge & Cox Worldwide Funds plc - Global Bond Fund

Fund	Bid	Offer	+/-	Yield
EUR Accumulating Class	€ 14.80	-	0.05	0.00
EUR Accumulating Class (H)	€ 11.24	-	0.00	0.00
EUR Distributing Class	€ 11.62	-	0.04	3.83
EUR Distributing Class (H)	€ 8.79	-	0.00	3.93
GBP Distributing Class	£ 12.81	-	0.06	3.89
GBP Distributing Class (H)	£ 9.25	-	0.00	4.26
USD Accumulating Class	$ 12.61	-	-0.01	0.00

Dodge & Cox Worldwide Funds plc-Global Stock Fund

Fund	Bid	Offer	+/-	Yield
USD Accumulating Share Class	$ 20.88	-	0.15	0.00
GBP Accumulating Share Class	£ 26.27	-	0.33	0.00
GBP Distributing Share class	£ 18.14	-	0.23	1.41
EUR Accumulating Share Class	€ 26.53	-	0.28	0.00
GBP Distributing Class (H)	£ 10.19	-	0.08	1.16

Dodge & Cox Worldwide Funds plc-U.S. Stock Fund

Fund	Bid	Offer	+/-	Yield
USD Accumulating Share Class	$ 26.78	-	0.44	0.00
GBP Accumulating Share Class	£ 31.86	-	0.69	0.00
GBP Distributing Share Class	£ 19.45	-	0.42	1.07
EUR Accumulating Share Class	€ 29.38	-	0.58	0.00
GBP Distributing Class (H)	£ 11.12	-	0.18	1.12

Dragon Capital Group
1501 Me Linh Point, 2 Ngo Duc Ke, District 1, Ho Chi Minh City, Vietnam
Fund information, dealing and administration: funds@dragoncapital.com
Other International Funds

Fund	Bid	Offer	+/-	Yield
Vietnam Equity (UCITS) Fund A USD	$ 22.35	-	0.25	0.00

EdenTree Investment Management Ltd (UK)
PO Box 3733, Swindon, SN4 4BG, 0800 358 3010
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Amity UK Cls A Inc	219.80	-	2.00	1.38
Amity UK Cls B Inc	219.60	-	2.10	-
Higher Income Cls A Inc	111.40	-	1.10	5.32
Higher Income Cls B Inc	117.70	-	1.20	5.44
UK Equity Growth Cls A Inc	258.50	-	2.50	1.67
UK Equity Growth Cls B Inc	264.30	-	2.60	-
Amity Balanced For Charities A Inc	96.57	-	0.68	4.81
Amity European Fund Cls A Inc	252.40	-	2.40	1.10
Amity European Fund Cls B Inc	255.20	-	2.50	1.95
Amity Global Equity Inc for Charities A Inc	136.50	-	0.80	2.46
Amity International Cls A Inc	290.80	-	2.30	0.49
Amity International Cls B Inc	293.60	-	2.30	1.23
Amity Sterling Bond Fund A Inc	104.50	-	0.10	3.85
Amity Sterling Bond Fund B Inc	116.40	-	0.10	3.85

Ennismore Smaller Cos Plc (IRL)
5 Kensington Church St, London W8 4LD 020 7368 4220
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Ennismore European Smlr Cos NAV	£ 121.53	-	0.55	0.00
Ennismore European Smlr Cos NAV	€ 134.55	-	0.45	0.00

Ennismore European Smlr Cos Hedge Fd
Other International Funds

Fund	Bid	Offer	+/-	Yield
NAV	€ 476.16	-	-1.35	0.00

Equinox Fund Mgmt (Guernsey) Limited (GSY)
Regulated

Fund	Bid	Offer	+/-	Yield
Equinox Russian Opportunities Fund Limited	$ 179.78	-	1.60	0.00

Euronova Asset Management UK LLP (CYM)
Regulated

Fund	Bid	Offer	+/-	Yield
Smaller Cos Cls One Shares	€ 50.97	-	0.02	0.00
Smaller Cos Cls Two Shares	€ 33.57	-	0.01	0.00
Smaller Cos Cls Three Shares	€ 16.91	-	0.01	0.00
Smaller Cos Cls Four Shares	€ 21.73	-	0.00	0.00

FIL Investment Services (UK) Limited (1200)F (UK)
130, Tonbridge Rd, Tonbridge TN11 9DZ
Callfree: Private Clients 0800 414161
Broker Dealings: 0800 414 181
OEIC Funds

Fund	Bid	Offer	+/-	Yield
Allocator World Fund Y-ACC-GBP	£ 2.18	-	0.02	1.42
American Special Sits W-ACC-GBP	£ 15.04	-	0.12	-
Asia Pacific Ops W-Acc	£ 2.52	-	0.00	-
Asian Dividend Fund W-ACC-GBP	£ 1.92	-	0.01	3.31
China Consumer Fund W-ACC-GBP	£ 3.90	-	-0.03	0.44
Emerging Asia Fund W-ACC-GBP	£ 1.91	-	0.00	0.94
Enhanced Income Fund W-INC-GBP	£ 0.74	-	0.01	8.45
European Fund W-ACC-GBP	£ 19.05	-	0.20	1.60
Extra Income Fund Y-ACC-GBP	£ 1.38	-	0.00	3.41
FID INST - Emerging Markets Fund W-ACC-GBP	£ 1.91	-	0.00	-
Fidelity American Fund W-ACC-GBP	£ 51.32	-	0.26	0.33
Fidelity Asia Fund W-ACC-GBP	£ 17.40	-	-0.03	0.94
Fidelity Cash Fund Y-ACC-GBP	£ 1.02	-	0.00	0.66
FID Emerg Europe, Middle East and Africa Fund W-ACC-GBP	£ 2.07	-	0.02	-
Fidelity European Opportunities W Acc	£ 4.95	-	0.03	1.10
Fidelity Global Enhanced Income Fund W-ACC-GBP	£ 1.96	-	0.01	3.82
Fidelity Global Focus Fund W-ACC-GBP	£ 30.99	-	0.18	0.22
Fidelity Global High Yield Fund Y-ACC-GBP	£ 14.88	-	0.02	3.83
Fidelity Japan Fund W-ACC-GBP	£ 4.66	-	0.04	0.61
Fidelity Japan Smaller Companies Fund W-ACC-GBP	£ 3.97	-	0.00	0.37
Fidelity Multi Asset Income Fund W Acc	£ 1.06	-	0.00	2.65
Fidelity Select 50 Balanced Fund PI-ACC-GBP	£ 1.10	-	0.00	0.75
Fidelity Special Situations Fund W-ACC-GBP	£ 29.30	-	0.36	3.95
Short Dated Corporate Bond Fund Y ACC GBP	£ 10.94	-	0.00	3.91
Fidelity Sustainable Water & Waste W Acc	£ 1.06	-	0.01	-
Fidelity UK Growth Fund W-ACC-GBP	£ 3.34	-	-0.05	-
Fidelity UK Select Fund W-ACC-GBP	£ 2.95	-	0.02	2.50
Global Dividend Fund W-ACC-GBP	£ 2.49	-	0.01	2.70
Global Property Fund W-ACC-GBP	£ 1.85	-	0.01	2.01
Global Special Sits W-ACC-GBP	£ 46.27	-	0.25	0.75
Index Emerging Markets P-Acc	£ 1.72	-	0.00	2.25
Index Europe ex UK P-Acc	£ 1.56	-	0.02	2.61
Index Japan P-Acc	£ 1.76	-	0.01	2.03
Index Pacific ex Japan P-Acc	£ 1.58	-	0.01	3.51
Index UK P-Acc	£ 1.17	-	0.02	4.64
Index US P-Acc	£ 2.67	-	0.02	1.45
Index World P-Acc	£ 2.15	-	0.01	1.84
MoneyBuilder Balanced Y-ACC-GBP	£ 0.55	-	0.01	3.84
MoneyBuilder Dividend Y-INC-GBP	£ 1.04	-	0.01	5.86
MoneyBuilder Income Fund Y-ACC-GBP	£ 14.41	-	-0.01	2.96
Multi Asset Allocator Adventurous Fund Y-ACC-GBP	£ 1.86	-	0.01	1.30
Multi Asset Allocator Defensive Fund Y-ACC-GBP	£ 1.41	-	0.00	1.21
Multi Asset Allocator Growth Fund Y-ACC-GBP	£ 1.73	-	0.01	-
Multi Asset Income Fund W-INC-GBP	£ 1.04	-	0.00	4.19
Multi Asset Allocator Strategic Fund Y-ACC-GBP	£ 1.59	-	0.00	1.12
Multi Asset Open Advent W-ACC-GBP	£ 1.49	-	0.01	0.00
Multi Asset Open Defen W-ACC-GBP	£ 1.32	-	0.00	0.00
Multi Asset Open Growth Fund W-ACC-GBP	£ 1.43	-	0.01	0.00
Multi Asset Open Strategic Fund W-ACC-GBP	£ 1.39	-	0.00	0.00
Open World Fund W-ACC-GBP	£ 1.82	-	0.01	0.00
Strategic Bond Fund Y-ACC-GBP	£ 1.35	-	0.00	1.88
UK Opportunities Fund W-ACC-GBP	218.20	-	2.80	1.26
UK Smaller Companies W-ACC-GBP	£ 2.33	-	0.03	2.33

Institutional OEIC Funds

Fund	Bid	Offer	+/-	Yield
America	£ 7.09	-	0.07	0.34
Emerging Markets	£ 5.76	-	-0.01	-
Europe (ex-UK) Fund ACC-GBP	£ 6.58	-	0.03	0.59
Fidelity Pre-Retirement Bond Fund	£ 164.40	-	-0.40	1.71
Global Focus	£ 5.71	-	0.03	-
Index Linked Bond Gross	£ 4.68	-	0.00	0.10
Japan	£ 3.75	-	0.00	-
Long Bond Gross	£ 1.25	-	0.00	1.49
Pacific (Ex Japan)	£ 5.09	-	0.01	2.44
Select Emerging Markets Equities	£ 2.20	-	0.00	0.51
Select Global Equities	£ 5.20	-	0.05	-
South East Asia	£ 6.80	-	-0.02	1.26
Sterling Core Plus Bond Gr Accum	£ 3.10	-	-0.01	2.11
UK	£ 3.89	-	0.04	2.94
UK Aggreg Bond Gr Accum	£ 2.42	-	-0.01	1.73
Sterling Corporate Bond - Gross	£ 3.00	-	0.00	2.31
UK Gilt Gross	£ 2.64	-	-0.01	1.23
Sterling Long Corp Bond - Gross	£ 3.63	-	-0.01	2.74

Findlay Park Funds Plc (IRL)
30 Herbert Street, Dublin 2, Ireland Tel: 020 7968 4900
FCA Recognised

Fund	Bid	Offer	+/-	Yield
American EUR Unhedged Class	€ 124.76	-	0.99	-
American Fund USD Class	$ 147.55	-	0.59	0.00
American Fund GBP Hedged	£ 74.43	-	0.30	0.00
American Fund GBP Unhedged	£ 112.67	-	1.03	0.00

First State Investments (UK) (1200)F (UK)
23 St Andrew Square, Edinburgh, EH2 1BB
enquiries@firststate.co.uk
Client Services: 0800 587 4141 Dealing Line: 0800 587 3388
Authorised Funds

Fund	Bid	Offer	+/-	Yield
Asia-All Cap Acc GBP	£ 1.69	-	0.00	1.06
Asia Focus Acc GBP	£ 2.14	-	0.00	1.17
Diversified Growth B Acc	£ 1.18	-	0.01	-
Emerging Markets Bond A Accumulation	£ 1.38	-	0.00	4.90
Emerging Markets Bond A Income	£ 0.94	-	0.00	5.08
Global Listed Infrastructure Acc	275.84	-	2.92	2.96
Global Listed Infrastructure Inc	184.94	-	1.96	3.03
Global Property Securities A Accumulation	218.84	-	2.32	2.32
Global Property Securities A Income	152.12	-	1.61	2.34
Greater China Growth A Shares	1113.86	-	-4.44	0.66
Japan Focus Acc GBP	£ 2.60	-	0.00	0.00

Foord Asset Management
Website: www.foord.com - Email: info@foord.com
FCA Recognised - Luxembourg UCITS

Fund	Bid	Offer	+/-	Yield
Foord International Fund | R	$ 42.79	-	0.04	-
Foord Global Equity Fund (Lux) | R	$ 15.67	-	0.07	-

Regulated

Fund	Bid	Offer	+/-	Yield
Foord Global Equity Fund (Sing) | B	$ 19.16	-	0.09	0.00
Foord International Trust (Gsy)	$ 42.58	-	0.04	0.00

Franklin Templeton International Services Sarl (IRL)
JPMorgan House - International Financial Services Centre,Dublin 1, Ireland
Other International Funds
Franklin Emerging Market Debt Opportunities Fund Plc

Fund	Bid	Offer	+/-	Yield
Franklin Emg Mkts Debt Opp CHFSFr	13.82	-	-0.01	10.87
Franklin Emg Mkts Debt Opp GBP	£ 9.04	-	0.00	7.72
Franklin Emg Mkts Debt Opp SGD	S$ 19.86	-	-0.01	5.37
Franklin Emg Mkts Debt Opp USD	$ 15.72	-	-0.01	7.45

Fundsmith
Equity Fund

Fundsmith LLP (1200)F (UK)
PO Box 10846, Chelmsford, Essex, CM99 2BW 0330 123 1815
www.fundsmith.co.uk, enquiries@fundsmith.co.uk
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Fundsmith Equity T Acc	533.63	-	2.26	-
Fundsmith Equity T Inc	488.23	-	2.08	-

GAM
funds@gam.com, www.funds.gam.com
Regulated

Fund	Bid	Offer	+/-	Yield
LAPIS GBL TOP 50 DIV.YLD-Na-D	£ 95.79	-	1.12	4.82
LAPIS GBL F OWD 50 DIV.YLD-Na-D	£ 95.76	-	0.90	-

Genesis Investment Management LLP
Other International Funds

Fund	Bid	Offer	+/-	Yield
Emerging Mkts NAV	£ 7.21	-	-0.16	0.00

HPB Assurance Ltd
Anglo Intl House, Bank Hill, Douglas, Isle of Man, IM1 4LN 01638 563490
International Insurances

Fund	Bid	Offer	+/-	Yield
Holiday Property Bond Ser 1	£ 0.49	-	-0.01	0.00
Holiday Property Bond Ser 2	£ 0.62	-	-0.01	0.00

Hermes Property Unit Trust (UK)
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
Property	£ 6.33	6.80	-0.05	2.30

Intrinsic Value Investors (IVI) LLP (IRL)
1 Hat & Mitre Court, 88 St John Street, London EC1M 4EL +44 (0)20 7566 1210
FCA Recognised

Fund	Bid	Offer	+/-	Yield
IVI European Fund EUR	€ 22.24	-	-0.01	-
IVI European Fund GBP	£ 26.69	-	-0.04	-

Janus Henderson Investors (UK)
PO Box 9023, Chelmsford, CM99 2WB Enquiries: 0800 832 832
www.janushenderson.com
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Janus Henderson Asia Pacific Capital Growth Fund A Acc	1345.00	-	-4.00	-
Janus Henderson Asian Dividend Income Unit Trust Inc	88.84	-	0.35	8.67
Janus Henderson Cautious Managed Fund A Acc	251.40	-	1.90	-
Janus Henderson Cautious Managed Fund A Inc	132.90	-	1.00	-
Janus Henderson China Opportunities Fund A Acc	1770.00	-	-9.00	0.20
Janus Henderson Emerging Markets Opportunities Fund A Acc	217.00	-	0.30	0.26
Janus Henderson European Growth Fund A Acc	245.70	-	2.20	0.47
Janus Henderson European Selected Opportunities Fund A Acc	1861.00	-	20.00	0.18
Janus Henderson Fixed Interest Monthly Income Fund Inc	22.53	-	0.01	4.09
Janus Henderson Global Equity Fund Acc	4082.00	-	-6.00	0.00
Janus Henderson Global Equity Income Fund A Inc	56.52	-	0.67	3.53
Janus Henderson Global Sustainable Equity Fund A Inc	426.00	-	0.00	-
Janus Henderson Global Technology Fund A Acc	2792.00	-	7.00	0.00
Janus Henderson Instl UK Idx Opps A Acc	£ 0.85	-	0.01	-
Janus Henderson Multi-Asset Absolute Return Fund A Acc	145.00	-	0.20	0.78
Janus Henderson Multi-Manager Active Fund A Acc	235.10	-	0.60	-
Janus Henderson Multi-Manager Distribution Fund A Inc	128.60	-	-0.20	3.07
Janus Henderson Multi-Manager Diversified Fund A Acc	90.15	-	-0.12	2.88
Janus Henderson Multi-Manager Global Select Fund Acc	267.70	-	0.70	-
Janus Henderson Multi-Manager Income & Growth Fund A Acc	180.80	-	-0.20	2.57
Janus Henderson Multi-Manager Income & Growth Fund A Inc	148.50	-	-0.10	2.61
Janus Henderson Multi-Manager Managed Fund A Acc	288.30	-	0.90	-
Janus Henderson Multi-Manager Managed Fund A Inc	279.10	-	0.90	-
Janus Henderson Sterling Bond Unit Trust Acc	249.90	-	-0.20	1.47
Janus Henderson Sterling Bond Unit Trust Inc	70.33	-	-0.06	1.49
Janus Henderson Strategic Bond Fund A Inc	130.60	-	-0.20	2.91
Janus Henderson UK & Irish Smaller Companies Fund A Acc	590.40	-	3.20	0.26
Janus Henderson UK Absolute Return Fund A Acc	160.80	-	0.00	0.00
Janus Henderson UK Alpha Fund A Acc	126.90	-	0.90	0.36

MANAGED FUNDS SERVICE

Fund	Bid	Offer	+/-	Yield
Janus Henderson UK Equity Income & Growth Fund A Inc	404.90	-	6.00	4.34
Janus Henderson UK Property PAIF A Acc	£ 2.29	2.41	0.00	3.19
Janus Henderson UK Property PAIF A Inc	£ 0.95	1.00	0.00	3.25
Janus Henderson US Growth Fund A Acc	1614.00	-	17.00	-

Kleinwort Hambros Bank Limited (UK)
5TH Floor, 8 St James's Square, London, SW1Y 4JU
Dealing and enquiries: 033 0024 0785

Authorised Inv Funds

Unit Trust Manager/ACD - Host Capital

Fund	Bid	Offer	+/-	Yield
HC Kleinwort Hambros Growth A Acc	225.77	-	0.48	1.36
HC Kleinwort Hambros Growth A Inc	204.83	-	0.43	1.38
HC Kleinwort Hambros Equity Income A Inc	83.57	-	-0.08	3.06
HC Kleinwort Hambros Equity Income A Acc	152.28	-	-0.14	4.50
HC Kleinwort Hambros Multi Asset Balanced A Acc	171.88	-	0.11	0.81
HC Kleinwort Hambros Multi Asset Balanced A Inc	162.45	-	0.10	0.81
HC Kleinwort Hambros Fixed Income A Acc	136.30	-	-0.13	3.44
HC Kleinwort Hambros Fixed Income A Inc	108.71	-	-0.11	3.44

Lazard Fund Managers Ltd (1200)F (UK)
P.O. Box 364, Darlington, DL1 9RD
Dealing: 0870 6066408, Info: 0870 6066459

Authorised Inv Funds

Lazard Investment Funds (OEIC) B Share Class

Fund	Bid	Offer	+/-	Yield
Developing Markets Acc	133.54	-	0.89	0.24
Developing Markets Inc	131.54	-	0.87	0.19
Emerging Markets Acc	304.57	-	2.42	-
Emg Mkts Inc	247.69	-	1.97	-
European Alpha Acc	900.05	-	7.29	1.20
European Alpha Inc	786.38	-	6.37	1.22
European Smaller Cos Acc	626.61	-	4.29	0.70
Global Equity Income Acc	175.31	-	2.67	3.53
Global Equity Income Inc	94.48	-	1.44	-
Managed Bal Inc	172.74	-	1.44	1.74
UK Income Acc	1198.92	-	17.63	4.54
UK Income Inc	472.98	-	6.96	4.66
UK Omega Acc	214.23	-	3.58	2.86
UK Omega Inc	183.95	-	3.07	2.92
UK Smaller Cos Inc	1820.69	-	12.93	1.39

Lloyds Investment Fund Managers Limited (1000)F (JER)
PO Box 311, 11-12 Esplanade, St Helier, Jersey, JE4 8ZU 01534 845555

Other International Funds

Lloyds Investment Funds Limited

Fund	Bid	Offer	+/-	Yield
Euro High Income	€ 1.5440xd	-	-0.0010	2.32
High Income	£ 0.8709	-	-0.0011	3.78
Sterling Bond	£ 1.5970xd	-	-0.0020	2.14

Lloyds Multi Strategy Fund Limited

Fund	Bid	Offer	+/-	Yield
Conservative Strategy	£ 1.2870	-	-0.0010	0.00
Growth Strategy	£ 1.7980	-	0.0010	0.00
Aggressive Strategy	£ 2.4490	-	0.0050	0.00
Global USD Growth Strategy	$ 1.7520	-	-0.0030	0.00

Dealing Daily

Lothbury Property Trust (UK)
155 Bishopsgate, London EC2M 3TQ +44(0) 20 3551 4900

Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
Lothbury Property Trust GBP	£ 1844.76	-	-13.20	-

M & G Securities (1200)F (UK)
PO Box 9038, Chelmsford, CM99 2XF
www.mandg.co.uk/charities Enq./Dealing: 0800 917 4472

Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Charifund Inc	1218.41	-	21.63	6.58
Charifund Acc	21316.90	-	378.38	6.36
M&G Charibond Charities Fixed Interest Fund (Charibond) Inc	£ 1.26	-	0.01	-
M&G Charibond Charities Fixed Interest Fund (Charibond) Acc	£ 42.66	-	0.11	-
M&G Charity Multi Asset Fund Inc	£ 0.77	-	0.01	-
M&G Charity Multi Asset Fund Acc	£ 83.90	-	1.06	-

MMIP Investment Management Limited (GSY)
Regulated

Multi-Manager Investment Programmes PCC Limited

Fund	Bid	Offer	+/-	Yield
UK Equity Fd Cl A Series 01	£ 2089.66	2122.78	-108.36	0.00
Diversified Absolute Rtn Fd USD Cl AF2	$ 1591.75	-	-26.62	0.00

Fund	Bid	Offer	+/-	Yield
Diversified Absolute Return Stlg Cell AF2	£ 1500.42	-	-23.86	0.00
Global Equity Fund A Lead Series	£ 1508.38	1513.33	13.76	0.00

Marlborough Fd Managers Ltd (1200)F (UK)
Marlborough House, 59 Chorley New Road, Bolton, BL1 4QP 0808 145 2500
www.marlboroughfunds.com

Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Balanced	209.07	209.07	-0.09	0.42
Bond Income	52.03	52.03	0.16	3.24
Cautious Inc	85.23	85.23	-0.06	2.25
Emerging Markets	310.59	310.59	0.01	1.00
ETF Commodity A	72.31	72.31	0.22	0.00
European Multi-Cap	540.47	540.47	4.40	0.00
Extra Income	81.48	81.48	0.68	3.40
Far East Growth A Inc	238.76	238.76	0.12	0.92
Global	272.48	272.48	-0.08	0.12
Global Bond Inc	159.88	159.88	0.60	2.24
High Yield Fixed Interest	69.54	69.54	0.51	3.96
Multi Cap Income A Inc	123.29	123.29	0.91	4.81
Nano-Cap Growth A Acc	182.05	182.05	-4.89	0.00
Special Situations A Acc	1763.08	1763.08	14.47	0.00
UK Multi-Cap Growth A Inc	370.64	370.64	2.70	0.00
UK Micro Cap Growth A	783.22	783.22	2.74	0.00
US Multi-Cap Income	642.57	642.57	0.51	1.30

MFM - Third Party Funds

Fund	Bid	Offer	+/-	Yield
Junior Oils	35.61	35.61	0.21	0.00
Junior Gold C Acc	51.14	51.14	0.20	0.00
MFM Bowland	303.25	303.25	-3.00	0.67
MFM Hathaway Inc	147.58	147.58	0.67	0.77
MFM Techinvest Special Situations Acc	210.31	210.31	3.98	0.00
MFM Techinvest Technology Acc	740.18	740.18	3.52	0.00
MFM UK Primary Opportunities A Inc	363.46	363.46	4.07	1.74

Marwyn Asset Management Limited (CYM)
Regulated

Fund	Bid	Offer	+/-	Yield
Marwyn Value Investors	£ 340.40	-	-14.66	0.00

McInroy & Wood Portfolios Limited (UK)
Easter Alderston, Haddington, EH41 3SF 01620 825867

Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Balanced Fund Personal Class Units	5477.70xd	-	39.20	1.38
Income Fund Personal Class Units	2601.30xd	-	22.30	2.72
Emerging Markets Fund Personal Class Units	2163.40xd	-	21.00	1.69
Smaller Companies Fund Personal Class Units	6306.00xd	-	11.40	1.16

Milltrust International Managed Investments ICAV (IRL)
mimi@milltrust.com, +44(0)20 8123 8316 www.milltrust.com

Regulated

Fund	Bid	Offer	+/-	Yield
British Innovation Fund	£ 123.94	-	23.92	0.00
MAI - Buy & Lease (Australia)	A$ 123.94	-	21.42	0.00
MAI - Buy & Lease (New Zealand)	NZ$ 98.28	-	0.99	0.00
Milltrust Global Emerging Markets Fund - Class A	$ 103.20	-	-0.75	0.00
The Climate Impact Asia Fund (Class A)	$ 107.42	-	5.61	-

Milltrust International Managed Investments SPC
em@milltrust.com, +44(0)20 8123 8316, www.milltrust.com

Regulated

Fund	Bid	Offer	+/-	Yield
Milltrust Alaska Brazil SP A	$ 66.32	-	0.15	-
Milltrust Laurium Africa SP A	$ 82.49	-	-0.12	-
Milltrust Singular ASEAN SP Founders	$ 132.34	-	0.68	-
Milltrust SPARX Korea Equity SP A	$ 133.96	-	-3.05	-
Milltrust Xingtai China SP A	$ 136.53	-	0.39	-

Ministry of Justice Common Investment Funds (UK)
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
The Equity Idx Tracker Fd Inc	1619.00	1619.00	10.00	3.17

Distribution Units

Mirabaud Asset Management (LUX)
www.mirabaud.com, marketing@mirabaud-am.com
Conviction based investment vehicles details available here www.mirabaud-am.com

Regulated

Fund	Bid	Offer	+/-	Yield
Mir. - Glb Strat. Bd I USD	$ 118.67	-	-0.06	0.00
Mir. - DiscEur D Cap GBP	£ 153.68	-	0.06	0.00
Mirabaud - UK Equity High Alpha	£ 121.58	-	0.18	0.00

New Capital UCITS Fund PLC (IRL)
Leconfield House, Curzon Street, London, W1J 5JB
www.newcapitalfunds.com

FCA Recognised

New Capital UCITS Funds

Fund	Bid	Offer	+/-	Yield
New Capital China Equity Fund	$ 249.91	-	-2.68	0.00
New Capital Dynamic European Equity Fund	€ 122.54	-	-0.44	0.00
New Capital Dynamic UK Equity Fund	£ 107.17	-	0.13	0.00
New Capital Global Alpha Fund	£ 113.96	-	-0.24	0.00
New Capital Global Equity Conviction Fund	$ 186.06	-	0.01	0.00
New Capital Global Value Credit Fund	$ 157.02	-	-0.15	0.00
New Capital Japan Equity Fund	¥ 1477.73	-	-20.07	0.00
New Capital US Growth Fund	$ 405.15	-	-1.18	0.00
New Capital US Small Cap Growth Fund	$ 185.48	-	2.08	0.00
New Capital Wealthy Nations Bond Fund	$ 152.91	-	-0.17	0.00

Oasis Crescent Management Company Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
Oasis Crescent Equity Fund	R 10.72	-	0.08	0.74

Oasis Global Mgmt Co (Ireland) Ltd (IRL)
Regulated

Oasis Crescent Global Investment Fund (Ireland) plc

Fund	Bid	Offer	+/-	Yield
Oasis Crescent Global Short Term Income Fund I - Class A Dist	$ 0.99	-	0.00	2.16
Oasis Crescent Global Equity Fund	$ 32.32	-	0.12	0.50
Oasis Crescent Variable Balanced Fund	£ 8.96	-	0.02	0.00
OasisCresGl Income Class A	$ 11.00	-	-0.01	2.70
OasisCresGl LowBal D ($) Dist	$ 12.07	-	0.02	1.05
OasisCresGl Med Eq Bal A ($) Dist	$ 13.03	-	0.03	0.37
Oasis Crescent Gbl Property Eqty	$ 7.47	-	0.02	1.55

Omnia Fund Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
Estimated NAV	$ 585.09	-	-10.16	0.00

Oryx International Growth Fund Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
NAV (Fully Diluted)	£ 9.10	-	-0.52	0.00

Orbis Investments (U.K.) Limited (GBR)
28 Dorset Square, London, NW1 6QG
www.orbis.com 0800 358 2030

Regulated

Fund	Bid	Offer	+/-	Yield
Orbis OEIC Global Cautious Standard	£ 9.90	-	0.01	0.03
Orbis OEIC Global Balanced Standard	£ 14.05	-	0.03	0.00
Orbis OEIC Global Equity Standard	£ 17.61	-	0.10	0.00
Orbis OEIC UK Equity Standard	£ 6.53	-	0.02	0.00

Platinum Capital Management Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
Platinum All Star Fund - A	$ 136.11	-	-	-
Platinum Global Growth UCITS Fund	$ 12.82	-	-0.12	0.00
Platinum Essential Resources UCITS Fund SICAV USD Class E	$ 6.82	-	0.00	0.00
Platinum Global Dividend UCITS Fund	$ 53.60	-	0.22	0.00

Polar Capital Funds Plc (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Automation & Artificial Intelligence CL I USD Acc	$ 15.87	15.87	-0.01	0.00
Asian Financials I USD	$ 401.32	401.32	0.42	0.00
Biotechnology I USD	$ 35.42	35.42	0.19	0.00
Emerging Market Stars I USD Acc	$ 13.44	-	-0.11	0.00
European Ex UK Inc EUR Acc	€ 10.40	10.40	0.00	0.00
Financial Opps I USD	$ 11.50	-	0.12	2.45
GEM Income I USD	$ 11.40	-	0.04	0.00
Global Convertible I USD	$ 15.44	15.44	0.07	0.00
Global Insurance I GBP	£ 6.70	-	0.06	0.00
Global Technology I USD	$ 79.94	-	-0.21	0.00
Healthcare Blue Chip Fund I USD Acc	$ 15.41	15.41	0.18	0.00
Healthcare Opps I USD	$ 60.17	-	1.19	0.00
Income Opportunities B2 I GBP Acc	£ 2.10	2.10	0.02	-
Japan Value I JPY	¥ 104.96	104.96	0.97	0.00
North American I USD	$ 27.43	27.43	0.28	0.00
UK Val Opp I GBP Acc	£ 10.16	10.16	0.11	0.00

Polar Capital LLP (CYM)
Regulated

Fund	Bid	Offer	+/-	Yield
European Forager A EUR	€ 171.86	-	-0.93	0.00

Private Fund Mgrs (Guernsey) Ltd (GSY)
Regulated

Fund	Bid	Offer	+/-	Yield
Monument Growth 20/10/2020	£ 483.14	487.75	-6.35	1.59

Prusik Investment Management LLP (IRL)
Enquiries - 0207 493 1331

Regulated

Fund	Bid	Offer	+/-	Yield
Prusik Asian Equity Income B Dist	$ 158.35	-	1.35	4.98
Prusik Asia Emerging Opportunities Fund A Acc	$ 162.11	-	1.25	0.00
Prusik Asia Fund U Dist.	£ 213.40	-	-1.21	0.00

Purisima Investment Fds (UK) (1200)F (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 922 0044

Authorised Inv Funds

Authorised Corporate Director - Link Fund Solutions

Fund	Bid	Offer	+/-	Yield
Global Total Fd PCG A	333.29	-	1.19	0.54
Global Total Fd PCG B	330.19	-	1.18	0.34
Global Total Fd PCG INT	325.82	-	1.17	0.14

Purisima Investment Fds (CI) Ltd (JER)
Regulated

Fund	Bid	Offer	+/-	Yield
PCG B ✠	271.61	-	-2.57	0.00
PCG C ✠	265.44	-	-2.52	0.00

Ram Active Investments SA
www.ram-ai.com

Other International Funds

Fund	Bid	Offer	+/-	Yield
RAM Systematic Emerg Markets Eq	$ 191.97	191.97	-0.32	-
RAM Systematic European Eq	€ 442.05	442.05	-0.63	-
RAM Systematic Funds Global Sustainable Income Eq	$ 120.79	120.79	0.21	0.00
RAM Systematic Long/Short Emerg Markets Eq	$ 108.25	108.25	0.40	-
RAM Systematic Long/Short European Eq	€ 143.25	143.25	-0.66	-
RAM Systematic North American Eq	$ 332.58	332.58	-0.68	-
RAM Tactical Global Bond Total Return	€ 154.44	154.44	-0.13	-
RAM Tactical II Asia Bond Total Return	$ 154.19	154.19	-0.04	-

RLUM Ltd (UK)
5th Floor, Churchgate House, 56 Oxford Street, Manchester M1 6EU 03456 057777

Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Royal London Sustainable Diversified A Inc	£ 2.39	-	0.01	0.58
Royal London Sustainable World A Inc	337.50	-	1.80	-
Royal London Corporate Bond Mth Income	93.71	-	-0.03	3.41
Royal London European Growth Trust	172.20	-	1.70	0.22
Royal London Sustainable Leaders A Inc	678.50	-	7.10	0.67
Royal London UK Growth Trust	526.50	-	7.40	1.36
Royal London UK Income With Growth Trust	180.10	-	2.00	-
Royal London US Growth Trust	285.90	-	1.20	0.01

Additional Funds Available
Please see www.royallondon.com for details

Ruffer LLP (1000)F (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 601 9610

Authorised Inv Funds

Authorised Corporate Director - Link Fund Solutions

Fund	Bid	Offer	+/-	Yield
LF Ruffer European C Acc	692.74	-	-5.61	0.06
LF Ruffer European C Inc	126.41	-	-1.03	0.10
LF Ruffer European O Acc	675.87	-	-5.51	0.00
LF Ruffer Equity & General C Acc	448.59	-	-1.74	0.20
LF Ruffer Equity & General C Inc	410.26	-	-1.59	0.20
LF Ruffer Equity & General O Acc	437.70	-	-1.72	0.00
LF Ruffer Equity & General O Inc	405.24	-	-1.59	0.00
LF Ruffer Gold C Acc	324.80	-	-10.72	0.00
LF Ruffer Gold C Inc	196.58	-	-6.48	0.00
LF Ruffer Gold O Acc	316.80	-	-10.47	0.00
LF Ruffer Japanese C Inc	153.42	-	-1.80	0.09
LF Ruffer Japanese C Acc	329.69	-	-3.86	0.09
LF Ruffer Japanese O Acc ✠	321.26	-	-3.78	0.00
LF Ruffer Pacific & Emerging Markets C Acc	368.19	-	-3.09	0.85
LF Ruffer Pacific & Emerging Markets C Inc	100.34	-	-0.84	0.88
LF Ruffer Pacific & Emerging Markets O Acc	358.90	-	-3.04	0.54
LF Ruffer Total Return C Acc	481.25	-	-1.94	0.87
LF Ruffer Total Return C Inc	311.44	-	-1.26	0.88
LF Ruffer Total Return O Acc	469.53	-	-1.91	0.87
LF Ruffer Total Return O Inc	303.68	-	-1.24	0.88

RobecoSAM (LUX)
Tel. +41 44 653 10 10 http://www.robecosam.com/

Regulated

Fund	Bid	Offer	+/-	Yield
RobecoSAM Sm.Energy/A	£ 25.63	-	0.17	1.27
RobecoSAM Sm.Energy/N	€ 23.69	-	0.14	0.00
RobecoSAM Sm.Materials/A	£ 207.45	-	2.20	1.55
RobecoSAM Sm.Materials/N	€ 217.40	-	2.04	0.00
RobecoSAM Sm.Materials/Na	€ 141.76	-	1.33	1.55
RobecoSAM S.HealthyLiv/B	€ 231.62	-	1.46	0.00
RobecoSAM S.HealthyLiv/N	€ 223.83	-	1.42	-
RobecoSAM S.HealthyLiv/Na	£ 167.27	-	1.27	1.39
RobecoSAM S.Water/A	£ 299.80	-	2.37	1.44
RobecoSAM S.Water/N	€ 263.01	-	1.76	0.00

Rubrics Global UCITS Funds Plc (IRL)
www.rubricsam.com

Regulated

Fund	Bid	Offer	+/-	Yield
Rubrics Emerging Markets Fixed Income UCITS Fund	$ 137.06	-	0.00	0.00
Rubrics Global Credit UCITS Fund	$ 17.44	-	0.00	0.00
Rubrics Global Fixed Income UCITS Fund	$ 181.49	-	-0.25	0.00

Scottish Friendly Asset Managers Ltd (UK)
Scottish Friendly Hse, 16 Blythswood Sq, Glasgow G2 4HJ 0141 275 5000

Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Managed Growth ♦	290.80	-	1.60	0.00
UK Growth ♦	334.10	-	2.80	0.00

Slater Investments Ltd (UK)
www.slaterinvestments.com; Tel: 0207 220 9460

FCA Recognised

Fund	Bid	Offer	+/-	Yield
Slater Growth	592.30	592.30	4.36	0.00
Slater Income A Inc	111.19	111.19	0.73	5.22
Slater Recovery	274.08	274.08	1.30	0.00
Slater Artorius	241.22	241.22	-3.76	0.42

Stonehage Fleming Investment Management Ltd (IRL)
www.stonehagefleming.com/gbi
enquiries@stonehagefleming.com

Regulated

Fund	Bid	Offer	+/-	Yield
SF Global Best Ideas Eq B USD ACC	$ 228.53	-	-1.09	-
SF Global Best Ideas Eq D GBP INC	£ 264.79	-	0.12	-

Thesis Unit Trust Management Limited (UK)
Exchange Building, St Johns Street, Chichester, West Sussex, PO19 1UP

Authorised Funds

Fund	Bid	Offer	+/-	Yield
TM New Court Fund A 2011 Inc	£ 16.90	-	0.08	0.03
TM New Court Fund - A 2014 Acc	£ 17.04	-	0.07	0.03
TM New Court Equity Growth Fund - Inc	£ 18.10	-	0.10	0.07

Toscafund Asset Management LLP (UK)
www.toscafund.com

Authorised Funds

Fund	Bid	Offer	+/-	Yield
Aptus Global Financials B Acc	£ 3.22	-	0.02	5.01
Aptus Global Financials B Inc	£ 2.25	-	0.02	6.42

Toscafund Asset Management LLP
www.toscafund.com

Fund	Bid	Offer	+/-	Yield
Tosca A USD	$ 330.32	-	8.46	-
Tosca Mid Cap GBP	£ 138.17	-	-6.01	-
Tosca Opportunity B USD	$ 209.98	-	-7.42	-
Pegasus Fund Ltd A-1 GBP	£ 32.99	-	-1.41	0.00

Troy Asset Mgt (1200) (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 608 0950

Authorised Inv Funds

Authorised Corporate Director - Link Fund Solutions

Trojan Investment Funds

Fund	Bid	Offer	+/-	Yield
Spectrum Fund O Acc	246.92	-	-0.87	0.24
Spectrum Fund O Inc	234.57	-	-0.83	0.24
Trojan Ethical O Acc	118.67	-	0.33	0.10
Trojan Ethical O Inc	118.44	-	0.33	0.09
Trojan Ethical Income O Acc	130.97	-	1.00	-
Trojan Ethical Income O Inc	114.89	-	0.88	-
Trojan Fund O Acc	352.05	-	1.24	0.35
Trojan Fund O Inc	285.09	-	1.00	0.35
Trojan Global Equity O Acc	425.10	-	3.86	0.24
Trojan Global Equity O Inc	350.77	-	3.19	0.24
Trojan Global Income O Acc	130.54	-	0.89	2.98
Trojan Global Income O Inc	116.54	-	0.80	3.04
Trojan Income O Acc	320.41	-	2.97	3.61
Trojan Income O Inc	167.19	-	1.55	3.64

Unicorn Asset Management Ltd (UK)
PO Box 10602, Chelmsford, Essex, CM1 9PD 0845 026 4287

Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
UK Growth A Inc	570.11	-	2.66	1.16
Mastertrust A Inc ✠ F	517.42	-	3.18	-
UK Growth B Inc	573.68	-	2.69	1.92
Mastertrust B Inc ✠ F	463.88	-	2.86	1.06
Outstanding British Cos A Acc ✠ F	277.49	-	1.91	0.68
Outstanding British Cos B Acc ✠ F	300.49	-	2.08	1.48
UK Smaller Cos A Inc ✠ F	529.55	-	3.04	1.84
UK Smaller Cos B Inc ✠ F	516.72	-	2.97	2.59
UK Income A Acc ✠ F	270.89	-	2.92	3.65
UK Income A Inc ✠ F	197.95	-	2.14	3.07
UK Income B Acc ✠ F	298.46	-	3.23	3.50
UK Income B Inc ✠ F	218.22	-	2.37	3.42

WA Fixed Income Fund Plc (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
European Multi-Sector	€ 123.54	-	-0.32	3.26

Zadig Gestion (Memnon Fund) (LUX)
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Memnon European Fund - Class U2 GBP	£ 185.15	-	-0.49	0.00

Data Provided by

MORNINGSTAR®

www.morningstar.co.uk

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Guide to pricing of Authorised Investment Funds: (compiled with the assistance of the IMA. The Investment Management Association, 65 Kingsway, London WC2B 6TD.
Tel: +44 (0)20 7831 0898.)

OEIC: Open-Ended Investment Company. Similar to a unit trust but using a company rather than a trust structure.

Different share classes are issued to reflect a different currency, charging structure or type of holder.

Selling price: Also called bid price. The price at which units in a unit trust are sold by investors.

Buying price: Also called offer price. The price at which units in a unit trust are bought by investors. Includes manager's initial charge.

Single price: Based on a mid-market valuation of the underlying investments. The buying and selling price for shares of an OEIC and units of a single priced unit trust are the same.

Treatment of manager's periodic capital charge: The letter C denotes that the trust deducts all or part of the manager's/operator's periodic charge from capital, contact the manager/operator for full details of the effect of this course of action.

Exit Charges: The letter E denotes that an exit charge may be made when you sell units, contact the manager/operator for full details.

Time: Some funds give information about the timing of price quotes. The time shown alongside the fund manager's/operator's name is the valuation point for their unit trusts/OEICs, unless another time is indicated by the symbol alongside the individual unit trust/OEIC name.

The symbols are as follows: ✠ 0001 to 1100 hours; ♦ 1101 to 1400 hours; ▲1401 to 1700 hours; # 1701 to midnight. Daily dealing prices are set on the basis of the valuation point, a short period of time may elapse before prices become available. Historic pricing: The letter H denotes that the managers/operators will normally deal on the price set at the most recent valuation. The prices shown are the latest available before publication and may not be the current dealing levels because of an intervening portfolio revaluation or a switch to a forward pricing basis. The managers/operators must deal at a forward price on request, and may move to forward pricing at any time. Forward pricing: The letter F denotes that that managers/operators deal at the price to be set at the next valuation.

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WORK & CAREERS

The hidden skills gaps employers must learn to bridge

Andrew Hill
On Management

The world is fretting about the looming "skills gap" and its potential impact on economic output. Again. "The [UK] government, of course, is well aware of this threat," wrote the Financial Times — in 1968.

This is a chronic problem, in other words. But it is entering an acute phase, thanks to the pandemic. Like coronavirus, the skills gap is mutating, in potentially dangerous ways.

The first and most obvious fissure in the future of work is still the one identified in that 1968 report: a dearth of workers (engineers, in that case) with the skills for the jobs of the future. Today's problem is summed up by a new report from the World Economic Forum: 40 per cent of the core skills in the average job will change in the next five years, it concludes.

Beneath this chasm lurks a second skills gap, between lower-educated, lower-paid, and younger workers, who are disproportionately worse hit by the crisis, and better-paid, older professionals. Outcomes for women are also worse than for men. US data show peak unemployment hit 21.2 per cent in April for workers educated to lower than secondary level, falling only to 12.6 per cent by end of August. In each case that was more than double the rate for workers with at least a degree.

What looks like good news for the more highly educated, though, may only be relative. The UK government's Industrial Strategy Council last year estimated an additional 7m people, or 20 per cent of the workforce, would be under-skilled for their jobs by 2030, but another 1m would be over-skilled.

The pandemic will potentially widen this third gap. I click-and-collected my groceries the other week from a man who had lost his job managing shop refits for a retailer. He was philosophical about the turn in his fortunes. "It's the first time for a while I've had no responsibility," he told me. Similarly, Tom De Silva, who hoped to go into advertising before Covid-19 hit, earned viral fame with a recent mordant tweet about his part-time supermarket job: "4 years ago I was doing trollies at Sainsburys on a Monday night. I left, worked hard and got a degree from the University of Sheffield. Now I'm doing trollies at Waitrose on a Friday night. Never give up".

Through no fault of their own, people who have to downshift in this way worsen the qualifications gap, and take roles that might otherwise have been open to a less educated candidate wanting to get a foot on the jobs ladder.

Conventional wisdom suggests digital skills are the hole in the future jobs market. True, data analysts and specialists in artificial intelligence, big data, and digital marketing top the list of jobs in increasing demand, according to the WEF report. (Its jaunty video about the challenge ahead even offers hope for Mr De Silva, illustrating the need for "customer success specialists" with an animation of supermarket trolleys.) But the top skills required for 2025 are broader — such as analytical thinking, complex problem-solving, and creativity — and expose a fourth potential rift in the jobs market.

"There's going to be a point where all the technology has been built and you no longer need a gazillion software programmers and data scientists," says Julian Lambertin of KRC Research, who has worked with Microsoft on recent reports about the future of work. Instead, "you will need people who work with the technology" and apply their human, personal and leadership skills.

Companies, governments and educational institutions need to act fast and in a co-ordinated fashion to plug these holes. More than half of working adults fear they will lose their jobs in the next 12 months, according to an Ipsos survey for the WEF.

More optimistically, two-thirds think they can retrain with their current employer. To fulfil such hopes, companies have to meet their side of the bargain and commit resources to valuable on-the-job training even as they are under fierce financial pressure. Saadia Zahidi, co-author of the WEF report, points out that the return on investment in reskilling is fast, "so you would think that the business case is there". But "businesses are having to take short-term decisions because of the downturn".

Here, a final skills gap looms — one of the hardest to close. The "things that are easiest to teach and test have also become the easiest to digitise", Andreas Schleicher of the OECD warned the WEF's Jobs Reset summit last week.

Yet companies need staff with core social and emotional capabilities — misnamed "soft" skills — that can best be acquired, cultivated and assessed at work. Once out of a job, candidates may find it harder to prove to employers their "active learning" capacity, second on the WEF's list of top skills for 2025. If they cannot bridge this gap, policymakers, business leaders and educators will still be wringing their hands about the skills shortfall decades from now.

> Companies have to commit resources to valuable on-the-job training even as they are under fierce financial pressure

andrew.hill@ft.com

Working lives

What I wish I'd known at the start of the pandemic

'I wish I'd known it was even possible for businesses to go through such a seismic, rapid and permanent digital transformation'

FT montage; AFP, Getty

Leading business people and thinkers reflect on the early days of Covid-19, as told to *Andrew Hill*, *Emma Jacobs* and *Pilita Clark*

Rebecca Henderson

Harvard Business School professor and author of 'Reimagining Capitalism in a World on Fire', shortlisted for the FT/McKinsey Business Book of the Year prize

What do you wish you'd known six months ago?

That entrusting my signature red leather jacket to a dry cleaner on March 10 was a bad idea.

That it would shortly become obvious that having a competent government really was essential to the health of the economy. I would have been rather less apologetic in advancing the idea.

What is the best decision you have made since the pandemic started?

To work my way (slowly) through the entire *Harry Potter* series.

To start a gratitude practice. To focus deliberately — every day — on how incredibly privileged I am.

To buy a Blue Yeti microphone on March 19.

And the worst?

To say nothing to our 24-year-old son about his diet when he came to live with us for four months, despite the fact that he seemed to live on almost nothing but granola bars.

Luis von Ahn

CEO and co-founder of language learning app Duolingo, and professor of computer science, Carnegie Mellon University

What do you wish you'd known six months ago?

I wish we had known how long Covid would last. We have a team in China, so we had greater foresight than most, but I don't think anyone was predicting the turmoil it would cause or how much of a profound and long-term impact it would have on society.

For us, we have seen a rise in online learning that has remained outside of lockdown as people prepare for future disruption and recognise how effective online learning can be. We've seen huge growth for the Duolingo learning app and our English Test all over the world.

Best and worst decisions?

I'd say our best decision was launching our new literacy app early and prioritising the Duolingo English Test.

We also diverted resources to our English proficiency test because we knew students wouldn't be able visit physical testing centres and still needed to take exams.

Personally, I am also proud of how we kept our culture alive. Lockdown affected our team in so many ways, with parents juggling childcare and new employees and interns adapting to work when they'd never met their colleagues, so keeping people connected and reassured was paramount.

The worst decision was not getting a haircut the week before lockdown.

Jackie Stevenson

CEO of creative agency The Brooklyn Brothers and president of Women in Advertising and Communications, London

What do you wish you'd known six months ago?

How bad the pandemic was going to be for women in the workplace. It has created the perfect storm that will result in so many talented women leaving businesses and downshifting.

If we'd had a bit more foresight there was so much that industry, governments, we all could have done.

Best and worst decisions?

The best was making our business "flexible first" overnight by giving our team the power to decide when, where and how they work. It's been so much more effective to learn as we go rather than do what we used to and debate for hours.

The worst has been planning for a "return to normal". There's so much more freedom in planning "for better". As soon as you shift to this way of thinking a weight is lifted and you are back in the box seat.

Sir Douglas Flint

Chairman of Standard Life Aberdeen and former chairman of HSBC

What do you wish you'd known six months ago?

I wish I'd known how adaptable and agile people are when faced with challenging circumstances. The scale and pace of change that people managed was beyond anyone's estimation of what could be possible.

The way people supported those in more difficult circumstances was also just fabulous. It's what you would have dreamt would happen, but never knew was possible.

Best and worst decisions?

The best decision I made was continuing and completing our succession planning process, which was challenging in a period of remote working. It would have been easy to say it was all too difficult. But we decided to go ahead with it and brought in a first class chief executive, with the huge support and commitment of the retiring CEO.

The worst decision was not doing something in the early stages of lockdown to improve my home broadband. We had five people using it at once, in a lovely village in Sussex, which at times was a real frustration.

Mitchell Baker

CEO of Mozilla Corporation, chair of the Mozilla Foundation and judge for the FT/McKinsey Business Book of the Year award

What do you wish you'd known six months ago?

More about how to help people build organisational resilience to weather multiple simultaneous crises. The specifics of real-time learning are irreplaceable, but a deeper foundation six months ago would have been invaluable.

> 'I wish I'd known that entrusting my red leather jacket to a dry cleaner on March 10 was a bad idea'

Best and worst decisions?

The best is the commitment to openness with our employees and community about the state of our organisation and business.

There is often no model for how to communicate openly as one works through difficult decisions. As a result, it can take more time and problem solving to determine how best to provide accurate assessments, be realistic about problems and also provide positive leadership for the future.

I have found the "upfront" time doing this to bring long-lasting rewards in the form of employee commitment and dedication.

The worst decision wasn't actually a conscious decision. The error was to allow the fatigue from the pandemic and extreme wildfires to cloud the need to move quickly to resolve a culture issue.

Cal Henderson

CTO and co-founder of workplace messaging app Slack

What do you wish you'd known six months ago?

That it was even possible for businesses to go through such a seismic, rapid and permanent digital transformation, which was unimaginable at the start of the year. We quickly recognised our unique position and responsibility to help businesses make this major change in how they worked, and it was hugely motivating and inspiring for everyone at Slack.

Best and worst decisions?

From very early, the best decision we made, which played a major part in driving our business forward, was to focus on the health and wellbeing of our employees.

It is the same notion of putting your oxygen mask on first on a plane, before helping others. We worked hard to ensure work was not a point of stress for our people. We were very clear we wanted people to take care of themselves and their families, even if that impacted work. We are all human first.

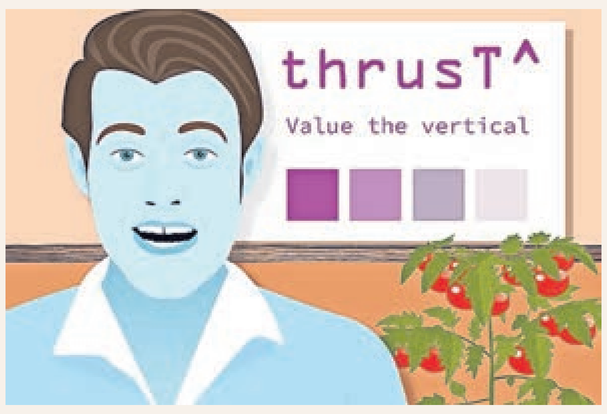
As for the worst decision, along with many others, I assumed that leaving the office and working from home would be a shortlived experience. With that as an assumption, I was focused on how we get through this difficult period and get "back to normal".

I know now that we'll never get back to how things were, and figuring out what that meant for operating in a distributed way sooner was a missed opportunity.

Work Tribes

'Do you love the rebrand? The look on your faces says it all!'

ANDREW HILL AND EMMA JACOBS



Matt, the chief marketing officer

Hey! I'm Matt. Virtual high-fives to anyone I haven't yet met. It's weird to be promoting an iconic building I haven't yet visited but my wife Jules is in a vulnerable category so it's safer for me to stay here in Provence.

Anyway, the team and I are super excited to give you a peek of the creative for our rebrand. We think you're going to *love* it.

Et voila!

I think you'll recognise we have done something truly radical here by blending Thrust's purpose, mission, vision, values, heritage, brand, community, and KPIs into a single vibrant identity that showcases our DNA.

Our new logo — thrusT^ — is a lower case T rising to a dramatic capital, emphasised by the dangling circumflex, which expresses the genius and vision of Sir Harry Ziffer, Thrust architect and ultimate arbiter of my bonus this year, and his maxim "Upward!"

Combined with our new purpose statement — "Value the Vertical" (fruit of a year-long hackathon) — I think you'll all agree this is a powerful call to action, aligned with our urgently revised strategy of attracting artists, poets, change agents and desperate freelancers to our home-from-home in the City. Our colour scheme is "heliotrope" — a shade of purple from the sun-loving bloom of the same name, which graces the Thrust's SkyShrubbery. Our focus groups agreed that nothing says "hope" as insistently as this shade of purple.

We are backing this brand positioning with a £100m campaign that we think is the most disruptive yet seen in the space. As Sir Harry has so wisely declared, "If you're not a disrupter, you're a disruptee". And what could be more disruptive in this era of relentless change than a massive piece of fast-depreciating city-centre real estate, built at the top of the market, standing half-dark and nearly empty, as global recessionary storm clouds gather? Well? That's right — nothing!

So — do you love it? The shocked look on your faces tells me all I need to know!

Cressida, the superwoman

Before we wrap up today's Zoom meeting — hold on a minute, does Jake know we can still see him? What *is* he doing? Can someone throw him out of the meeting, quick!

Thank God, John, you've saved us all from a rather unedifying spectacle.

Anyway, I just wanted to remind you of my memo at the start of the week. Rather than mandatory fun weekly drinks, I thought we could wrap up our morning Zoom meeting with a 10-minute chat about non-work lives — not too private, obviously! You don't want to hear about my marital problems — hypothetical problems, of course.

Why don't we start with Halloween? Anyone have Covid-safe ideas? No one?

OK, I'll start. Well, Halloween is a highlight of the year. With six children things can get out of control! I don't know what they put in those natural fruit drops and raw carob buttons but it certainly sends the kids wild. Halloween is an exception to our no-sweets rule — on Halloween Eve, I send one of the nannies down our street with sugar-free 'sweets' so our neighbours can hand them out to my kids instead of those sickly Haribos and fizzy colas. It's my tip if you don't want your kids eating rubbish.

This year, we've decided it's more Covid-secure to give rather than receive. To that end, I've set my husband a project — creating a fruit chute so we can dispatch tangerines to trick-or-treaters from upstairs. The only contagion in our house will be high spirits!

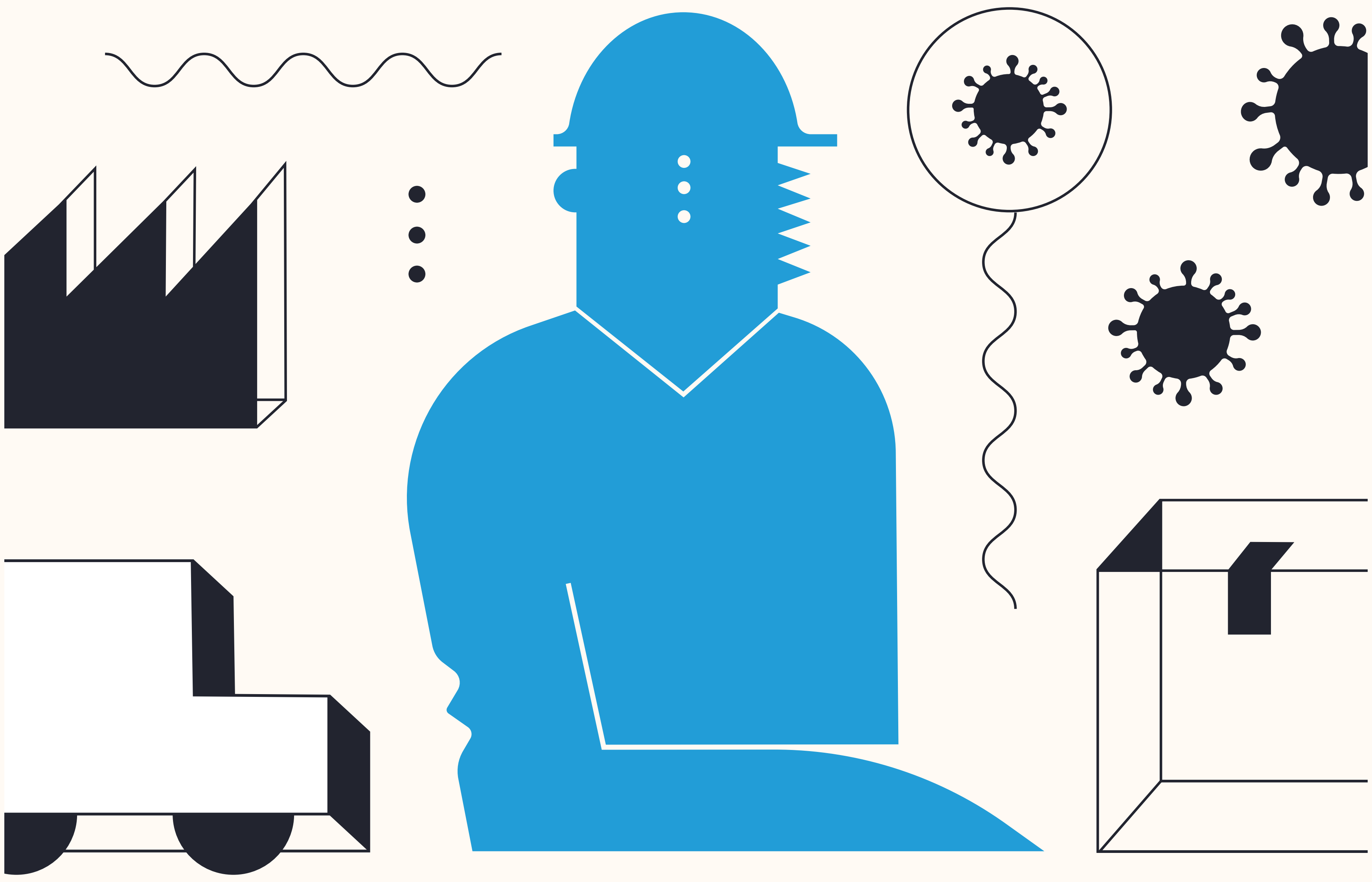
For my own kids, I've got something rather special planned. This has been a difficult time for theatreland so I'm hiring three West End set designers to dress my London home as a horror house. Since we dismantled our award-winning illuminated NHS rainbow installation, the street has felt drab so this is the least we can do to inspire our less imaginative neighbours.

That's enough about my plans, John, what will you be doing on Halloween? Can you hear me? Oh, I've been booted out.

REBOOTING THE WORKPLACE

It is time to think about the other workplaces

We need to consider the future of the factories and warehouses where many millions of people work, writes Daniel Susskind



William Gibson, the science fiction writer, once quipped: "The future is already here — it's just not evenly distributed." The pandemic has proved his point.

Most of the technologies that white-collar workers have relied on in recent months — Zoom, Skype, Teams — have been around for years. It took a pandemic, though, for them to become widespread: at the start of the outbreak, about two-thirds of those working in the US and UK did so remotely.

Does this working-from-home revolution mean we no longer need workplaces? Of course not.

As the pandemic has gone on, it has become clear that offices are very likely to remain a fixture of future life. People miss the gossip and face-to-face friendship. They find remote working technologies unexpectedly intense and exhausting.

They struggle without the water-cooler creativity that comes from accidental interactions. They worry about the loss of community in a world where people no longer share the same physical space. At the same time, though, we are unlikely to see a return to pre-Covid-19 working life — even once the pandemic comes to an end.

One way to think about the past few months is that white-collar workers have been involved in a massive unplanned pilot scheme in the use of technology in their workplace. Like any pilot project, some of this experimentation has ended in failure.

But other bits have turned out surprisingly well. When companies like Twitter, Facebook, and Square announce that they plan to let large numbers of their staff work from home indefinitely, it is in part because the pilot has been successful.

Series

The future of work

Over the past few weeks, prominent thinkers, policymakers and workplace experts have examined the biggest questions of the post-pandemic moment — what will the future of work look like and how do we build it?

Architect Elsie Owusu examined how better design executed by diverse teams will improve the spaces where we work and live. Meanwhile Oxford university's Linda Scott argued for an end to the male monopoly in international trade.

Catch up with the rest of the series: **ft.com/rebootingworkplace**

And so, the relatively unexciting truth is that tomorrow's white-collar workplace will surely sit somewhere between these two opposing poles: the traditional workplace at one end, and no workplace at all at the other. The exact positioning will vary according to the preferences and quirks of each organisation.

Yet this is only part of the story. It is true that white-collar workers have often been able to retreat to the comfort of their home offices. For other workers, such a move is a luxury they have not been able to enjoy.

Blue-collar workers in particular, who spend their lives in shops, restaurants and factories, for instance, have either had to go to their traditional place of work and risk catching the virus, or simply not work at all.

This is, in part, why UK male blue-collar workers were at one point twice as likely as the wider working population to die from Covid-19: their work tends to expose them to the virus.

Equally, it helps to explain the fact that US workers in the bottom 20 per cent of earners were almost four times as likely to lose their job at the start of the pandemic than those in the top 20 per cent: this is a product of their inability to work in any other way.

There has been far less debate about the future of warehouses and factories, where Covid-19 has so often flourished and spread — Dominika Lipniewska

During the pandemic, many people have commented that the pay of blue-collar workers too often falls below their apparent social value. Far less attention has been paid to the culture and quality of the places where these workers spend their time, and whether these too will need to change in the years ahead.

There is a great deal of reflection about the future of the office, but far less about the future of the warehouses, factories and meat-processing plants where Covid-19 has so often flourished and spread.

Today, when we talk about the future of work, we argue endlessly about the "quantity" of jobs there will be for people to do: pessimists anticipate a world where "robots" will take them all, optimists point to unemployment figures over the past few years — at record lows in many places — and argue that fears about a world with fewer jobs are overblown.

UK male blue-collar workers have been twice as likely to die from Covid-19: their work tends to expose them to it

One of the most important lessons of the pandemic, though, is that we need to discuss the "quality" of jobs in the future, too. Remote working has prompted us to do that for white-collar work with innumerable opinion pieces debating the merits or otherwise of the office.

We now need a similarly intensive discussion about workplaces elsewhere in the working world as well.

Daniel Susskind is fellow in economics at Balliol College, University of Oxford and author of 'A World Without Work', which has been shortlisted for the 2020 FT/McKinsey Business Book of the Year Award

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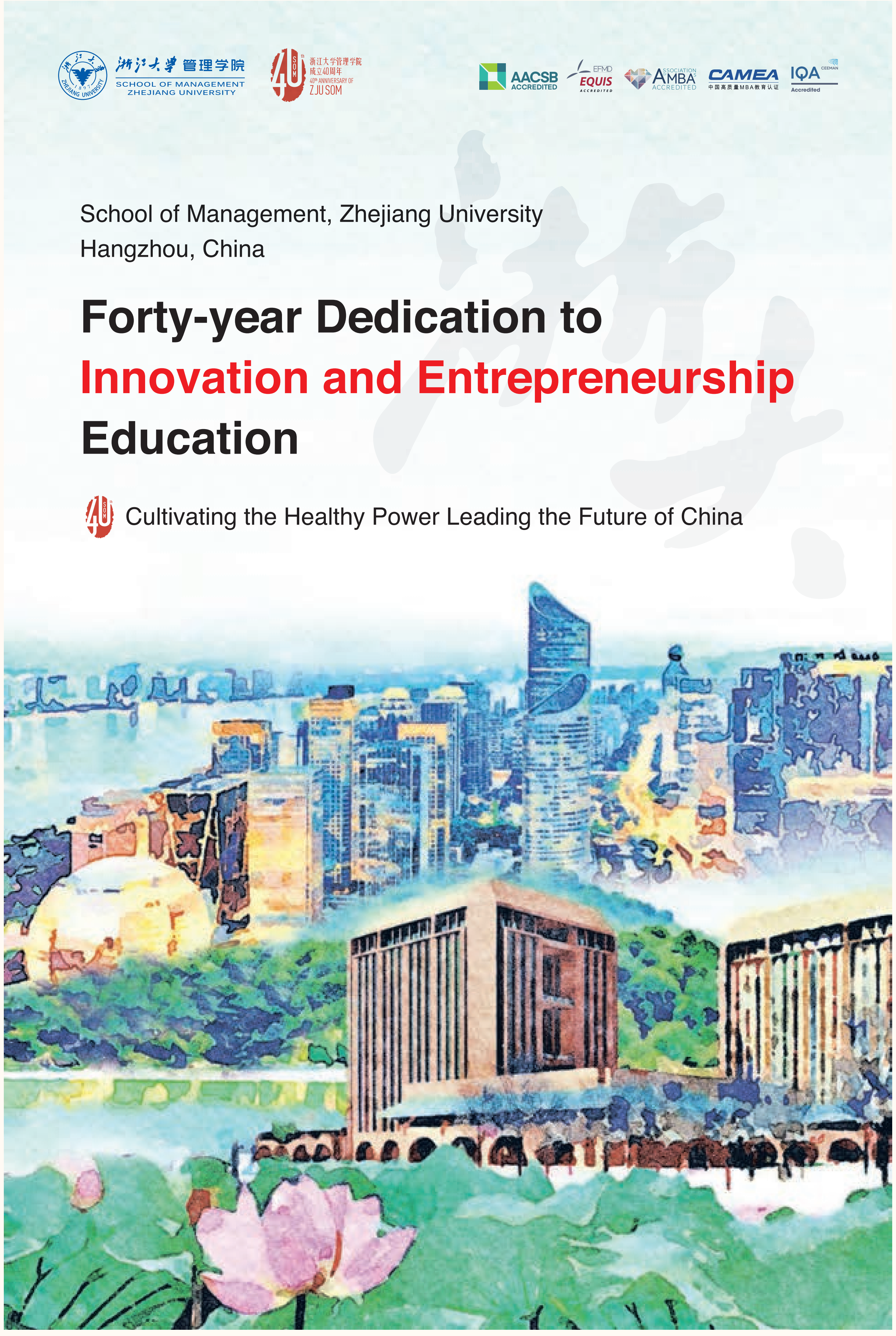

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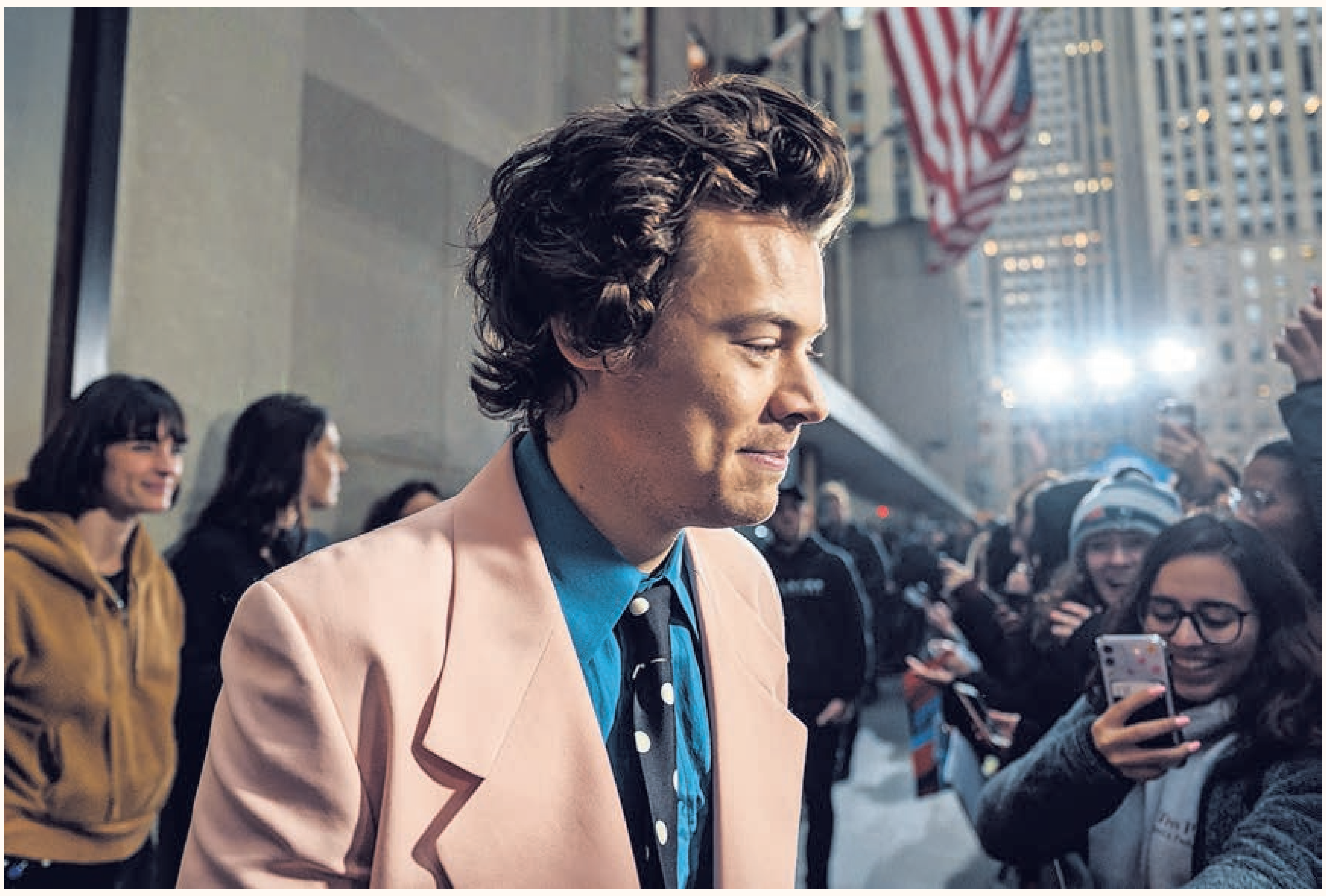
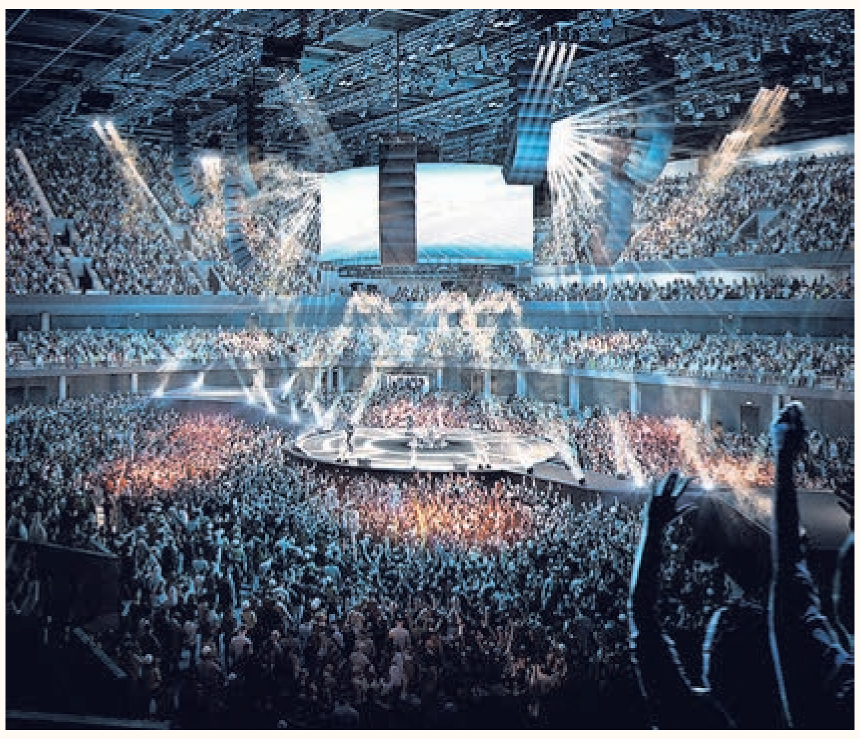
Harry Styles means business

The One Direction band member and solo star on launching into his first substantial business venture. By Ludovic Hunter-Tilney





Clockwise from above: Harry Styles; the singer performing in New York in February; rendering of the Co-op Live Manchester arena — Getty Images

Two weeks ago, the stark phrase "HE CUT HIS HAIR" began trending on social media. I can confirm its truth: the One Direction member turned solo star Harry Styles has indeed cut his hair. The usual curly tresses are gone, scissored into a tousled, swept-back look. It's for a film role he's currently shooting in Los Angeles. But the star hasn't joined me on a Zoom call to discuss traumatic haircuts. Instead, we're discussing what's being billed as his first venture into the world of business.

Styles is the public face of a new arena to be built in Manchester, which claims to be the largest indoor venue in the UK when it opens in 2023. It's being built by the US entertainment company Oak View Group at a projected cost of £350m. The capacity will be 23,500. Following a link-up with the Manchester-based business The Co-operative Group, it will be called Co-op Live.

"It feels like full circle for me to be doing this," Styles says, speaking in what looks like the stainless steel confines of his LA film trailer. He grew up near Manchester, in a village in the neighbouring county Cheshire. "My first job was with the Co-op, it was delivering papers for them," he recalls.

Manchester was where he went to gigs with friends. It was also where he auditioned for the television talent show *The X Factor* in 2010 when he was 16, singing an unaccompanied version of Stevie Wonder's "Isn't She Lovely". It led to him joining the boy band One Direction. Transcending their talent show origins (they came third on *The X Factor*), Styles and his bandmates became a global phenomenon. They were the first band in US chart history to have their first four albums debut at number one, outdoing even The Beatles.

With his newly shorn hair, a green jacket with big stitching, a t-shirt with blue palm trees and a cross dangling from his neck, Styles manages even on a visually unflattering Zoom call to look the part of the teen heartthrob. But while other boy-band singers have struggled to establish themselves as individual acts, Styles has made a handsome success of it. He launched a solo career in 2016 and has released two accomplished hit albums. In 2017, he made his acting debut in Christopher Nolan's war film *Dunkirk*. He's currently shooting Olivia Wilde's horror-thriller, *Don't Worry Darling*.

Diversification from the evanescent world of teen-pop continues with his involvement in the Co-op Live arena. It links him with two big names in the US entertainment industry. Tim Leiweke, former CEO of the concert promoter AEG, and Irving Azoff, former CEO of Ticketmaster, run Oak View Group, the company building the arena. Azoff's son Jeffrey Azoff is Styles's manager. "This is a big project and it would be a lot scarier if I was with people I didn't know," the singer says.

He has a financial stake in it as an investor. "I didn't get into music because I wanted to be a businessman," he says. "I got into music because I love music. That's always going to be a first for me. But when an opportunity like this comes up, for me it feels so much about what I can bring to it as a musician, and also as a fan."

Construction of the arena is due to begin in November. Styles has a vaguely defined role as an advisor in its design and decor. "Obviously I'm not an expert architecturally, in terms of building an arena," he says.

"I guess the weight of my involvement falls into the idea of what you want backstage as an artist. People operate in different ways after a show. Some people like a quiet space, some people like a place where you can invite all your friends."

Arenas have a reputation as soulless venues, the kind of interchangeable setting where a forgetful star can get the name of the city wrong (as happened to Bruce Springsteen in 2016 when he cried, "Party noises, Pittsburgh!" during a show in Cleveland).

Even at the tender age of 26, Styles is a veteran of these cavernous spaces, which he refers to as "rooms".

"There's a lot of cold rooms that you can play in," he says. "You definitely remember being in the ones that sound better, the ones in which you can create some sort of feeling of being at home.

"As an artist, it's rare to find that if you're touring for months at a time, to go in these big rooms and feel that comfortable."

Manchester's new arena is being designed to maximise sightlines between performer and audience. "That's usually the first thing that you miss when you go into big rooms," he says. "There's a point when you're doing shows and you can see the whites of people's eyes and you can have that connection with people. It's easy to lose that if you can't see people's faces."

The first time he sang in public was in the canteen of his Cheshire school, for a music competition. He recalls the feeling of exhilaration: "You're so used to sitting in the classroom and looking up at your teachers. All of a sudden everyone's down there and the teachers are looking up at you."

He gets the same sensation when performing for tens of thousands of people. "It's obviously on a different scale but that feeling is very much the same," he says. "I think it's the same chemical. It's just like such an unnatural thing. It's kind of like — this isn't supposed to be like this, this isn't how life works. That kind of adrenalin I think is just something that you wish you could share with people that you know. It's a beautiful thing, it's a really special moment."

> 'When an opportunity like this comes up, it feels so much about what I can bring to it as a musician'

The coronavirus pandemic poses an existential threat to venues. "It's such a strange time to be talking about live music, because right now it just doesn't exist," Styles says. He insists that the Co-op Live is designed to enhance Manchester's live infrastructure, not overwhelm it. (The city already has one of the UK's largest indoor venues, the AO Arena.)

"The purpose is not in any way to try to monopolise the city in terms of music," he says. "It's about bringing more music to Manchester, wanting to bring more artists there, to use this building as a reminder of why it's such a great music city, not trying to wipe out other venues."

After its projected completion in 2023, Co-op Live will be able to welcome its celebrity investor on stage ("If they'll have me. I'll have to speak to someone and ask about that"). In the meantime, Styles is due to embark on a world tour next February, although the pandemic has cast it in doubt.

"It's one of those things of just seeing how things go," he says. "I don't think anyone wants to be putting on a tour before it's safe to do so. There will be a time we dance again, but until then I think it's about protecting each other and doing everything we can to be safe. And then when it's ready and people want to, we shall play music."

Love and the balancing act of being human

PODCASTS

Fiona Sturges

Goodbye To All This, a new podcast from the BBC World Service and Falling Tree Productions, is the story of a woman navigating the death of her husband from cancer and raising two girls without him. I realise this description makes it sound gruelling, and possibly the kind of series you'd strive to avoid in the midst of a pandemic. However, I would urge you to listen, not least because there's considerably more to it than death. It's about love, loss and the balancing act that is being human, in which day-to-day concerns — walking the dog, getting the children to school, going for a milkshake — can exist alongside shattering existential upheaval.

The series is essentially a monologue by the Australian producer Sophie Townsend, who, in the opening episode, discusses the business of marriage and domesticity in a tone that is equal parts love and weariness. "With raising kids and paying bills, sometimes the person you do that with day after day is hard to like," she observes. When her husband complains that he is tired, her initial response is exasperation — because what parent hasn't, at some point, turned tiredness into a competitive sport? But when he drops her off at the airport for a short break with their eldest daughter, "he blows a kiss and I see it — the exhaustion in his eyes. How did I not notice it before?" And so he goes to the doctor and, after a series of tests, a shadow is found on his lung.

Producer Sophie Townsend

The second episode, entitled "The Secret", opens with the sound of birdsong, passing traffic and gentle washes of violin. Townsend leaves her office and goes to the grocers where she drops her money on the floor and nearly bumps her head while picking it up. Asked if she's OK by the person behind the counter, she replies, "I think my husband has lung cancer" and then leaves in a state of embarrassment. Later, at the hospital, the chest specialist keeps clearing his throat, which drives Townsend mad. When the cancer diagnosis is confirmed, she apologises for her tears. "Of course you are crying," says the consultant, "you are very, very frightened."

The production, courtesy of Eleanor McDowall, whose CV includes BBC Radio 4's *Short Cuts* and this year's *Field Recordings*, is exquisite as it delves into the background noise that soundtracks all our lives. There is terrific music, too, from Summer Camp's Jeremy Warmsley, which drifts in and out without ever intruding on the narrative. More memoir than audio diary, *Goodbye To All This* is wonderfully written, startling in its intimacy and detail. While the mood is undoubtedly sad, Townsend doesn't deal in melodrama or sentimentality. Instead, in magnifying life's mundane details and revealing her petty annoyances, she reveals much about resilience and the ways we keep going in the face of catastrophe.

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FT SERIES. CORONAVIRUS: COULD THE WORLD HAVE BEEN SPARED?

The continent's experience of infectious disease outbreaks allowed many countries to mount a powerful and speedy response to the pandemic – providing lessons to wealthier nations on what steps to take.

By David Pilling

How Africa fought the pandemic

Many African countries reacted swiftly to the virus, using knowledge of fighting diseases like malaria and tuberculosis to prevent the spread of Covid-19 — FT montage/Bloomberg

In a deserted wing of the African Union complex in Addis Ababa, John Nkengasong was hunched over a desk peering at numbers. The large, drab room was one of several occupied by the Africa Centres for Disease Control and Prevention, a pan-African public health agency charged with bolstering health systems across the vast continent of 54 nations. Africa CDC was only three years old and Mr Nkengasong was its first director.

The date was February 18 2020. Four days earlier, Egypt had reported Africa's first case of coronavirus when a Chinese national tested positive after flying into Cairo. No further infections had been confirmed. But Mr Nkengasong, a virologist with 30 years' experience in public health, knew what was coming.

Although Europe had barely woken up to the threat of Covid-19, Africa was on high alert. At Bole International Airport in Addis Ababa, where half a dozen flights from China arrived daily, masked staff were collecting passenger data and checking temperatures.

The same was happening across the continent. People with fevers were tested for Covid-19, but all came up negative. Genomic analysis would later reveal that almost all infections brought into Africa came not from China but from Europe, in what Mr Nkengasong calls an "amphibious attack".

It is a reversal of the normal patterns of infectious disease in which Africa is so often the epicentre. This time, the threat was coming from the north. Looking back at the initial months of the pandemic, when it was overwhelming sophisticated health systems in Italy, Spain and the UK, Mr Nkengasong recalls the shock he felt. "We watched with total fright what was happening in Europe. We knew we had no chance if it happened here on that scale."

Early intervention

Apart from a handful of countries, such as South Africa and Egypt, there were virtually no intensive care units in a continent of 1.3bn people, although sophisticated equipment would not be the key to managing the pandemic, even in rich countries.

Early intervention would be vital. Mr Nkengasong sent someone to Germany to bring back 10,000 emergency test kits. Meanwhile, the Louis Pasteur Institute in Dakar, Senegal, a world-class facility, started training technicians to test for the new disease. By the end of February, 42 countries had the capacity to test for Covid-19. Just a few weeks earlier, there were none.

Mr Nkengasong has spent much of his career battling human immunodeficiency virus, which causes Aids, a disease that had only recently emerged when he began his medical studies in the mid-1980s. HIV has since infected 75m people worldwide and killed 32m, the majority in Africa.

In almost every respect, Africa is at a disadvantage compared with richer continents. Apart from one: Africans know all too much about infectious diseases. Scattered around the continent, there are people of Mr Nkengasong's calibre, veterans of hard-knock battles against endemic diseases such as malaria, tuberculosis and cholera.

Inevitably, the virus pierced Africa's hastily erected defences, spreading to almost 40 countries by March 20. But numbers were relatively low and many countries mounted an aggressive effort to snuff out new infections.

Rwanda, in central Africa, was one of the most aggressive. On January 31, it cancelled flights from China. A week after the first case slipped through the net in March, it suspended all international flights, closed its borders and told people to stay indoors. "This is what any country should have done," says Agnes Binagwaho, vice-chancellor of Rwanda's University of Global Health Equity. "We didn't do this because we are rich. We did it because we are organised."

Not all countries could do likewise. Indeed, there was an argument that western-style lockdowns might do more harm than good. Poor people had to eat. Some warned that lockdowns were an overreaction. After all, Africa has a very young population, with a median age of 19.4, about half that of Europe. There is little obesity.

Governments had to weigh up the risks. Most stopped short of full lockdown, but erred on the side of caution. Countries from Senegal to Uganda closed schools, churches and mosques, and banned mass gatherings. Kenya imposed a dusk-to-dawn curfew.

> 'Never before had Africa managed such a response. Remarkably, they acted even before they had a problem'

Despite the hardship, people took the health threat seriously. Conductors on Nairobi's crowded minibuses sprayed customers' hands before they climbed on board. In west Africa, dustbin-sized "Veronica Buckets", used in the Ebola outbreak (2013-16), appeared outside offices and shops so people could wash their hands under a little tap.

Not all governments took Covid-19 seriously. In Tanzania, President John Magufuli, known as "The Bulldozer" for his uncompromising style, denied it posed a threat. He urged Tanzanians to work and gather as normal. The funerals of many of those who died were carried out at night.

Even when governments took decisive action, the virus spread. Deaths were concentrated at the extreme north of the continent, in Morocco, Egypt and Algeria, and in the extreme south, in South Africa, where almost half of all deaths on the continent so far have occurred. By July, some hospitals were overwhelmed. New infections were hitting 12,000 a day and by September, South Africa would register more than 16,000 deaths. But by then the country was moving into the southern hemisphere's summer and the epidemic was easing. New infections fell dramatically.

The rest of the continent has so far avoided the worst of the pandemic. By October, Africa, which makes up 17 per cent of the global population, had recorded just 3.5 per cent of Covid deaths.

The low fatalities, even if they underestimate the true numbers, could not be attributed to policy alone. It looked increasingly as if other factors, including pre-exposure to related viruses, might have made people less vulnerable to Covid-19, although scientists say it is too early to tell.

Still, policy did play a vital role.

"Never before had Africa managed such a response," says Peter Piot, director of the London School of Hygiene and Tropical Medicine. "Remarkably, they acted even before they had a problem."

Living in a microbe's paradise

Those fighting infectious diseases had for decades been warning about the risks of a pandemic. It was dangerous to pigeonhole pathogens as "tropical diseases" in an era of jet travel when microbes could hitch a ride anywhere, they say. "I think that, in the mindset of the west, it was always a threat that was for the developing world, especially for Africa," says Mr Nkengasong.

In 1981, Richard Krause, former director of the National Institute of Allergy and Infectious Diseases, told the US Congress: "Plagues are as certain as death and taxes".

Major outbreaks of Ebola in Africa from 1976, of severe acute respiratory disease, or Sars, in China in 2003, and of swine flu in Mexico in 2009, proved that microbes remained a potent force.

Ebola showed how even the most "exotic" and frightening disease can spread, first to west Africa, where it killed 11,300 people, and from there as far afield as Dallas and Glasgow, admittedly in tiny numbers. The H1N1 strain of swine flu moved from Mexico to the US before infecting people worldwide with a lab-confirmed death toll of 18,449 and probable fatalities many multiples of that.

Yet the false sense of security in the west persisted. Humans had made remarkable progress against the microbial threat through advances in public health. The widespread use of antibiotics by the 1940s only added to the growing sense of infallibility. By 2001, in high-income nations, only 6 per cent of deaths were caused by infectious disease. It was tempting to think that sickness spread by bacteria, viruses, parasites and protozoa could be squeezed out altogether.

This was a false conclusion. The proportion of people dying from infectious disease may have been falling, but the emergence of new ones — spread from animals — was gaining speed.

The persistence of the microbial menace owed partly to the paradox of progress. Advances in nutrition and medicine allowed the human population to explode from 1.6bn in 1900 to 7.8bn today. People have crowded into ever-larger conurbations. As they encroached on rainforests, they and their domesticated animals came into closer contact with wildlife. And between 1970 and 2018, according to the World Bank, air passenger numbers rose from 310m to 4.2bn. It was a microbe's paradise.

Added to this was the trade in wild animals, which transported exotic species to markets in China, south-east Asia and beyond. "If this trade had been stopped, then [Covid-19] almost certainly would not have happened," says Paul Hunter, professor in medicine at the University of East Anglia.

There was another reason humans were ill-prepared for a pandemic they should have seen coming, says William Haseltine, an American scientist and businessman who has specialised in HIV/Aids and pioneered the use of genomics for drug discovery. That was a failure to direct science at the most potent threats.

Outside HIV, where pressure groups successfully lobbied for funding, the response to new diseases has been lacklustre, he says. He cites Sars, which like Covid-19 is caused by a coronavirus found in bats. Public funding initially flowed into finding treatments. "But when, after about nine months, Sars sort of faded away, they pulled the plug. It was virtually impossible to get funding even though we were clearly warned," he says. Drugs that might have treated, or prevented, coronavirus diseases did not complete clinical trials.

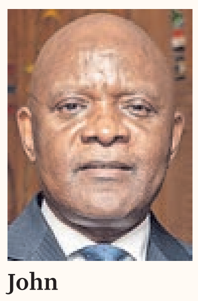
Mr Haseltine mentions research into protease inhibitors of the sort used against HIV to block an enzyme that viruses use to multiply. "Had we taken that and other drugs to a human development stage . . . almost nobody needs to have died in China. And nobody needs to have died in the US," he says. "Because that drug, if given prophylactically to exposed people, would almost certainly have stopped the infection in its tracks."

A health worker screens a child arriving from China at Jomo Kenyatta International Airport in Nairobi, Kenya, on January 29

Yet the big money, especially that spent by pharmaceutical companies, has gone into heart disease, cancer, kidney disease, diabetes and degenerative illnesses such as Alzheimer's. These conditions have two things in common. They are non-infectious and predominantly affect people with money.

Shahid Jameel, chief executive of the Wellcome Trust/DBT Alliance, a biomedical charity, says: "Big pharma has stopped investing in infectious disease. You take an anti-bacterial or an antiviral only until you clear the infection. But once you start on a statin or anti-diabetes medicine, you take it for life. Big pharma is investing in chronic disease because that is where the money is."

Public health too is under assault. There has been a backlash in some rich countries against vaccines, the ultimate public good. In poor countries, where public health is even more vital, it is even more neglected. In 2017, Nigeria, Africa's most populous country, spent $74 per capita on health, less than one-hundredth of the $8,000 spent by Norway. "The greatest error we've made is to take the public out of public health," says Oyewale Tomori, a fellow of the Academy of Science of Nigeria.



John Nkengasong, director of the Africa Centres for Disease Control and Prevention

If health is increasingly a question of individual responsibility, then linked to that, say experts, is a shift towards technology as the principal weapon against disease. The problem with pre-emptive public health is that it is invisible. "Nobody notices if you stop a [Covid-19] outbreak. They only notice if you don't."

Secrets and lies

Covid-19 burst upon a world that had neglected the required tools to fight pandemics: infectious diseases research and investment in public health systems. Even as word of a new coronavirus in China began to trickle through to Europe and America, authorities remained strangely unalarmed.

> 'In the mindset of the west, [tropical disease] was always a threat that was for the developing world, especially Africa'

That may, in part, have been due to the initial suppression of information in China. Beijing's secrecy highlighted the World Health Organization's lack of authority to compel individual nations to divulge information. "We need to be less reliant on the compliance and transparency of nation states around emerging infections," says Thomas Bollyky, director of the global health programme at the Council on Foreign Relations.

Still, by mid-January, it ought to have been obvious that the virus spiralling out of Wuhan had the makings of a global pandemic. Some countries, notably in north and south-east Asia, took the threat seriously. That was partly because they had experienced the devastating impact, not least economic, of Sars. Others — among them the US, Brazil and to some extent the UK — were less alert to the danger.

"The countries that moved aggressively in using proven measures to suppress the spread of emerging infections — testing, identifying cases, contact tracing, isolation and quarantine — enjoyed great success," says Mr Bollyky.

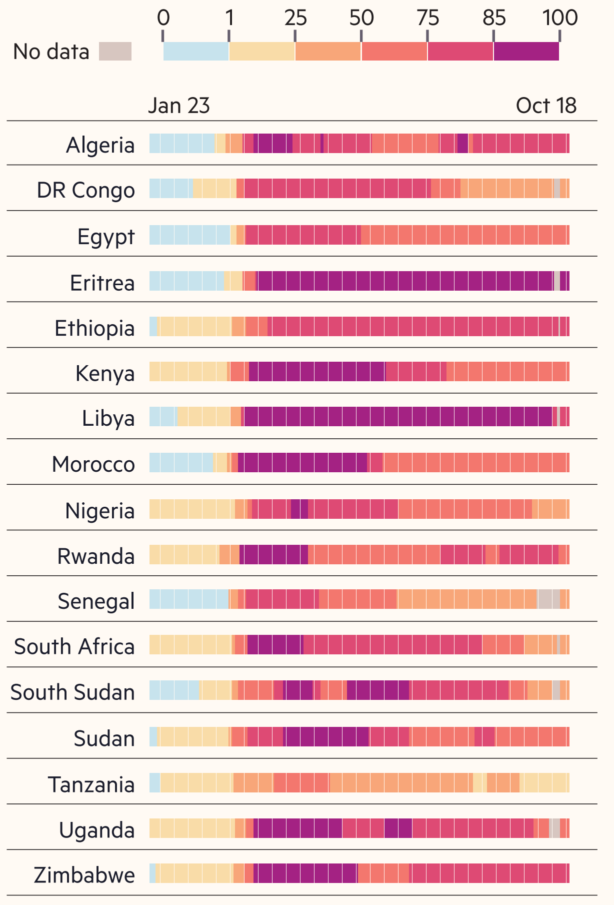
Governments, just like individuals, are bad at planning for "Black Swan" events, says Bhramar Mukherjee, professor of biostatistics at the University of Michigan. "You have to play the long game in public health," she says. "It would have been much better to have financed contact tracing for 100 years than to have spent trillions of dollars on economic stimuli [after Covid-19]."

"We always live in reaction mode," says Mr Jameel. "We don't live in pre-emptive mode."

The kind of foresight required does not come easily. But it is not as if we have not been warned.

African responses to the pandemic

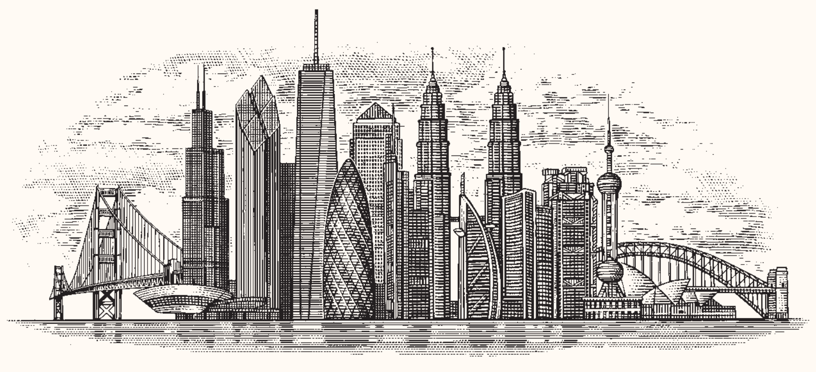
Covid-19 government response stringency index, a composite score developed by researchers at Oxford university, to compare countries' policy responses to the coronavirus pandemic



Graphic: Max Harlow, Caroline Nevitt and Aleksandra Wisniewska

Source: Blavatnik School of Government, University of Oxford. Data for the most recent seven days may not yet reflect government response changes implemented during that period

FT Series
What went wrong — and right — as Covid-19 spread. View the whole series online and join the debate
ft.com/coronavirus-investigation



FINANCIAL TIMES
'Without fear and without favour'

MONDAY 26 OCTOBER 2020

A better plan is required for the next pandemic

The world must be ready to combat even more lethal virus outbreaks

Ten months ago this week, Chinese officials reported a cluster of pneumonia cases in Wuhan. The ensuing Covid-19 pandemic, on reported figures alone, has killed 1.1m people and infected 43m. As a week-long Financial Times series has described, it has devastated lives, widened inequalities, and exposed severe failings of governance.

As the first pandemic of the globalised era it has laid bare the economic mayhem that can be caused even by what is, in reality, only a moderately lethal virus. Modern societies no longer tolerate mass casualties as predecessors did, but have been prepared to shut down economies to protect lives as never before. A future pathogen may be nastier, making it vital to learn lessons on how to prevent new pandemics — or make them less calamitous.

Covid-19 has shaken richer-world governments and scientists out of any complacency that epidemics are somehow a developing-world phenomenon. Sars-Cov-2, the coronavirus strain behind this outbreak, has spotlighted the threat of unknown pathogens leaping from animals to humans, then spreading globally by air. It is the third coronavirus to have jumped species this century, after Sars and Mers.

Reducing the likelihood of such "zoonotic" transmission means reducing the encroachment of fast-expanding humankind on wild habitats — for example, by stopping cutting down tropical forests for farmland. Controls must be tightened, too, on trade in wild animals — especially on selling them in city markets in Asia and elsewhere.

A first rule of battle is to know who your enemies are. Initiatives, such as the Global Virome Project, which aims to map hundreds of thousands of animal viruses with the potential to sicken humans, deserve support. That information could be shared with pharmaceuticals companies and research labs to assist development of preventive drugs and treatments. Unlike after the Sars and Mers outbreaks, funding for antiviral research should not ebb away. Incentives are needed for the pharma industry to pursue infectious disease research and not just focus on "diseases of affluence", such as diabetes.

The information on lurking risks could be fed, too, into a new early-warning network linking scientists and health officials, designed to spot any suspicious surge in an unusual disease, isolate it and snuff it out. This network should form part of a strengthened global health architecture. What should sit atop this structure? The World Health Organization has been criticised for elements of its pandemic handling, and President Donald Trump has weakened it by withdrawing US funding. Yet it is better to improve what we have than lose time trying to build something new from scratch.

The structure and governance of the WHO need reforming to insulate it better from influence by any individual members. Its puny $2.5bn annual funding should then be raised — particularly by increasing contributions from rich countries — with less money tied to specific projects set by donors, improving its capacity to prevent epidemics.

International Health Regulations, which govern the WHO's emergency work, should be strengthened into a new global agreement on infectious diseases, committing signatory countries to provide rapid and comprehensive data about any outbreak, and allow access to international officials.

Some guidelines from early in this emergency, eg, that air travel should not be suspended to avoid economic, social and technical disruption, will need rewriting. Some, such as advice on mask wearing, already have been. A lesson of this crisis is that with a highly infectious disease, rapidly shutting down passenger traffic from countries of origin is vital. Indeed, preventing new pandemics will involve preserving both the knowledge gained and the infrastructure created to fight this one — or the ability to recreate it rapidly. The origins and nature of future outbreaks may differ. But local lockdowns, social distancing measures and test and trace systems are still likely to be key to containing them. Asian countries that gained such experience from Sars handled Covid-19 better than many counterparts in Europe and the Americas.

The world ignored increasingly urgent warnings by infectious disease experts that an unknown pathogen — "disease X" — would emerge from animals and unleash a devastating pandemic. If Covid was disease X, we must be far better prepared for disease Y.

Securing justice for the victims of opioid abuses

Investigators need to bring to book the highest profile perpetrators

Last week's $8.3bn settlement between Purdue Pharma and the US justice department is a landmark on a long journey from tragedy to justice for victims of the US opioid epidemic and their families. That journey is far from over. Purdue has played a dark part in one of the most profound public health crises in modern US history. It pitched its painkiller OxyContin aggressively to doctors, some of whom prescribed it, in the words of the settlement, "without a legitimate medical purpose".

The epidemic has raised questions that go to the heart of how incentives distort the medical establishment. It has exposed still deeper fissures in US public policy. Flaws in the system left many Americans prone to problems of inequality, pain and depression, with little choice but to try drastic remedies.

This settlement will not solve those larger issues. But the courts can help to sharpen the disincentives and deterrents to corporate negligence, misbehaviour and crime by looking beyond the settlement to the individuals involved. Shareholders are shielded from catastrophe by limited liability and can usually shrug off fines. Purdue sought bankruptcy protection, so the full total of criminal penalties, civil damages and criminal forfeiture will probably never be collected.

The billionaire members of the Sackler family who owned Purdue have lost their company and their reputations. In a parallel civil settlement, they agreed to pay $225m, while denying the allegations against them. The Sacklers who served on Purdue's board said in a statement that they "acted ethically and lawfully," and "relied on repeated and consistent assurances from Purdue's management team that the company was meeting all legal requirements". They expect to release company documents to back up their case, and to demonstrate the propriety of financial distributions from Purdue.

Last week's settlement, though, did not release executives, employees, or relevant Sacklers from any potential criminal liability. That should spur prosecutors to redouble their efforts.

As the global financial crisis amply demonstrated, while it is easy to level blame at executives and board members when things go badly wrong, it is much harder to make charges stick in court. Attributing direct responsibility for the wider opioid crisis is difficult. But prosecutors have already managed to hold accountable senior people at drugmaker Insys. Its founder and his colleagues were found guilty last year and sentenced to jail time for bribing doctors to prescribe their painkiller.

By definition, the more widespread a scandal, the more people will have played a part. Investigators should not allow accountability to dissipate, or to attach only to intermediaries and middle managers. Instead, they must identify the highest profile people responsible and try to bring them to book.

Letters

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Finance belatedly finds its purpose with ESG

It is true that "doing well by doing good" is a fallacy (Opinion, FT.com, October 23) but only according to the norms and morality of finance which played a big role in the need for environmental, social and governance investing in the first place.

The fallacy which ESG reveals is one that defines profit or value maximisation in narrow terms that fail to account for the real world costs.

It is a fallacy of accounting which treats the boundaries of the firm as sacred and fallacy of finance that its function should take precedence over its purpose.

Efforts of enlightened accountants to bring these very real outcomes into a corporate account are gaining pace but they still run up against a morality that places profit in opposition to purpose.

Our regulators and policymakers are faced with similar cognitive dissonance when they realise the fallacy of stability is storing up recurring crises of capital that endanger the function of the system. "Doing well by doing good" doesn't mean that ESG somehow "beats the market".

It means that finance is no longer bent on extracting wealth from the world no matter what the cost. It means it has found its purpose.

Bruce Davis
Joint Managing Director, Abundance Investment
Visiting Research Fellow, Bauman Institute, University of Leeds, UK

Republican party has been a minority for 20 years

Facing a reactionary Republican Congress, Donald Trump never could have "governed as paternalistically as he ran" in 2016 (Opinion, October 22). For one thing, plutocratic party donors demanded tax cuts as a condition for their continued support. Mr Trump's populist effusions, like his revisionist second thoughts on the Iraq war, were merely an exercise in differentiation within the Republican primary space. He never was, or could have been, an independent third force in US politics.

Nor is benign statism an option for the contemporary Republican party, notwithstanding George W Bush's modest Medicare expansion. Janan Ganesh should consult other scholars of the modern American right. Mitt Romney might have soft-pedalled supply-side economics in 2012, perhaps picking the more emollient Marco Rubio as his running mate in place of the funereal Paul Ryan. But opposition to socialised medicine has been a hallmark of the conservative movement ever since Medicare was enacted. Far from drifting into minority status, the Republican party has been a minority party for over 20 years. But this has not prevented it from dominating the political landscape. The constitution's counter-majoritarian features noted by Mr Ganesh are the party's bread and butter. Whatever the necessity of free-market economics "in the over-governed 1970s", its adherents are central to the Republican electoral coalition then and now.

Religious conservatives and anti-government libertarians round out the coalition. These no longer add up to a majority. But nothing suggests the party could afford to abnegate its traditional affluent supporters.

Robert Denham
Oakland, CA, US

The GOP cannot afford to lose its traditional affluent supporters

Transatlantic alliance has little holding it together

Professor Terhalle's response to Janan Ganesh about the ties that bind the US and Europe (Letters, October 16) is greatly exaggerated. The Trump presidency has accelerated trends that were already there. Geopolitically, the US is increasingly reluctant to spend billions defending Europe; and from what? The idea that Russian tanks have their engines running in readiness for the military invasion of 500m Europeans is not credible, if ever it was. The geopolitical centre of the world has shifted to the Western Pacific and I don't see any evidence that the Europeans are in a hurry to become involved militarily on the other side of the world.

Culturally, both Europe and the US are more worried about internal threats to freedom than saving the world and themselves from the Chinese or Russian jackboot. They might make a lot of noise but the Europeans certainly won't be sending gunboats to defend Hong Kong or Taiwan.

And ethnically, traditional American ties with the "old countries" are becoming weaker as the demographic changes: the Latino population is increasing proportionally and the ethnic minorities are hungry for greater representation. What ties, other than slavery, do black Americans have with Europe? Prof Terhalle's view of the Atlantic alliance had more credibility four years ago. Less so now.

Christopher Sterling
Harpenden, Hertfordshire, UK

Hate-filled campaigning is as old as Shakespeare

Jemima Kelly argues in "How hate became a driving force in elections" (Opinion, October 16) that Trump has won by making elections about his opponents and their perceived weaknesses. I am not sure that this describes a new phenomena. Beneath the sound and fury there have always been three basic positions to take in an election.

The first is the traditional incumbent message of "don't let those idiots come in and ruin it", countered by the opposition's "kick those fools out". What has perhaps changed is that the third position, "a plague on both their houses", has now become a dominant narrative.

Mr Trump looks set to lose at least partially because he has been forced to switch from the third message to the first.

Tim Gordon
Chief Executive, Liberal Democrats, 2012-17, London N1, UK

Citizens are not necessarily saddled with national debt

Stephen King (Markets Insight, October 23) unwittingly illustrates the MMT claim that misunderstandings about government debt and deficits abound. Mr King observes that the debt we are running up now to fight the Covid-19 crisis is "in effect, borrowing from our collective futures" by which he means we will eventually have to decide whether to pay the bill through higher taxes, less spending, or default.

This is false. As long as interest rates remain below the growth rate as they seem likely to do for the foreseeable future, it is possible to stabilise the debt relative to gross domestic product without any of these policies.

He has forgotten that the national debt can be serviced by means of continued borrowing, something generally unavailable to ordinary economic agents not named Ponzi.

For the record, I am a non-mainstream economist who disagrees with MMT on many points. But I'm all for the effort to debunk the myth that government finances are no different than those of a business or household.

Thomas Michl
Professor of Economics, Colgate University Hamilton, NY, US

Vulnerable workers are hidden from view

The image that Sarah O'Connor's column brought to mind was day labourers hoping for work, massed outside workplace gates in the early 20th century ("What a ready-meals factory tells us about hidden inequality", Opinion, October 20). However, today's agency and other vulnerable workers cannot be photographed en masse waiting for work, as it is all hidden from general view online.

So we rely on journalists like Ms O'Connor. Thank you.

Deborah Cross
Sudbury, Suffolk, UK

A cap on arms spending would relieve Nato

"US pressures signatories of UN disarmament treaty to withdraw" — LA Times, October 22.

"Nato set to miss spending pledge targets" — Financial Times, October 22.

Here's a novel idea: instead of chastising Nato members to spend no less than 2 per cent of gross domestic product on "defence", follow up on the UN disarmament treaty ratification with another that caps arms spending to no more than 2 per cent of GDP.

Thomas Tomeoni
Thousand Oaks, CA, US

The reason why managers oppose 'bean counters'

I fully agree with your editorial of October 21 ("The EU's fiscal progress needs a political anchor"), and also with the recommendations of the European Fiscal Board. The EU needs "greater budgetary muscle", as you say. But what does this actually mean and imply? How do you get there?

I have a few ideas, since I struggled with this very same issue for many years, as chairman of the advisory group on budgetary matters of the Comprehensive Nuclear-Test-Ban Treaty Organization in Vienna, Austria.

I wanted to change the way budgets are defined, structured and managed, in order to improve the efficiency and effectiveness of the use of money — ie, to improve the quality and control of spending. I pleaded strongly for a general need of greater transparency in the budget and a greater accountability of the budget users, particularly the managers.

What I discovered astonished me. Both managers or "users", and politicians or "providers", are not very interested in transparency, because, as I found out, it exposes their own accountability. What they want is to avoid accountability and thus responsibility, because it makes them vulnerable to criticism.

Despite their opposition, I had nevertheless some success in giving more importance to transparency by introducing a more precise and concrete definition of the objectives of activities, their costs and their expected results.

To achieve this, budgeting as well as accounting were key tools that permitted the detailed quantification of cost estimates and outcomes and their ex-post comparison in a special yearly report. In my view, all of this, at least, is needed now, not only to back up the newly accepted recovery package but also the EU budget in general. And one should not listen to those who will oppose all this, as they opposed my efforts, on the ground that it is nothing but so-called excessive "micromanagement" or "bean counting".

André R Gué
Former World Bank Director
Vienna, Austria

Cryptic crossword setter had a hallmark elegance

I am saddened beyond measure to know of the passing of crossword setter "Armonie", Mr John Dawson. Mondays were special when his puzzles appeared. Thanks for the reprint (October 10) of his 1995 debut piece.

Cryptic crossword setting styles have advanced tremendously over the years with new and inventive devices being deployed everyday. I wondered if this old puzzle might be dated. I just completed it and am delighted to see the simple elegance, his hallmark, has always been there — as if he set it yesterday! Solvers will say "neat" (as his 15 across).

He will be missed sorely by cryptic fans everywhere.

R Vijayaraghavan
San Jose, CA, US

OPINION ON FT.COM
Graham Loomes
Why politicians' reluctance to quantify Covid-19's threat harms all
ft.com/opinion

Political division puts rural America on edge

Pennsylvania Notebook

by Christine Spolar

A few months ago, a group of men near my old high school in rural Pennsylvania decided to bear arms, which mostly meant pulling out their hunting rifles and some pistols, to defend the community's sleepy main street. One brought a pitchfork.

They were on the lookout for "agitators". They told the town's police chief there were rumours that outsiders were aiming to make trouble over the death of George Floyd, an African American killed by a police officer in Minneapolis in May. A warning on Facebook that Black Lives Matter protesters were headed from out of state had spurred online outbursts, and a bunch of guys with guns thought they could be helpful.

About 100 men gathered, weapons in hand, and waited. Police circled. After an hour, about a dozen local residents walked down main street with handwritten signs in support of racial justice. As the sun dipped, the men drove home, their ammo safe for deer hunting season.

"I've never seen anything like it," the police chief said. The rumours and reaction "put everybody on edge".

How should we explain this fearful, illogical response to legitimate protest? Or understand the tension, ire and loathing of these pre-election days in the US? In polls about the Covid-19 pandemic, the American Psychological Association cited uncertainty and the current political climate "as a significant source of stress" for both Republicans and Democrats.

I have been living in Pittsburgh since August and the loathing I hear is directed toward both presidential candidates, Donald Trump and Joe Biden. Sometimes it falls on me, when I ask people how they intend to vote. Conversations with people who own carpet stores, or work in bakeries or clothing stores, shut down when I inquire about this most basic democratic act.

As an overseas correspondent reporting on wars and troubled politics, I met plenty of people skittish or scared about exploring or explaining their beliefs. But that was in Bosnia, Serbia, Iraq or Lebanon, not American communities with names like Cranberry, Economy and Harmony — all in Pennsylvania, a swing state with 20 electoral votes that could once again prove pivotal.

Western Pennsylvania, where I grew up, was always full of neighbourly chatterboxes: people share opinions when you aren't asking. These days, easy conversation seems a lost art. Such is the division that people are afraid of losing business, friends or even jobs if they are too vocal in support of a candidate.

A shoe salesman told me he couldn't risk an interview because he feared hurting his sales in a Covid-19-battered economy — and he had too many family blow-ups over politics. He spoke only when I agreed to drop my pen. He's voting for Mr Biden but no longer speaks with his favourite uncle, who backs Mr Trump.

A grandmother who owns a small business spoke to me for an hour about her decision to vote for Mr Trump. When I called again to verify a fact, she had thought better of our talk and hung up swiftly: "I don't have time and I probably said too much anyhow," she said.

A 28-year-old woman who works nights and schools her young daughter in the day was willing to be interviewed. She hadn't decided yet for whom she was going to vote.

She was bouncing between what her parents told her. Her father, a police officer, was pro-Trump. Her mother was voting for Mr Biden. She was leaning towards Mr Trump because "it all comes down to family".

Hours after I quoted her in a story about undecided voters, her supervisor read it online and confronted her. She had no right to speak to a newspaper, she was told. No one should talk politics with media. She texted me at 4.30am: could I please remove the name of her workplace? She feared losing her job, never mind that she had not spoken about her work and hadn't said for sure how she would vote.

I tried to point out that in the US free speech is a constitutional guarantee — it comes just before the right to bear arms. It is a right, I said with some irony, that makes America great.

I get that, she texted back, "I'm just trying to save my butt."

The writer is a former FT investigations editor

Opinion

UK needs more fiscal planning in a pandemic, not less

ECONOMICS

Martin Sandbu

The UK government's decision last Wednesday to cancel a planned three-year spending review was a mistake. But it was a mistake that is understandable, instructive and not too late to undo.

The motive was, we are told, "100 per cent Covid" — the huge economic uncertainty caused by the pandemic. Uncertainty can, indeed, be a reason to hold off on large long-term commitments. When visibility is very low, it can make sense to stand still until the fog lifts. In economics jargon, households and businesses may do best to reap "the option value of waiting".

But a government is not like a household or an individual business. We have learnt the hard way how the household analogy can go astray in fiscal policy. Public belt-tightening in a recession can make things worse, because government frugality adds to the private sector's income loss. Something similar is true for the option value of waiting. Government indecisiveness adds to the private sector's uncertainty.

The UK defence community's reaction brings this out. Without long-term financial visibility neither procurement, which involves multiyear investment projects, nor strategic military planning can be adequately carried out.

What is true for defence is true for the broader economy. As one business leader has explained: "The problem with delaying [the spending review] is that it will completely stall any of the midterm investments that will enable business to recover."

Two types of business decisions require taking a view of long-term economic conditions. One is investment. The second is restructuring — whether to plan to do business differently from before. A business must decide, for example, whether in the post-Covid world it will need more physical space or more staff than before to deliver the same product or service, or whether it should substitute robots for some tasks previously done by humans.

Put differently, decisions have to be made about the quantity and the composition of capital. Precisely because the crisis will force businesses to make large changes to both, government plans are unusually relevant for how they make these decisions.

Fear of embarrassment over potential U-turns is a bad reason not to commit to a long-term trajectory

Clearly announced long-term policy commitments serve as an anchor in the general drift. With an ambitious multiyear spending plan, a government can both co-ordinate private sector expectations for where economic conditions may be headed, and make it more profitable, through subsidies and other incentives, for the private sector to shift in the direction the plan points to.

Unlike the UK, the EU is giving itself the tools to do so. As part of its "Next Generation EU" recovery fund, national governments must submit plans on how they intend to green and digitise their economies with money from common borrowing. The existence of a tool is no guarantee that it will be used wisely. But at least the opportunity is there to give the private sector a surer sense of direction over the coming years.

Spending plans are not the only way to do so. Regulatory and tax commitments are another. Neither the EU nor the UK should wait to set out an ambitious yearly path for the level and coverage of carbon taxes well into the future. The EU should quickly do the same for its mooted carbon tariffs on imports from states that do not do their bit to combat climate change.

While medium-term decisiveness from governments can remove some uncertainty from the economy, much will remain until the virus is tamed. The UK government is not wrong to fear that public finances will be exceedingly volatile. The pandemic may wreak havoc with the government's revenue and benefit spending, not to mention require new job and business support schemes.

It is wrong, however, to fall back to merely reactive short-term policymaking. The fear of political embarrassment over potential U-turns is a bad reason not to commit to a long-term trajectory. Instead, robust planning means accepting that to anchor some aspects of the economy the government must allow others to escape its control.

In this case, a multiyear spending plan would make government deficit and debt levels the balancing item. So be it. Both the UK and EU countries should make explicit that for several years to come, red ink in the public finances will not threaten otherwise important spending plans — above all public investment, which the IMF has insisted is crucial to a good recovery.

Just as cutting government deficits in a recession is a false economy for a country, so postponing all but the shortest-term public sector planning only creates a false sense of control.

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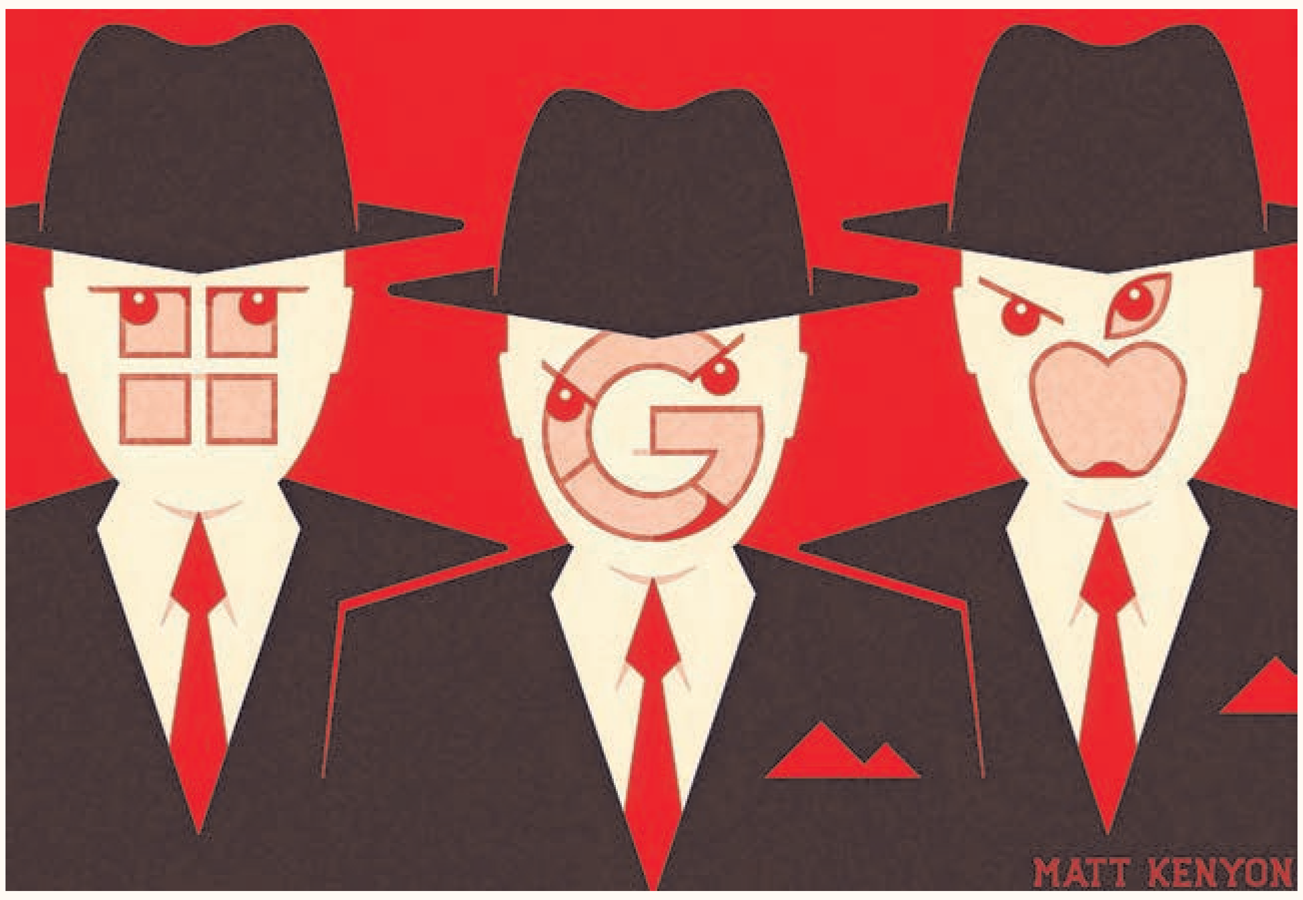
Big Tech collaborates to conquer



MATT KENYON

BUSINESS

Rana Foroohar

It's finally happening. The US Department of Justice has taken on the antitrust case of our time, accusing Google of illegally protecting its 92 per cent share of the global search market. Key evidence includes deals cut with Apple and other Big Tech groups to lock-in the search engine as the default option across devices and platforms. The DoJ is alleging that Google and Apple teamed up to maintain dominance. That makes perfect sense to me as there's a paper trail of behaviour going back over a decade to suggest exactly that.

Consider the 2011 class action lawsuit that laid out in documents how, in 2007, Apple founder Steve Jobs (then the company's chief executive) called Google to complain that a recruiter was trying to hire one of his software engineers.

Eric Schmidt (Google CEO at the time) then emailed his company's human resources department saying, "I believe we have a policy of no recruiting from Apple . . . Can you get this stopped and let me know why this is happening? I will need to send a response back to Apple quickly."

Mr Schmidt added that he would respond "verbally, since I don't want to create a paper trail over which we can be sued later."

It turned out that a group of large tech companies had put in place "no call" agreements to avoid having their top talent poached by one other. Numerous antitrust lawyers, and both Republican and Democratic Congressional aides, have pointed out to me that employment cartels are the sort of thing that people can be sent to jail for. But Barack Obama's administration settled without seeking a penalty. Google, Apple and other groups implicated in the scandal, including Adobe and Intel, later agreed to pay $415m in damages to 64,000 employees in a settlement.

Remember that scene from *The Godfather* when the big five mob families are dividing up the geographical and sectoral pie? The relationship among the Big Tech giants has always reminded me of that. When critics complain that there's too little competition in the field, the leaders of these companies often reply that they are, in fact, competing very, very hard — against each other. But both the new DoJ case and a damning report issued by the House of Representatives Judiciary subcommittee this month allege they are more likely to be helping one another maintain dominant positions in individual areas.

This exercise in back scratching is expensive, but clearly worth it to the companies. Google alone shelled out a fifth of its global net income to Apple to guarantee that its search engine would be the default on all Apple devices. Google needs Apple. But the more Apple relies on services for revenues — as they are less easy for competitors to turn into a commodity than devices — the more Apple needs Google. As a senior Apple employee wrote to a Google counterpart in 2018, "Our vision is that we work as if we are one company."

It's "an ecosystem of mutual benefit," says Columbia University law professor Lina Khan, who helped draft the House report. To me, this ecosystem mirrors the industrial trusts at the turn of the 20th century in which oil, steel and railroad tycoons often worked together to protect their interests.

Those trusts were broken up using lawsuits based on the 1890 Sherman antitrust act, which the DoJ also employed when it tried to penalise Microsoft for abusing its dominance in PCs. It won at trial, lost on appeal and then settled. It is now using the same law to try to prevent Google from inking distribution deals with competitors, favouring its own products in searches, and restricting websites that use its AdSense advertising platform from also using competing services.

This exercise in back scratching is expensive, but clearly worth it to the companies

Kent Walker, Google's chief counsel, and Mr Schmidt are teeing up the usual arguments about the consumer "harm" that will result should Google be forced to change its practices. "There's a difference between dominance and excellence," says Mr Schmidt.

But dominance and excellence feed each other. Google's size creates barriers to competitors on both the "supply and demand" sides, as the UK Competition and Markets Authority report on online platforms put it in July.

One example is "web crawling", the algorithmic trawling of the internet for the most relevant web pages. Google was the first to do it, and its success helped lock in its dominance. Now, it is too costly for any other search engine provider except Microsoft to attempt to compete at scale. Because too many crawlers can crash sites, major webpage owners block all but a few. All this results in more clicks, better algorithms and increased market share for Google.

What's the solution? Some ideas include changing default settings to allow more competition, forcing Google to spin off its Android operating system, creating independent crawlers, and/or making the data and algorithms behind Google's success public. That would, in essence, turn the company into exactly what railroad and telecom monopolies ultimately became — regulated utilities.

Google's founders made a similar recommendation in the original Stanford University paper that they wrote on search in 1998. Quite presciently, they wrote that conflicts of interest in a large-scale private search engine would necessitate having a "competitive search engine that is transparent and in the academic realm". I'm all for it. You can't be excellent — or not evil, to cite Google's original motto — without being fair.

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The world must prepare for a contested US election

Timothy Garton Ash

Democracies everywhere must prepare for the contingency of a contested result in the most important US election in living memory.

Learning from the disarray around the disputed 2000 election, they should have an informally co-ordinated stance. Listening to international election monitors, they should calmly wait as long as it takes for the extraordinarily complex, decentralised US system to produce a clear outcome. Measured clarity from fellow democracies may contribute, at the margin, to a more civilised US process, and, more substantially, calm the international environment around this febrile contest.

Back in 2000, foreign leaders were all over the place. Among others, the German president initially congratulated candidate George W Bush, then withdrew his congratulations. It took five weeks and the Supreme Court ruling in Bush vs Gore to achieve clarity.

The situation today is much worse than in 2000. Because of Covid-19, more than half of all voters are considering voting by post. That would make things difficult even if the US had a climate of Buddhist calm. But its political and media landscape is now so hyper-polarised that each side has its own facts, which for the other are not facts at all.

US president Donald Trump has been furiously sowing distrust of the legitimacy of the electoral process, and especially of postal votes. "This will be the most corrupt Election in American History!", he tweeted recently.

The international context is also less favourable. In 2000, it seemed the US was the sole "hyperpower" and democracy was triumphing around the globe. Now, the US is globally challenged by an authoritarian China, and around the world there is a democratic recession.

If current opinion polls translate into votes in battleground states, there may be no need to activate these contingency plans. If Democrat Joe Biden is seen to have won key swing states already on election night, responsible Republicans should promptly tell the president that he must accept the result.

But given that more Democrat than Republican voters are requesting mail in ballots, it is quite possible that Mr Trump could be leading on the night and then Mr Biden moves ahead as postal votes are counted. That "blue shift" scenario could mean days and even weeks of furious disputes, from polling stations, through county, city and state electoral administrations, to state and federal courts.

Controversy could stretch into 2021 amid possible violence, market panic and worldwide dismay

In a still worse case, the result could end up hanging on a decision of a Supreme Court whose composition is itself the subject of fierce partisan disagreement: a repeat of Bush vs Gore, but on steroids. In the worst case of all, controversy could stretch into January 2021 amid possible violence, market panic and worldwide dismay.

A calm, considered approach by the world's other democracies will be most relevant in the "blue shift" scenario. These countries will have thousands of diplomats and journalists on the ground. The US and international media will be reporting this event intensively, and Facebook and Twitter are going to great lengths to stem misinformation. Although the facts will be disputed, that does not mean there will be no facts. A vital task of liberal democracies is to stick to and stand up for those facts.

In doing this, they can rely on an election monitoring mission from the Organization for Security and Co-operation in Europe, which includes the US in its 57 members. It has conducted some 370 election observation missions over 30 years and has, with US help, developed benchmark best practices for rigour and impartiality.

The OSCE mission has just presented an interim report and will hold a press conference in Washington, the day after election day.

If, as in 2000, the dispute is decided by the Supreme Court, the world's democracies will surely have to accept its verdict. But Stanford University's Nathaniel Persily argues that long before any such judicial high noon what will be decisive is the actions of innumerable local and state officials in the more than 10,000 jurisdictions involved and of lower court judges. Some will be biased, but most will be Americans committed to ensuring that this time-honoured if somewhat ramshackle process is as free and fair as it can be in a time of Covid-19, populism and paranoia. They deserve our quiet support.

The stakes are so high, for us all. At worst, this could mark a further downward turn in a worldwide democratic recession. At best, it could be the beginning of a wider, global democratic renewal, so that government of the people, by the people, for the people, should not perish from the earth.

The writer is an Oxford university professor and Hoover Institution senior fellow

Should Happy the elephant have a legal personality?

David Allen Green

The New York Supreme Court is to hear arguments in November on whether an elephant can have legal personality. This may seem odd. But from a legal perspective it is not that strange. Indeed, it may be a practical way of using the law to protect the welfare of animals.

To have a legal personality does not mean the court is pretending something is a human being. It means a thing has standing to be represented in court in respect of its interests and has certain rights, the scope of which are defined by law. It does not necessarily mean it has the same legal powers and obligations as a human being.

That something other than a human can have legal personality is commonplace. The most familiar example is a corporation. The clue is in the word: commercial companies and other abstract entities are "incorporated" (that is, given a body), thereby becoming recognised at law. Some corporations have wide legal powers, such as public bodies and commercial companies, and some are limited. They can own property, conduct litigation and even receive criminal penalties, but they do not require a physical existence.

And if a thing without a tangible form can be a legal person, then it is no great conceptual leap to also confer legal personality on a thing that does physically exist. This, too, is not a novelty. Before 1873 the admiralty courts in England would ascribe legal personality to ships. In New Zealand, rivers have also been granted legal personality.

Lawyers contend that she is being kept in inappropriate conditions for a social and intelligent animal

That a natural or legal person cannot turn up to court, or even instruct their lawyers, is also no barrier. Babies and those mentally or physically unable to communicate routinely have solicitors and others appointed by the state or a court to represent their interests.

Some legal systems have already conferred legal personality on animals. In 2015, an Argentine judge accepted that an orang-utan had legal personality — although she was a non-human person, her rights should be properly protected.

So the issue about conferring legal personality on animals is not whether it can be done. It can. The key question is: is it something that should be done?

Here the position is less clear. There is no point conferring legal personality without also providing the legal person with rights that are recognised by a court. This raises questions about which rights should be granted and the extent to which they should prevail in conflict with the rights of others.

Then, which animals should have legal personality? Great apes and elephants? What of other intelligent creatures such as dolphins, crows and octopuses? And who would appoint lawyers on their behalf?

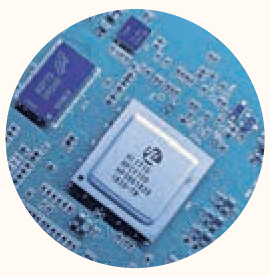
In the New York case, lawyers for their "client" Happy the elephant contend that she is being kept in inappropriate conditions for a social and exceptionally intelligent animal, and are seeking a writ of habeas corpus. Significantly, the Nonhuman Rights Project is not basing its case on welfare grounds, but on those of civil rights.

This is an ambitious approach, but there is something to be said for it. The orthodox approach to animal welfare law is that humans have obligations in respect of the treatment of animals and these must be enforced by a regulator. But leaving it to regulators with limited resources may not be the most effective way of promoting animal welfare.

Allowing an animal's rights to be directly put forward before a court dealing with a legal issue seems sensible. Such a voice may not always prevail, but at least it would be heard and considered. A court may decide against the animal but would have to take account of its interests as a distinct legal person.

If this means that the general level of animal welfare would improve, then there is no objection in legal principle. Ascribing legal personality to animals may be an idea whose time has come. As Jules Winnfield averred in *Pulp Fiction*, personality goes a long way.

The writer is an FT contributing editor



China's chip race
Beijing's new push to build its own semiconductor champions
COMPANIES & MARKETS

Hurrah for the companies giving staff more time off

Pilita Clark
Business Life

A day of leave is by no means the total answer to burnout but it is a good start — Getty

On the first Monday of this month, millions of people woke to a beeping alarm, rubbed their eyes and plodded off to get ready for another week of work.

At Unilever, they stayed in bed. Or went to the beach, or binged on Netflix or did whatever else took their fancy because their company had told them to take the day off.

The household goods giant gave what it called a Global Day of Thanks to its workers for their months of pandemic-induced productivity.

Since large chunks of the group's 155,000 staff started working from home this year, the length of their average working week has risen by about 9 per cent.

Close to 90 per cent of employees who used to be in an office are working the same amount or more than they were before lockdowns began, the company told me last week.

Something similar may be happening at Google, which gave its staff a day off at the start of September.

Google's move followed that of smaller US tech companies such as Chegg, an online learning outfit that shut down for a day in April, a week in July and on Fridays over summer to give its 1,600 workers a break.

It acted after watching stressed staff struggle to be parents, teachers and fully-functioning employees as the pandemic took hold.

"We realised that we had a pretty big issue on our hands," says Debra Thompson, Chegg's chief people officer.

It is possible to feel sympathy for those workers while also acknowledging it could be worse: ask anyone who has just lost their job or is likely to very soon.

It's also possible to be sceptical, which I was when I first heard about Google's efforts. At the start of this year its parent, Alphabet, became the latest tech colossus to achieve the once unthinkable market value of $1tn.

Giving a day off to its relatively small workforce (127,500 as of June) seems eminently do-able. By itself, it is also questionable. One day of leave is cheering but if workloads stay the same and nothing else is done, it is hard to imagine that much changes.

> **❝ No one really knows precisely how to manage a workforce in a crisis of this scale. Some ideas are bound to fail ❞**

Still, I give points to any company offering such breaks — especially in a useless vacation nation such as the US, practically the only advanced economy that does not guarantee workers a paid holiday.

For one thing, a business-wide day off sends a signal that leaders understand the existence of burnout, a serious side-effect of the pandemic, no matter where people work.

Employees in a physical workplace are just as worried about fatigue and burnout as people working remotely, according to a survey of nearly 4,000 people in 11 countries released last month. In both cases, 43 per cent said they were concerned.

An executive who offers a day off also seems likely to be the type of leader willing to experiment with other admirable anti-burnout measures, such as meeting-free days or better yet, meeting-free weeks.

That word 'experiment' is critical. No one really knows precisely how to manage a workforce in a crisis of this scale. Some ideas are bound to fail. Some will need drastic refinement.

The main thing is to try, as the days-off pioneers are learning.

Some firms have found that if you give staff Friday off they will just spend all day Saturday catching up, so more has to be done to ease workloads.

Others think a day off works best when the entire business downs tools at once: it's hard to tune out in New York if you keep getting work calls from London. Uniformity is not always possible.

Unilever tried to make sure everyone took the same day off on its Global Day of Thanks. But exceptions had to be made for the finance team, which was busy finishing the latest quarterly accounts. Local public holidays meant staff in some countries took a different day off to the rest of the business.

Other companies will find different problems. Some will test entirely different remedies. The main thing is to understand the nature of the problem and then have a go at fixing it.

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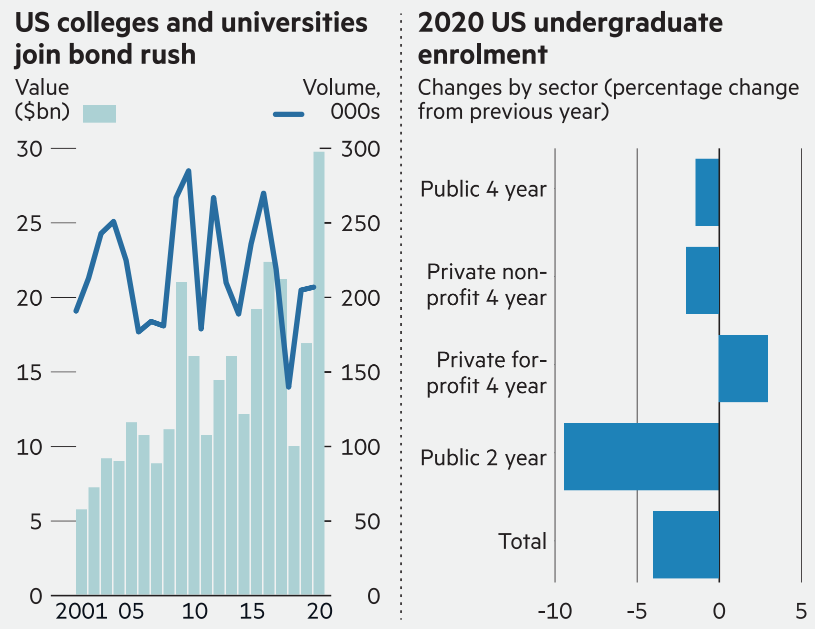
Lex.

US colleges: alma martyrs



US colleges and universities join bond rush

2020 US undergraduate enrolment
Changes by sector (percentage change from previous year)

FT graphic includes public/municipal market debt
Sources: Refinitiv; National Student Clearinghouse Research Center

No amount of scholarships could have prepared US higher education for dealing with coronavirus. Falling enrolments and shrinking revenues are putting the squeeze on the finances of US colleges and universities. After years of heavy borrowings, funding an amenities arms race to attract students, the sector is heading for a shakeout.

US colleges and universities have built up big debts in a bet that student numbers will continue to grow. This, in turn, has made them more dependent on tuition dollars — particularly from overseas students — to cover operating budgets and service borrowings.

The pandemic has upended this calculation. Many potential students are opting to take a gap year or defer admissions rather than shell out hefty tuition fees for online classes. Foreign candidates are holding off on enrolling because of travel restrictions and concerns about studying abroad.

US political hostility to China — where a foreign education is a status symbol — has worsened the problem.

Overall, the undergraduate population is 4 per cent lower this autumn compared with last year, according to data released by the National Student Clearinghouse Research Center. First-year students accounted for the biggest drop with numbers falling 16 per cent.

For colleges, the drop in enrolments comes as cash flows from athletics, dining halls and endowments are taking a knock as a result of lockdowns and social distancing. In response, many are freezing recruitment and cutting staff.

Of the 434 colleges whose credit are rated by S&P Global Ratings, 31 per cent are triple B plus or lower. Two-fifths have a negative outlook. At the start of the year, the figure was just 9 per cent.

Institutions with strong endowments and cash flows, such as Yale, will have no problem weathering the pandemic.

Some of the biggest names in higher education have taken advantage of ultra-low interest rates to issue more debt. Colleges have raised $29.7bn through corporate and municipal bond sales this year, according to Refinitiv. That is more than the combined total for the previous two years.

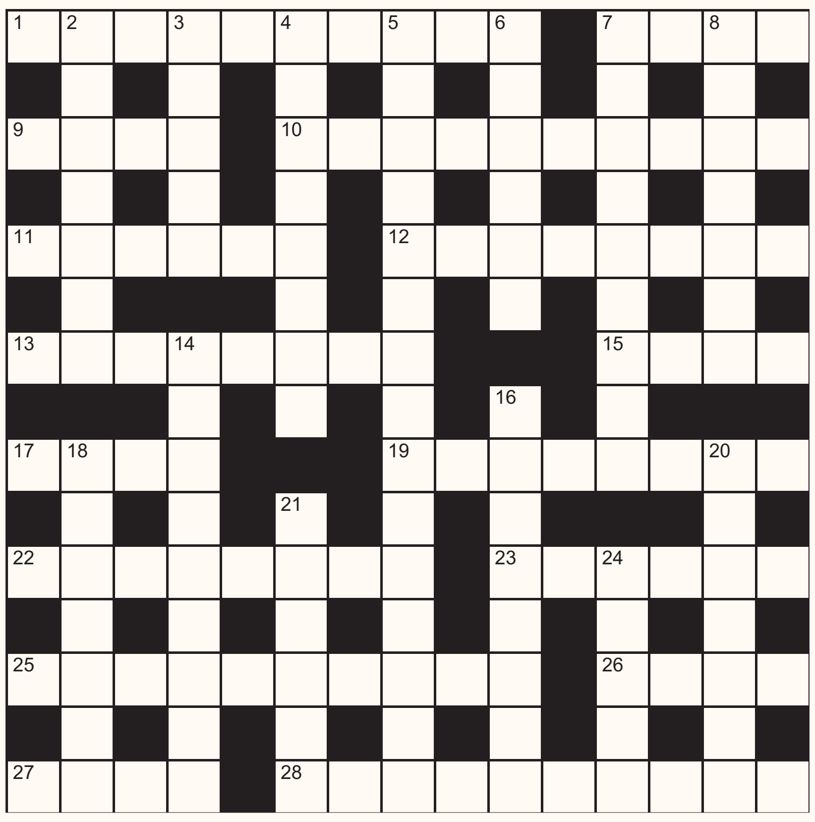
Instead, the financial shock will hit smaller private colleges and regional public universities badly. The pandemic will widen the gap between top-tier institutions and lesser-known ones.

Between 2016 and 2019, at least 20 colleges have closed in the US. That list is set to lengthen.

NIKKEI Asia The voice of the Asian century

CROSSWORD

No 16,617 Set by ZAMORCA



JOTTER PAD

ACROSS
1 Chaotic argument nobody needed to settle? (4-3-3)
7 Sobbed as first of wound's evil pus trickled (4)
9 Bet against being heard (4)
10 High flyers review model exam during mocks (3-7)
11 American writer initially tried one chapter in verse (6)
12 Those voting against point haven't a get-out (2,6)
13 Terrible colic after Rob's pickled vegetable! (8)
15 Thought island endlessly expensive (4)
17 Times report causes confusion (4)
19 Depressed following act's decline (4,4)
22 Calm vice-president's securing recall of current reservists (8)
23 Beheading meme by jerk is vomit-inducing (6)
25 Question article's peripheral knowledge on world seismic event (10)
26 Interested in painting some of spectacular Tyrol (4)
27 Good woman always gives support (4)
28 Teaches English nervously at first then becomes less serious (10)

DOWN
2 Competed with bravery, no time for bitterness . . . . (7)
3 . . . . and quits over final defeat in tournament (5)
4 One protesting judge is involved in October revolution (8)
5 Bad outcome as a second can with spirit gets teetotal man in trouble (1,5,2,3,4)
6 Made sheep's eyes bloodshot after emptying out lice drug (6)
7 Pregnant, which is surprising taking in time left inside out of sight (4,5)
8 Kipper cooked with egg stuffing is Melton Mowbray's claim to fame (4,3)
14 Revolutionary film on line shows special connection between people (9)
16 Repair fridge and put in, say, something for breakfast (5,3)
18 Determined now to get Mum set up with social worker (7)
20 Penned injured tit seized by another small bird (7)
21 Small university in France that is like no other (6)
24 Praise former gangster starting to testify (5)

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