FINANCIAL TIMES

WEDNESDAY 14 JUNE 2023 | EUROPE

An undersea fight for the internet's plumbing
BIG READ, PAGE 15

Why UK democracy isn't safer than America's
JANAN GANESH, PAGE 17

Civilian target
Russia steps up air attacks

Andriy Dubchak/AP

Children look at the scene of a Russian rocket attack that damaged an apartment building in the central Ukrainian city of Kryvyi Rih, yesterday.

Moscow has stepped up its campaign of air strikes that target civilian infrastructure days after Ukraine's army began a counter-offensive aimed at liberating the roughly 18 per cent of its territory still occupied by Russian forces.

The latest strikes came as Russia said it would impose a windfall tax on its oligarchs to raise Rbs300bn ($3.6bn) as the war continues to stretch the Kremlin's finances.

The plans demand that Russia's biggest companies, with average profits of more than Rbs1bn a year, pay a one-off 10 per cent tax. Andrei Belousov, deputy prime minister, said Russia's oligarchs had volunteered to surrender their profits in a patriotic gesture.

Ukraine-Russia reports page 2

Briefing

▸ US inflation eases to lowest level for two years
The consumer price index has fallen back but core inflation matched April's increase, keeping pressure on the Federal Reserve to raise rates again.— PAGE 4

▸ JPMorgan cuts Odey ties
The bank has become the last big lender to end its relationship with Odey Asset Management, after sexual misconduct allegations against Crispin Odey.— PAGE 6

▸ German business gloom
Investor sentiment has worsened at the fastest pace since the Covid pandemic. Exporting sectors are particularly at risk because of weak global demand.— PAGE 4

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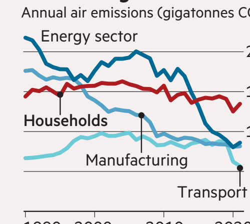
▸ €105mn for AI start-up
A French group founded four weeks ago by former Meta and Google artificial intelligence researchers has sealed Europe's biggest seed round.— PAGE 8

Datawatch

Carbon league
Annual air emissions (gigatonnes CO_2e)



Source: ONS

Consumers produce more than a quarter of UK greenhouse gas emissions, mainly thanks to heating and car commuting. And, despite energy sector emissions falling by 57 per cent since 2006, they rose by 3 per cent between 2020 and 2021

EY chief's decision to quit sparks race for helm after collapse of break-up bid

● Di Sibio to step down in 2024 ● Mastermind of Project Everest ● US opposition sealed plan's fate

STEPHEN FOLEY — NEW YORK
MICHAEL O'DWYER — LONDON

EY global chief executive Carmine Di Sibio has told partners he plans to retire next year, sparking a race to lead the accounting and consulting firm after the collapse of his plan to split it in two.

Di Sibio masterminded Project Everest, the once-in-a-generation break-up plan, but called off the deal in April after opposition from leaders of the firm's US business.

His future has been in doubt since the collapse of Everest, which would have involved spinning off EY's consulting arm and listing it on the stock exchange.

The break-up promised to deliver multimillion-dollar windfalls to partners and would have been the biggest shake-up of the accounting industry since the collapse of Enron auditor Arthur Andersen two decades earlier.

Although Di Sibio has continued to say the deal was necessary to free consultants from conflict-of-interest rules that restrict them from working for audit clients, work on the doomed project cost more than $600mn and triggered bitter infighting. He said he would not step down immediately, but would oversee the organisation through a transition until June next year.

> 'I am proud of the bold vision we set out. We set the sector on a new course'
> Carmine Di Sibio

In a partner webcast, he said he planned to leave "having reached the EY mandatory retirement age".

His initial four-year term was set to expire this month but EY had extended his tenure for two years, allowing him to continue beyond the firm's retirement age of 60 so he could oversee the split, which he had argued would become a blueprint for other Big Four firms.

"I am proud of the bold vision we set out in Project Everest," he said.

"The courage that we displayed set the entire sector on a new course that will only become apparent in the years to come. We challenged the status quo, we asked tough questions and we were bold in our ambitions. Actions such as these will make us a better organisation in the long term. Now it is time to usher in a new generation of leaders."

A succession process will begin in the next few months and a new leader is expected to be named around November, partners were told.

If Everest had gone ahead Di Sibio would have led the new publicly traded consulting business. The audit-focused firm would have remained a private partnership under the EY brand, and its partners would have received cash windfalls of up to four times their pay.

However, Di Sibio misjudged the strength of opposition to the split by some within the firm, notably among high-ranking partners in the US audit business, who objected to large parts of EY's tax advice business being hived off into the new consulting company.

Market conditions also worsened while the firm thrashed out the details of how the split would work, meaning the consulting business likely have struggled to reach the valuation originally envisaged. The deal was called off before it could be put to votes among EY's 13,000 partners.

Its collapse pitched the firm into chaos, with some partners calling for the removal of Di Sibio and other leaders in both its global HQ and in its US business.

Di Sibio also had to lead EY's response to the collapse of audit client Wirecard in a fraud scandal. Its German arm is barred from winning new public company audits for two years.

The firm expects to report global revenues of more than $50bn for the 12 months to the end of June 2023, up from $36.4bn when Di Sibio took over in 2019.

Splits in Berlusconi party an opportunity for Meloni

Analysis ▸ PAGE 4

China cuts interest rate and boosts tax breaks as economic recovery falters

JOE LEAHY — BEIJING
HUDSON LOCKETT — HONG KONG

China unexpectedly cut a key interest rate yesterday and announced tax breaks for businesses, as weaker bank lending added to signs that the nation's post-Covid recovery was losing steam.

The People's Bank of China cut the seven-day reverse repo rate, used to manage short-term liquidity in the banking system, in a move analysts said signalled more substantial monetary easing and stimulus measures to come.

Following the rate cut, the government released credit growth figures for May that analysts said fell well short of forecasts as a weak property market weighed on consumer sentiment.

China's economy staged a comeback in the first quarter after draconian Covid controls were lifted, but it has begun to falter in recent weeks with export growth slowing and the property market struggling to recover.

While services remain strong, with restaurants and other businesses reopening, factory activity is weak and construction has been constrained by the property downturn.

The government sought to help address the economic weakness by cutting the rate that sets the cost of seven-day lending by 10 basis points to 1.9 per cent to "maintain reasonably sufficient liquidity in the banking system".

Lowering the rate pulls down the cost of short-term loans and boosts liquidity.

The government also announced 22 measures to lower costs for companies this year, including tax breaks and measures to reduce interest rates and channel loans to certain sectors.

Analysts believe the reduction in the reverse repo rate could presage cuts to the PBoC's other policy rates — the medium-term lending facility rate and the benchmark loan prime rate.

"We expect more monetary policy easing measures to be announced, including MLF rate and LPR cuts over the next few days," Goldman Sachs said.

New bank lending was Rmb1.36tn ($190bn) in May, well short of the Rmb1.6tn forecast by analysts.

If the government wanted to stimulate a recovery in loan demand, it would need more aggressive rate cuts, said Julian Evans-Pritchard, head of China economics at Capital Economics.

But Beijing was reluctant to follow the example of central banks in developed countries, which aggressively eased monetary policy during the pandemic only to rapidly tighten it afterwards.

Griffin bullish on China page 6

Austria	€4.50	Morocco	Dh50
Bahrain	Din1.8	Netherlands	€4.30
Belgium	€4.50	Norway	NKr45
Croatia	Kn33.91/€4.50	Oman	OR1.60
Cyprus	€4.20	Pakistan	Rupee350
Czech Rep	Kc125	Poland	Zl 25
Denmark	DKr46	Portugal	€4.20
Egypt	E£80	Russia	€5.00
France	€4.50	Serbia	NewD530
Germany	€4.50	Slovenia	€4.20
Greece	€4.20	Spain	€4.20
Hungary	Ft1450	Switzerland	SFr6.70
India	Rup220	Tunisia	Din7.50
Italy	€4.20	Turkey	TL80
Luxembourg	€4.50	UAE	Dh24
Malta	€4.20		

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World Markets

STOCK MARKETS

	Jun 13	Prev	%chg
S&P 500	4362.85	4338.93	0.55
Nasdaq Composite	13537.24	13461.92	0.56
Dow Jones Ind	34198.02	34066.33	0.39
FTSEurofirst 300	1834.46	1821.50	0.71
Euro Stoxx 50	4350.92	4316.49	0.80
FTSE 100	7594.78	7570.69	0.32
FTSE All-Share	4151.46	4140.42	0.27
CAC 40	7290.80	7250.35	0.56
Xetra Dax	16230.68	16097.87	0.83
Nikkei	33018.65	32434.00	1.80
Hang Seng	19521.42	19404.31	0.60
MSCI World $	2906.01	2885.63	0.71
MSCI EM $	1003.14	1002.33	0.08
MSCI ACWI $	671.33	667.08	0.64
FT Wilshire 2500	5616.63	5565.27	0.92
FT Wilshire 5000	43800.30	43402.30	0.92

CURRENCIES

Pair	Jun 13	Prev	Pair	Jun 13	Prev
$/€	1.080	1.075	€/$	0.926	0.930
$/£	1.261	1.251	£/$	0.793	0.799
£/€	0.857	0.859	€/£	1.167	1.164
¥/$	139.815	139.625	¥/€	151.035	150.062
¥/£	176.236	174.671	£ index	81.204	81.544
SFr/€	0.978	0.977	SFr/£	1.141	1.138

CRYPTO

	Jun 13	Prev	%chg
Bitcoin ($)	25819.10	25904.70	-0.33
Ethereum	1733.26	1742.31	-0.52

COMMODITIES

	Jun 13	Prev	%chg
Oil WTI $	69.29	67.12	3.23
Oil Brent $	74.14	71.84	3.20
Gold $	1952.90	1960.30	-0.38

GOVERNMENT BONDS

Yield (%)	Jun 13	Prev	Chg
US 2 yr	4.64	4.61	0.03
US 10 yr	3.78	3.78	0.00
US 30 yr	3.92	3.92	0.00
UK 2 yr	4.87	4.63	0.24
UK 10 yr	4.52	4.44	0.08
UK 30 yr	4.57	4.53	0.04
JPN 2 yr	-0.08	-0.08	0.00
JPN 10 yr	0.42	0.42	-0.01
JPN 30 yr	1.24	1.26	-0.02
GER 2 yr	2.96	2.90	0.06
GER 10 yr	2.42	2.39	0.03
GER 30 yr	2.56	2.55	0.01

Prices are latest for edition
Data provided by Morningstar

INTERNATIONAL

Stretched finances

Kremlin plans windfall tax on oligarchs

Deputy prime minister claims business chiefs had suggested the proposal

MAX SEDDON — RIGA
ANASTASIA STOGNEI — TBILISI

Russia has unveiled a windfall tax on big companies to raise an estimated Rbs300bn ($3.6bn) from its oligarchs, as the war in Ukraine continues to stretch the Kremlin's finances.

The proposed levy, outlined in a draft bill introduced yesterday, will require Russian groups making profits of more than Rbs1bn a year since 2021 to pay a one-off tax worth up to 10 per cent of the gains.

One senior Kremlin official claimed the idea for the levy had come from the companies themselves after realising during the period they had made "gigantic" profits that needed to be properly taxed.

The move is part of a series of measures to shore up the Kremlin's coffers after falling oil revenues under western sanctions and a surge in war-related defence spending saw Russia run up a Rbs3.41tn ($42bn) budget deficit in the first half of this year. Though the money will not go directly to fund President Vladimir Putin's invasion of Ukraine, the new tax indicates the Russian state's growing sway over big business as it consolidates control over the economy.

Russia's largest metals, mining and chemical companies saw off plans for a similar windfall tax in 2018, which would have raised an extra $7.5bn for social spending, after their share prices tumbled.

But deputy prime minister Andrei Belousov, the driving force behind both initiatives, claimed that Russia's oligarchs had volunteered to surrender their profits in a patriotic gesture.

> 'I don't understand the idea . . . If you need money, just raise taxes'
> Russian oligarch

"I'll tell you a big secret: the idea of this Rbs300bn tax came from business, not the state," Belousov told Russian business newspaper RBC in an interview published yesterday. "They are smart and well informed. They understand they have colossal excess profits for 2021 and 2022, just gigantic."

But the plans have proved contentious among Russia's oligarchs, who lobbied for months to water down the measure.

"I don't understand the idea . . . If you need money, just raise taxes," one oligarch likely to be affected by the tax told the Financial Times. "There is a feeling that [Putin] has once again outwitted everyone, including himself."

Russia began discussing the new tax, which analysts say is likely to hit the metals and fertiliser industries hardest, earlier this year after western sanctions first began to depress the country's oil export revenue.

Though most of Russia's oligarchs are under western sanctions, many of their industrial and agricultural conglomerates have escaped restrictions thanks to the important role they play in global supply chains.

Timur Nigmatullin, an analyst at the Russian investment company Finam, said he expected the windfall payments to be "opaque" to external observers to minimise the risk of companies being hit by sanctions for supporting the war.

In an apparent attempt to avoid sanctions, finance minister Anton Siluanov said Russia would spend the extra revenue on payments for families with children, handouts that were notably scaled back in Putin's most recent state-of-the-union address in February.

Moscow strategy

Putin eyes buffer zones to prevent strikes on 'our territory'

ROMAN OLEARCHYK — KYIV
MAX SEDDON — RIGA

A missile attack in Ukrainian president Volodymyr Zelenskyy's home town killed at least 11 people as Russian president Vladimir Putin warned he would create "sanitary zones" inside occupied areas to prevent strikes and raids on his country's territory.

"More terrorist missiles, Russian killers continue their war against residential buildings, ordinary cities and people," Zelenskyy said yesterday about the overnight strikes in Kryvyi Rih. Ukraine's air force said it intercepted 11 of 14 Russian cruise missiles early yesterday.

After an early spring lull, Moscow has stepped up its air strike campaign targeting Ukrainian energy networks and other civilian infrastructure. But a spate of attacks inside Russia has prompted Putin to acknowledge the need to fortify his country's own defences.

Speaking to a group of pro-Kremlin war bloggers yesterday, Putin said the creation of a sanitary zone in occupied territory would put Ukraine "at a distance from which they won't be able to strike our territory", without specifying details.

The apparent Ukrainian strikes inside Russia have proved a big embarrassment for the Kremlin and stoked public criticism of Russia's armed forces.

Putin said Russia was working to identify Ukrainian sabotage groups allegedly behind the drone strikes and bombings on Russian territory. Ukraine has not admitted to carrying out the attacks and denies involvement in some of them, though officials in Kyiv have welcomed their results.

In Kryvyi Rih, mayor Oleksandr Vilkul said six missiles were fired on his city, hitting five locations, none of which was a military target. In addition to the residential buildings, a storage facility housing consumer products was also hit. Rescue teams were working to find people believed to be trapped under the rubble. A power station was also struck, officials said, knocking out electricity for 9,000 residents.

Missile, drone and artillery strikes were also reported by officials in cities across frontline and border areas, including Chernihiv, north of Kyiv, Kharkiv in the north-east and Zaporizhzhia in the south. Several civilians were reported to have been killed, and scores more injured.

Ukraine, its western backers and human rights organisations have repeatedly accused Russian forces of conducting indiscriminate strikes on civilian buildings and public infrastructure since Moscow launched its full-scale invasion nearly 16 months ago.

Putin on Monday claimed Ukrainian forces were using the same tactics on the occupied eastern city of Donetsk, without providing evidence of the attacks.

"I can't understand in any way why the enemy is striking residential areas," he said at a ceremony in the Kremlin.

Yesterday's strikes came days after Ukraine's army reported its first modest gains in a counteroffensive that aimed to liberate some 18 per cent of territory still occupied by Russian forces in the eastern and southern regions of the country.

Geopolitical divisions. Economic fallout

Ukraine invasion spurs defence spending rethink

China-Taiwan tensions and Iran nuclear fears also prompt moves to raise military budgets

JOHN PAUL RATHBONE — LONDON

Fightback: Ukrainian soldiers ride an infantry fighting vehicle near a newly liberated village in the Donetsk region yesterday
Oleksandr Ratushniak/Reuters

Next April, for the first time in more than three centuries, Danes will have to work on the holiday of Great Prayer after the government scrapped the religious day off partly to pay for extra defence spending.

The decision, approved in March, was deeply unpopular: in one poll, 70 per cent of Danes opposed it, but economists have praised Copenhagen for enacting a plan to meet its rising defence bills, unlike many other governments.

"Nobody wants to pay more taxes. But everyone wants better defence and good health services," John Llewellyn, a former head of economic forecasting at the OECD, said. "At some point the issue will be forced into the public arena, as no one's clear how the funds will be raised."

Japan, worried by China's rise and the risk of war in the Indo-Pacific, has not specified how it will fund a planned two-thirds increase in its defence budget by 2027. The UK, spurred by Russia's war on Ukraine, wants to eventually boost military spending to 2.5 per cent of gross domestic product but only as "fiscal and economic circumstances allow".

Germans, unnerved by Russian aggression, want to raise defence spending, but not if it means losing a public holiday. France has not detailed how it will pay for a planned 40 per cent rise in its military budget over the next five years. The same is true for Poland, which aims to almost double its spending to 4 per cent of GDP.

How to pay for wars is an issue as old as war itself. Cicero, the Roman statesman, said the "sinews of war are infinite money". In 1694, the Bank of England was founded to help William III finance war with France. Today, even as the world appears increasingly chaotic, spending looks more finite amid an environment of rising interest rates and high government debt burdens.

Europe is in the middle of its biggest armed conflict since 1945. Geopolitical tensions between China and Taiwan are on the rise. Iran may soon be able to make a nuclear weapon, and challenges such as climate change and migration may also force countries to spend big.

The Stockholm International Peace Research Institute (Sipri) calculates that global defence spending rose by 4 per cent to reach a record $2.24tn last year. This year, it is set to continue rising, even as higher rates increase governments' borrowing costs.

Economists such as Lawrence Summers, former US Treasury secretary, and Olivier Blanchard, former chief economist at the IMF, have suggested higher defence spending could even help drive interest rates higher.

"One scenario is that countries which already increased defence spending in 2022 continue to do so, while those that have said they will begin to increase defence spending in 2023 actually start," said Diego Lopes da Silva, senior researcher at Sipri's military expenditure and arms production programme.

Among the world's five biggest defence spenders, the numbers are mind-boggling. US politicians carved out an exemption in the debt ceiling talks to allow for a 3 per cent rise in military spending to $886bn in 2024. China's defence budget, which Sipri estimates to be $292bn, is on track this year for its 29th consecutive annual increase.

Russia, which spent about $86bn on defence last year, has said there will be "no funding restrictions" for its war against Ukraine, even as its budget remains classified. India plans to increase its defence budget by 13 per cent this coming year to $73bn, while Saudi Arabia, fearful of a nuclear Iran, now spends 7.5 per cent of GDP on defence, second only to Ukraine.

In Nato, only seven of its 31 members last year met its self-imposed defence spending target of 2 per cent of GDP. If they all did, total outlays would rise by over $150bn a year, FT research shows.

While war was one of "the most expensive and least productive of human activities", James Grant, a financial historian and editor of the *Grant's Interest Rate Observer*, noted there was "also a tendency for peace to explode periodically in our faces." Grant added: "When that happens, there is often a confluence of promises to pay and money printing."

> 'If there is a long war, the more it goes on, the more you have to use other [funding] methods, like taxes'

As a general rule, "short, hot wars" that require a sudden surge in spending are financed by extra borrowing, while "long, cold wars" that require sustained defence spending are financed by taxes.

The Napoleonic, first and second world wars were mainly financed by debt. Yet during the cold war, the west financed defence spending by higher taxation. In the 25 years that preceded the fall of the Berlin Wall, tax revenues among OECD countries rose on average to more than 32 per cent of GDP from 25 per cent, while debt levels generally fell.

Wars are also often accompanied by higher inflation and the suppression of interest rates. During the second world war, US wholesale prices rose by an average of 8.2 per cent a year, even as interest rates on long-term debt were fixed at 2.5 per cent, a gap that helped Washington inflate away the value of the bonds the US issued.

"All wars are generally associated with some inflation," said Richard Sylla, co-author of *A History of Interest Rates*. "Politicians don't like to put up taxes [to pay for wars], and inflation is a hidden tax."

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Security guarantees

France, Germany and Poland vow long-term Kyiv support

HENRY FOY — BRUSSELS
LEILA ABBOUD — PARIS
FELICIA SCHWARTZ — WASHINGTON

France, Germany and Poland have pledged to support Ukraine militarily against the Russian invasion for as long as it takes, while they and other western powers work on the issue of "security guarantees" aimed at shoring up Ukraine's defences and assuring its sovereign future.

President Emmanuel Macron of France, Olaf Scholz, Germany's chancellor, and Andrzej Duda, Poland's president, met in Paris on Monday evening and sought to project unity in support of Ukraine as it embarks on its counter-offensive against Russian forces.

But they provided little detail on the discussions happening among Ukraine's western backers on what sort of security guarantees they would provide once the war ends, or whether Ukraine would be given a firm timetable to join Nato.

"Our support will last as long as it is needed," Macron said. "We must ensure that Russia will not only not win this unfortunate campaign but also can never repeat it."

The security guarantee discussions, which are taking place both bilaterally with Ukraine and among western powers, reflect agreement that Kyiv cannot be offered membership of Nato while the war is raging. But divisions remain over what should be offered instead, the timing, and what would be sufficient to ensure Russia will not threaten Ukraine again.

While western officials admit Nato's Article 5 mutual defence pledge is the only true "security guarantee", Ukraine's supporters are attempting to secure what they call long-term "assurances" that are expected to include annual provisions of cutting-edge weaponry, Nato-standard training and intelligence-sharing, akin to the type of military support the US provides for Israel.

Israel and the US do not have a formal defence treaty, but an agreement for significant military aid that is renewed every 10 years.

Such support packages would aim to bolster Ukraine's defences while upgrading its military to Nato standards so that it is ready to join the alliance if and when there is political consensus for membership.

Some countries, including the US and Germany, oppose giving Ukraine a timeline to join, as it could imply Article 5 commitments and widen the war.

In contrast, Macron has said he supports a "path" to membership, while Duda went further on Monday, saying Ukraine needed "a real perspective to join Nato in the future".

"The question is between guarantees and assurances," said one European diplomat involved in the talks. "We can't promise them we will go to war for them, but we can give long-term pledges to keep them safe in other ways."

Allies: Olaf Scholz, left, Andrzej Duda and Emmanuel Macron

Volodymyr Zelenskyy, president of Ukraine, has called for Nato countries to provide binding security guarantees and a defined pathway for Kyiv to become a member at a Nato summit next month, and threatened to spurn an invitation to attend if there was no such offer.

Talks on security guarantees are mainly focused on pledges to be made by the US, UK, France and Germany, said people briefed on the talks, who declined to be identified given the issue's sensitivity. "What is critical in the security guarantee [discussion] is that they have to be provided by countries that, essentially, can back them up," said one of the people.

The talks are wide-ranging and with no clarity on final outcomes, the people said, adding that it was still unclear as to what legal or political commitments would bind capitals to uphold them.

"It is important to keep in mind that these are not real security guarantees, the readiness of countries to defend each other," said a second European diplomat. "But these are more assurances that the assistance with weapons, equipment, ammunition will continue."

INTERNATIONAL

Trump threatens political revenge in wake of classified documents charges

Former president says if elected to White House again he will appoint a prosecutor to 'go after' Biden

JAMES POLITI AND LAUREN FEDOR
WASHINGTON
JOSHUA CHAFFIN — MIAMI

As Donald Trump flew from New Jersey to Florida on Monday to face the federal justice system, he vowed to exact political revenge for his historic indictment on charges of mishandling classified documents.

In a scorching social media post, Trump said that, if elected to the White House again in 2024, he would appoint his own "real special prosecutor" to "go after" Joe Biden and his "crime family".

The comments marked a rhetorical escalation against the sitting US president and America's democratic norms and revealed Trump's political strategy in the face of the charges on which he was to have been arraigned in a Miami court yesterday.

Far from hunkering down to focus on his legal defence, Trump seems intent on winning over jurors and the public — especially Republican primary voters — by casting himself as unfairly persecuted even if it risks raising the heat again in a way that could fuel violence.

"When attacked or investigated, he ramps up his attacks on the investigator, discredits the issue and spreads counter-disinformation, and stokes fury and anger within his base," said Julian Zelizer, a professor of history and public affairs at Princeton University. "He is being too defiant but this is how he has continued to respond to major moments of political peril."

The increasingly tense atmosphere leading to Trump's arraignment in Florida already raised concerns in Miami of protests and violence surrounding the courthouse yesterday. An array of police personnel and sniffer dogs were sweeping the area around the Wilkie D. Ferguson, Jr federal courthouse on Monday even as authorities said no credible threats had been identified.

Manuel Morales, the Miami police chief, said his force was prepared for anywhere from 5,000 to 50,000 protesters. "Make no mistake about it, we're taking this event extremely seriously. We know there is a potential of things taking a turn for the worse."

During his first public rally since his federal indictment was unsealed, Trump on Saturday declared that "our people are angry" and a "final battle" was under way to save the country, echoing some of the bellicose phrases he used ahead of the January 6 2021 attack on the US Capitol.

"In the end, they're not coming after *me*, they're coming after *you*, and I'm just standing in their way," he told supporters in Columbus, Georgia.

At the same event, Kari Lake, the defeated Republican candidate for Arizona governor in 2022 and one of Trump's most loyal allies, noted that many of his supporters are gun owners.

"If you want to get to President Trump, you're going to have to go through me, and you're going to have to go through 75mn Americans just like me," she said. "And I'm going to tell you, most of us are card-carrying members of the NRA [National Rifle Association]. That's not a threat; that's a public service announcement."

Show of support: Donald Trump followers gather outside the courthouse in Miami yesterday ahead of his expected appearance. Below, Trump boards his plane from New Jersey to Florida on Monday
Joe Raedle/Getty Images, Bryan Woolston/AP

Such remarks have fuelled worries about broader unrest beyond Miami throughout the summer as the former president's legal problems continue to play out. In addition to the federal case in Florida, Trump is facing charges in Manhattan of falsifying business records linked to hush money payments to adult film actress Stormy Daniels, and is being probed at the federal state level in Georgia for his efforts to overturn the results of the 2020 election.

"He's all but calling for a revolution," Elaine Kamarck, a senior fellow in governance studies at the Brookings Institution think-tank in Washington. "He wants people to come demonstrate at the courthouse, he sees himself as a little dictator, and he gets worse and worse."

The former president's aides and allies insist that his stance is not just justified but will help him politically. Trump comfortably tops national polls for the Republican presidential nomination in 2024, with the first ballots due to be cast early next year. Ron DeSantis, the Florida Republican governor and his closest rival, is trailing by double-digits.

"[Trump] is able to play the narrative that he is the victim of a deep state and of Joe Biden employing Putin tactics by putting the opposition in jail," said Bryan Lanza, a Republican strategist and a former Trump communications aide who is now at Mercury, an advisory firm in Washington.

Lanza added that Trump could benefit from a perception among American voters that Democrats have "overreached" in supporting judicial cases against Trump. "There is no way on earth the American public wants the former president to serve 400 years [in jail]," Lanza said, referring to the total prison term that Trump faces if convicted on all counts, but in all likelihood any sentences would run concurrently.

Meanwhile, one Republican operative close to Trump said his team would "try everything they can to slow down the trial", which would give the former president even more of a window to deliver his political messages before any verdict is handed down.

> 'To have a former president on such a rampage against the legal system is dangerous and can have long-term effects'
> Julian Zelizer, Princeton University

Ford O'Connell, a Republican strategist in Florida, said: "[The federal indictment] weighs on him in a general election. It does not weigh on him in a Republican primary."

But others are not so sure. "As democracy plays out we're going to see the dark hysteria of Trump and his movement but we're also going to see other Republicans trying to displace him," said Kamarck. "They are going to walk on tiptoes but they are going to show they are a better alternative."

After landing at Miami airport, Trump headed to his Doral golf club in the city, where he was greeted by supporters waving signs and flags. Following his court appearance yesterday, he is expected to fly back to Bedminster, New Jersey, the residence he often uses in the summer, to make a statement on the day's proceedings and hold a fundraiser.

Yet many worry about what Trump's indictment and his reaction to it will mean for American democracy more broadly. "To have a former president on such a constant rampage against the legal system is dangerous and can have long-term consequences," said Zelizer.

"These battles will resonate long after he is gone, and building trust in an already problematic and frail system will not be easy."

Green labelling

EU tightens sustainable investment criteria after backlash

ALICE HANCOCK — STRASBOURG

Brussels has tightened EU criteria for what counts as a green investment after a backlash from campaigners but is still making allowances for fossil fuel-intensive industries such as aviation.

To qualify as green under the EU's sustainable investment criteria, known as the taxonomy, sustainable aviation fuels made from crops and organic waste will have to make up 15 per cent of a plane's fuel mix by 2030, according to standards published yesterday.

This represents a rise of 5 per cent compared with previous criteria floated in April that were labelled as "unscientific" by non-governmental groups. Sustainable aviation fuels currently make up about 0.05 per cent of aircraft fuel.

But aircraft will also be considered sustainable if they reach certain efficiency criteria even when running on traditional jet fuel.

Shipping, which is likewise considered difficult to decarbonise, will be subject to similar requirements.

Tsvetelina Kuzmanova, senior policy adviser on EU sustainable finance at think-tank E3G, said the expansion of the taxonomy to aviation and shipping was a "welcome step" but that it had to be rooted in scientific evidence and some criteria "regrettably continue to be perpetuating business as usual for polluting industries".

Valdis Dombrovskis, the EU's trade commissioner, said sustainable finance was not "only about companies that are already green". "It is also there to help companies that . . . clearly want to transition towards greener activities."

Previous taxonomy proposals had been criticised as "too black and white", he said. Yesterday's proposals also included guidance that would make it easier for businesses to understand how they could comply, he said.

"This is about some companies that are concerned that they are not yet green enough to qualify for the finance they badly need to become greener."

Other changes that were made included only allowing plastics made from biowaste to be considered green and setting a threshold for use of chemicals that are considered high risk.

The overall financial and reporting rules are designed to mobilise money towards the green transition, which the commission estimates will require €700bn in additional investment each year if the EU is to meet its goal of reaching net zero emissions by 2050.

But proposals that have already been introduced have come under fire from business groups, who argue that they are burdening industry with red tape.

The commission is also facing several legal challenges from environmental campaigners and from the Austrian and Luxembourg governments over the inclusion of gas and nuclear in the EU's taxonomy last year.

Last week, the publication of reporting standards, outlining what elements of their climate and environmental impacts companies should report on, was criticised by sustainable finance groups for lacking ambition.

Global appeal

Paris pushes for global shipping emissions levy

ATTRACTA MOONEY AND
OLIVER TELLING — LONDON
LEILA ABBOUD — PARIS
ALICE HANCOCK — BRUSSELS

France is drumming up support for a global levy on greenhouse gas emissions from the shipping industry ahead of a summit hosted by Emmanuel Macron this month.

Several people familiar with the discussions said France hoped to team up with other countries to issue a joint call for members of the UN's International Maritime Organization to agree such a levy at its meeting in July.

France is seeking to build a coalition of dozens of nations to back the idea, and has won support from Japan, Denmark, Kenya, Panama and Mexico — along with the Solomon and Marshall Islands, which have championed the idea for years — said one of the people familiar with the situation.

If finalised, the call would be a key achievement to emerge from Macron's summit for a new global financing pact, a two-day event the French president is co-hosting with the leader of Barbados on June 22-23 about climate finance and global financial reforms.

A French diplomatic official said: "This is an initiative that some of our partners have been supporting for a long time, and this summit will give them an important political platform. It is undeniable that we will need new sources of income to finance the fight against climate change, which is why we will support this initiative."

The lobbying push comes ahead of an the IMO meeting to discuss new targets for cutting emissions from the shipping industry. Shipping, which carries up to 90 per cent of global trade and largely relies on fossil fuels, is a big contributor to pollution but critics say it has been slow to decarbonise because of insufficient regulation.

> 'This is an initiative some of our partners have been supporting for a long time'
> French diplomat

The maritime organisation has previously set a target for shipping to halve annual greenhouse gas emissions between 2008 and 2050, falling short of net zero ambitions in other industries.

People present during previous talks said that industry lobbyists had opposed tougher measures, as had some member states with large shipping industries. Countries including Argentina, Saudi Arabia and China have been reluctant to support a levy, they say.

The IMO typically makes decisions based on consensus among its members, but can also rely on a majority, said Tristan Smith, a shipping researcher at University College London.

The EU already plans to introduce shipping into its emissions trading scheme, under which shipowners travelling through European waters will pay for their pollution.

But an agreement on a greenhouse levy at next month's IMO meeting would impose a financial cost on shipping emissions globally.

If such a carbon levy were introduced, it would affect container shipping giants such as Switzerland's MSC Mediterranean Shipping Company, Denmark's AP Møller-Maersk, France's CMA-CGM and their customers.

However, it remains unclear what form a shipping levy would take. A proposal from the Solomon Islands and Marshall Islands, which are particularly exposed to rising sea levels, for a $100 a tonne emissions levy is considered the most developed, and has been discussed at working groups hosted by France ahead of the summit.

Under the islands' proposal, the money generated could be used to develop new fuels and help countries deal with the impact of climate change, among other uses.

Peace mission

Africa pressing Putin on war, says Sierra Leone

AANU ADEOYE — FREETOWN

African leaders are "working to bring pressure" on Russia's Vladimir Putin and others to end the war in Ukraine that has caused a cost of living crisis on much of their continent, according to the president of Sierra Leone.

Julius Maada Bio, who is seeking re-election this month, said Africa "always suffers disproportionately" during global crises, but was often ignored because "our voice has not been strong enough to stop what's happening out there".

Speaking on the eve of a high-profile peace mission by African leaders to Moscow and Kyiv this week, Bio said: "We're working to bring pressure to bear on President Putin and all those concerned so the war can come to an end, so we can live peacefully."

Many nations rely on food imports, but few are as dependent as Sierra Leone, which has to buy in almost everything for its 8.4mn citizens. The country ranks 112th of 121 countries on the Global Hunger Index compiled by European non-governmental organisations.

The leaders of South Africa, Egypt, Senegal, Zambia, Uganda and Republic of Congo will travel to Kyiv to meet Ukrainian president Volodymyr Zelenskyy on Friday, then to Moscow the following day for talks with Putin.

Jean-Yves Ollivier, the veteran French middleman who helped broker the trip, has said the talks would focus on freeing exports of Russian fertiliser and Ukrainian grain that the continent relies on.

"War is never good for anyone; there's destruction and lives are being lost, and it's affecting the economies of different countries and the global economy," Bio said from Freetown, capital of the west African nation. "All we hope for is that the powers that be understand what impact the situation is having on us."

The former army brigadier, who has been in power since 2018, has economic concerns stemming from the conflict that have dominated the election campaign ahead of the June 24 vote.

Julius Maada Bio: Africa 'suffers disproportionately' in global crises

Bio, who seized power as military leader for a short time in the 1990s amid the civil war that ended in 2002, is facing a challenge from Samura Kamara, a former finance and foreign affairs minister in a rerun of a contest Bio won in a second-round run-off five years ago.

Annual inflation in Sierra Leone surged to 43 per cent in April driven by rising food costs. Its economy, heavily reliant on commodities, particularly iron ore, was reeling from "successive external shocks" even before Russia's invasion of Ukraine last year, according to the IMF. The fund forecasts Sierra Leone's growth at 2.7 per cent this year, from 3.6 per cent in 2022.

The country was already recovering after an Ebola outbreak that killed thousands over three years and the pandemic, plus the commodity prices crash.

Many Sierra Leoneans blame Bio's government for the country's woes, although he has insisted that inflation was "imported". This also explained why his initiatives, including waivers for import duties on essentials such as rice and flour, have had a negligible impact.

Import costs have also risen as the leone has lost almost a fifth of its value against the US dollar this year. Central bank efforts to curb inflation have included re-denominating the leone by cutting three zeroes from the notes.

INTERNATIONAL

Monetary policy

US inflation hits lowest level in two years

Biden hails data but rise in core rate keeps pressure on Fed to tighten further

COLBY SMITH — WASHINGTON

US inflation eased last month to its lowest level in more than two years, but pressure remains on the Federal Reserve to raise interest rates further.

The consumer price index climbed 4 per cent in May compared with a year earlier, a significant step down from the 4.9 per cent jump registered in April and marking the slowest increase since March 2021. Inflation has fallen sharply from its peak of 9.1 per cent last June.

Consumer prices edged up just 0.1 per cent on a monthly basis in May, data released by the Bureau of Labor Statistics showed yesterday.

Once volatile items such as food and energy are stripped out, however, "core" CPI inflation rose another 0.4 per cent in May — matching April's increase. Compared with the same time last year, core prices are up 5.3 per cent.

The two-year Treasury yield, which moves with interest rate expectations, dipped 0.006 percentage points to 4.586 per cent. US stocks advanced, with the S&P 500 and Nasdaq Composite both up about 0.5 per cent.

The latest read on inflation comes just before the Fed begins its two-day policy meeting. The US central bank is widely expected to forgo an interest rate increase this week after 10 consecutive rises since March 2022, but will keep the door open to further tightening this year if warranted by the data.

"They have more work to do," said Marc Giannoni, chief US economist at Barclays. He expected the central bank to deliver at least two further quarter-point rate rises this year, which he says are necessary to tame the stickiest of price pressures.

"We still have this loop between the tightness in the labour market, income generation and [that] then fuelling consumption that keeps the labour market tight. The Fed is trying to slow that down and to break that cycle."

Some officials have signalled they do not think the current level of the federal funds rate, which hovers between 5 per cent and 5.25 per cent, is high enough to damp demand to the degree necessary to tame one of the worst inflationary episodes in decades.

Consumer prices are down sharply from their peak of 9.1 per cent last June but inflation remains well above levels the Fed is looking for.

US president Joe Biden framed the report as "good news", adding it "shows continued progress tackling inflation at the same time that unemployment remains at historic lows".

The deceleration in last month's CPI was driven by a 3.6 per cent drop in energy prices for the month and a modest 0.2 per cent increase in food prices.

Meanwhile, the so-called shelter index, which tracks housing-related costs, rose 0.6 per cent in May, making it one of the biggest drivers of the monthly increase in core prices, according to the BLS data. The index was up 8 per cent from a year ago.

Economists have been waiting for housing inflation to ease, reflecting last year's sharp drop in rents and home prices, which takes time to show up in the data. However, home prices in some parts of the country have begun to level off or increase.

A metric of underlying inflation — "core services ex-housing" — edged up slightly to 0.24 per cent from 0.11 per cent in April, according to calculations by BMO Capital Markets.

Additional reporting by Kate Duguid

Eurozone powerhouse

Sentiment on Germany's economy ebbs at fastest rate since Covid-19

MARTIN ARNOLD — FRANKFURT

Investor sentiment on Germany's economic climate has worsened at the fastest pace since the pandemic hit over three years ago, a survey has found.

Sluggish manufacturing output, slowing consumer spending and weak export growth have combined with high inflation and rising borrowing costs to cause the economy to shrink in the past two quarters.

The Leibniz Centre for European Economic Research, or ZEW, said the downturn had triggered a sharp fall in its gauge of investor sentiment on the eurozone's largest economy. The gauge dropped 21.7 points to minus 56.5 when it was published yesterday, marking the biggest monthly fall since April 2020. Economists polled by Reuters had predicted only a much smaller decline to minus 40.

ZEW president Achim Wambach said investors had become less gloomy about the outlook for the German economy over the next six months. Its index of economic sentiment remained in negative territory, despite rising 2.2 points to minus 8.5 points.

> 'The experts do not expect the economic situation to improve in the second half of the year'

"The experts do not expect the economic situation to improve in the second half of the year," said Wambach.

"The export-orientated sectors in particular are likely to develop rather poorly due to a weak global economy. Overall, however, the recession is not assessed as particularly threatening."

While Germany's economy has struggled recently, many of its largest companies are faring better. The country's Dax index of the 40 biggest listed companies is up 20 per cent over the past year to a new all-time high.

Manufacturers have struggled, however. Investors told ZEW they expected this divergence between the dominant services sector and manufacturers to continue, with firms in the machinery, carmaking and chemical sectors all forecast to be hit by falling profits.

Christian Schnittker, an economist at Goldman Sachs, said the survey's findings were "consistent" with its expectations that Germany's economy would contract over the course of this year.

Most analysts expect Germany to achieve only tepid growth this year and the country is expected to be the weakest performer among the world's big economies, the OECD added, which forecast gross domestic product in the country would stagnate in 2023.

The European Central Bank is expected to cut its forecast for growth in the eurozone this year when its governing council meets this week.

The downgrade is unlikely to be enough to dissuade the ECB from raising interest rates by another quarter percentage point tomorrow as it tries to bring down inflation that remains three times higher than its 2 per cent target.

A drop in government and household spending caused German GDP to shrink 0.3 per cent quarter on quarter in the first three months of the year.

Italy. Leader's death

Forza Italia future in doubt without Berlusconi

Experts query how a party so reliant on the charisma of one man can survive his passing

AMY KAZMIN — ROME

Paying respects: floral tributes for Silvio Berlusconi are laid in Monza. Below, Giorgia Meloni
Claudio Furlan/LaPresse/AP

Silvio Berlusconi ruled his centre-right party, Forza Italia, as his personal fiefdom, without ever laying the ground for a succession.

As Italians prepare for Berlusconi's state funeral in Milan today, many are sceptical that the party, a member of Giorgia Meloni's rightwing government, can survive the loss of its polarising, deep-pocketed founder.

"His image of himself as a charismatic leader was totally incompatible with the idea that someone could take his place," said Giovanni Orsina, author of a book on Berlusconi. "Charismatic leaders . . . think they are the best person; there is no substitute, and the world ends with their end."

Analysts are predicting that Berlusconi's death could trigger vicious party infighting, which would be an ill-timed distraction but also a political opportunity for Meloni.

"If Forza Italia disintegrates, there will be a competition for its market share," said Roberto D'Alimonte, a professor of politics at Rome's Luiss University. "It's a risk she didn't have before. But if she plays it right, she could build the grand party of the right that Berlusconi was never able to build."

Foreign minister Antonio Tajani, entrusted with Forza Italia's day-to-day management during its founder's recent spells in hospital, has insisted the party still has a future.

"We have a duty as Forza Italia to move forward, albeit wounded," Tajani said on Monday after Berlusconi's death. "We will still do so under his moral and spiritual guidance . . . What he created is not destined to disappear."

Yet the former European parliament president is described as lacking the charisma and killer instincts needed to keep together a party riven by warring factions, including one led by Berlusconi's last companion, Marta Fascina, and another led by his former nurse.

"It's very hard for Tajani to fill the shoes of Berlusconi," said Marianna Griffini, a lecturer at King's College London, and author of a book on Italy's populist radical right.

"There may be many power struggles."

Most expect the party to splinter gradually as different factions align with Meloni, or with her other coalition partner, far-right League leader Matteo Salvini. Forza Italia's potential implosion is unlikely to shake the stability of Meloni's government, however, as most of its lawmakers will still support it. "I don't think the government is in danger," said Orsina. "Meloni is way too strong and the people in Forza Italia have nowhere else to go."

Already, he argued, Meloni has established herself as Berlusconi's true political heir — even without his blessing.

"It is very clear that Meloni inherited most of Berlusconi's voters and is now the leader of the rightwing coalition that he created in 1994," he said.

"She is, of course, his heir, and she inherited not because she asked Berlusconi to give things, but she struggled and took the inheritance by herself."

Italian media have long speculated that Berlusconi's eldest daughter, Marina Berlusconi, currently chair of the family holding company, Fininvest, might step forward to reinvigorate the party and arrest its further decline.

However, Marina has long denied any interest in active politics, which would force her to relinquish control of Fininvest with its media, banking, and publishing interests. Instead, she is expected to use her clout discreetly to hold the party's remnants together, said D'Alimonte.

Forza Italia — the name means "Come on, Italy" and was a popular football chant — was founded in 1994, when Berlusconi, then Italy's richest man, entered politics.

He tapped popular television personalities and senior managers from his companies to stand in elections, leveraging his media companies' reach to engineer a stunning election victory in just two months.

The media tycoon continued to run the party as its controlling shareholder, even as he was embroiled in scandals, convicted of tax fraud and barred from running for office until 2018.

> 'Charismatic leaders think they are the best person; there is no substitute, and the world ends with their end'

That tight control has led to an exodus of talented politicians over the years.

Meloni's most important political allies — her defence minister, Guido Crosetto and the EU affairs minister, Raffaele Fitto — come from the ranks of Forza Italia.

Other high-profile figures quit Forza Italia last year, in a show of protest at Berlusconi's role in bringing down Prime Minister Mario Draghi.

Voters have also drifted away: despite Berlusconi's attempt at a political comeback, Forza Italia won just 8 per cent of the vote last year, a far cry from the 37 per cent it commanded at the peak of his popularity in 2008.

"They are a spent force," said Daniele Albertazzi, a professor of politics at the University of Surrey.

"Even if they stand for election another couple of times, are they going to exercise any real influence?"

Politics

Johnson's 'carousel of cronies' intensifies UK debate regarding House of Lords reform

GEORGE PARKER — LONDON

Boris Johnson has decanted seven more political allies, advisers and cronies into the bloated House of Lords, a parting gift to the UK that has reignited debate on the case for reforming the second chamber.

Johnson used his prerogative as outgoing prime minister to send nominees to sit on parliament's overcrowded red benches, enabling them to make laws for the rest of their lives without the need to win an election.

With nearly 800 members, the Lords is the second-biggest legislative chamber in the world, behind only China's rubber-stamp National People's Congress. Neither is exactly an advertisement for democracy.

Johnson's list of life peers includes Charlotte Owen, a former special adviser and now the youngest member of the Lords. She was born in 1993 and her only experience of work has been backroom political jobs.

Ross Kempsell, a former Times Radio journalist and Johnson's spokesperson, becomes a peer at 31. Other former Downing Street advisers including Ben Gascoigne and Dan Rosenfield are also on the list.

It could have been more; the Lords appointments commission, which vets nominations, rejected eight of Johnson's candidates, to the fury of the former premier.

"The carousel of cronies he's tried to put through completely undermines the House of Lords," said Angela Rayner, Labour's deputy leader.

Once appointed to the upper house, where the average age is 71, peers help to write Britain's laws until they retire or die, enjoying the titles of lord or baroness, which still have a cachet in the UK.

Turning up to work at the second chamber has perks: the Palace of Westminster is one of London's finest clubs with low-cost food and wine. Peers can claim £322 a day just for attending.

Johnson's resignation list has again shone a spotlight on the process by which people find themselves appointed as lawmakers, charged with revising legislation passed down from the elected House of Commons.

Sir Keir Starmer, leader of the opposition Labour party, has vowed to scrap the Lords and replace it with an elected "Assembly of the Nations and Regions", reducing it to perhaps only 200 members, but he has not committed to doing so in his first term.

Many prime ministers, including the Conservative David Cameron, pushed the issue down their list of priorities, fearing legislative trench warfare with an upper house fighting for survival.

Downing Street said prime minister Rishi Sunak had "no plans to change the longstanding custom of former prime ministers having dissolution or resignation honours lists". Constitutional stasis has become the norm.

Life peers eligible to sit in the Lords number just over 650, but at least they are appointed by elected political leaders. Some even have skills and knowledge that could be useful to the nation; the red benches include diplomats, business leaders, doctors, athletes and so on.

Crowded house: peers at a state opening of parliament — Aaron Chown/PA

But some 26 members are Church of England archbishops and bishops, in what amounts to an unusual mingling of church and state. Justin Welby, the Archbishop of Canterbury, has used his political pulpit to denounce the government's "illegal migration" bill.

Then there are the 90-odd hereditary peers, who owe their presence in the Lords purely to the circumstances of their birth, many of whom can trace their lineage back centuries.

Tony Blair, the former Labour prime minister, tried to scrap the hereditary peers. But he, too, was thwarted by opposition in the upper house, whose members persuaded him to retain 92 of their number on a "temporary" basis.

This week, in one of the most extraordinary aspects of British democracy, Liberal Democrat peers will hold a "by-election" to choose a blue-blooded successor to Viscount Falkland, who is retiring after almost 40 years in politics.

The candidates are descendants of the great statesmen Lord John Russell and David Lloyd George, later Earl Lloyd-George of Dwyfor, who hope to move off a waiting list for hereditary peers on to the red benches.

Baroness Olly Grender, a Lib Dem peer, has voted in the contest even though her party has campaigned for Lords reform for generations: "Reform can't come soon enough, but the system is what it is right now."

Jess Sargeant, associate director of the Institute for Government, said the Lords did "a very good job on what you might call the boring bits of parliament", such as line-by-line scrutiny of legislation.

She argued that, unlike the Commons, where bills could be rushed through with a large majority, peers took their time. Bills on Brexit issues and "illegal migration" have come under intense scrutiny.

But Sargeant went on to point out that the way the Lords was composed was "quite difficult to defend". She added: "Are people being appointed because we think they are going to do a good job, or is it just political patronage?"

Janan Ganesh see Opinion

Made in Europe Fears over China-US rift and supply snags push nearshoring businesses to buy up factories in region ➔ MARKETS

Companies & Markets

JPMorgan cuts Odey Asset Management relationship

- Bank's move adds to turmoil at firm
- Swan fund shut and others frozen

HARRIET AGNEW, LAURA NOONAN, EMMA DUNKLEY AND ROBERT SMITH — LONDON

JPMorgan is terminating its relationship with Odey Asset Management, the last of the big banks to cut ties with the firm after sexual misconduct allegations against its founder Crispin Odey.

The US bank's move added to the turmoil to hit the firm, which told clients it had closed Odey's Swan fund and had stopped investors withdrawing money from two others run by its subsidiary, Brook Asset Management, because of a higher volume of requests to withdraw.

JPMorgan has served notice on both its prime broking and its custody agreements with Odey Asset Management, according to people familiar with the situation.

> The termination follows an FT probe reporting that the founder was facing sex assault claims

JPMorgan and Odey Asset Management both declined to comment.

JPMorgan was one of Odey Asset Management's key relationships. Its termination of its ties with the hedge fund follows a Financial Times investigation which reported last week that Odey was facing allegations of sexual assault or harassment from 13 women, which he denied.

Morgan Stanley, Odey Asset Management's other main prime broker, moved to cut ties with the firm last week, as did Goldman Sachs and Exane. But JPMorgan's relationship with Odey Asset Management was more complicated since, as custodian of its assets, it needed to find another party to take on these assets as depositor, the people said.

Odey Asset Management said it had closed Odey's Swan fund and stopped investors from withdrawing money from a couple of other products run by subsidiary Brook Asset Management, which was set up in November 2020. Odey Asset Management said it was liquidating the Swan fund, which manages €117mn, and returning money to shareholders after the founder was ousted over the weekend.

Odey Asset Management told clients that it had gated redemptions in its Brook Developed Markets fund owing to a higher volume of requests to withdraw.

Link Fund Solutions, the administrator to a number of Odey Asset Management funds, said it had suspended dealing in another product, the Brook Absolute Return fund.

The measure to halt customer withdrawals is one of the emergency actions taken by Odey Asset Management to contain the fallout. On Sunday it announced that Odey would stop managing his funds.

Odey Asset Management said the gating decision was taken after redemption requests exceeded 10 per cent of the Brook Developed Markets fund's net asset value. The fund, managed by James Hanbury and Jamie Grimston, runs $205mn of customers' money. The board said the redemption gate was "in the best interests of all shareholders".

The fund, which has risen 8 per cent over the past year and has an ongoing charge of more than 1 per cent, counts office company IWG, investment trading business Plus500 and retailer Frasers among its holdings. Its highest sector weighting is in consumer stocks, followed by financial services companies.

Odey Asset Management faces a broader investigation by the Financial Conduct Authority, which opened a probe into possible "non-financial misconduct" at the hedge fund two years ago. MPs are planning to scrutinise the FCA next month over its handling of misconduct allegations relating to Odey.

Grain tie-up Bunge acquires Glencore-backed Viterra in $8.2bn deal to rival industry leaders

Viterra has its roots in grain-handling co-operatives in Canada's Saskatchewan province — Michael Wheatley/Alamy

LESLIE HOOK AND HARRY DEMPSEY
LONDON

The global crop merchant Bunge is to buy competitor Viterra in an $8.2bn cash and shares deal, creating an agricultural behemoth to rival the largest trading houses that move grains, oilseeds and pulses from farm to consumers.

The combined group will compete with industry leaders Cargill and Archer Daniels Midland, strengthening Bunge's presence in some of the main food-supplying regions such as Canada and the US.

Shareholders in Glencore-backed Viterra will receive about $6.2bn in Bunge shares and $2bn in cash, and will control one-third of the group's stock. The move comes after a year of bumper profits for both, as the Ukraine war led to grain price spikes and volatility in commodities.

Bunge, founded more than 200 years ago, has long been known as the "B" in the so-called "ABCD" of global grain trading companies that link farmers with food importers. The others are ADM and Cargill, both headquartered in the US, and Europe-based Louis Dreyfus.

Bunge chief executive Greg Heckman said the merger would help the company diversify and insulate it from changes in the external environment — such as regional droughts brought about by climate change.

"By putting these two networks together, we have more diversification in geographies, and diversification in crops," he said. "The asset footprints are very complementary."

Viterra has its roots in grain-handling co-operatives in Canada's Saskatchewan province and operations across the US, which it gained through its 2022 purchase of Gavilon.

Bunge will gain more than 270 storage and handling facilities, more than 30 processing sites and a fleet of more than 200 ships through the deal to bolster its presence in the fertile regions of Canada, the US, Brazil, Argentina and Australia.

Bunge-Viterra's revenues totalled $121bn in 2022, which would put the merged group in league with Cargill, the largest agricultural commodities group with revenues of $165bn in its fiscal year ended May 2022.

Heckman declined to say whether regulators might need any asset disposals as part of antitrust reviews.

For Viterra shareholders — Glencore, Canada Pension Plan Investment Board and British Columbia Investment Management Corp — the deal represents a chance to cash in at a time when commodities trading houses are enjoying big profits.

Shares in Glencore climbed 5.3 per cent in London on the news. Bunge shares rose 1.8 per cent in New York.

Lex page 18

Citadel chief Griffin bullish over China's growth target

HUDSON LOCKETT AND ROBIN HARDING
HONG KONG

Ken Griffin, the billionaire investor, said China could prop up the global economy this year, helping avert an "ugly" slowdown in growth if the US enters a recession.

Speaking to the Financial Times on his first visit to Hong Kong since the Covid-19 pandemic, Griffin said he was optimistic China could beat its growth target. "Why might one be optimistic on China? They're very clearly putting economic growth back at the top of their priority list," said Griffin, CEO and founder of the US hedge fund Citadel and market maker Citadel Securities.

China's growth had been tipped to roar back after Covid-19 curbs were fully lifted in December. But the initial surge in global appetite for Chinese stocks that accompanied reopening has since waned, reflecting weak data on industrial output, manufacturing activity and the property sector.

The economy posted year-on-year growth of 4.5 per cent in the first quarter, but that pace trailed the government's modest annual target of 5 per cent — already its lowest in decades.

Chinese equities are flat this year. By contrast, investors have snapped up shares in the rest of Asia where stock markets in Japan, South Korea and Taiwan have notched up double-digit gains, often in excess of 20 per cent.

A Bank of America survey yesterday showed that fund managers continue to revise down their growth expectations for China. But Griffin remained optimistic that the country could deliver sustained growth, potentially lining it up to bail out the global economy as the US grapples with the threat of recession.

"My economists think China's GDP growth may be better than expected this year, and I hope they're right," said Griffin, whose $54bn-in-assets firm made record profits for investors after fees in 2022, making it the most successful hedge fund firm of all time. It runs global macro portfolios among its other strategies.

"That would go a long way towards helping the US achieve a soft landing. If China hits a speed bump as US consumer spending stops, that would be a really ugly one-two punch," he added.

In the US, Griffin said he anticipated inflation would remain sticky unless the Federal Reserve was willing to accept higher unemployment to drive it down.

Singapore's listing ambitions hit by woes of data centre operator

INSIDE BUSINESS
ASIA
Mercedes Ruehl

Singapore is thriving as a hub. Record amounts of capital are flowing in from China, southeast Asia, the US and elsewhere. Not only did the city-state gain from the closure of Hong Kong during the pandemic, but it has benefited from a more neutral approach amid geopolitical polarisation.

However, it has struggled with its ambitions for part of its hub strategy: to develop a thriving bourse with a pipeline of stock listings. Monthly delistings often outnumber new companies, and the number of quoted companies has fallen from 720 at the start of 2020 to 645 as of April. The Straits Times index for the market has essentially flatlined over the past five years, excluding a Covid-related dip and recovery.

The market has been delivered a fresh blow by the dismal performance of a listing of a foreign business, Digital Core Reit. It is not just a matter of a steep share price decline. The circumstances of the real estate investment trust's problems raise questions over the level of disclosure required on the market.

The owner of data centres was spun out of US property group Digital Realty and was Singapore's biggest equity listing by funds raised of the past five years and the fourth largest over the past decade, according to Dealogic.

The company's shares have dropped 35 per cent from the offer price and 60 per cent from an early 2022 high. A factor in that slide has been problems with two tenants. Earlier this month, data centre operator Cyxtera, reported to be Digital Core Reit's second-biggest customer, went bankrupt. The company has accounted for about 22 per cent of the trust's rental revenue income.

Cyxtera's troubles have been documented by the media since at least the beginning of this year. But until recently, investors would not have known about them by reading only the disclosures by Digital Core Reit, or even that it was a big customer of the trust.

According to management, the Singapore-listed group is typically bound by confidentiality provisions in lease agreements.

> The circumstances of Digital Core Reit's problems raise questions over the level of disclosure required on the market

Nor was the identity of the trust's reportedly fifth-largest customer, Sungard, disclosed at the time of the IPO. Sungard went bankrupt for a second time in April 2022 — just four months after Digital Core Reit's IPO. The trust informed investors of the bankruptcy of its fifth-biggest tenant 10 days after Sungard had filed in the US. It did not mention Sungard, which had accounted for about 7 per cent of the trust's rental revenue, by name.

It was not until April that any mention was made of the troubles facing Cyxtera, when the trust released responses to shareholder questions. Cyxtera filed for bankruptcy protection on June 4. This time the failure was disclosed the next day, though Cyxtera was still not mentioned by name.

Under Singapore's continuous disclosure rules, companies have to disclose information that is likely to materially affect the price of their securities. The exceptions are if the information is confidential, prepared for internal management purposes or concerns an incomplete negotiation.

The Singapore Exchange says: "We have been assessing the information flow and promptness of disclosures bearing in mind the impact on the Reit's financials."

Mak Yuen Teen, a professor at the National University of Singapore, says that if Digital Core Reit had been listed in the US, some of its "tardy disclosures" might have seen investors "come after them".

Digital Core Reit said: "Upon learning that its second-largest customer had filed for bankruptcy, Digital Core Reit immediately requested a trading halt and promptly provided robust and timely disclosures . . . In general, we believe it is inappropriate to speculate or comment on any customer's financial condition or course of action."

The company earlier told shareholders that it expected "minimal impact" from the bankruptcy.

The poor performance of Digital Core Reit's share price speaks to reduced confidence in the company's prospects and the assets chosen for its portfolio. In seeking to attract more listings, it seems fair to ask: did Singapore get a poor deal with Digital Core Reit?

The city-state has developed into something of a hub for Reits but as a centre for stock exchange listings, it has not matched its achievements elsewhere. The woes of Digital Core Reit underline the importance of quality in listing candidates and strong regulation to ensure market integrity if it wants to do better.

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Financials

Commerzbank eyes second buyback

Finance boss says move would make sense as stock is heavily undervalued

OLAF STORBECK — FRANKFURT

Commerzbank is hoping to announce a second, larger share buyback after its half-year results at the start of August, the bank's chief financial officer has said.

Germany's second-largest listed lender more than trebled net profit to €1.4bn last year and in June began the first buyback in its 153-year history. However, at €122mn, the scheme represents just 1 per cent of its €12bn market capitalisation. It has also paid out €250mn in dividends this year.

Bettina Orlopp said additional buybacks "make perfect sense" because Commerzbank shares were heavily undervalued, trading at less than half its book value.

"Buybacks effectively reduce capital and improve the [return on tangible equity], which is simply advantageous for our shareholders," she said. "We will certainly contemplate [a second one] as soon as we know how our half-year results look."

The buyback would require approval from the supervisory board, regulators and the German government, which is Commerzbank's largest shareholder, owning a stake of more than 15 per cent stake since it bailed out the bank in 2009 during the financial crisis.

Analysts expect on average that Commerzbank's annual profit will rise more than 50 per cent to €2.2bn this year because of rising interest rates and a cost-cutting plan that has involved closing half its German branches and axing a third of domestic staff.

> Analysts expect that the lender's annual profit will rise more than 50% to €2.2bn this year

The bank's common tier one equity ratio is 14.2 per cent, or 40 per cent above the regulatory minimum. Orlopp suggested it could be comfortably lower, adding that the bank was aiming for about 13 per cent.

She would not be drawn on the size of any second buyback, but stressed that it would be "significantly larger" than the current one. She hinted that it would be more than €200mn but below the upper limit of around €1bn as set out by shareholders.

The main source of uncertainty for first-half results, which the bank will report on August 4, was its Polish mortgage portfolio, said Orlopp.

Commerzbank's Polish subsidiary mBank is one of many banks that sold Swiss-franc-denominated mortgages to households in the early 2000s without hedging foreign exchange risk.

Clients were later exposed to huge losses and have successfully been suing their mortgage providers.

The sector is expecting a judgment from the European Court of Justice that may rule that banks have to refund all interest payments to clients.

In a worst-case scenario, this could expose Commerzbank to a "three-digit- million-euros amount", said Orlopp.

This would be in addition to the €1.7bn that Commerzbank has so far paid out or provisioned for the issue.

AGMs. Shareholder votes

US investor zeal ebbs on green and social activism

Support for petitions declines amid more prescriptive plans and growing political pressure

PATRICK TEMPLE-WEST — NEW YORK
ATTRACTA MOONEY — LONDON

Investors' support for environmental and social activism sank at this year's annual meetings of US companies, reflecting hesitation over increasingly prescriptive proposals and mounting political pressures.

The waning enthusiasm was evident across an array of businesses including Amazon, ExxonMobil and United Parcel Service. Petitions asking US groups for more action on climate change won an average of 23 per cent shareholder support in the year to the end of May, down from 36.6 per cent last year, the Sustainable Investments Institute says.

Shareholder proposals on human rights took 21.6 per cent of votes cast, compared with almost a third in 2022.

Shareholder proposals have increasingly become an activism tool for religious organisations, environmentalists and other socially engaged investors. A record number are expected to be filed this year, according to The Conference Board and data from Esgauge.

A US policy change in 2021 has allowed more petitions to go to a vote. As a result, proposals have evolved from anodyne disclosure requests to specific demands for action.

Support has not grown correspondingly. Only five US shareholder resolutions on environmental and social issues have won majority support of company shareholders this year, down from more than 35 in 2022 and 2021, the institute said.

"We have seen an increase in more transparent corporate disclosures, especially by larger companies, along with a rise in overly prescriptive proposals appearing on company ballots," said Benjamin Colton, head of stewardship at State Street Global Advisors. "Our observation is that these dynamics have led to an overall decline in investor support for environment and social shareholder proposals."

Only 11 per cent of Exxon shareholders last week backed a petition to set emissions reduction targets consistent with the Paris deal, down from 28 per cent last year. At Amazon, a resolution calling for more information about plastic packaging risks received less than one-third of shareholder support, down from nearly half last year.

There were exceptions in voting at several banks over climate policies. About three in 10 voting shareholders at Goldman Sachs, Wells Fargo and Bank of America backed resolutions that called for the board to set out climate transition plans, with the figure rising to 35 per cent at JPMorgan Chase.

Plastic pollution motivated a cohort of investors in Restaurant Brands International, the group behind Burger King, and Yum Brands, the parent of KFC, Pizza Hut, and Taco Bell, where 37 per cent called for the company to report on how it could cut out plastic use.

But support for a proposal on diversity, equity and inclusion at shipping business UPS was 25 per cent this year, down from 37 per cent in 2022.

The business of shareholder voting has also become engulfed in political fights over the rise of environmental, social and governance investing.

Florida governor and presidential candidate Ron DeSantis last month signed a law that requires the state's pension funds to only vote shares on "pecuniary factors".

Senate Republicans in December accused asset managers BlackRock, Vanguard and State Street of using their shareholder voting power "to advance liberal social goals".

Publicly, large asset managers had indicated that the political attacks had not changed their voting policies, said Matteo Tonello, a managing director at The Conference Board, but "I do think their response to the backlash has led them to be a little more cautious and sensitive to the implications that these [voting] policies have."

The picture is different outside the US.

Average support for environmental and social proposals at European companies inched up to 11.6 per cent in 2023 from 10.6 per cent last year and 5.5 per cent in 2021, according to data provider Diligent. Fewer shareholder proposals are filed in Europe. Only eight environmental or social proposals went to a vote by May 31.

Support for environmental and social resolutions outside Europe and the US stood at 17 per cent this year, up from 11.3 per cent last year, according to Diligent.

US conservative activists have lodged record numbers of shareholder proposals since the SEC's policy change. Their issues have also failed to win the support of institutional investors and asset managers.

BlackRock said its shareholder voting had always been focused on delivering "long-term financial value for our clients". The company's support for shareholder petitions had dropped last year. Colton said the asset manager's voting record has remained "very consistent over the years".

Vanguard declined to comment.

Abortion-related petitions, filed after the Supreme Court struck down federal rights to an abortion last year, failed to win more than 12 per cent support at Tenet Healthcare, American Express and Eli Lilly.

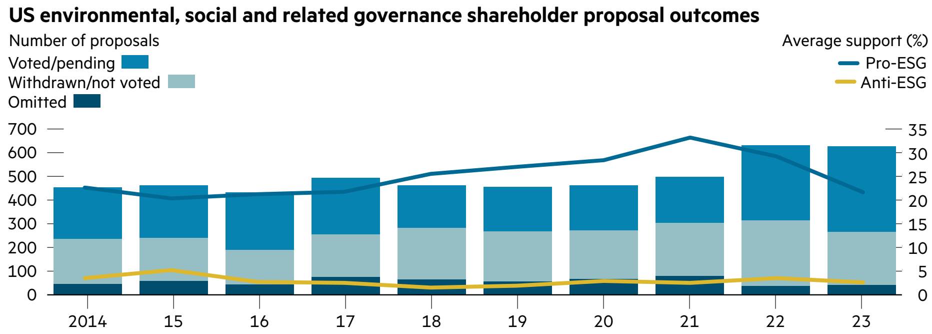
At insurance company Travelers, a proposal asking the company to set a deadline to stop underwriting new fossil fuel projects won 8.8 per cent support in May, down from 13 per cent support last year. Proxy adviser Institutional Shareholder Services said the company had disclosed most of what the shareholder petition demanded.

Shareholder proposals were "becoming increasingly prescriptive", said Brian Bueno of Farient Advisors. For the organisations that typically filed the most petitions, "it clearly didn't work what they were doing this year. We will end up seeing that their efforts did not work as well this year as prior years".

Additional reporting by Brooke Masters in New York

Petitions asking US businesses for more climate action won an average of 23% investor support in the year to the end of May, down from 36.6% last year
Amr Alfiky/Reuters

US environmental, social and related governance shareholder proposal outcomes



As of June 1 2023
Source: Sustainable Investments Institute

> Backing for a proposal on diversity, equity and inclusion at UPS was 25%, down from 37% in 2022

Financials

Croatia piled pressure on Allianz over Sberbank deal

OLAF STORBECK — FRANKFURT
AND MARTON DUNAI — ZAGREB

The Croatian government put pressure on insurer Allianz and threatened it with regulatory action after a pension fund it controls pulled out of a deal that involved a €500mn payment to Kremlin-controlled Sberbank.

The Russian bank has been trying to find a buyer for its 42.5 per cent stake in Fortenova, a retailer and food producer that is Croatia's biggest employer, with 45,000 staff and €5.2bn of sales, and a food supplier across the region.

The government's preferred option last autumn was for Sberbank to sell to a group of Croatian pension funds, the biggest of which was AZ, a fund that is 51 per cent owned by Allianz. Italy's UniCredit owns a minority stake.

The transaction, which valued Sberbank's stake in Fortenova at €500mn, collapsed when AZ walked away last October after Allianz decided against the deal because of concerns it could breach EU sanctions, people familiar with the details said.

Allianz said AZ's supervisory board "took the independent decision not to pursue the Fortenova investment case because its risk and return profile was wholly unsuitable for pensioners, and because its financial structure presented potential compliance risks that it considered unacceptable."

Foreign minister Gordan Grlić-Radman and envoy to Germany Gordan Bakota lobbied Allianz executives, according to the people. Grlić-Radman urged Allianz board member Klaus Peter Röhler to overrule the decision.

> The Fortenova stake sale collapsed when AZ, which is 51% owned by the insurer, walked away

The foreign ministry did not respond to requests for comment. The embassy in Berlin declined to comment.

When Allianz refused to reconsider, Croatian watchdog Hanfa in November issued what one of the people called "explicit threats" against the business.

Hanfa asserted that if governance and risk management controls were found to be flawed, it could result in a fine and the replacement of local management, the people said. Weeks later, the regulator started an on-site inspection of AZ, saying it was a regular audit of decision-making processes, controls and its handling of cyber risks, the people said.

Hanfa declined to comment in detail, saying its "examination of the pension company Allianz is still under way" and "we will inform the public of the outcomes of the examination after it has finished".

Sberbank is Fortenova's biggest shareholder but sanctions fallout has made this structure problematic.

Berlin said it would not "comment on internal entrepreneurial decisions [or] on the content of confidential discussions with representatives from other countries".

Allianz said it would not comment "on interactions with government authorities" but it made "decisions based on their merit, in line with the company's values and duties to its clients".

Fortenova chief executive Fabris Peruško declined to comment on the government's actions but said: "The situation we are in today is because of the deal we didn't execute in October. If we had, today we would be refinanced and focusing on our business exclusively."

Banks

Credit Suisse wants tuna bonds case struck out

JANE CROFT — LONDON

Credit Suisse has asked London's High Court to strike out a lawsuit brought by Mozambique over the bank's role in the $2bn "tuna bonds" scandal, claiming that failures to disclose government documents mean there cannot be a fair trial.

The Swiss bank and other parties are defending a lawsuit brought by Mozambique over their role arranging $2bn of loans and bond issues for the country in 2013, ostensibly to fund projects including a state tuna fishery. The loans were partly concealed from the IMF and other donors, who cut support to the country after they were discovered.

A civil trial is due to start in the High Court in September.

It comes at a time when UBS, which completed its rescue of Credit Suisse this week, begins to wrestle with legacy issues at its former rival, including a number of existing lawsuits.

In its application to the High Court, Credit Suisse claimed that Mozambique's failure to disclose documents from the office of its president as well as from the country's state intelligence and security service meant a fair trial would not be possible.

Andrew Scott KC, barrister for Credit Suisse, told the court that the "breaches are serious" and were the result of "choices made by the Republic on what disclosure it will provide".

In written arguments, Credit Suisse claimed that Mozambique "remains in breach of its disclosure duties" and the breaches were "wilful". "Their effect is to preclude any possibility of a fair trial in the proceedings that the Republic chose to commence here," the bank claimed.

Mozambique claimed to the hearing that it was "not accurate or fair to characterise the Republic as a recalcitrant litigant which has set its face against giving proper disclosure". In its written arguments Mozambique said there had been "strenuous efforts" to obtain documents and the bank's application "gives no weight to the substantial efforts made by the Republic to meet and overcome the momentous challenges in giving disclosure which it has had to face".

It said "the assertion that there is a substantial body of relevant documents likely to be missing" from disclosure "is overblown and wrong. It would be wrong, at this stage, to assume that there is a substantial body of material missing as the Applicants contend and thus that a fair trial is not possible".

Jonathan Adkin KC, barrister for Mozambique, said in written submissions that a trial should go ahead because the case involved "an international fraud and official corruption on a vast scale" and the court could determine at trial "whether there is 'missing' material as alleged".

The three-day High Court hearing continues.

Financials

Bank CEOs see 'green shoots' on Wall Street

JOSHUA FRANKLIN — NEW YORK

The chief executives of Goldman Sachs and Morgan Stanley said they were seeing "green shoots" in their struggling investment banking businesses, which implemented large-scale dismissals as higher interest rates damped activity.

Wall Street firms are suffering through one of the leanest periods in years even by the standards of the feast-to-famine nature of investment banking, with a dearth of capital markets activity and deals as would-be buyers and sellers struggle to agree on price.

However, after several quarters of falling investment banking revenues, Morgan Stanley's James Gorman and Goldman's David Solomon said the environment was showing signs of improving.

"My gut tells me, and this is probably not a good read but it served me pretty well over time I would say, I feel like we've bottomed on this. I just feel the tone is a little better," Gorman said at an industry conference organised by Morgan Stanley. "We're clearly seeing more green shoots. I'm having more discussions with CEOs."

Gorman, who plans to step down as CEO within the next 12 months, also said Morgan Stanley was "unlikely" to pursue further large-scale dismissals in the near future after the bank cut several thousand jobs in recent months.

"You can never say for sure but it's unlikely we'll be going back to that world," he said of the recent job cuts, adding that he thought the bank's headcount was "where we want it".

Speaking to CNBC, Solomon said Goldman was also seeing "green shoots" of activity. "We reset valuations in 2022, we reset capital costs, and that obviously slowed down capital markets activity significantly. I always say it takes four to six quarters to reset. We're kind of five quarters in," he said.

"I would expect capital markets activity to pick up as we head into 2024. At the end of the day, people need capital, they can defer some of those activities but at the end of the day, they can't postpone them indefinitely."

Gorman added it was unlikely the Federal Reserve — which has raised its benchmark rate to between 5 per cent and 5.25 per cent — would cut interest rates this year but then rates may start to drop "at some point" in 2024 before settling at 2 per cent to 3 per cent.

Gut instinct: Morgan Stanley's James Gorman detects an improving mood

Big Pharma in $85bn five-month M&A spree

Pfizer, Merck and Sanofi to the fore but sector frets over antitrust risk after FTC's targeting of Amgen move for Horizon

JAMIE SMYTH — BOSTON

Pharmaceutical and biotech companies spent $85bn on acquisitions in the first five months of the year, marking a recovery in dealmaking as they seek to replenish drug pipelines.

The surge in mergers and acquisitions, compared with $35.6bn in deals in the same period of 2022 and $49.1bn the year before, according to Stifel, an investment bank, is being fuelled by large cash reserves amassed by Big Pharma during the pandemic and investor concerns about growth prospects.

At the start of the year, the largest pharma companies held more than $1.4tn in dealmaking firepower, according to an analysis by EY. They face the expiry of patents stretching to the end of the decade, which exposes $200bn of their top-selling branded drugs to generic competition and will squeeze revenues.

Pfizer, Merck and Sanofi have led the M&A revival this year by announcing multibillion-dollar acquisitions, even as dealmaking across other sectors has fallen sharply due to rising interest rates and tighter bank lending.

"It's a big turnround and completely bucking the overall trend in the M&A market," said Tim Opler, managing director at Stifel's global healthcare group. "If we maintain the pace of the first five months and a week, we would be on track to have a $215bn year."

In 2022 the value of biopharma deals was $127bn, while in 2021 it was $149bn.

However, at Bio International Convention, one of North America's largest biotech conferences, last week in Boston, executives, bankers and analysts were not celebrating.

They were fretting about the rising threat that US antitrust regulators have begun a crackdown on consolidation in the sector.

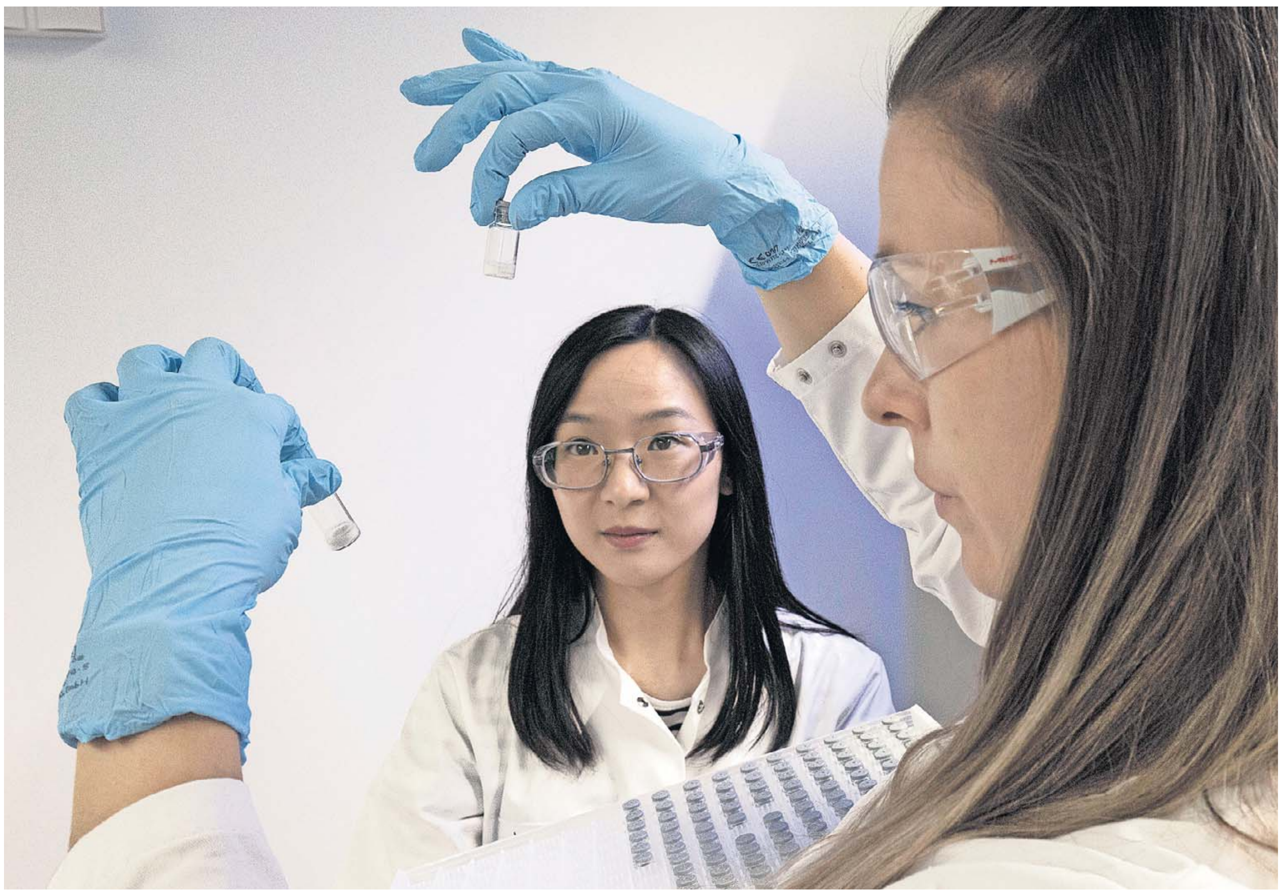
Last month the Federal Trade Commission caused shockwaves when it sued to block Amgen's takeover of Horizon Therapeutics — a $28bn deal announced in December that kick-started the nascent M&A recovery.

The FTC warned that "rampant" consolidation in the pharma sector was pushing up prices for patients, in its first ruling in more than a decade seeking to block a merger in the sector.

It deployed a novel argument: the transaction would enable Amgen to use rebates on its existing blockbuster drugs to press insurance companies and pharmacy benefit managers to favour Horizon's two monopoly products.

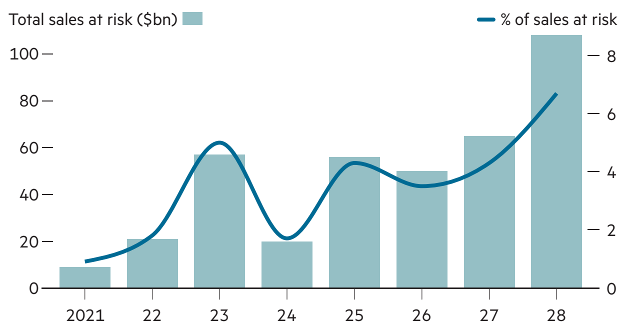
Amgen said it would fight the decision in court, but this did not temper industry-wide concerns that the action would chill M&A activity when many smaller biotechs face funding constraints.

"Blocking that deal is absolutely uninformed. The more volatility there is, the harder it is for investors to invest," said Paul Hastings, chief executive of Nkarta, an early-stage biotech company specialising in cell therapies that target cancers.



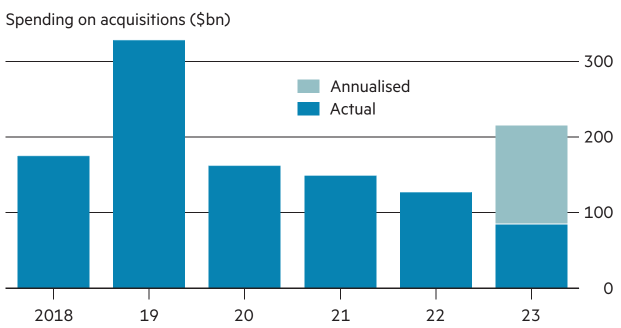
The dealmaking surge is being fuelled by large cash reserves amassed during the pandemic and investor concerns about prospects for growth — Ulrich Baumgarten/Getty Images

Big pharma faces revenue shock from patent cliff



Sources: EY analysis; Stifel

Biopharma spending on deals surges in early 2023



Hastings, outgoing chair of Bio, the biotech industries' main lobbying group, warned that US antitrust authorities' tougher stance on pharma/biotech deals risked upending a decades-long business model that underpinned innovation. The model attracted investors to biotechs that were pursuing high-risk research in the knowledge that large companies might later buy them and supply the funds needed to complete expensive clinical trials and commercialise new drugs.

The importance of small to midsize biotechs to drug development has grown rapidly over the past two decades. Last year emerging biopharma companies were responsible for a record 65 per cent of the molecules in the R&D pipeline without a larger company involved, up from less than 50 per cent in 2016 and 34 per cent in 2001, according to the Iqvia Institute.

Bio's concerns were echoed by Seagen, whose shareholders recently backed a proposed $43bn takeover by Pfizer — the largest deal in the sector since AbbVie agreed to buy Allergan in 2019.

Seagen chief executive David Epstein said that if the FTC took away the possibility of Big Pharma buying biotechs, "funding" and "innovation" would soon dry up in the sector.

"I hope that the FTC can come to understand how the ecosystem works," he said.

The intervention of the FTC, which has taken a tougher approach to M&A under commissioner Lina Khan, comes at a tough time for biotech groups that face capital constraints and the biggest shake-up in drug pricing in the US for decades.

Biopharma groups raised $54.6bn in funding last year, a drop of 54 per cent on 2021 and the lowest level of funds raised by the industry since 2016, according to a report last week by EY.

Rising interest rates, the seizing-up of initial public offering markets, and the collapse of Silicon Valley Bank — one of the largest funders to the biotech sector — mean many groups are struggling to raise cash.

> 'It's a big turnround, completely bucking the trend in the M&A market'

"Look at the financing challenges of the companies that have obviously less than two years of cash, and not all of those companies are going to survive," said Rich Ramko, EY US biotech leader.

Last week Merck sued the US government over a new law that hands the federal government the power to negotiate prices for some of the most expensive drugs. The pharma group alleged that the drug pricing reforms were unconstitutional and "tantamount to extortion".

Experts say regulators' increased willingness to intervene in the sector raises uncertainty and risk for companies considering large takeovers.

"The odds that we wake up and see a J&J or Lilly do something big like buying Alnylam, Incyte or Vertex goes down from where it would have been," said Stifel's Opler.

But he said any chilling of M&A could be temporary as the FTC could be beaten in court given that many legal experts believed that their case was not strong.

"This could actually free up the market to do more deals without fear of antitrust agency blockage," he said.

Kay Chandler, co-chair of the global life sciences industry practice at Cooley, a law firm, said that dealmaking might take a bit longer, and there could be a shift in how much risk companies were prepared to take on when considering M&A.

However, ultimately, large pharma businesses had no choice but to continue to pursue M&A because they had to fill the innovation gaps in their drug pipelines.

"I don't think this changes the fact that companies do deals."

After the FTC action against Amgen, analysts at investment bank Evercore forecast that a thawing in Big Pharma interest in megadeals would invariably shift "consolidation focus to smaller and earlier-stage biotech companies — and more of them".

The next test for antitrust authorities involves Pfizer's takeover of oncology-focused Seagen. The FTC must decide within days whether to extend the initial 30-day time period for a review of the deal, which is central to Pfizer's efforts to return to growth after a sharp fall in Covid revenues this year.

"We could see a potential challenge to Pfizer/Seagen as this would represent an even larger transaction," said Evan Seigerman, analyst at BMO Capital Markets, in a note published after the FTC sued Amgen.

But for the moment, Pfizer and Seagen were confident that their deal would not draw fire from the FTC, arguing that there was no product overlap and that it would benefit competition and innovation.

"It's not even unlikely, its like zero [chance]. It is not going to happen," said Epstein, noting that the break-up fee Pfizer would pay Seagen in that event was almost $2.3bn.

Financials

Insight Partners cuts $20bn fund target amid tech reset

TABBY KINDER AND GEORGE HAMMOND
SAN FRANCISCO

Insight Partners has slashed the $20bn target for its latest fund and said it would slow its pace of dealmaking after almost a year of glacial fundraising as technology valuations have slumped.

The New York-based venture capital firm, which is among the largest tech growth investors in the US with $90bn of assets, has raised only about $2bn for its 13th fund, which was first marketed to investors last June.

It told institutional investors that it was witnessing a "great reset in tech" as a result of a steep decline in public company valuations that had impacted the value, number and quality of start-ups in which it could invest.

As such, Insight said it would cut the size of its latest fund to $15bn. It also said it expected to slow the pace at which it deploys its existing funds. Insight is "not seeing a volume of companies that [it is] excited about", said a person close to the fund.

Insight is regarded as a bellwether for venture capital and tech investing. One New York investor said the difficulty it faced underscored the sector's challenges. "It is a bloodbath," they said.

Institutional investors such as pension and endowment funds have reined in their investments to illiquid private markets as interest rates have risen and tech companies' valuations have stalled.

Venture capital fundraising soared to record levels during the pandemic, with firms raising a total of $159bn in 2021 and $171bn in 2022, according to researcher PitchBook. But that has collapsed, and US venture funds raised just $12bn in the first quarter of this year.

Insight was one of the busiest investment firms in 2021 when tech valuations and dealmaking boomed, participating in deals valued at a total of $25bn including leading fundraising rounds larger than $500mn into Transmit Security and Nuvemshop, according to Crunchbase. However, the number of venture and private equity rounds Insight participated in fell by a fifth last year, from 243 deals to 199, and the total sum of deals it was in dropped to $14.4bn, Crunchbase data showed.

"The sharp fall in valuations has reset the market in a very positive way," Insight's note said. "In 2021, we saw exceptional growth in tech demand but challenging valuations and a lack of discipline around cost structures and rates of cash burn. We believe the great reset has solved those two challenges."

Insight has invested heavily in fast-growing software companies in recent years, particularly as valuations soared in 2020 and 2021. However, it is exposed to the painful reversal in tech valuations over the past 18 months.

"They deployed very aggressively in a short time . . . at peak prices," said one US investor.

Additional reporting by Ivan Levingston and William Louch

Technology

Four-week-old Mistral AI taps record €105mn seed financing

TIM BRADSHAW — LONDON
LEILA ABBOUD — PARIS

A French start-up founded four weeks ago by a trio of former Meta and Google artificial intelligence researchers has raised €105mn in Europe's largest-ever seed round.

Mistral AI's first round of financing values the Paris-based concern at €240mn, including the funds raised, according to people close to the company.

The record amount raised highlights the growing frenzy surrounding AI and Europe's desire to create a viable alternative to Silicon Valley companies such as Microsoft-backed OpenAI and Google's DeepMind.

"There is a rising awareness of the fact that this technology is transformative and Europe needs to do something about it, both as a regulator, as a customer and an investor," said Arthur Mensch, Mistral's chief executive.

The former DeepMind researcher founded the start-up with Timothée Lacroix and Guillaume Lample, who both recently left Meta.

Lightspeed Venture Partners, an early backer of companies including Snapchat, Epic Games and StabilityAI, is leading Mistral's round. Other investors include former Google chief Eric Schmidt, French telecoms billionaire Xavier Niel, and Bpifrance, the French state-backed investment bank, a sign of the strategic nature of the project.

Mistral has yet to develop its first product, and its first few employees started work only days ago. It plans to launch early next year a new "large language model", similar to the "generative AI" system that powers OpenAI's breakout ChatGPT app.

Antoine Moyroud, partner at Lightspeed, said the unprecedented size and speed of Mistral's financing reflected the expertise of its three founders, who are all in their early 30s.

"There's a pool of 80 to 100 people globally who have the level of experience they have," Moyroud said. "Right now, for better or for worse, the capital requirements in compute and top-tier talent make [launching an AI start-up] quite a capital-intensive game."

According to Dealroom.co, which tracks private tech investments, Mistral's funding is Europe's largest ever seed round, a term that usually describes a start-up's first institutional round of equity funding.

Dealroom data shows that more than $4bn has been invested this year in AI-related companies in Europe, including the UK and Israel. That figure compares with $25bn in the US.

Despite a sharp downturn in private tech dealmaking over the past year, AI companies have continued to raise huge sums, driven by optimism that generative AI can transform industries from customer service to programming. Since the start of 2023, a handful of AI start-ups have achieved valuations of at least $1bn.

Fixed income. Debt pressures

US junk loan defaults surge as higher interest rates bite

Higher ground: the US Federal Reserve has lifted its targets for interest rates over the past year, leaving corporate borrowers facing much more costly interest payments
Nathan Howard/Bloomberg

Total this year exceeds 2021 and 2022 combined for assets that are key source of financing

HARRIET CLARFELT — NEW YORK

Defaults in the $1.4tn US junk loan market have climbed sharply this year as the Federal Reserve's aggressive campaign of interest rate rises increases the pressure on risky companies with "floating" borrowing costs.

There were 18 debt defaults in the US loan market between January 1 and the end of May totalling $21bn — greater in number and total value than for the whole of 2021 and 2022 combined, according to a Goldman Sachs analysis of data from PitchBook LCD.

May alone saw three defaults totalling $7.8bn — the highest monthly dollar amount since the depths of the Covid-19 crisis three years ago.

The failures underscore the pressure being exerted on lowly rated companies with large debt piles as they bear the brunt of the US central bank's tighter monetary policy to curb high inflation.

"There is a payment shock unfolding among the weakest issuers in the loan market," said Lotfi Karoui, chief credit strategist at Goldman Sachs.

Many junk-rated companies loaded up on leveraged loans — debt with floating borrowing costs that move with prevailing interest rates — when the Fed cut rates close to zero at the peak of the Covid crisis.

Issuance nearly doubled between 2019 and 2021 to $615bn, data from PitchBook LCD shows.

However, the Fed has lifted its "target range" for interest rates to 5-5.25 per cent in just over 14 months. That has left borrowers facing much higher interest payments, just as slowing economic growth threatens to squeeze earnings.

This combination is "really problematic for companies that have a big chunk of their liabilities in floating rate form", added Karoui.

Among the companies to have defaulted this year for the first time, as classified by rating agency Moody's, are cinema advertising group National CineMedia and infrastructure services provider QualTek.

Some companies that defaulted in 2023 had already previously defaulted, such as Envision Healthcare and mattress company Serta Simmons.

Many companies that are rated junk now rely on leveraged loans as a critical source of financing — the asset class has swelled to roughly the same size as the junk bond market.

Bank analysts and rating agencies expect defaults to rise further as market expectations shift to interest rates staying higher for longer and as the lagging effects of successive rate rises are felt.

The threat is overshadowing investors holding particularly risky debt in a scenario that threatens to fuel even more downgrades, restructurings and bankruptcies as borrowers struggle to access fresh funding.

"We are lining up here for a pretty meaningful default cycle," said Steve Caprio, head of European and US credit strategy at Deutsche Bank.

Default rates for US junk loans are ticking up this year
Per cent

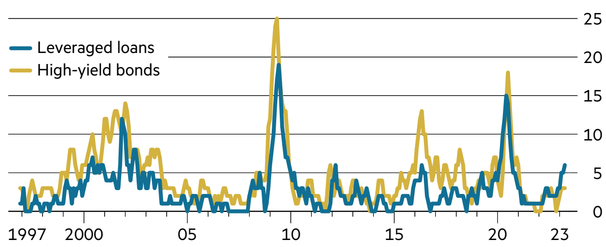


Chart shows three-month trailing annualised default rates
Sources: Moody's; Goldman Sachs Global Investment Research

Loan issuance fell sharply in 2022 and has been meagre this year because most companies do not urgently need cash after replenishing their coffers and pushing out maturities while money was cheap.

Compounding the situation, the biggest buyers of leveraged loans — known as "collateralised loan obligations" — are unable to hold large amounts of very risky debt because of safety mechanisms in their own capital structures.

They have a typical cap of 7.5 per cent of their assets for triple C rated loans.

If more companies have their credit ratings downgraded to triple C, it could trigger a process that cuts off cash flows to the lowest rung of investors in the CLO structure in order to redirect money to investors higher up the CLO ladder.

There is still demand for lower quality single B loans, said Drew Sweeney, a loan portfolio manager at asset manager TCW, referring to the rating just above triple C.

But investors "have to have some faith that those are not going to be the most likely loans to be downgraded".

Market estimates of defaults are rising, although forecasts vary depending on the breadth of loans, definitions of default and different economic forecasts.

For the 12 months to May 2023, the loan default rate stood at 1.58 per cent, according to LCD — up from 1.31 per cent in April and the highest figure since May 2021.

Karoui pointed out that there were relatively few defaults in 2021-22 so the market could simply be reverting "back to normal".

But loan defaults are still rising at a faster pace than defaults in their corporate bond counterparts, which have fixed coupons and therefore are slower to feel the effect of Fed policy changes.

According to a Goldman's analysis of Moody's data, the annualised default rate for US junk bonds in the three months to April 30 stood at 3 per cent — flat since February and up only slightly from 2 per cent a year earlier.

In contrast, the same measure of defaults for loans reached 6 per cent in April, up from 2 per cent a year earlier.

On top of interest rate pressures, "the credit quality of the loan space is poorer than the bond space", noted John McClain, a portfolio manager at Brandywine Global Investors.

Rating agency S&P believes that the 12-month trailing loan default rate could rise to its long-term average of 2.5 per cent by next March, up from 1.42 per cent in April 2023. But in a pessimistic scenario, the number of "stressed borrowers" could surge and credit challenges persist — meaning "many issuers cannot access capital".

Sweeney said that some companies with strong prospects will still find willing lenders.

Private equity firms, which back many loan issuers, are "not going to walk away from a capital investment when they think it could be worth much more — and so that they contribute a certain amount of capital, and then go through the process of an amend and extend", he said.

> 'There is a payment shock unfolding among the weakest issuers in the loan market'

Fixed income

Gupta's steel business in Australia tests appetite for bond sale

ROBERT SMITH — LONDON
ERIC PLATT — NEW YORK

Sanjeev Gupta's Australian steel business has been sounding out investors about a bond sale in a big test of whether institutions are willing to lend to the metals magnate in spite of ongoing criminal investigations of his business empire.

Executives from metal recycling and distribution business InfraBuild met bond fund managers in New York last week — the first time one of Gupta's companies has met a broader group of investors since the collapse of his main lender Greensill Capital plunged his businesses into crisis in 2021.

While the investor meetings — which continue in London this week — are not a formal bond roadshow, the company and its bankers at Jefferies have been informally sounding out investors on a potential bond issue, according to people familiar with the meetings.

Investors have been asked whether they would consider buying a new US dollar bond at a yield of about 14 per cent, the people added, with the company targeting a deal as large as A$1bn ($670mn).

They said the higher yields were being offered to compensate for the reputational risks of lending to a company owned by Gupta, whose GFG Alliance group of companies is under criminal probe in the UK and France.

> 'The underlying business is not horrible, it's just I don't want to have the wrong kind of headlines'

InfraBuild has told investors that it does not believe it is a target of these investigations.

Investors have long seen InfraBuild as one of GFG's stronger businesses — and unlike many other companies in the group it has its accounts audited by a Big Four firm — but several investors told the Financial Times that they were unwilling to lend to the company.

"The underlying business is not horrible, it's just I don't want to walk into the office one day and have the wrong kind of headlines," said one New York-based bond fund manager. "It's just not worth my time."

GFG said: "InfraBuild continues to perform strongly and has secured the backing of top-tier investors for its growth plans."

InfraBuild did recently secure a $350mn asset-backed loan from US funds BlackRock and Silver Point.

A new bond deal would be used to refinance InfraBuild's outstanding $325mn bond and also to raise money for a potential acquisition of Gupta's US steel business.

This deal would also release money for Gupta to repay some of the billions of dollars still owed to Greensill Capital investors who bought packaged up loans to his companies, according to two people familiar with the plans.

Commodities

Fund managers cut raw material bets on growing doubts over China outlook

CHRIS FLOOD AND HARRY DEMPSEY

Fund managers have cut commodities allocations to their lowest levels for three years in a shift that illustrates declining confidence in the outlook for Chinese demand for raw materials and fears that the global economy will enter recession.

Bank of America's monthly global fund manager survey showed that a net 3 per cent of managers held an "underweight" position in commodities in May after canvassing the views of 247 institutional investors that together oversee $708bn of assets.

Investor sentiment towards commodities has weakened markedly, dropping 17 percentage points over the past two months — the steepest deterioration since August 2015, according to BofA.

Most major commodity prices, apart from gold, sugar and beef, have fallen over the past 12 months.

The S&P Goldman Sachs Commodity total return index, the most widely followed commodities benchmark, has dropped 27 per cent since reaching a near eight-year high in June 2022.

Francisco Blanch, BofA's top commodity strategist, said commodity falls had been driven by a combination of rapid rises in US interest rates and the lenient economic sanctions imposed in response to Russia's war in Ukraine, which had allowed Moscow to minimise revenue losses from oil and gas exports.

"This combination of lax commodity sanctions on Russia and less money in the [global financial] system has contributed to a major commodity price pullback," said Blanch.

Sentiment towards commodities has also been dented by evidence that the bounce in Chinese economic activity following the easing in November of coronavirus lockdown restrictions has fizzled out, with official purchasing managers surveys indicating that manufacturing activity shrank in both April and May.

"Growth is stalling in key China sectors, most notably the property sector," said Duncan Wrigley, chief China economist at the consultancy Pantheon Macroeconomics.

Wrigley said he expected the Chinese government to introduce limited new measures to support economic growth but he cautioned that policymakers in Beijing remained wary of the risk of creating another debt hangover if they pursued a stimulus programme on the same scale as the response to the 2007-08 global financial crisis.

Iron ore prices and some Chinese real estate stocks have rallied on expectations of a large property-related stimulus but Aakash Doshi, a senior commodities strategist at Citigroup in New York, cautioned that Beijing would aim "to prop up but not to pump up" domestic economic activity.

Gold is among the assets that have bucked a weaker commodities trend

Property

Demand for European factories defies downturn amid rush to 'nearshoring'

OLIVER TELLING

Manufacturers around the world are snapping up more European factories despite an economic downturn in the region as geopolitical and concerns over supply chains prompt businesses to bring their operations closer to their customers.

Businesses acquired or leased 9.6mn square feet of industrial space in the region in 2022, a 29 per cent increase over the previous year, according to Cushman & Wakefield.

The commercial property broker's analysis covers transactions in nine European countries, including the UK, France and Germany.

Tim Crighton, Cushman's head of logistics and industrial in Europe, said he was seeing clients "nearshoring" by investing in European production so they are less dependent on China as well as other far-flung locations.

Groups from Asia to Europe were acquiring European sites in response to demand from clients in the continent, who had outsourced the production of many of the goods they buy to China and other low-cost manufacturing hubs.

The growing demand for new factories comes as overall take-up of European industrial space declines amid a fall in consumer spending that has prompted retailers and warehouse owners to cut back on investments.

But companies are rethinking their strategy given deepening tension between western governments and Beijing and after the severe disruption to global supply chains during the Covid-19 pandemic.

> 'If you want to continue supplying us, we prefer you do it from Europe instead of China'

Crighton said that the use of robots in manufacturing, which has minimised the cost benefit of producing in regions with cheaper labour, created a "compelling" case for European businesses to boost production closer to consumers.

Pointing to Mercedes-Benz's recently announced plans to build its first factory dedicated to electric vans in Poland — as well as BMW's plans to boost car battery production at a new plant in Hungary — Cushman's report said central and eastern Europe where labour was relatively cheap had in particular seen "major investment in manufacturing".

Bert Hesselink, client relationship director at European commercial property owner CTP, said manufacturing sites were making up an increasing share of its portfolio since a drop-off in demand for warehouse space.

"[Our clients] are being told, 'if you want to continue supplying us, we prefer you do it from Europe instead of China'," he added.

Although investments in new sites were increasing manufacturers' costs during a period of already heightened inflation, he said companies were prioritising securing their operations from the next supply-chain "disaster".

Not all businesses were leaving China, however. Many have seen supply chains affected by elevated energy costs.

In April, Dulux owner Akzo Nobel of the Netherlands said it was actually having to source more from China after energy costs forced its European suppliers to close factories.

Investors face stark choice of siding with US or China

Diana Choyleva

Markets Insight

The technological revolution epitomised by startling advances in artificial intelligence opens up rich opportunities for investors but it also confronts them with a stark choice: are they on the side of the US or China?

For the world is dividing as Washington and Beijing battle for economic and geopolitical supremacy with the weapons of choice: cutting-edge technologies such as AI and quantum computing.

The US and China are so far ahead in this high-tech arms race that others have no realistic chance of carving out their own independent sphere of influence. The EU has ambitions and money but is politically fragmented. India is one country and has scale but is behind in economic development.

As such, given that both China and the US are happy to use economic coercion and sanctions to press their technological advantage, countries, companies and investors will be under growing pressure to choose whose technology they want to use and cannot do without.

The choice that US allies had to make over Huawei's telecommunications equipment and whether to join efforts to deny China advanced semiconductors are just stepstones in a long and all-encompassing confrontation. Hankering for the evolution of a multipolar order is, sadly, just wishful thinking.

Decoupling will be costly, as will its close cousin, de-risking. But any divorce, even the most amicable one, is costly. Both Washington and Beijing have made it explicit that national security concerns trump economics.

Even Treasury secretary Janet Yellen, a relative China dove, has said protecting national security will be the US priority in its relations with China, regardless of the economic expense. Hence the bans that Washington has imposed on exports of high-end chips are now to be followed by curbs on outbound investments in some technologies with significant national security implications.

For his part, Chinese leader Xi Jinping vowed last month to push forward the "profound unity" of economic development and national security.

Xi's comments are a clear indication that China will take steps to boost growth, including encouraging more foreign direct investment, only if they do not jeopardise national security — in other words, the authority of the Chinese Communist party. It had already sent out the same message by launching raids earlier this year on the Chinese offices of US consultancies Bain, Capvision and Mintz. Beijing also banned the sale of some products from US memory chipmaker Micron.

> Decoupling will be costly, as will its close cousin, de-risking. But any divorce, however amicable, is costly

This sharpening of strategic competition between the world's two biggest economies requires a fundamental rethink of investment approaches.

Valuation models based on past performance will be unable to capture the tectonic shifts that are now taking place.

Indeed, no model can factor in unpredictable, politically motivated actions that can upend the prospects of individual firms or entire sectors in an instant.

Complicating matters further, it is unclear which countries will end up in the two spheres of influence. The US has successfully strengthened its military links in the Indo-Pacific but traditional allies such as South Korea and the Philippines are all too aware of the geopolitical economic pull of China.

Or take India, which is a partner of the US in the Quad diplomatic alliance but is also a member of the Brics, a grouping dominated by China.

The Brics group hitherto has punched below its weight but more than a dozen countries are interested in joining the club, something that would bring them closer into China's orbit. Some of them, including energy producers Saudi Arabia and the UAE, have traditionally been firmly in the US camp.

Western companies with substantial business in China, such as Apple, BASF, HSBC, Tesla and Volkswagen, may also find it hard to keep riding two horses in a confrontational, bifurcating world.

Manufacturing supply chains and global finance are highly integrated — so excluding China from your portfolio is not simply a matter of avoiding its stock market or firms.

Against this background, a successful decoupling strategy for equity investors is likely to involve being long those firms that are less exposed to the bifurcation and going short the ones that are stuck in the middle with, say, revenues derived from the US but costs incurred in China.

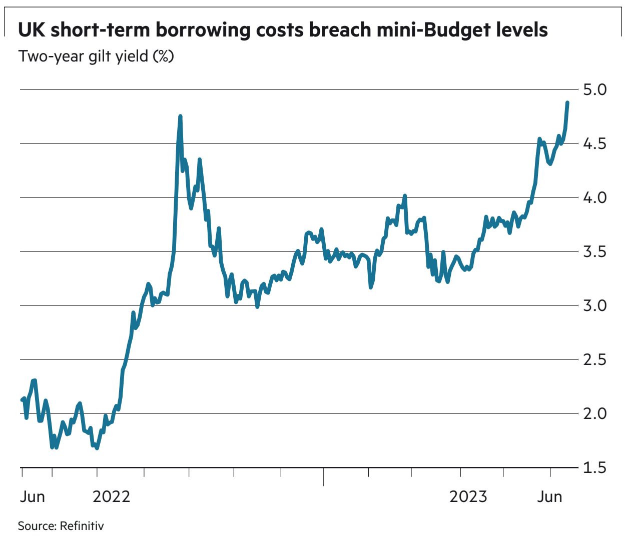
The geopolitical outlook is changing as fast as technology is progressing. Pension funds and other institutional owners of assets need to move with the times and rethink from first principles the remits they give to their fund managers.

Diana Choyleva is chief economist at Enodo Economics

The day in the markets

What you need to know

- **Wall Street and European stocks rise after US inflation lower than forecast**
- **Traders expect Fed to pause interest rate increases**
- **Treasuries and the dollar come under selling pressure**



Wall Street stocks rallied yesterday after US inflation came in lower than expected, bolstering investors' bets that the Federal Reserve will not raise interest rates this week.

The benchmark S&P 500 rose 0.7 per cent by midday in New York while the tech-heavy Nasdaq Composite added 0.8 per cent.

The latest US consumer price index report showed that headline inflation slowed to 4 per cent year on year in May, down from 4.9 per cent in the previous month, marking its lowest level since March 2021.

The figure was slightly below the consensus forecast of economists polled by Reuters and signalled that the Fed's tightening campaign was beginning to take effect.

The data "should cement expectations for the Fed to keep rates unchanged tomorrow but the commentary around the decision is likely to remain hawkish", said James Knightley, chief international economist at ING.

Markets were pricing in a 93 per cent probability that the Fed would hold raising interest rates today, according to data compiled by Refinitiv and based on interest rate derivatives prices.

"The consensus view is that inflation is on a path lower, the economy is slowing but not contracting and the Fed will chill and reassess in July," said Mike Zigmont, head of research and trading at Harvest Volatility.

Yields on two-year US Treasuries, which are more sensitive to monetary policy expectations, rose 4 basis points to 4.63 per cent while those on benchmark 10-year bonds added 2bp to 3.79 per cent as the debt was sold.

The US Dollar index, a measure of the currency's value against a basket of six peers, typically weakens when investors expect lower rates and lost 0.4 per cent.

The moves came a day after the benchmark S&P 500 reached its highest point since last April and the Nasdaq its highest level in 14 months.

Across the Atlantic, the region-wide Stoxx Europe 600 rose 0.6 per cent while Frankfurt's Xetra Dax firmed 0.8 per cent.

In the UK, strong wage data pushed short-term gilt yields above the level reached during the turmoil following the "mini" Budget last autumn, raising the likelihood that the Bank of England will increase rates further.

Yields on the two-year gilt rose 26bp to 4.89 per cent compared with the peak of 4.64 per cent reached in late September.

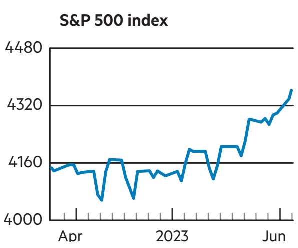
Daria Mosolova

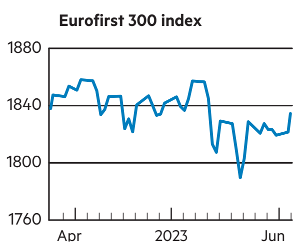
Markets update

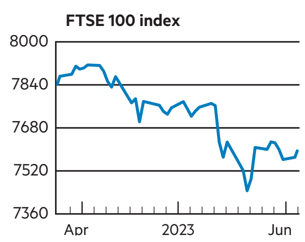
	US	Eurozone	Japan	UK	China	Brazil
Stocks	**S&P 500**	**Eurofirst 300**	**Nikkei 225**	**FTSE100**	**Shanghai Comp**	**Bovespa**
Level	4362.85	1834.46	33018.65	7594.78	3233.67	117168.46
% change on day	0.55	0.71	1.80	0.32	0.15	-0.14
Currency	**$ index (DXY)**	**$ per €**	**Yen per $**	**$ per £**	**Rmb per $**	**Real per $**
Level	103.303	1.080	139.815	1.261	7.153	4.853
% change on day	-0.339	0.465	0.136	0.799	0.151	-0.655
Govt. bonds	**10-year Treasury**	**10-year Bund**	**10-year JGB**	**10-year Gilt**	**10-year bond**	**10-year bond**
Yield	3.782	2.420	0.416	4.521	2.670	10.947
Basis point change on day	0.300	3.300	-0.780	8.200	-3.900	7.100
World index, Commods	**FTSE All-World**	**Oil - Brent**	**Oil - WTI**	**Gold**	**Silver**	**Metals (LMEX)**
Level	446.17	74.14	69.29	1952.90	24.21	3690.60
% change on day	0.76	3.20	3.23	-0.38	-0.43	-1.25

Yesterday's close apart from: Currencies = 16:00 GMT; S&P, Bovespa, All World, Oil = 17:00 GMT; Gold, Silver = London pm fix. Bond data supplied by Tullett Prebon.

Main equity markets







Biggest movers

%	US		Eurozone		UK	
Ups	Norwegian Cruise Line Holdings Ltd	5.43	A.p. Moller - Maersk B	4.39	Glencore	5.28
	Freeport-mcmoran	5.31	Saint Gobain	3.11	Antofagasta	3.54
	Halliburton	5.26	Cnh Industrial	3.07	Anglo American	2.75
	Assurant	4.53	Bureau Veritas	2.93	Rio Tinto	2.66
	Comerica	4.48	Adidas	2.46	Flutter Entertainment	2.50
Downs	Biogen	-3.53	Telefonica	-5.18	Admiral	-5.11
	Zions Ban Na	-2.51	Grifols	-2.04	Persimmon	-4.38
	Solaredge	-2.02	Acs Const.	-1.54	Segro	-3.70
	Bio-techne	-1.61	Endesa	-1.38	Taylor Wimpey	-3.23
	Host Hotels & Resorts	-1.42	Coloplast	-1.12	Barratt Developments	-2.73

Prices taken at 17:00 GMT. Based on the constituents of the FTSE Eurofirst 300 Eurozone

All data provided by Morningstar unless otherwise noted.

Wall Street

Software stalwart **Oracle** hit a fresh high after bringing in record revenue of $50bn for its fiscal 2023 year.

Underpinning these results was a 54 per cent year-on-year jump in cloud sales during its financial fourth quarter, aided by the popularity of artificial intelligence apps.

Chair Larry Ellison said Oracle's Gen2 Cloud had "quickly become the number one choice for running generative AI workloads", adding that "Nvidia themselves are using our clusters . . . for their AI infrastructure".

Utah-based lender **Zions Bancorp** was near the bottom of the S&P 500 index following reports that its net interest income — the difference between what it pays on deposits and what it earns from loans and other assets — was decreasing in the second quarter.

Manchester United rallied following rumours that Qatari Sheikh Jassim Bin Hamad Al Thani was set to take over the English football club.

CNBC, quoting Qatar's Al-Watan newspaper, said Sheikh Jassim was about to be announced as the preferred bidder, a move that would see off a rival proposal from British billionaire Sir Jim Ratcliffe.

The UK's Mirror newspaper later reported that the Qatari camp had branded the claims as "pure speculation". *Ray Douglas*

Europe

A discounted share sale weighed on **Almirall**, the Spanish drugmaker, which raised €200mn through the issuance of more than 24mn shares at €8.20 each.

That was 5.7 per cent lower than Monday's closing price. Proceeds from the sale were earmarked for "inorganic growth opportunities", including bolt-on acquisitions that were "currently under analysis", it said.

Some well-received projections lifted Sweden's **Storytel**, which forecast net sales of "at least" SKr5bn ($460mn) by 2026.

The audiobook streamer also unveiled a target of 3.2mn paid subscribers in three years' time, up from around 2mn reported last month.

A broker's backing helped lift **Neste**, the oil refiner and biofuel producer, which had its rating upgraded from "sector perform" to "outperform" by RBC Europe.

Analysts said the revision reflected the Finnish group's "competitive advantage in a sustainable aviation fuel market about to accelerate substantially".

RBC's research suggested airlines were about to sign more offtake deals in line with "SAF policies worldwide".

Germany's **Dürr** rallied after the machinery maker announced that it was buying automation specialist BBS from private equity firm EQT and its co-shareholders. *Ray Douglas*

London

Heading the FTSE 250 index was trading platform **Plus500**, which disclosed that it had bought £101mn of its own shares — representing about 8.2 per cent of its share capital — from Odey Asset Management.

This comes as partners at Odey AM said at the weekend that founder Crispin Odey would leave the firm in the wake of allegations of sexual misconduct. Odey denies the allegations.

Plus500 said it had sought to act "quickly to execute this opportunity to acquire shares at an attractive price" of £13.83 each, below Monday's close of £13.90.

In the lower half of the mid-cap index was another trading platform, **CMC Markets**, which warned of "quiet market conditions" in the first two and a half months of its fiscal 2024 year.

Client trading activity was down between 15 and 20 per cent — softness that would "negatively impact" its first-quarter net operating income, said CMC.

At the bottom of the FTSE 100 index was **Admiral**, which had its rating downgraded to "sell" by Citi, whose analysts also placed the insurer on a "negative catalyst watch".

Against a backdrop of claims inflation, the broker said consensus earnings were "too optimistic on Admiral's UK motor margin improvement". *Ray Douglas*

MARKET DATA

WORLD MARKETS AT A GLANCE

FT.COM/MARKETSDATA

Change during previous day's trading (%)

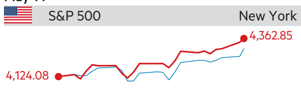
S&P 500	Nasdaq Composite	Dow Jones Ind	FTSE 100	FTSE Eurofirst 300	Nikkei	Hang Seng	FTSE All World $	$ per €	$ per £	¥ per $	£ per €	Oil Brent $ Sep	Gold $
0.55%	0.56%	0.39%	0.32%	0.71%	1.80%	0.60%	0.76%	0.465%	0.799%	0.136%	-0.233%	2.26%	-0.38%

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

AMERICAS

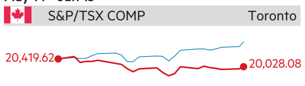
May 14 - Jun 13 — Index — All World

S&P 500 — New York



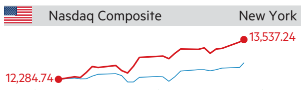
Day 0.55% Month 5.82% Year 16.39%

S&P/TSX COMP — Toronto



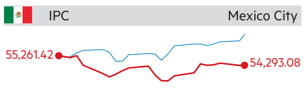
Day 0.44% Month -2.02% Year 1.34%

Nasdaq Composite — New York



Day 0.56% Month 10.24% Year 25.28%

IPC — Mexico City

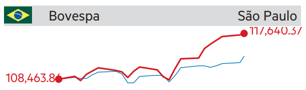


Day 0.36% Month -0.87% Year 12.44%

Dow Jones Industrial — New York

Day 0.39% Month 2.69% Year 12.06%

Bovespa — São Paulo

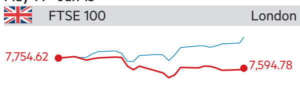


Day -0.14% Month 8.03% Year 14.21%

EUROPE

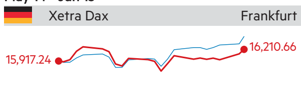
May 14 - Jun 13 — Index — All World

FTSE 100 — London



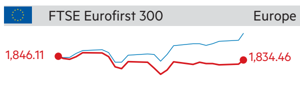
Day 0.32% Month -2.03% Year 5.43%

Xetra Dax — Frankfurt



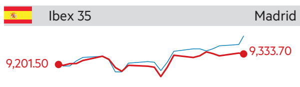
Day 0.83% Month 1.67% Year NaN%

FTSE Eurofirst 300 — Europe



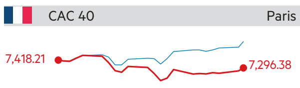
Day 0.71% Month -0.43% Year 13.24%

Ibex 35 — Madrid



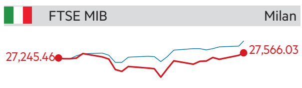
Day -0.11% Month 1.08% Year 11.24%

CAC 40 — Paris



Day 0.56% Month -1.67% Year 17.84%

FTSE MIB — Milan

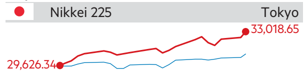


Day 0.57% Month 0.80% Year 22.26%

ASIA

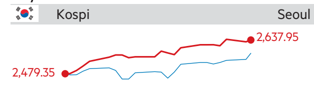
May 14 - Jun 13 — Index — All World

Nikkei 225 — Tokyo



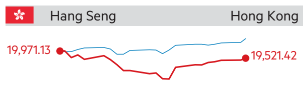
Day 1.80% Month 12.38% Year 18.70%

Kospi — Seoul



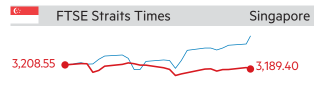
Day 0.33% Month 6.57% Year 1.62%

Hang Seng — Hong Kong



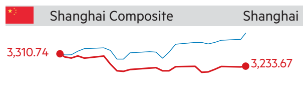
Day 0.60% Month -0.52% Year -10.46%

FTSE Straits Times — Singapore



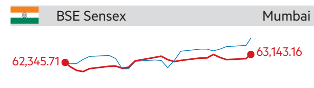
Day -0.21% Month -0.55% Year 0.29%

Shanghai Composite — Shanghai



Day 0.15% Month -1.18% Year -1.56%

BSE Sensex — Mumbai



Day 0.67% Month 1.77% Year 16.25%

Country	Index	Latest	Previous
Argentina	Merval	380717.27	381672.46
Australia	All Ordinaries	7329.10	7312.30
	S&P/ASX 200	7138.90	7122.50
	S&P/ASX 200 Res	5967.90	6028.00
Austria	ATX	3184.94	3171.19
Belgium	BEL 20	3650.49	3642.11
	BEL Mid	10204.46	10207.96
Brazil	IBovespa	117168.46	117336.34
Canada	S&P/TSX 60	1203.48	1198.19
	S&P/TSX Comp	20007.99	19921.31
	S&P/TSX Div Met & Min	1745.56	1755.10
Chile	S&P/CLX IGPA Gen	29182.51	29116.62
China	FTSE A200	10140.20	10101.49
	FTSE B35	9000.71	8988.96
	Shanghai A	3389.73	3384.66
	Shanghai B	271.48	270.92
	Shanghai Comp	3233.67	3228.83
	Shenzhen A	2127.74	2114.53
	Shenzhen B	1123.80	1123.26
Colombia	COLCAP	1261.61	1260.21
Croatia	CROBEX	2013.05	2011.29

Country	Index	Latest	Previous
Cyprus	CSE M&P Gen	68.46	68.68
Czech Republic	PX	1316.98	1316.55
Denmark	OMXC Copenahgen 20	2036.31	2034.96
Egypt	EGX 30	17704.58	17739.63
Estonia	OMX Tallinn	1882.67	1880.89
Finland	OMX Helsinki General	10482.60	10372.92
France	CAC 40	7290.80	7250.35
	SBF 120	5567.39	5537.55
Germany	M-DAX	27473.14	27305.83
	TecDAX	3249.53	3230.00
	XETRA Dax	16230.68	16097.87
Greece	Athens Gen	1266.31	1263.38
	FTSE/ASE 20	3079.06	3071.56
Hong Kong	Hang Seng	19521.42	19404.31
	HS China Enterprise	6618.29	6585.68
	HSCC Red Chip	3795.38	3812.00
Hungary	Bux	49866.76	50009.74
India	BSE Sensex	63143.16	62724.71
	Nifty 500	16048.20	15929.10
Indonesia	Jakarta Comp	6719.01	6722.37
Ireland	ISEQ Overall	8597.88	8532.64
Israel	Tel Aviv 125	1801.43	1801.02

Country	Index	Latest	Previous
Italy	FTSE Italia All-Share	29733.51	29557.50
	FTSE Italia Mid Cap	43962.87	43587.52
	FTSE MIB	27566.03	27410.47
Japan	2nd Section	7228.27	7239.06
	Nikkei 225	33018.65	32434.00
	S&P Topix 150	1978.84	1952.29
	Topix	2264.79	2238.77
Jordan	Amman SE	2485.69	2510.41
Kenya	NSE 20	1588.20	1594.02
Kuwait	KSX Market Index	6633.44	6603.51
Latvia	OMX Riga	1147.38	1155.77
Lithuania	OMX Vilnius	992.67	992.29
Luxembourg	LuxX	1456.68	1449.77
Malaysia	FTSE Bursa KLCI	1380.61	1386.77
Mexico	IPC	54472.59	54278.12
Morocco	MASI	11060.42	11003.59
Netherlands	AEX	767.71	760.34
	AEX All Share	1040.80	1029.93
New Zealand	NZX 50	11652.84	11615.55
Nigeria	SE All Share	55930.97	55956.59
Norway	Oslo All Share	1017.37	1006.88
Pakistan	KSE 100	41538.72	41782.93

Country	Index	Latest	Previous
Philippines	Manila Comp	6507.26	6507.15
Poland	Wig	65632.97	66297.57
Portugal	PSI 20	5997.68	5984.40
	PSI General	4644.11	4631.63
Romania	BET Index	12006.24	12187.24
Russia	Micex Index	2436.57	2445.30
	RTX	1245.71	1212.57
Saudi-Arabia	TADAWUL All Share Index	11423.13	11396.13
Singapore	FTSE Straits Times	3189.40	3196.07
Slovakia	SAX	316.91	316.91
Slovenia	SBI TOP	-	-
South Africa	FTSE/JSE All Share	77827.73	76282.13
	FTSE/JSE Res 20	68368.20	66626.46
	FTSE/JSE Top 40	72485.80	70968.68
South Korea	Kospi	2637.95	2629.35
	Kospi 200	346.39	344.57
Spain	IBEX 35	9333.70	9344.40
Sri Lanka	CSE All Share	9069.64	9014.83
Sweden	OMX Stockholm 30	2320.96	2299.50
	OMX Stockholm AS	861.05	855.15
Switzerland	SMI Index	11327.27	11301.25

Country	Index	Latest	Previous
Taiwan	Weighted Pr	17216.60	16955.37
Thailand	Bangkok SET	1563.63	1551.17
Turkey	BIST 100	5441.75	5588.98
UAE	Abu Dhabi General Index	9222.93	9251.11
UK	FT 30	2782.10	2779.10
	FTSE 100	7594.78	7570.69
	FTSE 4Good UK	6934.40	6921.42
	FTSE All Share	4151.46	4140.42
	FTSE techMARK 100	6823.92	6788.04
USA	DJ Composite	11286.33	11246.77
	DJ Industrial	34198.02	34066.33
	DJ Transport	14387.85	14305.04
	DJ Utilities	910.57	912.92
	Nasdaq 100	14860.94	14784.30
	Nasdaq Cmp	13537.24	13461.92
	NYSE Comp	15666.78	15548.47
	S&P 500	4362.85	4338.93
	Wilshire 5000	42053.18	41446.59
Venezuela	IBC	35500.36	34072.78
Vietnam	VNI	1122.46	1116.02

Country	Index	Latest	Previous
Cross-Border	DJ Global Titans ($)	504.22	501.26
	Euro Stoxx 50 (Eur)	4350.92	4316.49
	Euronext 100 ID	1361.51	1350.48
	FTSE 4Good Global ($)	11010.69	10942.64
	FTSE All World ($)	446.17	442.82
	FTSE E300	1834.46	1821.50
	FTSE Eurotop 100	3641.55	3615.72
	FTSE Global 100 ($)	2983.70	2964.37
	FTSE Gold Min ($)	1876.30	1877.71
	FTSE Latibex Top (Eur)	4440.00	4432.20
	FTSE Multinationals ($)	3065.34	3035.89
	FTSE World ($)	814.30	808.17
	FTSEurofirst 100 (Eur)	4923.89	4884.86
	FTSEurofirst 80 (Eur)	5899.54	5855.80
	MSCI ACWI Fr ($)	671.33	667.08
	MSCI All World ($)	2906.01	2885.63
	MSCI Europe (Eur)	1860.00	1853.07
	MSCI Pacific ($)	2830.92	2821.28
	S&P Euro (Eur)	1921.33	1908.58
	S&P Europe 350 (Eur)	1880.05	1867.62
	S&P Global 1200 ($)	3238.31	3215.43
	Stoxx 50 (Eur)	3996.51	3974.16

(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
Tesla	212.8	256.06	6.23
Nvidia	120.3	406.37	11.55
Advanced Micro Devices	72.9	129.09	-0.10
Apple	45.6	183.12	-0.67
Microsoft	33.3	331.76	-0.10
Amazon.com	32.9	126.54	-0.03
Oracle	27.4	117.93	1.50
Meta Platforms	20.3	271.74	0.69
Adobe	18.7	471.66	-2.97
Netflix	16.9	432.63	8.66

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Norwegian Cruise Line Holdings Ltd	19.41	1.00	5.43
Freeport-mcmoran	39.83	2.01	5.31
Halliburton	33.40	1.67	5.26
Assurant	131.32	5.69	4.53
Comerica	42.87	1.84	4.48
Downs			
Biogen	302.36	-11.06	-3.53
Zions Ban Na	29.48	-0.76	-2.51
Solaredge	279.66	-5.76	-2.02
Bio-techne	77.39	-1.27	-1.61
Host Hotels & Resorts	17.37	-0.25	-1.42

Based on the constituents of the S&P500

LONDON

ACTIVE STOCKS	stock traded m's	close price	Day's change
Rio Tinto	263.1	5203.00	135.00
Glencore	223.0	460.00	23.05
Astrazeneca	204.0	11740.00	-90.00
Shell	186.8	2296.00	18.00
Unilever	138.0	3965.50	-30.50
Gsk	136.7	1366.60	-7.20
Bp	122.7	464.85	2.25
Lloyds Banking	121.7	45.30	0.32
Anglo American	113.2	2483.00	66.50
British American Tobacco	111.9	2577.50	-1.50

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Plus500 Ltd	1481.00	91.00	6.55
Glencore	460.00	23.05	5.28
Carnival	1064.50	40.00	3.90
Ibstock	161.10	5.90	3.80
Antofagasta	1507.50	51.50	3.54
Downs			
Admiral	2209.00	-119.00	-5.11
Ferrexpo	91.85	-4.50	-4.67
Persimmon	1167.00	-53.50	-4.38
Crest Nicholson Holdings	223.80	-10.20	-4.36
Target Healthcare Reit	74.10	-3.20	-4.14

Based on the constituents of the FTSE 350 index

EURO MARKETS

ACTIVE STOCKS	stock traded m's	close price	Day's change
Novartis N	310.6	92.00	-0.87
Nestle N	292.7	109.03	-0.53
Asml Holding	252.5	678.60	7.10
Roche Gs	247.5	286.57	0.26
Richemont N	208.0	151.26	2.96
Stellantis	204.6	15.56	0.27
Unicredit	202.6	18.52	0.01
Eni	162.9	12.96	0.13
Abb Ltd N	138.7	36.07	0.48
Intesa Sanpaolo	134.5	2.31	0.01

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Neste	41.23	2.16	5.53
A.p. M__ller - M__rsk B A/s	1706.08	71.79	4.39
A.p. M__ller - M__rsk A A/s	1683.94	60.38	3.72
Umg	19.74	0.41	2.15
Mowi	16.02	0.33	2.11
Downs			
Orange	10.29	-0.10	-0.94
Sanofi	94.13	-0.89	-0.94
Novartis N	92.00	-0.87	-0.94
Dt.telekom Ag Na	18.86	-0.14	-0.76
Enel	6.07	-0.04	-0.67

Based on the constituents of the FTSEurofirst 300 Eurozone index

TOKYO

ACTIVE STOCKS	stock traded m's	close price	Day's change
Softbank .	2063.7	6310.00	315.00
Toyota Motor	1524.2	2173.50	104.50
Advantest	1248.3	19245.00	880.00
Tokyo Electron	1112.6	19900.00	945.00
Mitsubishi	579.8	6471.00	184.00
Mitsubishi Ufj Fin,.	564.6	963.20	2.20
Keyence	550.0	70440.00	430.00
Renesas Electronics	517.1	2567.00	91.50
Sony	508.8	13920.00	115.00
Fast Retailing Co.,	483.6	35800.00	1010.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Hitachi Zosen	919.00	50.00	5.75
Softbank .	6310.00	315.00	5.25
Toyota Motor	2173.50	104.50	5.05
Tokyo Electron	19900.00	945.00	4.99
Advantest	19245.00	880.00	4.79
Downs			
Osaka Gas Co.,	2240.00	-54.00	-2.35
Eisai Co.,	10555.00	-240.00	-2.22
Nippon Paper Industries Co Ltd	1257.00	-21.00	-1.64
Shizuoka Fin .	997.00	-14.00	-1.38
Pacific Metals Co.,	1548.00	-21.00	-1.34

Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Jun 13 price(p)	%Chg week	%Chg ytd
Winners			
Ocado	403.00	12.4	-
Glencore	460.00	6.7	-
Melrose Industries	526.00	5.4	31.4
Int Consolidated Airlines S.a.	165.75	5.3	33.8
Smiths	1708.00	5.3	6.9
Airtel Africa	132.40	5.0	18.4
Antofagasta	1507.50	4.3	-2.5
Hargreaves Lansdown	863.40	4.2	0.8
Ashtead	5412.00	3.8	13.3
Weir	1852.50	3.7	11.0
Auto Trader	638.00	3.4	23.7
Burberry	2262.00	2.4	11.4
Losers			
Croda Int	5486.00	-12.0	-
Segro	750.60	-9.6	-1.7
Admiral	2209.00	-7.7	3.4
Beazley	568.00	-7.3	-
Persimmon	1167.00	-6.7	-4.1
Vodafone	72.43	-5.9	-14.0
Taylor Wimpey	110.90	-5.7	9.2
British Land	336.70	-5.5	-
Land Securities	597.40	-5.4	-3.9
Barratt Developments	452.30	-5.3	14.0
Reckitt Benckiser	5984.00	-5.0	4.0
Smurfit Kappa	2884.00	-4.5	-6.1

FTSE 250	Jun 13 price(p)	%Chg week	%Chg ytd
Winners			
Carnival	1064.50	19.5	83.7
Firstgroup	139.30	17.5	37.9
Discoverie	920.00	15.4	25.9
Apax Global Alpha	183.40	10.9	-2.7
Ti Fluid Systems	133.60	5.5	0.0
Digital 9 Infrastructure	65.60	5.5	-
Baltic Classifieds	174.00	5.5	23.6
Petershill Partners	164.40	5.2	-2.7
Ssp	281.20	5.2	22.8
Investec	472.90	5.2	-7.5
Tui Ag	565.50	5.0	53.0
Harbour Energy	251.30	4.9	-
Losers			
Crest Nicholson Holdings	223.80	-11.4	-5.4
Lancashire Holdings	559.50	-10.2	-
Videndum	633.00	-9.6	-
Target Healthcare Reit	74.10	-9.0	-7.6
Asos	325.00	-8.7	-
Great Portland Estates	460.20	-8.7	-7.0
Warehouse Reit	88.30	-8.7	-15.6
Vanquis Banking	207.50	-7.8	8.5
Uk Commercial Property Reit	53.70	-7.1	-8.0
W.a.g Payment Solutions	89.40	-6.9	12.6
Bellway	2172.00	-6.4	13.9
Assura	47.30	-6.2	-

FTSE SmallCap	Jun 13 price(p)	%Chg week	%Chg ytd
Winners			
888 Holdings	111.50	39.4	28.2
Alfa Fin Software Holdings	189.00	16.3	13.9
Metro Bank Holdings	117.50	15.2	-2.9
On The Beach	113.20	11.9	-
Paypoint	454.00	11.5	-
Ocean Wilsons (holdings) Ltd	924.00	11.1	-0.6
Pensionbee	66.60	11.0	23.6
Ao World	77.60	10.4	49.2
Galliford Try Holdings	200.50	9.3	26.1
Ten Entertainment	305.00	7.8	20.1
Petrofac	74.55	6.9	6.1
Lsl Property Services	275.00	6.2	10.0
Losers			
Esken	3.90	-16.1	-
Costain	47.50	-10.4	20.6
Dwf	48.00	-9.4	-
Dfs Furniture	110.00	-7.6	-
Residential Secure ome	66.80	-7.5	-
Ct Property Trust	81.40	-7.0	18.7
Pendragon	15.92	-6.1	-
Impact Healthcare Reit	93.50	-6.1	-11.0
Norcros	170.00	-6.1	-5.6
De La Rue	35.70	-6.1	-54.5
Kin And Carta	58.90	-5.9	-
Vpc Specialty Lending Investments	70.90	-5.6	-14.8

Industry Sectors	Jun 13 price(p)	%Chg week	%Chg ytd
Winners			
Industrial Transportation	3881.03	4.5	11.8
Industrial Metals	6640.61	3.5	-
Travel & Leisure	7782.52	2.5	25.2
Aerospace & Defense	6425.13	1.8	25.2
Personal Goods	31285.96	1.7	1.7
Software & Computer Services	2047.69	1.7	15.8
Industrial Engineering	14729.31	1.5	6.4
Automobiles & Parts	1810.55	1.1	21.5
Construction & Materials	8013.37	0.8	16.5
Electronic & Electrical Equip.	10466.64	0.5	20.9
Oil & Gas Producers	7955.03	0.4	-1.8
Support Services	10780.74	0.4	8.5
Losers			
Chemicals	9986.76	-7.8	-
Nonlife Insurance	3088.02	-6.6	-7.8
Real Estate Investment Trusts	2136.13	-5.7	-4.0
Household Goods	10678.92	-5.2	7.6
Mobile Telecommunications	2052.88	-4.1	-3.9
Gas Water & Multiutilities index	5934.05	-2.8	4.8
Food & Drug Retailers	4095.15	-2.4	-0.6
Mining	11006.99	-2.4	-1.5
Life Insurance	6745.98	-2.4	-4.4
Real Estate & Investment Servic	2151.69	-1.9	1.6
Electricity	11116.55	-1.7	3.9
Tobacco	28417.65	-1.0	-

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

CURRENCIES

Jun 13	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	247.2040	0.3775	267.0426	1.7661	311.5991	2.8189
Australia	Australian Dollar	1.4728	-0.0090	1.5909	-0.0015	1.8564	0.0028
Bahrain	Bahrainin Dinar	0.3770	-	0.4073	0.0021	0.4752	0.0036
Bolivia	Bolivian Boliviano	6.9100	-	7.4645	0.0380	8.7100	0.0656
Brazil	Brazilian Real	4.8525	-0.0320	5.2419	-0.0077	6.1165	0.0060
Canada	Canadian Dollar	1.3294	-0.0076	1.4360	-0.0009	1.6756	0.0031
Chile	Chilean Peso	804.0250	-4.2250	868.5496	-0.1161	1013.4684	2.3470
China	Chinese Yuan	7.1531	0.0107	7.7271	0.0509	9.0164	0.0814
Colombia	Colombian Peso	4199.2550	19.2550	4536.2542	43.8024	5293.1365	63.9518
Costa Rica	Costa Rican Colon	544.7150	0.6750	588.4294	3.7231	686.6098	6.0153
Czech Republic	Czech Koruna	22.0181	-0.1150	23.7850	-0.0024	27.7536	0.0651
Denmark	Danish Krone	6.8991	-0.0351	7.4528	0.0002	8.6963	0.0215
Egypt	Egyptian Pound	30.8929	0.0181	33.3721	0.1895	38.9403	0.3159
Hong Kong	Hong Kong Dollar	7.8338	-0.0001	8.4625	0.0431	9.8745	0.0743
Hungary	Hungarian Forint	342.7217	-0.6838	370.2257	1.1511	431.9985	2.3979
India	Indian Rupee	82.3775	-0.0550	88.9885	0.3942	103.8363	0.7132

Jun 13	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	14860.0000	-2.5000	16052.5496	79.0784	18730.9413	137.9129
Israel	Israeli Shekel	3.5598	-0.0403	3.8454	-0.0238	4.4870	-0.0167
Japan	Japanese Yen	139.8150	0.1900	151.0354	0.9736	176.2359	1.5649
..One Month		139.8143	0.1886	151.0349	0.9727	176.2351	1.5634
..Three Month		139.8130	0.1860	151.0340	0.9708	176.2336	1.5604
..One Year		139.8072	0.1745	151.0296	0.9622	176.2351	1.5544
Kenya	Kenyan Shilling	139.6500	0.2050	150.8572	0.9888	176.0279	1.5821
Kuwait	Kuwaiti Dinar	0.3074	-	0.3320	0.0017	0.3874	0.0029
Malaysia	Malaysian Ringgit	4.6170	-0.0030	4.9875	0.0222	5.8197	0.0401
Mexico	Mexican Peso	17.2410	-0.0810	18.6246	0.0078	21.7322	0.0623
New Zealand	New Zealand Dollar	1.6238	-0.0117	1.7541	-0.0036	2.0468	0.0008
Nigeria	Nigerian Naira	463.0000	-1.5000	500.1566	0.9358	583.6085	2.5186
Norway	Norwegian Krone	10.6353	-0.1926	11.4888	-0.1485	13.4057	-0.1400
Pakistan	Pakistani Rupee	287.5000	0.0900	310.5724	1.6789	362.3919	2.8418
Peru	Peruvian Nuevo Sol	3.6408	-0.0173	3.9330	0.0014	4.5892	0.0129
Philippines	Philippine Peso	55.9565	-0.0935	60.4471	0.2074	70.5328	0.4142

Jun 13	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	4.1489	0.0152	4.4819	0.0392	5.2297	0.0584
Romania	Romanian Leu	4.5936	-0.0179	4.9622	0.0060	5.7902	0.0212
Russia	Russian Ruble	83.9763	0.6513	90.7155	1.1621	105.8515	1.6119
Saudi Arabia	Saudi Riyal	3.7501	-	4.0511	0.0206	4.7270	0.0356
Singapore	Singapore Dollar	1.3408	-0.0033	1.4484	0.0039	1.6901	0.0087
South Africa	South African Rand	18.5488	-0.0100	20.0373	0.0913	23.3806	0.1636
South Korea	South Korean Won	1271.4500	-16.6500	1373.4864	-10.8977	1602.6548	-8.7595
Sweden	Swedish Krona	10.7045	-0.1074	11.5635	-0.0565	13.4929	-0.0327
Switzerland	Swiss Franc	0.9054	-0.0039	0.9781	0.0008	1.1413	0.0037
Taiwan	New Taiwan Dollar	30.7195	-0.0360	33.1848	0.1304	38.7217	0.2466
Thailand	Thai Baht	34.5500	-0.0500	37.3227	0.1364	43.5501	0.2654
Tunisia	Tunisian Dinar	3.0979	-0.0117	3.3465	0.0045	3.9049	0.0148
Turkey	Turkish Lira	23.6393	-0.0183	25.5363	0.1105	29.7971	0.2016
United Arab Emirates	UAE Dirham	3.6729	-0.0001	3.9676	0.0202	4.6296	0.0348
United Kingdom	Pound Sterling	0.7933	-0.0060	0.8570	-0.0021	-	-
..One Month		0.7934	-0.0060	0.8569	-0.0021	-	-

Jun 13	Currency	DOLLAR Closing Mid	DOLLAR Day's Change	EURO Closing Mid	EURO Day's Change	POUND Closing Mid	POUND Day's Change
..Three Month		0.7935	-0.0060	0.8567	-0.0021	-	-
..One Year		0.7931	-0.0062	0.8553	-0.0022	-	-
United States	United States Dollar	-	-	1.0803	0.0055	1.2605	0.0095
..One Month		-	-	1.0801	-0.1708	1.2606	0.0095
..Three Month		-	-	1.0797	-0.1707	1.2607	0.0095
..One Year		-	-	1.0783	-0.1707	1.2603	0.0093
Vietnam	Vietnamese Dong	23494.5000	14.5000	25380.0021	144.8738	29614.7126	241.1335
European Union	Euro	0.9257	-0.0047	-	-	1.1669	0.0029
..One Month		0.9255	-0.0047	-	-	1.1667	0.0029
..Three Month		0.9252	-0.0047	-	-	1.1665	0.0029
..One Year		0.9237	-0.0047	-	-	1.1651	0.0027

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

FTSE ACTUARIES SHARE INDICES

UK SERIES
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Produced in conjunction with the Institute and Faculty of Actuaries

	£ Strlg Jun 13	Day's chge%	Euro Index	£ Strlg Jun 12	£ Strlg Jun 09	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	7594.78	0.32	6915.01	7570.69	7562.36	7205.81	3.75	1.84	14.47	159.51	7966.62
FTSE 250 (250)	19188.50	-0.01	17471.04	19190.81	19091.66	19160.21	3.30	0.71	42.88	286.63	16223.46
FTSE 250 ex Inv Co (169)	19821.72	-0.02	18047.59	19826.67	19724.94	19665.40	3.42	0.75	38.99	307.14	17110.16
FTSE 350 (350)	4192.10	0.27	3816.89	4180.77	4173.74	4007.68	3.69	1.70	15.99	84.43	8719.45
FTSE 350 ex Investment Trusts (266)	4138.48	0.29	3768.07	4126.65	4120.30	3945.38	3.74	1.76	15.15	85.09	4450.44
FTSE 350 Higher Yield (135)	3499.40	0.22	3186.19	3491.64	3503.22	3542.84	5.16	1.69	11.45	94.94	8267.26
FTSE 350 Lower Yield (215)	4484.55	0.32	4083.16	4470.31	4441.00	4034.91	2.26	1.70	26.05	59.71	5598.74
FTSE SmallCap (226)	6287.55	0.10	5724.79	6281.49	6262.34	6503.26	3.59	-0.59	-46.93	96.93	10756.27
FTSE SmallCap ex Inv Co (119)	5108.75	-0.11	4651.49	5114.16	5088.57	5456.82	3.69	0.83	32.66	80.78	9089.45
FTSE All-Share (576)	4151.46	0.27	3779.89	4140.42	4133.32	3977.61	3.69	1.64	16.50	83.15	8718.89
FTSE All-Share ex Inv Co (385)	4063.72	0.28	3700.00	4052.31	4045.89	3880.80	3.74	1.75	15.25	83.31	4436.75
FTSE All-Share ex Multinationals (515)	1088.32	-0.19	821.19	1090.37	1088.59	1104.60	4.09	1.11	22.06	21.61	2367.21
FTSE Fledgling (78)	11629.90	0.20	10588.98	11606.41	11588.73	12619.66	3.21	-1.03	-30.38	172.47	25618.17
FTSE Fledgling ex Inv Co (30)	15715.43	0.31	14308.83	15667.27	15565.99	17913.10	3.49	6.19	4.63	294.40	33711.40
FTSE All-Small (304)	4383.17	0.10	3990.85	4378.68	4365.71	4544.97	3.57	-0.62	-45.50	67.43	9617.25
FTSE All-Small ex Inv Co (149)	3846.38	-0.09	3502.11	3849.83	3830.35	4118.00	3.69	1.03	26.36	61.24	8667.69
FTSE AIM All-Share (713)	794.72	0.28	723.59	792.48	793.34	924.06	1.82	1.57	35.04	5.95	941.33
FTSE All-Share Technology (18)	2138.17	0.62	1856.99	2124.94	2086.43	1708.11	1.80	1.50	37.24	20.62	3130.08
FTSE All-Share Telecommunications (6)	1322.16	-0.84	1148.30	1333.38	1362.99	2009.76	8.00	1.52	8.23	39.79	2090.26
FTSE All-Share Health Care (13)	14979.11	-0.62	13009.30	15072.53	14984.00	14129.47	2.39	1.14	36.83	216.02	14075.18
FTSE All-Share Financials (254)	4803.25	0.25	4171.61	4791.30	4793.53	4372.55	3.92	1.65	15.49	124.95	5488.62
FTSE All-Share Real Estate (54)	788.83	-2.09	716.69	805.70	811.58	1019.35	4.53	-1.53	-14.40	15.57	848.66
FTSE All-Share Consumer Discretionary (82)	5140.92	0.22	4464.87	5129.55	5078.57	4348.15	2.31	1.31	32.96	66.92	5526.88
FTSE All-Share Consumer Staples (22)	18135.83	-0.12	15750.90	18157.62	18104.46	18845.77	4.30	1.64	14.16	335.26	16984.36
FTSE All-Share Industrials (84)	6980.53	0.41	6062.56	6951.87	6883.89	5807.31	2.22	1.31	34.29	85.63	8189.95
FTSE All-Share Basic Materials (21)	7957.48	3.32	6911.04	7701.69	7733.92	8839.28	6.39	3.43	4.56	255.73	11191.68
FTSE All-Share Energy (14)	8224.93	0.71	7143.32	8167.31	8245.55	8078.73	4.15	1.65	14.56	177.52	10208.65
FTSE All-Share Utilities (8)	8902.44	-0.93	7731.74	8985.67	8998.06	8848.62	4.72	0.68	31.41	218.79	13924.04
FTSE All-Share Software and Computer Services (16)	2316.00	0.63	2011.43	2301.59	2259.37	1836.65	1.78	1.52	37.12	21.94	3586.35
FTSE All-Share Technology Hardware and Equipment (2)	4149.21	0.40	3603.58	4132.76	4128.43	4776.68	3.16	0.65	48.85	89.37	5493.93
FTSE All-Share Telecommunications Equipment (1)	410.86	0.71	356.83	407.96	412.43	503.41	3.42	2.14	13.65	9.21	601.28
FTSE All-Share Telecommunications Service Providers (5)	2049.77	-0.90	1780.22	2068.33	2115.10	3135.23	8.17	1.51	8.11	62.32	2955.17
FTSE All-Share Health Care Providers (2)	11261.11	1.85	9780.23	11056.73	11062.18	10118.17	0.48	2.90	71.65	18.58	10469.23
FTSE All-Share Medical Equipment and Services (2)	5686.01	0.30	4938.28	5668.84	5690.64	5638.59	2.65	1.16	32.45	92.56	5585.19
FTSE All-Share Pharmaceuticals and Biotechnology (9)	21429.80	-0.68	18611.70	21575.77	21437.50	20167.83	2.38	1.13	37.03	310.15	18133.25
FTSE All-Share Banks (12)	3556.69	0.77	3088.98	3529.52	3544.80	3082.79	4.52	2.67	8.29	136.68	3268.78
FTSE All-Share Finance and Credit Services (8)	11954.91	0.25	10382.79	11925.37	11888.49	9573.75	1.76	1.87	30.41	148.60	16287.87
FTSE All-Share Investment Banking and Brokerage Services (31)	9459.99	0.47	8215.97	9415.67	9410.63	8108.62	4.73	2.36	8.96	182.55	13645.40
FTSE All-Share Closed End Investments (191)	11480.15	0.04	9970.47	11475.49	11432.95	11544.75	2.86	-0.53	-65.52	147.70	7293.81
FTSE All-Share Life Insurance (6)	6863.13	-0.37	5960.60	6888.27	6892.73	6521.96	4.69	0.57	37.19	215.96	8665.49
FTSE All-Share Nonlife Insurance (6)	3491.97	-2.98	3032.76	3599.06	3594.68	3404.84	4.81	1.24	16.82	56.37	7554.55
FTSE All-Share Real Estate Investment and Services (10)	2067.92	-0.53	1795.98	2078.91	2069.10	2427.17	2.40	1.67	24.94	27.21	6270.03
FTSE All-Share Real Estate Investment Trusts (44)	1947.24	-2.38	1691.17	1994.76	2013.73	2560.05	4.93	-1.83	-11.11	40.87	3022.85
FTSE All-Share Automobiles and Parts (3)	1819.83	0.94	1580.52	1802.85	1796.66	1885.62	0.25	-25.17	-16.17	2.74	1896.06
FTSE All-Share Consumer Services (1)	3580.33	-0.64	3109.50	3603.41	3580.33	2742.93	1.71	1.17	50.21	61.00	4625.95
FTSE All-Share Household Goods and Home Construction (11)	8911.75	-2.94	7739.82	9181.61	9115.26	10559.12	7.71	1.98	6.55	287.84	8271.04
FTSE All-Share Leisure Goods (2)	26652.28	0.04	23147.40	26640.94	25737.91	17085.12	3.37	1.14	25.94	666.68	30584.38
FTSE All-Share Personal Goods (4)	26868.18	0.41	23334.92	26758.48	26371.82	23166.85	2.11	2.93	16.23	81.05	21196.49
FTSE All-Share Media (10)	10074.35	0.46	8749.54	10028.63	9948.13	8580.34	2.52	1.85	21.45	172.51	7207.74
FTSE All-Share Retailers (22)	2184.45	0.27	1897.18	2178.50	2166.10	1926.71	2.55	3.49	11.25	17.80	2876.39
FTSE All-Share Travel and Leisure (29)	7588.96	1.33	6590.98	7489.69	7377.14	5806.21	0.70	-6.70	-21.25	34.60	7888.13
FTSE All-Share Beverages (5)	26145.01	0.33	22706.84	26059.03	25881.50	26914.83	2.38	2.29	18.34	273.41	21178.80
FTSE All-Share Food Producers (8)	6622.66	0.06	5751.76	6618.77	6586.44	6142.92	2.33	2.40	17.88	38.29	6488.52
FTSE All-Share Tobacco (2)	28417.70	0.13	24680.66	28380.76	28462.03	36237.70	8.48	1.58	7.49	752.81	27671.30
FTSE All-Share Construction and Materials (15)	8503.15	-0.25	7384.95	8524.52	8409.58	6845.67	2.98	0.53	63.64	185.09	10606.76
FTSE All-Share Aerospace and Defense (8)	6734.46	0.37	5848.86	6709.82	6664.19	4927.87	1.83	0.15	359.48	74.85	8306.12
FTSE All-Share Electronic and Electrical Equipment (11)	12303.36	1.13	10685.42	12165.34	12016.04	9967.42	1.47	2.36	28.80	81.67	12272.09
FTSE All-Share General Industrials (7)	5114.54	0.82	4441.96	5072.72	5054.51	4797.89	3.42	1.32	22.10	93.04	6892.47
FTSE All-Share Industrial Engineering (6)	16251.49	1.61	14114.35	15994.23	15898.23	13983.29	1.92	2.38	21.78	210.47	22107.50
FTSE All-Share Industrial Support Services (29)	10365.97	0.23	9002.81	10342.65	10207.19	8966.74	1.99	1.61	31.23	109.85	12072.04
FTSE All-Share Industrial Transportation (8)	5828.15	0.10	5061.73	5822.18	5773.84	4504.38	1.98	2.81	18.00	16.99	6130.70
FTSE All-Share Industrial Materials (1)	18103.38	0.98	597.31	17928.35	18253.41	15377.87	1.88	1.34	39.75	231.04	23156.41
FTSE All-Share Industrial Metals and Mining (8)	7153.85	3.65	6213.09	6901.74	6944.15	7962.29	6.83	3.54	4.13	243.73	11354.00
FTSE All-Share Precious Metals and Mining (5)	10402.14	1.31	9034.22	10268.08	10369.54	10031.27	3.24	1.79	17.27	169.32	7456.97
FTSE All-Share Chemicals (7)	11111.32	0.82	9650.14	11021.38	10813.53	12823.38	3.21	1.76	17.71	207.36	11350.46
FTSE All-Share Oil. Gas and Coal (13)	7984.45	0.71	6934.47	7928.49	8004.45	7840.81	4.15	1.65	14.56	172.35	10277.73
FTSE Sector Indices											
Non Financials (322)	**5018.22**	**0.27**	**4569.07**	**5004.60**	**4992.69**	**4879.88**	**3.61**	**1.64**	**16.84**	**91.47**	**9257.10**

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	7619.10	7605.49	7602.26	7577.83	7567.03	7555.65	7562.22	7563.20	7575.72	7619.10	7546.54
FTSE 250	19051.87	19082.40	19086.36	19027.38	18975.95	19004.18	19037.12	19063.14	19078.87	19099.16	18970.70
FTSE SmallCap	6250.85	6257.47	6255.91	6256.14	6254.98	6254.82	6254.51	6253.46	6253.56	6262.34	6250.38
FTSE All-Share	4157.91	4152.70	4151.32	4138.36	4131.85	4127.49	4131.49	4132.70	4138.91	4157.91	4124.52

Time of FTSE 100 Day's high:07:03:00 Day's Low12:34:45 FTSE 100 2010/11 High: 8014.31(20/02/2023) Low: 7335.40(17/03/2023)
Time of FTSE All-Share Day's high:07:03:00 Day's Low12:35:00 FTSE 100 2010/11 High: 4377.36(16/02/2023) Low: 4007.66(17/03/2023)

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FT 30 INDEX

	Jun 13	Jun 12	Jun 09	Jun 08	Jun 07	Yr Ago	High	Low
FT 30	2782.10	2779.10	2768.80	2770.80	2789.80	0.00	2895.30	2454.10
FT 30 Div Yield	-	-	-	-	-	0.00	3.93	2.74
P/E Ratio net	-	-	-	-	-	0.00	19.44	14.26

FT 30 hourly changes

8	9	10	11	12	13	14	15	16	High	Low
2779.1	2779.8	2777.3	2773.8	2771.5	2772.7	2782.9	2783.3	2780.5	2789.6	2768.9

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

FT WILSHIRE 5000 INDEX SERIES

	Jun 12		Jun 12
FT Wilshire 5000	43800.30	FT Wilshire Mid Cap	5537.93
FT Wilshire 2500	5616.63	FT Wilshire Small Cap	5060.43
FT Wilshire Mega Cap	5722.98	FT Wilshire Micro Cap	4754.39
FT Wilshire Large Cap	5693.68		

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FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Aerospace & Defense	25.19	Media	9.11	Oil & Gas Producers	-2.03
Automobiles & Parts	21.63	Technology	7.20	Oil & Gas	-2.08
Travel & Leisure	20.72	Household Goods & Ho	5.20	Telecommunications	-3.84
Electronic & Elec Eq	19.91	Gas Water & Multi	4.75	Industrial Metals &	-3.84
Construct & Material	16.79	Utilities	4.60	Life Insurance	-4.31
Fixed Line Telecomms	16.26	Financials	4.44	Real Est Invest & Tr	-4.55
Leisure Goods	15.55	Electricity	4.19	Personal Goods	-4.58
Financial Services	15.51	Real Est Invest & Se	2.43	Consumer Goods	-6.39
General Retailers	15.50	Pharmace & Biotech	2.21	Beverages	-6.47
Consumer Services	15.00	Health Care	2.19	Industrial Transport	-6.57
Industrials	12.87	FTSE 100 Index	1.92	Nonlife Insurance	-7.32
Food Producers	12.78	FTSE All{HY-}Share Index	1.87	Oil Equipment & Serv	-9.38
Software & Comp Serv	11.77	FTSE 250 Index	1.78	Mobile Telecoms	-12.22
Industrial Eng	11.57	Health Care Eq & Srv	1.69	Chemicals	-14.05
Food & Drug Retailer	10.77	NON FINANCIALS Index	0.88	Basic Materials	-14.79
Support Services	9.65	FTSE SmallCap Index	0.76	Mining	-14.94
Banks	9.57	Beverages	31.66	Tech Hardware & Eq	-17.07
		Equity Invest Instr	-0.86	Tobacco	-20.28

FTSE GLOBAL EQUITY INDEX SERIES

Jun 13 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	9488	750.54	0.6	3.4	10.3	1218.77	11.6	2.2
FTSE Global All Cap	9488	750.54	0.6	3.4	10.3	1218.77	11.6	2.2
FTSE Global Large Cap	1936	680.80	0.6	3.6	12.0	1139.80	13.3	2.2
FTSE Global Mid Cap	2228	929.84	0.5	2.2	5.3	1420.37	6.4	2.2
FTSE Global Small Cap	5324	963.16	0.4	4.2	6.8	1404.76	7.9	2.1
FTSE All-World	4164	442.82	0.6	3.3	10.7	761.63	12.0	2.2
FTSE World	2658	808.17	0.6	3.6	11.6	1865.64	12.9	2.2
FTSE Global All Cap ex UNITED KINGDOM In	9208	793.19	0.6	3.6	10.5	1262.82	11.7	2.1
FTSE Global All Cap ex USA	7698	523.32	0.1	0.5	7.0	948.52	8.9	3.2
FTSE Global All Cap ex JAPAN	8066	781.48	0.6	3.4	10.2	1280.12	11.5	2.2
FTSE Global All Cap ex Eurozone	8847	792.24	0.6	3.8	10.2	1257.06	11.3	2.1
FTSE Developed	2148	741.78	0.7	3.5	11.6	1212.79	12.9	2.1
FTSE Developed All Cap	5773	769.48	0.7	3.5	11.2	1239.30	12.4	2.0
FTSE Developed Large Cap	815	703.62	0.7	3.8	13.1	1171.05	14.5	2.0
FTSE Developed Europe Large Cap	205	414.64	0.0	-2.1	9.5	842.85	12.3	3.2
FTSE Developed Europe Mid Cap	346	615.95	0.2	-1.7	8.7	1080.85	10.8	3.1
FTSE Dev Europe Small Cap	734	847.33	0.3	-1.0	5.9	1431.12	8.1	3.2
FTSE North America Large Cap	234	943.73	1.0	5.4	14.9	1431.30	15.8	1.6
FTSE North America Mid Cap	413	1142.79	0.7	3.5	4.6	1604.13	5.4	1.7
FTSE North America Small Cap	1319	1139.48	0.5	5.9	7.3	1531.23	8.1	1.7
FTSE North America	647	609.09	0.9	5.0	12.8	944.59	13.7	1.6
FTSE Developed ex North America	1501	283.53	0.1	0.1	9.0	554.78	11.2	3.1
FTSE Japan Large Cap	175	421.99	0.5	4.8	13.7	629.12	15.2	2.3
FTSE Japan Mid Cap	339	564.34	0.2	0.3	6.6	800.05	8.1	2.4
FTSE Global wi JAPAN Small Cap	908	620.08	0.8	-0.9	4.3	914.46	5.9	2.7
FTSE Japan	514	172.01	0.4	3.9	12.3	287.21	13.8	2.3
FTSE Asia Pacific Large Cap ex Japan	1123	691.47	0.2	2.3	2.9	1276.91	4.0	3.2
FTSE Asia Pacific Mid Cap ex Japan	839	997.78	0.1	1.5	3.7	1779.35	4.7	3.2
FTSE Asia Pacific Small Cap ex Japan	2089	565.75	0.1	3.0	5.9	977.01	6.8	2.8
FTSE Asia Pacific Ex Japan	1962	551.54	0.1	2.2	3.0	1082.64	4.1	3.2
FTSE Emerging All Cap	3715	727.65	0.1	2.2	3.3	1286.31	4.5	3.5
FTSE Emerging Large Cap	1121	668.08	0.1	1.9	2.8	1187.42	3.9	3.5
FTSE Emerging Mid Cap	895	1069.45	0.1	2.7	4.6	1907.89	6.2	3.6
FTSE Emerging Small Cap	1699	800.93	0.1	3.9	6.3	1352.49	7.5	3.2
FTSE Emerging Europe	147	127.92	-0.8	0.5	-0.5	274.22	1.7	2.9
FTSE Latin America All Cap	252	804.46	-0.2	5.5	15.3	1652.27	18.6	8.7
FTSE Middle East and Africa All Cap	330	708.94	0.0	0.6	-2.1	1329.20	0.1	3.6
FTSE Global wi UNITED KINGDOM All Cap In	280	332.70	-0.4	-1.9	5.9	695.42	8.0	3.7
FTSE Global wi USA All Cap	1790	1043.75	0.9	5.4	12.6	1525.46	13.5	1.5
FTSE Europe All Cap	1467	467.38	0.1	-1.9	9.0	910.98	11.5	3.1
FTSE Eurozone All Cap	641	464.09	0.5	-1.2	12.0	898.82	14.9	3.1
FTSE EDHEC-Risk Efficient All-World	4164	480.07	0.3	1.1	3.6	767.84	5.0	2.6
FTSE EDHEC-Risk Efficient Developed Europe	551	337.20	0.0	-2.1	7.5	606.95	9.9	3.2
Oil & Gas	133	387.13	-1.0	0.4	-5.2	812.74	-3.3	4.8
Oil & Gas Producers	88	388.19	-1.1	0.4	-4.7	837.91	-2.7	5.1

Jun 13 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil Equipment & Services	25	260.63	-1.0	1.0	-6.2	494.80	-4.3	4.7
Basic Materials	405	600.62	0.0	-0.2	0.5	1129.24	2.3	4.2
Chemicals	202	807.32	0.4	-0.8	3.6	1454.24	5.1	3.1
Forestry & Paper	19	236.68	-0.6	0.6	-6.1	491.92	-3.7	4.2
Industrial Metals & Mining	104	511.83	-0.2	3.4	3.6	1000.73	5.4	4.6
Mining	80	927.59	-0.5	-1.3	-5.1	1853.19	-2.9	5.7
Industrials	811	529.97	0.6	3.4	8.7	856.83	9.9	2.1
Construction & Materials	163	629.58	0.4	1.7	13.0	1076.21	14.6	2.1
Aerospace & Defense	36	947.80	0.5	3.0	4.7	1494.72	5.7	1.5
General Industrials	79	266.27	0.6	4.4	11.6	478.34	13.2	2.4
Electronic & Electrical Equipment	158	666.91	1.1	5.0	11.2	966.45	12.0	1.5
Industrial Engineering	159	1078.55	0.8	5.0	9.7	1738.79	11.0	2.0
Industrial Transportation	129	924.05	-0.2	-1.6	2.5	1534.48	4.2	3.6
Support Services	87	547.26	0.7	5.3	8.3	822.33	9.2	1.5
Consumer Goods	562	591.63	0.5	0.6	10.0	1010.51	11.5	2.4
Automobiles & Parts	132	592.86	1.4	17.0	36.0	977.08	38.5	2.0
Beverages	71	778.49	0.1	-5.0	0.5	1339.33	1.4	2.4
Food Producers	137	723.83	-0.3	-5.4	0.4	1270.22	2.1	2.5
Household Goods & Home Construction	61	556.60	-0.3	-4.5	3.6	951.37	5.0	2.6
Leisure Goods	54	267.18	0.5	4.1	16.3	380.93	17.1	1.1
Personal Goods	94	978.44	1.1	-5.9	5.9	1522.79	6.8	1.8
Tobacco	13	928.04	0.0	-2.3	-7.0	2716.82	-5.4	6.8
Health Care	337	724.52	0.3	-1.8	-0.5	1167.95	0.5	1.8
Health Care Equipment & Services	131	1375.39	0.5	-1.4	-0.3	1696.81	0.2	1.1
Pharmaceuticals & Biotechnology	206	491.45	0.2	-2.0	-0.7	855.02	0.7	2.3
Consumer Services	424	578.69	1.0	2.9	12.7	832.52	13.4	1.2
Food & Drug Retailers	69	302.86	0.1	-1.3	-3.7	488.38	-2.4	2.5
General Retailers	139	1011.73	1.3	3.5	13.6	1391.31	14.2	1.0
Media	75	340.60	0.9	5.8	17.5	493.19	18.3	1.2
Travel & Leisure	141	508.41	0.9	1.0	14.8	748.16	15.6	1.2
Telecommunication	83	127.66	-0.3	-4.5	-0.8	308.13	1.3	4.4
Fixed Line Telecommuniations	29	100.05	-0.7	-5.0	-0.6	278.81	1.8	5.3
Mobile Telecommunications	54	150.56	-0.1	-4.2	-1.0	312.25	1.0	4.0
Utilities	201	317.43	-0.2	-3.4	-1.4	758.30	0.4	3.5
Electricity	145	356.90	-0.1	-3.1	-2.4	837.22	-0.8	3.3
Gas Water & Multiutilities	56	318.39	-0.3	-4.3	0.8	792.62	3.3	4.0
Financials	853	260.76	-0.1	1.6	0.5	511.57	2.3	3.4
Banks	271	194.82	-0.4	2.3	-1.7	429.05	0.8	4.5
Nonlife Insurance	72	369.97	-0.1	-1.5	1.1	632.20	3.3	3.0
Life Insurance	51	219.95	0.1	1.4	-3.4	433.38	-1.5	4.1
Financial Services	213	445.42	0.1	3.0	5.0	683.61	5.9	1.7
Technology	355	613.43	1.8	11.7	38.7	804.84	39.3	0.9
Software & Computer Services	180	914.48	1.7	8.9	34.9	1110.55	35.4	0.6
Technology Hardware & Equipment	175	551.09	1.8	14.7	42.8	779.25	43.6	1.2
Alternative Energy	20	159.18	1.2	-2.8	-13.0	228.89	-12.8	0.4
Real Estate Investment & Services	139	241.55	-0.2	-0.3	-3.8	478.88	-2.2	3.2
Real Estate Investment Trusts	107	430.36	0.0	-0.8	-1.2	1028.16	0.3	4.2
FTSE Global Large Cap	1936	680.80	0.6	3.6	12.0	1139.80	13.3	2.2

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 https://research.ftserussell.com/Products/indices/Home/indexfiltergeis?indexName=GEISAC&currency=USD&rtn=CAP&segment=global-developed–emerging. 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	Day's Change	FTSE 100	Closing Price	Day's Change
3I Group PLC	2018	17.00	Jd Sports Fashion PLC	148.35	-0.60
Abrdn PLC	215.80	-0.50	Johnson Matthey PLC	1771	25.50
Admiral Group PLC	2209	-119.00	Kingfisher PLC	239.10	0.90
Airtel Africa PLC	132.40	1.10	Land Securities Group PLC	597.40	-11.00
Anglo American PLC	2483	66.50	Legal & General Group PLC	235.70	-4.70
Antofagasta PLC	1507.5	51.50	Lloyds Banking Group PLC	45.30	0.32
Ashtead Group PLC	5412	-2.00	London Stock Exchange Group PLC	8702	24.00
Associated British Foods PLC	1869	-6.00	M&G PLC	202.30	1.00
Astrazeneca PLC	11740	-90.00	Melrose Industries PLC	526.00	-1.00
Auto Trader Group PLC	638.00	1.00	Mondi PLC	1245	0.50
Aviva PLC	400.10	1.90	National Grid PLC	1036	-11.50
B&M European Value Retail S.A.	539.00	4.00	Natwest Group PLC	264.30	3.40
Bae Systems PLC	953.80	5.00	Next PLC	6490	10.00
Barclays PLC	156.76	1.52	Ocado Group PLC	403.00	2.40
Barratt Developments PLC	452.30	-12.70	Pearson PLC	820.80	3.60
Beazley PLC	568.00	-6.50	Pershing Square Holdings LTD	2770	-6.00
Berkeley Group Holdings (The) PLC	3929	-62.00	Persimmon PLC	1167	-53.50
BP PLC	464.85	2.25	Phoenix Group Holdings PLC	552.40	-1.20
British American Tobacco PLC	2577.5	-1.50	Prudential PLC	1115.5	0.50
British Land Company PLC	336.70	-7.20	Reckitt Benckiser Group PLC	5984	-6.00
Bt Group PLC	140.65	-3.00	Relx PLC	2578	18.00
Bunzl PLC	3137	43.00	Rentokil Initial PLC	642.00	-7.00
Burberry Group PLC	2262	3.00	Rightmove PLC	527.20	3.80
Centrica PLC	117.65	-0.25	Rio Tinto PLC	5203	135.00
Coca-Cola Hbc AG	2346	8.00	Rolls-Royce Holdings PLC	150.90	0.75
Compass Group PLC	2172	-14.00	Rs Group PLC	807.40	-9.80
Convatec Group PLC	205.20	0.40	Sage Group PLC	873.00	5.60
Crh PLC	3920	-10.00	Sainsbury (J) PLC	271.50	1.70
Croda International PLC	5486	44.00	Schroders PLC	454.50	-0.50
Dcc PLC	4716	36.00	Scottish Mortgage Investment Trust PLC	684.40	-2.60
Diageo PLC	3356.5	10.00	Segro PLC	750.60	-28.80
Endeavour Mining PLC	2068	34.00	Severn Trent PLC	2694	-52.00
Entain PLC	1321.5	24.00	Shell PLC	2296	18.00
Experian PLC	2978	29.00	Smith & Nephew PLC	1189	4.00
F&C Investment Trust PLC	897.00	1.00	Smith (Ds) PLC	312.00	2.10
Flutter Entertainment PLC	15775	385.00	Smiths Group PLC	1708	29.50
Frasers Group PLC	695.00	10.50	Smurfit Kappa Group PLC	2884	2.00
Fresnillo PLC	660.40	11.80	Spirax-Sarco Engineering PLC	11415	155.00
Glaxosmithkline PLC	1366.6	-7.20	Sse PLC	1845	-4.50
Glencore PLC	460.00	23.05	St. James's Place PLC	1146.5	0.50
Haleon PLC	319.05	-2.30	Standard Chartered PLC	661.00	4.60
Halma PLC	2452	18.00	Taylor Wimpey PLC	110.90	-3.70
Hargreaves Lansdown PLC	863.40	4.20	Tesco PLC	262.30	-0.90
Hiscox LTD	1106	-18.00	Unilever PLC	3965.5	-30.50
HSBC Holdings PLC	609.60	4.30	Unite Group PLC	886.50	-23.50
Imperial Brands PLC	1744	14.00	United Utilities Group PLC	1038.5	-17.00
Informa PLC	707.00	-1.60	Vodafone Group PLC	72.43	-0.42
Intercontinental Hotels Group PLC	5548	16.00	Weir Group PLC	1852.5	40.00
International Consolidated Airlines Group S.A.	165.75	2.70	Whitbread PLC	3421	-6.00
Intertek Group PLC	4384	47.00	Wpp PLC	874.40	3.40

UK STOCK MARKET TRADING DATA

	Jun 13	Jun 12	Jun 09	Jun 08	Jun 07	Yr Ago
Order Book Turnover (m)	997.65	142.60	142.60	142.60	141.22	46.25
Order Book Bargains	550188.00	488528.00	488528.00	488528.00	458174.00	461255.00
Order Book Shares Traded (m)	2172.00	2702.00	2702.00	2702.00	1493.00	1557.00
Total Equity Turnover (£m)	8688.63	4732.67	4732.67	4732.67	20679.69	5907.60
Total Mkt Bargains	728229.00	663206.00	663206.00	663206.00	634815.00	643013.00
Total Shares Traded (m)	5807.00	6775.00	6775.00	6775.00	5523.00	5142.00

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

All data provided by Morningstar unless otherwise noted. All elements listed are indicative and believed accurate at the time of publication. No offer is made by Morningstar or the FT. The FT does not warrant nor guarantee that the information is reliable or complete. The FT does not accept responsibility and will not be liable for any loss arising from the reliance on or use of the listed information.
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UK RIGHTS OFFERS

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	
Altona Rare Earths	Int	**0.000**	0.000	**0.418L**	0.120L	**1.550L**	5.080L	**0.00000**	0.00000	-	**0.000**	0.000
Ashtead Group	Pre	**9667.300**	7962.300	**2155.800**	1668.100	**3.684**	2.809	**85.00000**	72.01800	Sep 12	**99.100**	84.800
Atrato Onsite Energy	Int		-	**5.304**	-	**354.000**	-	**1.23000**	-	May 26	**1.230**	-
B.P. Marsh & Partners	Pre			**27.590**	19.395	**66.200**	48.600	**1.39000**	2.78000	Jul 31	**2.780**	2.780
Baronsmead Second Venture Trust	Int			**3.768L**	29.939L	**1.140L**	10.080L	**2.25000**	3.00000	Sep 8	**2.250**	6.500
Baronsmead Venture Trust	Int			**2.406L**	24.990L	**0.750L**	8.590L	**1.75000**	3.00000	Sep 8	**1.750**	6.500
CMC Markets	Pre	**325.137**	326.643	**52.163**	91.495	**14.700**	24.600	**3.90000**	8.88000	Aug 11	**7.400**	12.380
Driver Group	Int	**24.219**	24.429	**0.508**	0.130	**0.600**	0.300L	**0.75000**	0.75000	Oct 27	**1.500**	1.500
Foresight Sustainable Forestry Co	Int		-	**6.012**	-	**3.500**	-	**0.00000**	-	-	**0.000**	-
Hargreave Hale AIM VCT	Int			**11.457L**	46.015L	**3.720L**	18.740L	**0.00000**	1.00000	-	**2.000**	4.150
Iomart Group	Pre	**115.638**	103.018	**8.502**	12.168	**6.400**	8.600	**3.50000**	3.60000	Sep 8	**5.440**	6.020
Lindsell Train Investment Trust (The)	Pre			**0.675L**	4.277L	**385.000L**	2177.000L	**0.00000**	5112.00000	-	**0.000**	5112.000
Mind Gym	Pre	**55.011**	48.668	**2.964**	0.482L	**2.930**	1.600	**0.00000**	0.00000	-	**0.000**	0.000
Oxford Instruments	Pre	**444.700**	367.300	**73.500**	47.600	**101.600**	67.100	**14.90000**	13.70000	Aug 22	**19.500**	18.100

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)
06/08	81.00		AMIF	Amicorp FS (UK) Plc	1.55	0.05	1.55	1.55	186.0
06/06	3.00		ASHI	Ashington Innovation PLC	3.50	0.00	4.75	3.80	214.9
06/05	1.00		TAB	Becket Invest PLC	1.13	-	0.00	0.00	92.3
05/25	5.00		ONE	Oneiro Energy PLC	9.25	0.50	9.35	5.98	411.8
05/17	10.00		ADMR	Admiral Acquisition UK Ltd	9.61	-0.09	10.10	9.00	518.7
05/10	8.50	AIM	GMET	Golden Metal Resources PLC	8.38	-0.04	9.00	6.20	711.9
05/03	100.00		AWEM	Ashoka WhiteOak Emerging Markets Trust plc	102.25	-0.01	110.91	98.50	0.0

§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	Day Chg	52 Week High	52 Week Low	Yld	P/E	MCap m
Australia (A$)							
ANZ Bank	22.93	0.08	26.08	20.78	6.56	9.64	46760.95
BHP Group	44.29	-0.43	50.09	35.83	9.25	10.43	152344.37
CmwBkAu	96.52	0.72	111.38	86.98	3.61	18.21	110464.29
CSL	308.52	3.22	314.21	254.30	0.98	44.31	101049.44
NatAusBk	25.22	0.02	32.83	25.10	3.55	13.47	53749.51
Telstra	4.34	0.03	4.43	3.62	2.30	35.41	34049.4
Wesfarmers	48.02	0.44	52.79	40.03	3.69	24.76	36974.58
Westpac Bank	20.30	0.05	24.50	18.80	4.36	14.81	48368.2
Woolworths	38.15	0.58	39.88	31.67	2.82	43.64	31569.15
Belgium (€)							
AnBshInBv	51.46	0.41	62.01	45.56	1.01	26.20	96570.36
KBC Grp	62.34	0.38	72.46	45.53	5.41	10.35	28093.4
Brazil (R$)							
Ambev	15.29	0.13	16.88	12.60	3.61	23.60	49639.54
Bradesco	14.42	0.02	17.71	11.15	5.63	6.82	15839.85
Cielo	4.70	-0.03	6.22	3.66	3.03	16.26	2631.43
ItauHldFin	23.71	0.15	26.04	18.86	3.19	9.59	24226.9
Petrobras	32.28	-1.90	42.08	23.61	14.54	4.70	49508.99
Vale	67.86	0.74	94.48	61.90	18.72	3.10	63475.93
Canada (C$)							
Bausch Hlth	9.89	0.17	13.81	5.10	-	-3.03	2692.2
BCE	61.74	0.10	66.66	55.66	5.55	21.08	42364.75
BkMontrl	117.84	1.48	137.64	111.88	3.76	9.24	63221.01
BkNvaS	66.38	0.59	81.98	63.19	5.47	8.47	59829.86
Brookfield	58.88	11.29	63.88	41.28	1.09	19.91	69948.82
CanadPcR	102.44	0.41	112.27	86.42	0.73	25.02	71747.64
CanImp	57.25	0.26	68.74	53.58	10.27	4.05	39523.07
CanNatRs	75.33	1.86	84.25	58.75	2.60	11.91	62133.22
CanNatRy	153.05	0.79	175.39	137.26	1.57	22.68	76367.98
Enbridge	50.22	0.12	58.06	47.66	6.51	17.87	76487.94
GtWesLif	38.30	0.23	39.88	27.99	4.94	10.98	26828.6
ImpOil	67.36	1.50	79.83	52.67	1.50	19.76	29599.82
Manulife	25.90	0.11	27.50	20.81	4.42	7.47	35963.78
Nutrien	80.47	0.83	132.75	70.69	2.83	11.78	30029.89
RylBkC	124.99	1.02	140.18	116.75	3.49	11.32	130758.21
SHOP	84.59	-2.37	88.64	33.00	-	2.99	76184.89
Suncor En	40.19	0.45	52.29	36.39	2.56	14.81	39667.24
ThmReut	166.03	0.04	180.93	121.67	1.21	11.67	58822.43
TntoDom	79.99	1.16	94.05	76.32	4.00	10.22	110691.59
TrnCan	55.04	0.42	71.82	50.70	6.19	30.21	42623.92
China (HK$)							
AgricBkCh	3.07	-0.02	3.28	2.20	7.20	3.88	12046.24
Bk China	3.16	-	3.45	2.51	7.30	3.76	33731.55
BkofComm	5.24	-0.02	5.65	3.83	6.92	4.16	23419.44
BOE Tech	0.66	-	0.85	0.53	-	10.24	16.76
Ch Coms Cons	4.73	-0.10	5.52	3.09	4.46	3.77	2667.83
Ch Evrbrght	2.46	-0.02	2.78	2.03	10.09	3.20	3981.38
Ch Rail Cons	5.97	-0.16	7.46	3.75	4.55	3.05	1582.3
Ch Rail Gp	5.07	-0.22	6.30	3.41	4.20	3.92	2723.02
ChConstBk	5.08	-0.08	5.70	4.10	7.57	3.55	155903.42
China Vanke	11.12	0.10	19.90	9.87	13.27	4.82	3132.12
ChinaCitic	4.14	-0.17	4.74	2.92	7.02	3.69	7864.93
ChinaLife	13.40	0.06	15.84	8.53	5.28	5.63	12728.43
ChinaMBank	37.70	-0.05	53.00	25.40	3.93	6.68	22093.62
ChinaMob	63.70	-0.70	70.20	46.80	5.24	9.45	166378.26
ChinaPcIns	21.05	-0.10	26.50	12.10	6.47	6.60	7457.43
ChMinsheng	2.89	-0.20	3.52	2.19	8.82	3.59	3069.44
ChMrchSecs	13.89	0.03	15.98	12.12	3.40	11.49	14412.27
Chna Utd Coms	5.17	-0.05	6.45	3.30	2.34	24.03	22381.04
ChShenEgy	26.15	-0.15	28.70	20.50	8.12	7.63	11274.37
ChShpbldng	4.49	0.01	5.32	3.37	-	-309.30	13862
ChStConEng	6.00	-0.05	7.35	4.68	3.86	4.31	34659.54
ChUncHK	5.83	-0.08	6.58	3.27	2.79	12.35	22771.43
CNNC Intl	6.87	-0.01	7.33	5.78	1.96	16.64	18123.2
CSR	4.78	-0.08	5.26	2.37	4.49	12.63	2667.14
Daqin	7.57	-0.03	8.21	5.95	6.85	10.62	16027.18
GuosenSec	9.12	0.01	10.55	8.43	2.72	9.71	11254.4
HaitongSecs	5.21	0.03	6.01	3.77	5.72	5.44	2267.6
Hngzh HikVDT	33.58	1.83	48.84	26.80	2.57	17.10	42761.11
Hunng Pwr	4.79	-0.02	5.28	2.62	4.28	-5.17	2874.05
IM Baotou Stl	1.81	-	2.71	1.75	-	28.56	7970.03
In&CmBkCh	4.25	-0.08	4.73	3.37	7.41	3.74	47087.51
IndstrlBk	17.01	0.07	21.00	14.91	4.92	4.32	49401.41
Kweichow	1699	3.00	2077	1333	1.23	35.46	298373.48
Midea	0.36	-	0.49	0.32	-	-3.76	13.83
New Ch Life Ins	21.60	-	25.00	12.04	7.35	3.94	2851.32
PetroChina	5.57	-0.12	5.87	2.95	4.44	10.80	15001.74
PingAnIns	53.85	0.10	63.10	31.30	4.82	8.23	51195.09
PngAnBnk	11.77	-0.02	15.27	10.22	1.60	6.51	31930.86
Pwr Cons Corp	5.72	-0.03	8.45	5.61	1.68	11.02	8789.38
SaicMtr	13.93	0.06	19.29	13.09	4.61	6.46	22752.61
ShenwanHong	0.13	-	0.18	0.07	-	3.56	140.59
ShgPdgBk	7.46	0.03	8.22	6.63	6.66	4.42	30611.68
Sinopec Corp	4.76	-0.09	5.47	3.06	3.04	5.52	15057.39
Sinopec Oil	1.98	-0.03	2.39	1.81	-	610.00	3756
Denmark (kr)							
DanskeBk	161.70	0.70	165.35	86.90	1.21	11.28	20207.75
MollerMrsk	12740	560.00	22650	11100	2.62	2.12	13780.7
NovoB	1091.2	-2.80	1185.6	730.60	0.84	53.59	271659.47
Finland (€)							
Nokia	3.85	0.05	5.20	3.66	-	13.55	23427.6
SampoA	43.08	-0.05	49.97	39.86	3.89	9.36	23779.5
France (€)							
Airbus Grpe	130.04	0.60	131.22	86.52	-	24.33	111031.58
AirLiquide	158.86	0.90	164.52	114.48	1.70	29.92	89866.01
AXA	26.38	0.15	30.34	20.34	5.31	9.07	65371.88
BNP Parib	56.68	0.25	67.02	40.67	4.63	8.33	75576.5
ChristianDior	798.00	7.50	872.00	525.00	0.86	29.73	155604.89
Cred Agr	10.85	0.06	12.03	8.09	7.22	6.05	35478.86
Danone	53.84	0.03	61.88	46.76	3.53	18.69	39399.26
EDF	12.00	-	12.05	7.27	3.97	9.44	53889.44
Engie SA	14.16	0.05	15.56	10.07	3.67	10.18	37251.02
EssilorLuxottica	167.50	1.70	188.40	132.70	0.63	52.13	81005.69
Hermes Intl	1981.8	7.80	2036	957.60	0.22	86.82	226007.56
LOreal	406.35	1.95	442.60	300.45	0.96	50.52	235266.55
LVMH	841.90	7.10	904.60	535.00	0.81	35.97	456594.99
Orange	10.29	-0.10	11.87	9.08	5.71	3484.94	29562.88
PernodRic	201.90	1.40	218.00	166.60	1.51	31.11	56259.06
Renault	34.23	0.30	43.96	22.33	-	-26.08	10933.33
Safran	139.28	0.78	145.52	87.85	0.30	1421.68	64284.55
Sanofi	93.93	-1.09	105.18	76.45	3.34	19.38	128090.48
Sant Gbn	56.67	1.71	58.53	35.18	2.35	13.83	31575.63
Schneider	166.24	2.06	167.24	110.02	1.53	29.93	102557.48
SocGen	23.26	-0.05	28.39	18.97	2.33	4.01	20307.59
Total	54.16	0.21	60.93	45.81	4.89	10.62	146164.54
UnibailR	49.68	0.06	73.09	39.68	-	-7.44	7615.7
Vinci	106.74	-0.42	112.40	80.84	2.47	24.16	68772.2
Vivendi	8.14	0.14	11.05	7.59	7.22	-14.84	9472.1
Germany (€)							
Allianz	208.95	0.35	228.40	156.22	4.50	13.47	91035.49
BASF	46.77	0.48	53.77	37.90	6.91	7.90	45160.57
Bayer	51.28	0.17	65.66	46.70	3.82	51.32	54421.7
BMW	112.06	1.92	112.06	68.44	1.66	6.09	72873.34
Continental	70.64	0.88	79.24	44.31	-	11.11	15262.26
Deut Bank	9.86	0.00	12.09	7.25	-	9.90	21731.2
Deut Tlkm	18.90	-0.10	23.13	17.35	3.11	22.18	101818.1
DeutsPost	42.98	0.86	44.64	29.68	3.15	11.10	57521.88
E.ON	11.30	-0.06	12.29	7.28	4.07	6.41	32242.18
Fresenius Med	42.46	0.05	51.66	25.95	3.09	13.09	13458.14
Fresenius SE	25.34	-0.10	30.16	19.69	3.48	8.18	15288.2
HenkelKgaA	66.40	-0.16	70.10	56.55	2.70	18.03	18634.83
Linde	343.80	9.20	345.00	261.20	1.06	54.52	182106.63
Mercedes-Benz	74.38	0.78	75.92	50.19	1.78	7.59	85960.52
MuenchRkv	325.20	0.10	346.90	212.70	2.95	15.86	47940.98
SAP	125.26	1.58	125.70	79.58	1.45	28.67	166231.79
Siemens	164.46	3.68	164.46	93.67	2.08	25.24	142126.58
Volkswgn	158.85	1.20	209.00	138.70	2.96	5.48	50636.83
Hong Kong (HK$)							
AIA	82.60	1.05	93.65	57.25	1.51	20.27	122519.68
BOC Hold	24.40	0.10	31.85	23.05	4.76	12.01	32931.14
Ch OSLnd&Inv	17.92	0.32	25.60	14.40	6.27	4.27	25036.64
ChngKng	44.85	-	57.00	42.00	3.69	9.84	20568.72
Citic Ltd	9.85	0.06	10.86	7.01	5.11	4.37	36577.22
Citic Secs	15.12	0.22	18.52	11.60	2.96	7.47	5057.01
CK Hutchison	49.10	-0.45	54.55	38.55	4.34	5.97	24005.61
CNOOC	11.28	-0.40	13.36	9.22	3.75	9.44	64186.53
HangSeng	114.10	1.30	141.40	103.80	5.00	17.61	27846.17
HK Exc&Clr	310.20	-0.20	404.20	208.20	2.76	33.54	50203.35
MTR	37.20	-0.05	42.75	33.15	3.09	25.83	29451.42
SandsCh	28.15	0.50	30.20	12.50	-	-29.82	29082.58
SHK Props	102.90	-0.10	114.80	83.10	4.50	11.27	38063.47
Tencent	344.80	6.40	397.60	188.69	0.44	13.01	422020.63
India (Rs)							
Bhartiartl	834.35	-2.00	888.75	628.75	-	172.95	60459.14
HDFC Bk	1603.5	2.70	1734.45	1271.6	-	26.39	108796.85
Hind Unilevr	2675.9	32.45	2741.6	2100	1.23	69.60	76322.67
HsngDevFin	2645.9	5.10	2867	2026	0.90	21.87	59249.4
ICICI Bk	943.55	7.60	958.85	669.95	0.22	29.06	80097.2
Infosys	1304.85	12.90	1672.6	1185.3	2.40	25.03	65733.52
ITC	445.40	8.45	452.00	258.55	2.49	35.93	67196.05
L&T	2354.4	14.45	2416.35	1456.35	0.79	37.92	40169.32
OilNatGas	155.65	0.60	169.00	119.85	6.03	4.28	23770.06
RelianceIn	2520.85	36.70	2755	2180	0.29	28.01	207051.06
SBI NewA	576.40	-2.25	629.55	430.70	0.72	15.61	62446.05
SunPhrmInds	988.10	2.65	1070.95	789.90	0.78	35.75	28779.51
Tata Cons	3243.7	-3.20	3575	2926.1	1.16	30.08	144078.95
Israel (ILS)							
TevaPha	26.66	-0.96	38.39	23.83	-	21.04	8321.25
Italy (€)							
Enel	6.07	-0.04	6.26	3.96	5.92	28.82	66664.24
ENI	12.96	0.13	14.98	10.45	5.10	5.57	47263.33
Generali	18.80	0.20	19.23	13.67	7.66	10.78	31667.04
IntSPaolo	2.31	0.01	2.60	1.58	1.55	73.14	45662.02
Unicred	18.52	0.01	20.05	8.24	0.63	28.06	38819.32
Japan (¥)							
AstellasPh	2290.5	13.50	2360.5	1823.5	2.27	31.26	29646.55
Bridgestne	5945	90.00	5984	4548	3.15	12.26	30346.78
Canon	3609	23.00	3618	2754.5	3.06	15.83	34428.01
CntJpRwy	17675	95.00	17920	14730	0.83	-30.04	26041.91
Denso	9443	255.00	9535	6389	1.68	23.46	53217.21
EastJpRwy	7894	-1.00	8325	6525	1.43	-7.18	21338.18
Fanuc	5131	1.00	24930	4409	9.96	5.53	36811.3
FastRetail	35800	1010	35880	21903.33	1.66	15.23	81481.32
Fuji Hvy Ind	2631	68.50	2684	1938.5	2.41	27.40	14474.14
Hitachi	8737	53.00	8797	5983	1.49	11.61	58630.43
HondaMtr	4379	82.00	4414	2990.5	3.33	8.40	56733.87
JapanTob	3178	30.00	3182	2275.5	4.86	14.67	45460.08
KDDI	4521	47.00	4560	3825	3.00	13.73	74459.56
Keyence	70440	430.00	71890	44880	0.32	53.36	122530.12
MitsbCp	6471	184.00	6494	3740	2.41	13.09	66530.94
MitsubEst	1022.48	6.78	1036.81	876.51	-	-	-
MitsubishiEle	2010	6.50	2018	1273	2.25	16.29	30868.47
MitsuiFud	1031.96	17.95	1040.73	684.38	-	-	-
MitUFJFin	963.20	2.20	999.50	632.60	3.05	8.85	87406.91
Mizuho Fin	2113	15.00	2238	1494	4.18	9.16	38375.25
Murata Mfg	8580	71.00	8620	6438	1.58	15.61	41471.12
Nippon TT	4110	-8.00	4334	3674	2.89	11.73	106472.65
Nissan Mt	535.50	11.20	570.00	408.10	-	15.41	16165.59
Nomura	517.00	1.80	573.90	464.30	5.03	-31.51	11698.03
Nppn Stl	2886	-3.00	3294	1838	3.13	4.04	19616.12
Panasonic	1673.5	26.00	1680	1006.5	1.69	15.00	29373.56
Seven & I	6194	38.00	6619	5041	1.88	20.89	39270.62
ShnEtsuCh	4748	166.00	21055	3797	6.90	4.03	68737.52
Softbank	6310	315.00	7180	4708	0.79	4.81	66342.46
Sony	13920	115.00	14065	9213	0.49	15.75	125553.47
SumitomoF	5733	-16.00	6261	3940	3.94	9.89	56368.09
Takeda Ph	4524	20.00	4629	3497	4.50	14.39	51198.8
TokioMarine	3289	57.00	3330	2417.67	7.56	4.74	47106.69
Toyota	2173.5	104.50	2216.5	1764	2.65	8.69	253625.29
Mexico (Mex$)							
AmerMvl	19.06	-0.06	20.25	15.67	1.61	16.41	46650.83
FEMSA UBD	188.61	2.11	188.83	120.63	1.01	164.22	23642.46
WalMrtMex	66.68	-0.31	79.15	64.81	0.71	35.39	67532.5
Netherlands (€)							
ASML Hld	680.60	9.10	698.10	375.75	0.49	53.63	296395.07
Heineken	93.98	1.04	106.30	78.28	1.02	16.63	58476.98
ING	12.17	0.12	13.55	8.43	4.83	10.10	47600.17
Unilever	46.36	-0.16	50.93	41.24	3.09	23.80	147042.31
Norway (Kr)							
DNB	193.30	0.85	209.50	168.20	10.10	11.00	28341.7
Equinor	324.95	12.30	410.95	278.70	1.70	12.48	97023.03
Telenor	109.10	-0.10	135.80	87.60	9.26	16.42	14356.05
Qatar (QR)							
QatarNtBk	15.90	-	23.00	14.31	3.28	12.40	40345.92
Saudi Arabia (SR)							
AlRajhiBnk	73.50	-	7317	0.00	3.01	13.50	78397.92
Natnlcombnk	37.25	-0.20	1552.5	0.00	3.59	13.55	59598.42
SaudiBasic	89.30	0.40	2115	0.00	3.36	12.59	71438.1
SaudiTelec	43.00	-0.10	8480	0.00	8.58	8.23	57331.8
Singapore (S$)							
DBS	30.90	-0.35	36.40	29.45	3.68	12.92	59435.94
JardnMt US$	49.83	-0.17	57.80	42.60	3.21	8.91	14443.85
OCBC	12.35	-0.03	13.23	11.20	3.14	12.56	41417.62
SingTel	2.46	0.02	2.82	2.31	2.81	42.36	30286.26
UOB	28.00	-0.10	31.40	25.91	3.27	12.71	35008.05
South Africa (R)							
Firstrand	68.08	1.56	71.00	56.80	4.18	11.23	20588.67
MTN Grp	144.10	6.60	160.00	107.35	-	17.91	14638.36
Naspers N	3167.57	44.66	3510	1693.51	0.20	15.52	74372.22
South Korea (KRW)							
HyundMobis	223000	1000.00	239500	189500	1.79	8.74	16536.69
KoreaElePwr	18990	10.00	23200	16500	6.43	-11.14	9588.18
SK Hynix	119500	4700	120100	60600	1.28	8.59	68422.89
SmsungEl	72000	1000.00	79000	51800	2.00	12.52	338058.4
Spain (€)							
BBVA	6.53	-0.02	7.56	3.97	5.57	9.07	42549.77
BcoSantdr	3.19	0.00	3.87	2.32	2.35	6.53	56736.01
CaixaBnk	3.60	-0.01	4.14	2.64	0.74	24.13	29134.6
Iberdrola	11.47	-0.08	11.96	9.09	3.60	20.08	79873.61
Inditex	34.11	0.35	34.30	20.53	0.64	36.72	114840.49
Repsol	13.56	0.20	15.59	11.19	4.34	8.44	19436.81
Telefonica	3.65	-0.20	4.96	3.22	9.30	2.72	22648.75
Sweden (SKr)							
AtlasCpcoB	140.30	2.15	140.80	82.30	5.73	8.59	20457.93
Ericsson	57.17	0.67	82.11	53.36	4.33	7.73	16462.37
H & M	145.50	0.52	157.30	98.27	4.76	18.38	19509.11
Investor	216.25	1.05	223.60	158.20	1.78	8.52	36806.55
Nordea Bk	114.00	0.66	134.94	88.32	14.10	12.19	38320.52
SEB	119.05	0.75	133.50	99.42	9.33	9.12	23531.3
SvnskaHn	90.64	0.48	112.90	80.88	6.07	8.15	16467.42
Swedbank	177.35	0.35	219.90	124.50	9.03	8.68	18754.93
Telia Co	24.04	-0.23	40.53	24.04	9.15	7.78	8830.69
Volvo	218.00	3.70	219.75	154.28	3.28	13.02	32349.65
Switzerland (SFr)							
ABB	35.28	0.47	35.29	23.84	2.18	17.39	76554.43
CredSuisse	0.82	0.01	5.86	0.66	11.32	-1.32	3611.19
Nestle	106.64	-0.52	118.70	103.42	2.38	19.03	314461.09
Novartis	89.99	-0.85	93.95	73.33	3.10	10.05	226351.8
Richemont	147.95	2.90	161.10	91.80	1.22	36.25	85294.49
Roche	280.30	0.25	335.85	256.05	2.90	19.30	217492.22
Swiss Re	88.46	0.08	99.68	68.16	6.18	21.96	31018.62
Swisscom	547.20	-0.60	619.40	443.40	3.72	16.73	31306.01
UBS	18.43	0.08	20.85	13.87	1.92	8.83	63806.28
Zurich Fin	425.30	-1.10	458.30	384.70	4.36	14.56	70672.82
Taiwan (NT$)							
Chunghwa Telecom	125.50	0.50	130.50	105.50	3.52	26.46	31691.89
Formosa PetChem	86.80	-1.40	97.80	75.20	0.70	16.20	26916.27
HonHaiPrc	112.50	2.00	114.00	98.00	3.67	10.99	50768.63
MediaTek	779.00	12.00	908.00	533.00	4.91	10.74	40564.58
TaiwanSem	593.00	19.00	594.00	370.00	1.86	22.86	500584.92
Thailand (THB)							
PTT Explor	31.50	-	38.25	29.50	6.17	8.63	26041.45
United Arab Emirates (Dhs)							
Emirtestele	24.30	0.70	38.98	11.60	2.75	27.17	57535.64
United Kingdom (p)							
Anglo American	2483	66.50	3699	2223.5	7.18	4.92	41863.59
AscBrFd	1869	-6.00	2076	1223	0.33	30.89	18333.41
AstraZen	11740	-90.00	12828.45	9399	1.76	1987.81	229352.78
Aviva	400.10	1.90	473.70	366.70	5.34	52.64	13809.15
Barclays	156.76	1.52	198.86	128.12	1.91	3.80	30732.23
BP	464.85	2.25	570.57	359.20	3.39	16.87	102513.4
BrAmTob	2577.5	-1.50	3645	2543	8.36	8.72	72657.17
BT	140.65	-3.00	196.60	22.98	-	13.66	17609.25
Compass	2172	-14.00	2250	1630.5	0.64	52.85	47529.24
Diageo	3356.5	10.00	3960	3304.32	2.16	25.82	95083.73
GlaxoSmh	1366.6	-7.20	2753.96	16.64	5.85	15.78	70539.94
Glencore	460.00	23.05	584.50	395.40	1.93	16.84	72221.29
HSBC	609.60	4.30	653.80	434.70	2.65	13.32	152878.63
Imperial Brands	1744	14.00	2185	1692.5	7.92	5.83	20103.51
Jardine Mathes.	62.50	-	55.30	46.89	2.56	11.17	18116.41
LlydsBkg	45.30	0.32	54.33	38.51	5.67	6.29	37055.27
LSE Group	8702	24.00	8893.86	6710	0.88	88.98	55477.23
Natl Grid	1036	-11.50	1229.21	844.29	4.75	24.15	48033.55
Natwest Group	264.30	3.40	308.65	210.90	3.97	10.41	29883.94
Prudential	1115.5	0.50	1336	782.40	1.06	18.12	38712.4
ReckittB	5984	-6.00	6824	5502	2.92	-25.89	54118.08
RELX	2578	18.00	2735	2064	1.85	34.01	61641.11
RioTinto	5203	135.00	6329	4424.5	9.66	5.44	82041.49
RollsRoyce	150.90	0.75	160.00	64.44	-	102.65	15915.84
Shell PLC	2296	18.00	2613.5	1908.6	2.64	12.10	197655.22
StandCh	661.00	4.60	797.40	515.60	1.34	14.82	23437.83
Tesco	262.30	-0.90	307.23	194.35	3.49	13.36	23786.68
Unilever	3965.5	-30.50	4868.64	3531.5	3.65	20.36	125789.29
Vodafone	72.43	-0.42	132.04	71.71	10.68	-162.04	24645.19
WPP	874.40	3.40	1082	713.00	3.03	16.66	11844.24
United States of America ($)							
21stC Fox A	33.50	0.01	37.26	28.02	1.31	14.57	9012.05
3M	102.06	0.80	152.30	92.38	5.40	10.84	56303.67
AbbottLb	101.52	0.12	115.69	93.25	1.65	27.69	176529.18
Abbvie	137.83	0.10	168.11	131.10	3.51	22.96	243164.64
Accenture	314.54	3.06	322.88	242.80	1.09	34.32	208412.84
Activision Bli.	80.43	0.66	87.01	70.94	0.54	25.12	63081.25
Adobe	471.66	-2.97	491.51	274.73	-	49.86	216350.44
Advanced Micro	129.09	-0.10	132.83	54.57	-	53.97	207881.61
AEP	83.11	-0.58	105.60	80.30	3.36	18.00	42707.41
Aflac	69.74	1.00	74.02	52.07	1.76	11.73	42138.79
AirProd	283.07	4.14	328.56	218.88	1.97	31.95	62876.28
Allstate	114.06	1.71	142.15	103.20	2.64	7.22	29980.89
Alphabet	124.02	0.38	129.04	83.34	-	1.19	736802.82
Altria	45.78	0.25	48.44	40.35	7.16	36.71	81710.18
Amazon	126.54	-0.03	146.57	81.43	-	2.10	1298345.16
AmerAir	16.25	0.23	17.64	11.65	-	-4.66	10606.36
AmerExpr	175.06	1.42	182.15	130.65	0.99	18.27	130117.17
AmerIntGrp	57.06	0.84	64.88	45.66	2.09	5.67	41297.32
AmerTower	188.34	-0.22	282.47	178.17	2.57	35.76	87774.58
Amgen	219.50	2.14	296.67	211.71	2.98	22.94	117282.02
Amphenol Corp	79.87	0.26	82.86	61.67	0.91	34.19	47548.13
Analog Devices	190.82	3.16	198.25	133.48	1.36	68.85	95680.64
Anthem	482.58	12.71	-	-	-	-	-
Aon Cp	318.03	-0.03	338.27	246.21	0.58	61.57	64956.2
Apple	183.12	-0.67	184.95	124.17	0.44	32.63	2880239.91
Applied Materi.	141.49	1.48	142.53	71.12	0.62	20.97	118815.86
Aptiv	101.07	0.80	124.88	77.96	-	55.98	27340.08
ArcherDan	74.10	0.93	98.28	69.92	1.86	16.62	40357.44
AT&T	15.97	0.04	21.39	14.46	12.12	6.22	114133.79
Autodesk	207.80	-0.30	235.01	163.20	-	98.74	44843.24
AutomData	219.47	1.11	274.92	196.61	1.62	36.51	90668.05
AutoZone	2409.97	-5.04	2750	1959.58	-	23.40	43755.25
Avago Tech	852.45	-2.91	921.78	415.07	1.64	51.73	351793.67
BakerHu	30.81	1.02	34.50	20.42	2.24	76.63	31190.88
Bank of NY	44.29	0.57	52.26	36.22	2.73	11.50	34950.74
BankAm	29.61	0.48	38.60	26.32	2.45	8.91	235966.61
Baxter	43.39	0.68	72.65	37.35	2.33	18.43	21948.84
BectonDick	251.05	0.34	269.06	215.90	1.25	46.67	71301.94
BerkshHat	511980.52	2976.52	515738.99	393012.25	-	9.25	299942.76
Biogen	302.36	-11.06	319.76	188.54	-	31.24	43763.56
BlackRock	689.59	7.21	785.65	503.12	2.23	19.39	103274.83
Boeing	221.72	0.16	223.91	113.02	-	-33.32	133382.3
Booking Holdings	2596.09	-9.25	2786.85	1616.85	-	99.03	95883.08
Bristol-Myers	64.57	-0.19	81.44	63.07	2.90	22.24	135651.7
Broadcom	852.45	-2.91	921.78	415.07	1.64	51.73	351793.67
Cadence Design	238.81	5.59	242.65	138.76	-	102.64	65119.67
CapOne	112.75	0.92	120.94	83.93	1.65	4.50	43048.65
CardinalHlth	87.97	0.79	88.04	49.70	2.07	48.97	22395.91
Carnival	15.23	0.51	15.37	6.11	-	-1.95	16991.32
Caterpillar	245.11	7.21	260.50	160.60	1.63	22.26	126318.82
Centene Corp	69.22	0.04	98.53	61.34	-	32.62	37985.81
CharlesSch	54.79	0.82	86.63	45.00	1.22	20.80	96931.3
Charter Comms	336.54	1.24	496.37	297.66	-	14.78	50674.59
Chevron Corp	159.31	1.98	189.68	132.54	3.10	21.03	301835.65
Chipotle Mexic.	2056.76	-6.91	2139.88	1196.28	-	96.51	56745.68
Chubb	192.85	2.30	230.27	173.78	1.53	10.75	79871.48
Cigna	268.79	1.80	340.11	240.11	1.38	18.36	79527.5
Cintas Corp	482.61	-1.92	486.30	343.86	0.70	45.46	49082.31
Cisco	50.60	0.12	52.56	38.61	2.75	19.30	206177.57
Citigroup	49.27	0.82	66.00	40.01	3.85	5.22	95906.73
CME Grp	178.47	-0.88	212.09	166.55	1.88	26.31	64198.25
Coca-Cola	60.47	0.26	65.47	54.02	2.59	28.88	261485.62
Cognizant	64.03	0.71	70.67	51.33	1.40	16.99	32495.23
ColgtPlm	75.22	-0.50	83.81	67.84	2.21	31.70	62400.12
Comcast	40.90	0.21	43.72	28.39	2.28	14.45	170097.97
ConocPhil	104.38	1.56	138.49	78.30	1.74	18.48	126305.93
Constellation	246.75	2.31	261.32	208.12	1.16	-1193.83	45211.57
Corning	33.05	0.22	37.73	28.98	2.70	27.74	28092.56
Corteva	57.69	0.69	68.43	50.03	0.86	26.15	41006.71
Corteva	57.69	0.69	68.43	50.03	0.86	26.15	41006.71
Costco	521.20	0.23	564.75	443.20	0.57	44.71	230944.03
CrownCstl	115.01	-0.15	184.92	110.22	4.42	46.28	49875.62
CSX	32.76	0.36	34.71	25.80	1.11	19.44	66592.71
CVS	72.44	0.94	107.26	66.34	2.57	13.08	92869.91
Danaher	239.28	1.23	303.82	221.22	0.35	29.34	176564.42
Deere	397.29	10.16	448.40	283.81	0.92	23.44	116480.84
Delta	41.05	0.85	41.09	27.20	-	52.94	26383.45
Devon Energy	50.69	1.29	78.82	44.03	3.62	13.00	33147.99
Digital Realty	106.28	0.93	139.14	85.76	4.06	19.23	31591.94
DiscFinServ	116.91	2.09	118.71	87.64	1.50	7.05	29688.83
Disney	93.71	0.57	126.48	84.07	-	58.54	171234.92
Dollar General	158.57	4.58	261.59	151.27	1.00	16.60	34781.14
DominRes	52.45	-0.05	86.28	48.48	4.47	17.67	43845.13
DukeEner	90.15	-1.24	113.67	83.76	4.03	19.65	69474.25
DuPont	70.91	1.19	78.40	49.52	1.57	23.59	32548.88
Eaton	192.54	2.99	193.00	122.50	1.47	38.74	76746.44
eBay	45.23	0.11	50.82	35.92	1.48	127.90	24186.15
Ecolab	180.51	1.48	181.73	131.04	1.01	49.61	51394.98
Edwards Lifesc.	86.74	1.17	107.92	67.13	-	39.16	52583.37
Eli Lilly	446.56	1.25	454.95	283.11	0.71	78.41	423902.57
Emerson	86.09	2.02	99.65	72.41	2.19	20.20	49199.41
EOG Res	114.80	0.88	150.88	92.16	1.31	15.44	67141.77
Equinix	757.35	3.47	762.69	494.89	1.41	147.16	70831.59
EquityResTP	65.65	-	80.89	54.60	3.42	20.59	24875.09
Exelon	39.91	-	47.23	35.19	3.57	24.65	39693.25
ExxonMb	107.14	0.72	119.92	80.69	3.03	21.36	433165.41
Fedex	227.77	3.22	248.76	141.92	1.17	13.16	57250.43
Fidelity NIS	55.15	0.67	105.16	48.57	2.63	88.45	32672.87
Fiserv	114.23	2.00	122.39	87.03	-	62.66	71750.87
FordMtr	14.03	0.25	16.68	10.61	0.66	3.39	55117.1
Franklin	26.84	0.44	32.88	20.24	3.92	7.63	13443.17
GenDyn	213.24	0.17	256.86	202.35	2.04	19.84	58499.32
GenElectric	106.89	0.66	107.33	46.77	0.28	-35.34	116398.94
GenMills	80.76	-0.82	90.89	64.94	2.37	22.92	47434.39
GenMotors	37.22	0.55	43.63	30.33	-	5.97	51740.4
GileadSci	77.97	0.11	89.74	57.17	3.39	16.99	97256.09
GoldmSchs	341.90	2.41	389.58	277.84	1.77	6.18	113664
Halliburton	33.40	1.67	43.42	23.30	0.73	20.17	30133.31
HCA Hold	278.50	2.26	294.02	164.47	0.64	14.14	76640.36
Hew-Pack	30.75	0.57	35.75	24.08	2.54	5.96	30313.22
Hilton Worldwi.	142.73	0.06	152.89	108.41	-	105.05	37770.15
HiltonWwde	142.73	0.06	152.89	108.41	-	105.05	37770.15
HomeDep	301.44	0.58	347.25	264.51	2.06	20.66	303060.58
Honywell	200.65	2.15	220.96	166.63	1.75	27.26	133568.04
HumanaInc	509.85	-3.38	571.30	418.70	0.51	24.17	63703.21
IBM	137.97	1.55	153.21	115.55	4.42	28.46	125283.03
IDEXX Laborato.	462.80	2.32	515.79	317.06	-	57.82	38365.71
IllinoisTool	243.37	3.60	247.09	173.52	1.80	30.73	73960.82
Illumina	207.45	-0.69	248.87	173.45	-	44.23	32797.85
Intcntl Exch	109.09	0.59	113.07	88.60	1.13	16.33	61075.89
Intel	33.66	0.59	40.73	24.59	3.84	7.44	140375.01
Intuit	444.69	-1.44	490.83	352.63	0.54	59.84	124538.36
John&John	160.18	0.28	183.35	150.11	2.43	22.04	416265.22
JohnsonCn	64.80	1.25	69.15	45.52	1.65	31.79	44459.2
JPMrgnCh	142.50	1.50	144.34	101.28	2.48	9.97	416426.11
Kimb-Clark	134.25	-0.41	147.87	108.74	3.27	27.07	45293.27
KinderM	17.08	0.19	19.36	15.78	6.05	39.65	38279.93
KLA Corp	479.31	3.88	481.70	250.20	0.76	26.51	65760.81
Kraft Heinz	36.71	0.13	42.80	32.73	4.06	48.10	45045.75
Kroger	46.71	0.33	52.00	41.82	1.57	22.91	33521.36
LasVegasSd	59.81	0.86	65.58	30.14	-	-42.56	45713.9
LibertyGbl	16.65	-0.12	22.82	15.22	-	0.76	2848.65
Lilly (E)	446.56	1.25	454.95	283.11	0.71	78.41	423902.57
Linde	371.04	9.03	373.58	262.47	1.06	54.47	181934.71
Lockheed	454.00	-5.87	508.10	373.67	2.28	20.95	114976.66
Lowes	216.35	2.99	221.42	170.12	1.30	19.13	126776.94
Lyondell	91.56	2.51	101.30	71.46	4.51	5.87	29780.47
Marathon Ptl	114.56	2.19	138.83	77.62	1.88	60.94	48605.84
Marsh&M	177.66	-0.95	182.43	143.33	1.40	29.36	87892.19
MasterCard	371.75	-3.56	392.20	276.87	0.56	45.60	349551.74
McDonald's	288.42	-0.15	298.86	230.58	1.69	30.87	210573.68
McKesson	397.06	1.79	401.78	298.69	0.42	48.32	53806.61
Medtronic	85.50	1.22	95.60	75.77	2.71	25.07	113751.23
Merck	110.06	0.20	119.65	83.05	2.23	24.33	279270.2
Meta	271.74	0.69	276.57	88.09	-	21.21	601134.05
Metlife	55.12	1.11	77.36	48.95	3.21	8.10	42212.05
Microsoft	331.76	-0.10	338.56	213.43	0.65	37.96	2466760.18
Mnstr Bvrg	58.13	0.22	60.47	41.95	-	24.30	58130
MondelezInt	72.93	0.12	78.59	54.72	1.70	25.78	99319.98
Monsanto	10.07	0.02	11.13	9.56	-	51.84	251.75
MorganStly	88.46	1.02	100.99	72.05	2.21	11.84	147738.26
Netflix	432.63	8.66	436.34	164.28	-	41.36	192318.57
NextEraE	74.33	0.35	91.35	69.64	2.03	104.92	150400.95
Nike	106.79	-0.04	129.23	82.22	1.02	29.99	131575.06
NorfolkS	216.54	0.60	264.22	196.33	1.79	19.21	49293.08
Northrop	451.61	-1.90	556.27	429.10	1.27	11.15	68581.24
NXP	195.24	5.89	196.05	132.08	1.07	30.90	50664.78
Occid Pet	59.37	0.18	77.13	54.30	0.06	30.97	52942.73
Oracle	117.93	1.50	123.99	60.78	1.02	47.91	318374.15
Pepsico	181.64	-0.26	196.88	154.86	2.18	35.55	250244.18
Perrigo	33.00	-0.01	43.90	30.78	2.71	-36.18	4465.08
Pfizer	40.27	0.37	54.93	36.17	3.61	11.01	227308.29
Phillips66	98.35	1.57	113.53	74.02	3.43	35.58	45129.11
PhilMorris	92.82	0.17	104.75	82.85	4.91	17.11	144074.9
PNCFin	128.57	1.16	176.34	110.31	3.47	10.88	51313.32
PPG Inds	140.96	0.97	145.51	107.06	1.57	33.24	33183.07
ProctGmbl	145.09	-0.32	158.11	122.18	2.30	26.50	341972.68
Prudntl	86.82	2.21	110.96	75.37	4.93	4.78	31689.3
PublStor	283.97	-0.72	357.13	270.13	2.62	30.92	49925.35
Qualcomm	124.39	2.25	156.66	101.47	2.01	15.31	138570.46
Raytheon	100.39	0.97	104.91	80.27	1.86	41.81	146684.05
Regen Pharm	760.77	6.76	837.55	538.01	-	11.36	83464.27
S&P Global	387.27	2.01	395.80	279.32	0.74	33.26	124699.33
Salesforce	211.01	-2.69	225.00	126.34	-	151.75	205518.87
Schlmbrg	48.52	1.50	59.45	30.65	0.96	39.50	68907.55
Sempra Energy	146.82	-0.36	176.47	136.54	2.79	39.34	46195.75
Shrwin-Will	246.71	1.80	265.64	195.24	0.83	37.98	63623.76
SimonProp	111.25	1.29	129.55	86.02	5.98	17.48	36377.47
SouthCpr	73.30	2.77	82.05	42.42	4.06	17.94	56667.42
Starbucks	99.28	0.82	115.48	70.35	1.72	28.83	113814.59
StateSt	74.66	1.59	94.74	58.62	2.72	11.16	24955.77
Stryker	280.71	0.79	306.56	188.84	0.86	57.89	106341.72
Sychrony Fin	34.05	0.31	40.89	26.59	2.47	4.82	14592.83
T-MobileUS	129.43	-1.36	154.38	121.76	-	57.71	155296.08
Target	128.47	1.99	183.89	125.08	2.31	9.70	59296.56
TE Connect	131.68	1.56	138.24	104.76	1.40	19.22	41492.37
Tesla Mtrs	256.06	6.23	314.67	101.81	-	56.15	811583.27
TexasInstr	177.75	3.71	186.30	144.46	2.20	23.12	161335.47
TheTrvelers	176.91	2.14	194.45	149.65	1.90	11.72	40862.06
ThrmoFshr	523.89	0.20	611.06	475.77	0.18	28.93	202075.52
TJX Cos	81.23	1.20	83.13	54.55	1.20	32.02	93352.64
Truist Financial Corp	32.43	0.48	52.22	25.56	5.34	7.80	43194.1
Twitter	53.70	0.35	60.16	31.30	-	-224.30	41093.72
UnionPac	197.08	-1.88	242.36	183.69	2.19	19.57	120268.73
UPS	171.71	0.21	209.39	154.87	2.21	12.57	124451.92
USBancorp	32.69	0.53	49.80	27.27	5.01	6.89	50111.18
UtdHlthcre	489.30	-3.30	558.10	449.70	1.07	29.08	455549.32
ValeroEngy	115.45	2.37	142.29	96.93	3.16	54.65	41737.13
Verizon	35.63	0.02	52.18	33.72	6.62	7.20	149767.2
VertexPharm	341.05	0.45	354.46	243.17	-	40.67	87837.97
VF Cp	18.98	-0.15	48.63	16.77	9.66	6.69	7377.1
Visa Inc	224.78	-1.39	235.57	174.60	0.55	39.99	363744.25
Walgreen	31.91	0.27	42.74	29.48	5.59	4.97	27527.5
WalMartSto	154.94	0.84	155.19	117.90	1.33	33.86	417227.87
Walt Disney	93.71	0.57	126.48	84.07	-	58.54	171234.92
Waste Manage.	162.36	-0.55	175.98	138.89	1.32	40.67	66050.76
WellsFargo	42.95	1.12	48.84	35.25	1.67	9.33	161158
Williams Cos	30.65	0.09	35.79	27.80	4.98	26.56	37337.44
Workday	212.92	3.27	218.88	128.72	-	1888.62	43861.52
Yum!Brnds	135.69	1.06	143.25	103.97	1.37	27.99	38005
Zoetis	166.03	0.48	187.82	124.15	0.56	41.78	76724.48
Zoom	68.83	-0.35	124.05	60.45	-	16.28	17267.73
Venezuela (VEF)							
Bco de Vnzla	4.22	-	4.59	1.00	131.53	-	570.30
Bco Provncl	9.50	1.25	70000	6.80	-	0.00	132.01

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 %
Carnival	15.23	14.72	0.51	3.43	1.95	19.2	54.83
Tesla Mtrs	256.06	249.83	6.23	2.49	28.52	15.7	52.44
MTN Grp	144.10	137.50	6.60	4.80	9.33	12.4	23.26
Oracle	117.93	116.43	1.50	1.28	9.33	10.1	20.49
SK Hynix	119500.00	114800.00	4700.00	4.09	6100.00	9.9	31.65
Equinor	324.95	312.65	12.30	3.93	15.80	9.5	7.55
DanskeBk	161.95	161.00	0.95	0.59	12.70	9.2	15.47
Delta	41.05	40.20	0.85	2.11	2.56	9.1	23.56
Adobe	471.66	474.63	-2.97	-0.63	41.74	9.0	40.61
AmerAir	16.25	16.02	0.23	1.40	1.09	8.8	15.87
Intel	33.66	33.07	0.59	1.77	2.11	8.7	16.22
FordMtr	14.03	13.78	0.25	1.78	0.85	8.5	20.18
Netflix	432.63	423.97	8.66	2.04	24.68	8.3	27.28
Caterpillar	245.11	237.90	7.21	3.03	11.22	8.1	17.00
MitsbCp	6471.00	6287.00	184.00	2.93	300.00	8.1	20.98
Firstrand	68.08	66.52	1.56	2.35	3.51	8.0	10.52
Avago Tech	852.45	855.36	-2.91	-0.34	65.36	7.9	35.02
Broadcom	852.45	855.36	-2.91	-0.34	65.36	7.9	35.02
NXP	195.24	189.35	5.89	3.11	8.09	7.7	18.63
Nutrien	80.15	79.64	0.51	0.64	5.22	7.7	-1.11

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 %
Midea	0.36	0.36	0.00	0.00	-0.04	-10.0	-10.00
ChMinsheng	2.89	3.09	-0.20	-6.47	-0.08	-8.8	-11.35
Bausch Hlth	9.74	9.72	0.02	0.21	-0.95	-8.7	25.29
CNOOC	11.28	11.68	-0.40	-3.42	-0.52	-7.5	-10.62
Hngzh HikVDT	33.58	31.75	1.83	5.76	-4.25	-6.7	-5.28
Vodafone	72.43	72.85	-0.42	-0.58	-4.07	-5.8	-19.41
Telefonica	3.65	3.85	-0.20	-5.18	0.00	-5.1	-5.98
ReckittB	5984.00	5990.00	-6.00	-0.10	-308.00	-5.0	-7.80
Sinopec Corp	4.76	4.85	-0.09	-1.86	-0.14	-4.6	-7.21
Hunng Pwr	4.79	4.81	-0.02	-0.42	-0.21	-4.6	-2.85
Telia Co	24.16	24.27	-0.11	-0.45	-1.00	-4.4	-9.92
Danone	53.75	53.81	-0.06	-0.11	-2.36	-4.3	-9.04
Swiss Re	88.46	88.38	0.08	0.09	-4.06	-4.3	-1.71
WalMrtMex	66.32	66.99	-0.67	-1.00	-2.23	-4.2	-10.34
Booking Holdings	2596.09	2605.34	-9.25	-0.36	-102.76	-4.1	-1.32
Roche	280.30	280.05	0.25	0.09	-12.10	-4.1	-1.56
MuenchRkv	326.10	325.10	1.00	0.31	-13.50	-3.7	-3.69
Orange	10.29	10.39	-0.10	-0.94	-0.30	-3.7	-10.98
Swisscom	547.20	547.80	-0.60	-0.11	-20.20	-3.7	-7.32
GenMills	80.76	81.58	-0.82	-1.01	-2.20	-3.6	-10.87

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

Jun 13	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-	109.50	2.33	0.16	0.52	1.28
Brazil	04/26	6.00	-	Ba2	BB-	115.15	2.78	-0.01	0.65	1.73
Poland	04/26	3.25	-	A2	A-	111.22	0.98	0.03	0.16	-0.07
Mexico	05/26	11.50	-	Baa1	BBB-	149.00	1.61	0.00	-0.12	0.56
Turkey	03/27	6.00	-	Ba2	BB+	101.26	5.82	0.00	0.17	3.07
Turkey	03/27	6.00	-	B2	BB-	102.88	5.43	0.14	0.83	4.38
Peru	08/27	4.13	BBB+	A3	BBB+	103.50	3.66	0.01	-0.02	0.80
Russia	06/28	12.75	-	Baa3	BBB	168.12	2.48	0.07	0.05	-
Brazil	02/47	5.63	-	Ba2	BB-	101.48	5.52	0.08	0.80	-
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	BBB+	A3	BBB+	107.76	0.76	0.00	-0.07	-1.56
Mexico	04/23	2.75	-	Baa1	BBB-	106.48	-0.26	-	-	-0.36
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

Jun 13	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-	98.73	1.34	-0.02	-0.14	0.27
£ Sterling										
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	128.68	3.20	0.00	-0.01	0.40
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	137.45	2.19	-0.03	0.02	-

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

Jun 13	Rate	Current	Since	Last
US	Fed Funds	4.75-5.00	22-03-2023	4.75-4.50
US	Prime	8.25	04-05-2023	8.00
US	Discount	5.00	02-05-2023	4.75
Euro	Repo	3.25	02-05-2023	2.899
UK	Repo	4.50	11-05-2023	4.25
Japan	O'night Call	0.00-0.10	01-02-2016	0.00
Switzerland	Libor Target	-1.25-0.25	15-01-2015	-0.75--0.25

INTEREST RATES: MARKET

Jun 13 (Libor: Jun 12)	Over night	Change Day	Change Week	Change Month	One month	Three month	Six month	One year
US$ Libor	5.06871	0.002	0.003	-0.001	5.21800	5.55743	5.63943	5.81186
Euro Libor	-0.64957	-0.064	0.000	0.001	-0.61943	-0.58057	-0.55600	-0.48571
£ Libor	0.18063	-0.005	0.000	0.001	4.20130	4.96060	4.74470	0.81363
Swiss Fr Libor				-0.002	-0.77540	-0.75300	-0.70280	-0.55320
Yen Libor				0.000	-0.06005	-0.02617	0.07165	0.04867
Euro Euribor				0.025	3.31500	3.47800	3.75300	3.93800
Sterling CDs				0.000	0.50000	0.63000	0.78500	
US$ CDs				-0.020	5.20000	5.45000	5.56000	
Euro CDs				0.020	3.31000	3.48000	3.66000	

Jun 13	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	2.89	3.19	2.95	3.25	3.16	3.46	3.33	3.63	3.51	3.81	3.61	3.91
Sterling					0.45	0.55	0.58	0.68	0.71	0.86	0.90	1.05
US Dollar	4.88	5.08	4.97	5.17	5.10	5.30	5.35	5.55	5.46	5.66	5.48	5.68
Japanese Yen	-0.30	-0.10	-0.30	-0.10	-0.25	0.05	-0.15	0.05	-0.05	0.15	0.00	0.20

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	207.86	-0.07	0.49	2.04	-1.43	2.48
Corporates(£)	322.78	-0.31	-0.27	-0.11	-2.51	-6.75
Corporates(€)	212.52	0.12	-0.08	2.52	-0.14	-0.88
Eurozone Sov(€)	212.78	0.13	-0.23	2.53	-0.05	-3.42
Gilts(£)	258.51	-0.76	-0.72	-4.10	-3.93	-15.48
Overall(£)	270.03	-0.64	-0.61	-3.04	-3.51	-13.21
Overall(€)	208.97	0.11	-0.20	2.34	-0.12	-3.04
FTSE						
Sterling Corporate (£)	-	-	-	-	-	-
Euro Corporate (€)	104.47	-0.05	-	-	0.54	-1.73
Euro Emerging Mkts (€)	657.98	-11.70	-	-	6.21	12.66
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	405.68	-4.08	-2.83	-46.21	510.17	403.76
Europe 5Y	76.76	-0.82	0.01	-9.73	101.15	76.07
Japan 5Y	71.01	-0.08	0.44	-7.92	99.54	69.88
Senior Financials 5Y	88.22	-0.29	0.43	-13.35	124.01	86.56
Markit CDX						
Emerging Markets 5Y	217.99	-2.01	-7.54	-40.45	265.81	217.99
Nth Amer High Yld 5Y	442.13	1.30	-11.54	-54.06	511.98	440.83
Nth Amer Inv Grade 5Y	70.68	0.15	-1.27	-10.20	88.71	70.53

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

VOLATILITY INDICES

	Jun 13	Day Chng	Prev	52 wk high	52 wk low
VIX	14.70	-0.31	15.01	35.05	13.50
VXD	11.65	-3.37	15.02	37.57	9.39
VXN	19.94	-0.52	20.46	41.12	5.85
VDAX	14.30	-0.39	14.69	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	-	-	-	-	-	-	-	-
	05/32	1.25	79.81	3.96	0.00	0.17	0.64	0.27
	02/50	1.00	95.70	1.83	0.00	0.10	0.29	0.18
Austria	02/29	0.50	87.75	2.86	-0.03	-0.03	0.17	1.07
	02/47	1.50	71.93	3.21	0.01	-0.01	0.08	1.04
Belgium	06/27	0.80	92.56	2.78	-0.02	0.01	0.19	1.20
	06/47	1.60	70.11	3.45	0.01	-0.02	0.06	0.90
Canada	03/25	1.25	94.72	4.48	-0.03	0.13	0.72	1.23
	06/30	1.25	86.65	3.42	-0.01	0.12	0.55	0.05
	12/48	2.75	90.77	3.29	0.00	0.05	0.28	0.07
Denmark	11/29	0.50	87.75	2.60	0.00	0.01	0.14	0.81
	11/52	0.25	51.29	2.66	0.04	0.00	0.06	0.72
Finland	09/24	0.00	96.16	3.17	0.01	0.02	0.32	2.10
	09/29	0.50	86.81	2.83	-0.02	-0.02	0.13	1.02
France	05/28	0.75	90.92	2.74	-0.02	0.01	0.16	1.05
	05/48	2.00	77.67	3.33	0.01	-0.02	0.06	0.91
Germany	08/29	0.00	86.77	2.33	-0.01	0.00	0.15	0.94
	08/50	0.00	51.76	2.45	0.02	-0.01	0.08	0.83
Greece	-	-	-	-	-	-	-	-
	01/28	3.75	102.15	3.24	0.04	0.04	-0.17	0.08
Ireland	-	-	-	-	-	-	-	-
	05/26	1.00	95.09	2.77	-0.04	-0.09	0.17	1.38
	02/45	2.00	80.37	3.28	0.00	-0.04	0.03	0.87
Italy	02/25	0.35	95.23	3.38	-0.04	-0.02	0.08	1.07
	05/30	0.40	91.57	1.70	-0.01	0.02	-0.11	0.58
	03/48	3.45	86.54	4.34	-0.04	-0.08	-0.18	0.45
Japan	04/25	0.05	100.07	0.01	-0.01	0.01	-0.02	-0.01
	12/29	0.10	99.48	0.18	0.00	-0.01	0.02	-0.02
	12/49	0.40	81.24	1.23	0.00	-0.01	0.01	0.20
Netherlands	07/27	0.75	92.72	2.65	-0.01	0.00	0.20	1.16
	01/47	2.75	99.32	2.79	0.02	-0.02	0.07	0.94
New Zealand	05/31	1.50	80.34	4.48	0.00	0.19	0.48	0.60
	09/40	2.50	120.12	2.60	-0.01	0.11	0.28	0.50
Norway	08/30	1.38	86.17	3.59	-0.02	0.11	0.39	0.53
Poland	-	-	-	-	-	-	-	-
	07/27	2.50	88.37	5.75	0.01	-0.03	0.03	-1.73
	04/47	4.00	77.05	5.80	0.00	0.08	-0.03	-1.13
Portugal	04/27	4.13	105.05	2.72	-0.02	0.01	0.07	0.66
Spain	-	-	-	-	-	-	-	-
	10/29	0.60	85.94	3.06	-0.03	-0.02	0.03	0.68
	10/46	2.90	85.65	3.84	-0.01	-0.04	-0.01	0.72
Sweden	06/30	0.13	113.66	0.74	0.04	0.09	0.15	2.00
	03/39	3.50	112.82	2.51	-0.04	-0.04	0.15	0.53
Switzerland	04/28	4.00	114.35	0.94	0.00	0.06	0.10	0.11
	06/29	0.00	94.59	0.93	0.00	0.05	0.04	0.04
United Kingdom	07/23	0.75	99.57	4.79	0.31	0.39	0.43	2.85
	07/27	1.25	88.17	4.43	0.09	0.15	0.78	2.30
	07/47	1.50	55.43	4.57	0.09	0.05	0.36	1.98
United States	-	-	-	-	-	-	-	-
	03/25	0.50	92.81	4.72	-0.02	0.11	0.67	1.50
	02/30	1.50	86.33	3.84	0.00	0.08	0.40	0.65
	02/50	0.25	68.79	1.71	0.03	0.00	0.13	0.91

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

GILTS: UK CASH MARKET

Jun 13	Price £	Red Yield	Change in Yield Day	Week	Month	Year	52 Week High	52 Week Low	Amnt £m
	-	-	-	-	-	-	-	-	-
Tr 0.75pc '23	99.61	4.47	1.82	1.82	6.94	123.50	99.61	97.34	34.36
Tr 0.125pc '24	97.03	4.97	3.97	4.63	20.05	133.33	97.53	94.34	35.55
Tr 2pc '25	93.77	4.99	5.27	8.71	29.95	128.90	101.22	93.15	39.93
Tr 0.125pc '26	88.63	4.78	5.29	9.13	31.32	122.33	95.25	86.33	35.32
Tr 1.25pc '27	87.44	4.65	4.73	8.39	29.17	111.36	98.68	85.65	40.99
Tr 0.5pc '29	79.96	4.58	4.09	7.26	24.12	97.41	95.06	78.21	28.92
Tr 1pc '32	75.78	4.40	2.80	5.52	20.22	76.00	122.11	75.78	35.96
Tr 4.25pc '36	97.36	4.52	2.26	4.63	17.71	71.21	125.01	94.91	31.68
Tr 4.5pc '42	98.29	4.63	1.54	3.81	13.20	72.12	135.11	93.79	28.35
Tr 3.75pc '52	86.42	4.60	1.32	3.14	11.65	76.92	132.80	82.51	25.11
Tr 4pc '60	91.44	4.48	1.36	2.75	11.44	79.92	147.23	87.32	25.13

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

GILTS: UK FTSE ACTUARIES INDICES

Price Indices / Fixed Coupon	Jun 13	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
1 Up to 5 Years	79.84	-0.45	2315.04	-1.73	-2.86	4.85
2 5 - 10 Years	139.76	-0.95	3007.29	-4.34	-10.11	4.43
3 10 - 15 Years	147.04	-1.01	3425.61	-5.26	-14.70	4.52
4 5 - 15 Years	140.44	-0.97	3104.53	-4.62	-11.41	4.47
5 Over 15 Years	192.07	-1.08	3364.05	-5.88	-26.87	4.56
7 All stocks	127.41	-0.81	2880.57	-3.96	-14.54	4.56

Index Linked	Jun 13	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	323.36	-0.22	-0.84	0.83	2748.34	-0.84	1.95
2 Over 5 years	506.42	-0.38	-3.73	-25.11	3871.31	-3.73	-24.70
3 5-15 years	440.28	-0.48	-2.53	-9.13	3576.42	-2.53	-8.36
4 Over 15 years	553.12	-0.30	-4.59	-33.52	4100.97	-4.59	-33.27
5 All stocks	485.45	-0.35	-3.24	-21.61	3787.24	-3.24	-21.11

Yield Indices	Jun 13	Jun 12	Yr ago		Jun 13	Jun 12	Yr ago
5 Yrs	4.54	4.35	2.20	20 Yrs	4.63	4.56	2.70
10 Yrs	4.47	4.35	2.50	45 Yrs	4.40	4.34	2.43
15 Yrs	4.58	4.49	2.67				

Real yield	inflation 0% Jun 13	Dur yrs	Previous	Yr ago	inflation 5% Jun 13	Dur yrs	Previous	Yr ago
Up to 5 yrs	1.78	2.24	1.68	-2.04	1.40	2.26	1.30	-2.48
Over 5 yrs	1.02	18.64	1.00	-0.94	0.99	18.69	0.97	-0.96
5-15 yrs	0.91	9.13	0.85	-1.23	0.83	9.14	0.77	-1.31
Over 15 yrs	1.04	25.45	1.03	-0.90	1.04	25.46	1.02	-0.91
All stocks	1.04	15.73	1.01	-0.96	1.00	15.80	0.98	-0.98

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

Tradeweb

COMMODITIES

www.ft.com/commodities

Energy		Price*	Change
Crude Oil†	Jul	68.64	1.52
Brent Crude Oil‡		74.14	2.30
RBOB Gasoline†	Jul	2.54	0.06
Natural Gas†	Jul	2.33	0.07
Base Metals (♠ LME 3 Months)			
Aluminium		2242.00	20.50
Aluminium Alloy		2150.00	-75.00
Copper		8439.50	151.50
Lead		2072.00	6.00
Nickel		21685.00	645.00
Tin		26215.00	220.00
Zinc		2371.00	38.00
Precious Metals (PM London Fix)			
Gold		1952.90	-7.40
Silver (US cents)		2421.00	-10.50
Platinum		993.00	-8.00
Palladium		1330.00	6.00
Bulk Commodities			
Iron Ore		111.14	-1.82
Baltic Dry Index		1074.00	18.00
Richards Bay ICE Futures		105.45	-1.40

Agricultural & Cattle Futures		Price*	Change
Corn♦	Jul	624.00	6.75
Wheat♦	Jul	634.75	1.00
Soybeans♦	Jul	1394.50	21.75
Soybeans Meal♦	Jul	401.20	3.80
Cocoa (ICE Liffe)✠	Jul	2497.00	56.00
Cocoa (ICE US)♥	Jul	3149.00	-31.00
Coffee(Robusta)✠	Jul	2706.00	0.00
Coffee (Arabica)♥	Jul	183.70	-1.85
White Sugar✠		679.80	-4.80
Sugar 11♥		25.25	-0.22
Cotton♥	Jul	83.60	0.11
Orange Juice♥	Jul	256.50	-2.90
Live Cattle♣	Jun	178.85	0.63
Feeder Cattle♣	May	134.88	-
Lean Hogs♣	Jul	91.05	1.43

	Jun 12	% Chg Month	% Chg Year
S&P GSCI Spt	536.37	-0.46	-32.45
DJ UBS Spot	101.16	-0.02	-24.08
TR/CC CRB TR	285.01	0.07	-17.92
LEBA EUA Carbon	58.91	-1.98	129.94
LEBA UK Power	1048.00	-37.43	-39.60

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

BONDS: INDEX-LINKED

	Price Jun 12	Yield Jun 12	Yield Prev	Month return	Value stock	Market	No of stocks
Can 4.25%' 26	108.18	1.802	1.852	-0.33	5.25	70419.59	8
Fr 0.25%' 24	99.56	0.652	0.514	-0.16	17.92	261697.68	17
Swe 1.00%' 25	126.31	1.252	1.155	-0.32	35.93	225752.93	7
UK 2.500%' 24	374.22	2.959	2.890	-0.06	6.82	524510.53	31
UK 2.50%' 24	374.22	2.959	2.890	-0.06	6.82	524510.53	31
UK 2.00%' 35	237.15	0.894	0.792	-0.36	9.08	524510.53	31
US 0.625%' 26	96.03	2.213	2.199	-0.09	42.42	1656338.62	48
US 3.625%' 28	108.18	1.849	1.860	-0.24	16.78	1656338.62	48

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	3.96	1.63	0.11	Netherlands	2.65	0.33	-1.19
Austria	2.86	0.54	-0.98	New Zealand	4.48	2.15	0.63
Canada	3.42	1.09	-0.42	Norway	3.59	1.27	-0.25
Denmark	2.60	0.27	-1.25	Portugal	2.72	0.39	-1.12
Finland	2.83	0.50	-1.01	Spain	3.06	0.73	-0.78
Germany	2.33	0.00	-1.51	Sweden	0.74	-1.59	-3.10
Italy	1.70	-0.63	-2.14	Switzerland	0.93	-1.40	-2.91
Japan	0.18	-2.15	-3.66	United States	3.84	1.51	0.00

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

MANAGED FUNDS SERVICE

abrdn Capital (CI) Limited (JER)
PO Box 189, St Helier, Jersey, JE4 9RU 01534 709130
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
abrdn Capital Offshore Strategy Fund Limited				
Bridge Fund	£ 2.2014	-	0.0078	2.09
Global Equity Fund	£ 3.4081	-	0.0266	1.36
Global Fixed Interest Fund	£ 0.7440	-	0.0001	6.36
Income Fund	£ 0.6301	-	0.0014	3.20
Sterling Fixed Interest Fund	£ 0.6576	-	-0.0052	4.58
UK Equity Fund	£ 1.9116	-	0.0004	3.69

Algebris Investments (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Algebris Financial Credit I EUR	€ 176.43	-	0.50	0.00
Algebris Financial Credit R EUR	€ 151.24	-	0.42	0.00
Algebris Financial Credit Rd EUR	€ 89.84	-	0.25	6.08
Algebris Financial Income I EUR	€ 182.26	-	-0.02	0.00
Algebris Financial Income R EUR	€ 165.08	-	-0.03	0.00
Algebris Financial Income Rd EUR	€ 98.87	-	-0.01	4.96
Algebris Financial Equity B EUR	€ 168.48	-	-0.27	-
Algebris Financial Equity R EUR	€ 140.96	-	-0.24	-
Algebris IG Financial Credit I EUR	€ 97.54	-	-0.02	0.00
Algebris IG Financial Credit R EUR	€ 95.78	-	-0.02	0.00
Algebris Global Credit Opportunities I EUR	€ 129.39	-	0.15	0.00
Algebris Global Credit Opportunities R EUR	€ 126.01	-	0.17	0.00
Algebris Global Credit Opportunities Rd EUR	€ 108.78	-	0.15	2.65
Algebris Core Italy I EUR	€ 150.37	-	1.02	0.00
Algebris Core Italy R EUR	€ 142.19	-	0.96	0.00
Algebris Sust. World B	€ 108.36	-	1.10	-
Algebris Sust. World R	€ 107.46	-	1.07	-

The Antares European Fund Limited
Other International

Fund	Bid	Offer	D+/-	Yield
AEF Ltd Usd	$ 558.22	-	2.55	0.00
AEF Ltd Eur	€ 510.72	-	2.48	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	D+/-	Yield
Artemis Corporate Bond I Acc	95.95	-	-0.75	3.69
Artemis Positive Future Fund	68.37	-	0.79	0.00
Artemis Target Return Bond I Acc	105.92	-	-0.36	3.77

Ashmore Group
61 Aldwych, London WC2B 4AE. Dealing team: +352 27 62 22 233
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
Emerging Markets Equity Fund	$ 125.66	-	1.18	-
Emerging Markets Equity ESG Fund	$ 145.19	-	1.35	0.00
Emerging Markets Frontier Equity Fund	$ 178.18	-	-0.35	1.04
Emerging Markets Blended Debt Fund	$ 52.65	-	0.02	5.10
Emerging Markets Blended Debt ESG Fund	$ 87.69	-	0.07	0.00
Emerging Markets Active Equity Fund	$ 122.64	-	0.37	0.00
Emerging Markets Corporate Debt Fund	$ 58.01	-	0.08	7.67
Emerging Markets Debt Fund	$ 56.99	-	0.11	6.11
Emerging Markets Local Currency Bond Fund	$ 64.28	-	0.01	4.47

Atlantas Sicav (LUX)
Regulated

Fund	Bid	Offer	D+/-	Yield
American Dynamic	$ 6844.16	-	184.98	0.00
American One	$ 7337.12	-	119.72	-
Bond Global	€ 1538.04	-	-8.16	0.00
Eurocroissance	€ 1400.37	-	0.10	-
Far East	$ 1053.26	-	17.93	-

Blue Whale Investment Funds ICAV (IRE)
www.bluewhale.co.uk, info@bluewhale.co.uk

Fund	Bid	Offer	D+/-	Yield
FCA Recognised - Ireland UCITS				
Blue Whale Growth USD T	$ 10.11	-	0.13	-

Brooks Macdonald International Fund Managers Limited (JER)
5 Anley Street, St Helier, Jersey, JE2 3QE
+44 (0) 1534 700 104 (Int.) +44 (0) 800 735 8000 (UK)

Fund	Bid	Offer	D+/-	Yield
Brooks Macdonald International Investment Funds Limited				
Euro High Income	€ 1.2150	-	0.0007	2.50
High Income	£ 0.6301	-	-0.0031	3.77
Sterling Bond	£ 1.2143	-	-0.0063	2.06
Brooks Macdonald International Multi Strategy Fund Limited				
Balanced Strategy A	£ 0.9209	-	0.0033	0.56
Balanced Strategy	£ 0.9222	-	0.0034	0.09
Cautious Balanced Strategy A	£ 0.8842	-	0.0015	-
Growth Strategy A	£ 0.9366	-	0.0045	0.49
High Growth Strategy A	£ 0.9404	-	0.0056	0.12
Cautious Balanced Strategy	£ 1.2395	-	0.0021	0.00
Growth Strategy	£ 1.9645	-	0.0095	0.00
High Growth Strategy	£ 2.7640	-	0.0164	0.00
US$ Growth Strategy	$ 1.7719	-	0.0109	0.00

Dealing Daily. Initial Charge Nil for A classes and up to 2% for other classes

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

Fund	Bid	Offer	D+/-	Yield
CG Portfolio Fund Plc				
Absolute Return Cls M Inc	£ 133.38	133.98	0.20	1.69
Capital Gearing Portfolio GBP P	£ 36676.68	36878.90	52.26	1.71
Capital Gearing Portfolio GBP V	£ 178.38	179.36	0.25	1.71
Dollar Fund Cls D Inc	£ 163.20	163.69	0.97	1.24
Dollar Hedged GBP Inc	£ 94.14	94.43	0.04	1.21
Real Return Cls A Inc	£ 195.16	195.75	1.02	1.73

Chartered Asset Management Pte Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
CAM-GTF VCC	$ 294965.31	294965.31	7567.86	-
CAM GTi VCC	$ 780.49	-	-32.39	-
RAIC VCC	$ 1.64	1.64	0.03	2.06

Dodge & Cox Worldwide Funds (IRL)
48-49 Pall Mall, London SW1Y 5JG.
www.dodgeandcox.worldwide.com 020 3713 7664
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Dodge & Cox Worldwide Funds plc - Global Bond Fund				
EUR Accumulating Class	€ 16.18	-	0.01	-
EUR Accumulating Class (H)	€ 10.69	-	0.02	-
EUR Distributing Class	€ 11.58	-	0.00	-
EUR Distributing Class (H)	€ 7.58	-	0.01	-
GBP Distributing Class	£ 12.24	-	0.09	-
GBP Distributing Class (H)	£ 8.18	-	0.01	3.49
USD Accumulating Class	$ 12.56	-	0.02	0.00
Dodge & Cox Worldwide Funds plc-Global Stock Fund				
USD Accumulating Share Class	$ 30.48	-	0.15	-
GBP Accumulating Share Class	£ 40.08	-	0.42	-
GBP Distributing Share class	£ 26.90	-	0.28	-
EUR Accumulating Share Class	€ 42.54	-	0.16	-
GBP Distributing Class (H)	£ 14.02	-	0.07	0.79
Dodge & Cox Worldwide Funds plc-U.S. Stock Fund				
USD Accumulating Share Class	$ 38.71	-	0.20	0.00
GBP Accumulating Share Class	£ 48.13	-	0.50	-
GBP Distributing Share Class	£ 28.77	-	0.30	0.18
EUR Accumulating Share Class	€ 46.65	-	0.18	-
GBP Distributing Class (H)	£ 15.25	-	0.08	0.37

Dragon Capital
www.dragoncapital.com
Fund information:info@dragoncapital.com

Fund	Bid	Offer	D+/-	Yield
Other International Funds				
Vietnam Equity (UCITS) Fund A USD	$ 26.86	-	0.02	0.00

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

Fund	Bid	Offer	D+/-	Yield
EdenTree Short Dated Bond Cls B	91.86	-	-0.43	-

Euronova Asset Management UK LLP (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
Smaller Cos Cls One Shares	€ 54.48	-	-0.85	0.00
Smaller Cos Cls Two Shares	€ 34.69	-	-0.54	0.00
Smaller Cos Cls Three Shares	€ 17.31	-	-0.27	0.00
Smaller Cos Cls Four Shares	€ 22.82	-	-0.36	0.00

Fidelity Investments International
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Emerging Mkts NAV	£ 7.21	-	-0.16	2.06

FIL Investment Services (UK) Limited (1200)F (UK)
Beech Gate, Millfield Lane, Lower Kingswood, Tadworth, KT20 6RP
Callfree: Private Clients 0800 414161
Broker Dealings: 0800 414 181

Fund	Bid	Offer	D+/-	Yield
OEIC Funds				
Index Sterling Corporate Bond Fund P-ACC-GBP	£ 0.81	-	0.00	3.02
Sustainable Multi Asset Balanced Fund W-ACC-GBP	£ 0.94	-	0.00	-
American Fund W-ACC-GBP	£ 57.52	-	0.65	-
Cash Fund W-ACC-GBP	£ 1.05	-	0.00	1.80
Sustainable Emerg Mkts Equity Fund A-ACC Shares	£ 1.52	-	0.01	4.74
Sustainable Global Equity Fund W-ACC-GBP	£ 34.16	-	0.28	0.41
Global High Yield Fund W-ACC-GBP	£ 13.87	-	-0.04	-
Japan Fund W-ACC-GBP	£ 6.16	-	0.09	1.46
Japan Smaller Companies Fund W-ACC-GBP	£ 3.70	-	0.06	-
Select 50 Balanced Fund PI-ACC-GBP	£ 1.15	-	0.01	-
Special Situations Fund W-ACC-GBP	£ 42.79	-	-0.14	-
Short Dated Corporate Bond Fund W-ACC-GBP	£ 10.50	-	-0.05	3.79
Sustainable Water & Waste W-ACC-GBP	£ 1.18	-	0.01	0.54
Sustainable Water & Waste W-INC-GBP	£ 1.16	-	0.01	0.54
UK Select Fund W-ACC-GBP	£ 3.69	-	0.00	-
Global Enhanced Income W-ACC-GBP	£ 2.38	-	0.00	4.37
Index UK Gilt Fund P-ACC-GBP	£ 0.71	-	0.00	-
Sustainable Multi Asset Conservative Fund W-ACC-GBP	£ 0.89	-	0.00	1.71
Sustainable Multi Asset Growth Fund W-ACC-GBP	£ 0.97	-	0.01	1.43

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

Fund	Bid	Offer	D+/-	Yield
American EUR Unhedged Class	€ 161.66	-	1.51	-
American Fund USD Class	$ 173.78	-	1.47	-
American Fund GBP Hedged	£ 84.86	-	0.73	0.00
American Fund GBP Unhedged	£ 138.90	-	1.95	-

Foord Asset Management
Website: www.foord.com - Email: info@foord.com

Fund	Bid	Offer	D+/-	Yield
FCA Recognised - Luxembourg UCITS				
Foord International Fund | R	$ 49.41	-	-0.23	0.00
Foord Global Equity Fund (Lux) | R	$ 16.84	-	0.04	-
Regulated				
Foord Global Equity Fund (Sing) | B	$ 20.12	-	0.05	0.00
Foord International Trust (Gsy)	$ 48.16	-	-0.22	0.00

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

Fund	Bid	Offer	D+/-	Yield
LAPIS GBL F OWD 50 DIV.YLD-Na-D	£ 104.14	-	0.96	-
LAPIS GBL MED DEV 25.YLD-Na-D	£ 96.15	-	1.17	-
LAPIS GBL TOP 50 DIV.YLD-Na-D	£ 117.90	-	0.55	2.98

Guinness Global Investors

Fund	Bid	Offer	D+/-	Yield
Guinness Global Equity Income Y GBP Dist	£ 19.11	-	0.17	-
Guinness Global Innovators Y GBP Acc	£ 28.70	-	0.58	-
Guinness Sustainable Global Equity Y GBP Acc	£ 11.45	-	0.20	-

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

Fund	Bid	Offer	D+/-	Yield
International Insurances				
Holiday Property Bond Ser 1	£ 0.48	-	0.00	0.00
Holiday Property Bond Ser 2	£ 0.63	-	0.00	0.00

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

Fund	Bid	Offer	D+/-	Yield
Janus Henderson Instl UK Index Opportunities A Acc	£ 1.15	-	0.00	2.97

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	D+/-	Yield
M&G Charibond Charities Fixed Interest Fund (Charibond) Inc	£ 1.05	-	-0.01	2.91
M&G Charibond Charities Fixed Interest Fund (Charibond) Acc	£ 38.17	-	-0.33	2.43
M&G Charity Multi Asset Fund Inc	£ 0.89	-	0.00	4.00
M&G Charity Multi Asset Fund Acc	£ 107.79	-	-0.19	3.80

MMIP Investment Management Limited (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
Multi-Manager Investment Programmes PCC Limited				
UK Equity Fd Cl A Series 01	£ 3312.15	3338.48	59.65	-
Diversified Absolute Rtn Fd USD Cl AF2	$ 1688.02	-	45.93	-
Diversified Absolute Return Stlg Cell AF2	£ 1579.00	-	-1.96	-
Global Equity Fund A Lead Series	£ 1752.47	1755.76	-19.13	-

Marwyn Asset Management Limited (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
Marwyn Value Investors	£ 329.72	-	-6.14	0.00

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

Fund	Bid	Offer	D+/-	Yield
British Innovation Fund	£ 121.92	-	2.89	0.00
MAI - Buy & Lease (Australia)	A$ 103.45	-	0.50	0.00
MAI - Buy & Lease (New Zealand)	NZ$ 91.20	-	-6.06	0.00
Milltrust Global Emerging Markets Fund - Class A	$ 95.03	-	-0.06	0.00

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

Fund	Bid	Offer	D+/-	Yield
Milltrust Alaska Brazil Fund SP A	$ 99.46	-	0.93	0.00
Milltrust Laurium Africa Fund SP A	$ 90.47	-	-0.30	0.00
Milltrust Marcellus India Fund SP	$ 126.66	-	0.34	0.00
Milltrust Singular ASEAN Fund SP Founders	$ 128.37	-	0.27	0.00
Milltrust SPARX Korea Equity Fund SP A	$ 126.36	-	1.11	0.00
Milltrust Xingtai China Fund SP A	$ 94.51	-	0.47	-
The Climate Impact Asia Fund SP A	$ 80.10	-	0.50	0.00
The Climate Impact Asia Fund (Class B)	$ 79.26	-	0.50	0.00

Mirabaud Asset Management (LUX)
www.mirabaud.com, marketing@mirabaud-am.com
Please find more details on our website: www.mirabaud-am.com
Regulated

Fund	Bid	Offer	D+/-	Yield
Mir. - Glb Strat. Bd I USD	$ 116.58	-	0.25	0.00
Mir. - DiscEur D Cap GBP	£ 164.55	-	1.49	-
Mir. - UKEq HA Cap I GBP	£ 136.35	-	0.50	0.00

Oasis Crescent Global Investment Funds (UK) ICVC (UK)
Regulated

Fund	Bid	Offer	D+/-	Yield
Oasis Crescent Global Equity Fund USD A (Dist)	$ 35.52	-	0.25	-
Oasis Crescent Global Income Fund USD A (Dist)	$ 10.00	-	0.00	3.17
Oasis Crescent Global Low Equity Fund USD D (Dist)	$ 12.32	-	0.03	1.04
Oasis Crescent Global Medium Equity Fund USD A (Dist)	$ 13.77	-	0.04	0.33
Oasis Crescent Global Property Equity Fund USD A (Dist)	$ 7.85	-	-0.04	-
Oasis Crescent Global Short Term Income Fund USD A (Dist)	$ 0.93	-	0.00	2.29
Oasis Crescent Variable Fund GBP A (Dist)	£ 9.72	-	0.04	0.39

Omnia Fund Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Estimated NAV	$ 916.73	-	-24.68	0.00

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

Fund	Bid	Offer	D+/-	Yield
Orbis OEIC Global Cautious Standard	£ 12.06	-	0.04	0.00
Orbis OEIC Global Balanced Standard	£ 20.01	-	0.12	0.37
Orbis OEIC Global Equity Standard	£ 22.51	-	0.15	-

Platinum Capital Management Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Platinum All Star Fund - A	$ 147.71	-	-	-
Platinum Global Growth UCITS Fund	$ 8.39	-	0.03	0.00
Platinum Essential Resources UCITS Fund SICAV USD Class E	$ 9.70	-	-0.06	0.00
Platinum Global Dividend UCITS Fund	$ 46.06	-	-0.01	0.00

Polar Capital Funds Plc (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Automation & Artificial Intelligence CL I USD Acc	$ 17.35	17.35	0.21	0.00
Asian Starts I USD Acc $	$ 14.62	-	0.07	0.00
Biotechnology I USD	$ 40.37	40.37	0.47	0.00
China Stars I USD Acc $	$ 10.54	10.54	0.03	0.00
Emerging Market Stars I USD Acc	$ 11.66	-	0.07	0.00
European Ex UK Inc EUR Acc	€ 15.12	15.12	-0.02	0.00
Financial Opps I USD	$ 14.07	-	0.01	2.20
Global Convertible I USD	$ 13.69	13.69	0.04	0.00
Global Insurance I GBP	£ 9.90	-	0.02	0.00
Global Technology I USD	$ 80.02	-	1.51	0.00
Healthcare Blue Chip Fund I USD Acc	$ 19.13	19.13	0.05	0.00
Healthcare Dis I Acc USD $	$ 13.15	-	0.07	0.00
Healthcare Opps I USD	$ 70.71	-	0.35	0.00
Income Opportunities B2 I GBP Acc	£ 2.95	2.95	0.01	0.00
Japan Value I JPY	¥ 166.58	166.58	1.03	0.00
North American I USD	$ 34.24	34.24	0.19	0.00
Smart Energy I USD Acc $	$ 10.22	10.22	0.19	0.00
Smart Mobility I USD Acc $	$ 9.50	9.50	0.11	0.00
UK Val Opp I GBP Acc	£ 12.63	12.63	-0.05	0.00

Private Fund Mgrs (Guernsey) Ltd (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
Monument Growth 06/06/2023	£ 540.44	545.59	-1.01	-

Prusik Investment Management LLP (IRL)
Enquiries - 0207 493 1331
Regulated

Fund	Bid	Offer	D+/-	Yield
Prusik Asian Equity Income B Dist	$ 182.54	-	0.41	4.95
Prusik Asia Emerging Opportunities Fund A Acc	$ 181.96	-	0.00	0.00
Prusik Asia Fund U Dist.	£ 205.53	-	1.67	0.00
Prusik Asia Sustainable Growth Fund A Acc	$ 89.67	-	0.53	0.00

Purisima Investment Fds (CI) Ltd (JER)
Regulated

Fund	Bid	Offer	D+/-	Yield
PCG B ✠	317.73	-	0.07	0.00
PCG C ✠	308.77	-	0.06	0.00

Ram Active Investments SA
www.ram-ai.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
RAM Systematic Emerg Markets Eq	$ 224.06	224.06	-0.71	-
RAM Systematic European Eq	€ 532.11	532.11	1.35	-
RAM Systematic Funds Global Sustainable Income Eq	$ 151.74	151.74	0.36	0.00
RAM Systematic Long/Short European Eq	€ 147.01	147.01	-0.26	-
RAM Systematic US Sustainable Eq	$ 353.61	353.61	2.16	-
RAM Tactical Global Bond Total Return	€ 139.34	139.34	0.00	-
RAM Tactical II Asia Bond Total Return	$ 146.36	146.36	0.01	-

Ruffer LLP (1000)F (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 601 9610
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
Authorised Corporate Director - Link Fund Solutions				
LF Ruffer Diversified Rtrn C Acc	99.96	-	-0.18	1.89
LF Ruffer Diversified Rtrn C Inc	98.14	-	-0.17	1.90
LF Ruffer European C Acc	770.94	-	5.09	0.81
LF Ruffer European C Inc	138.30	-	0.92	0.85
LF Ruffer Equity & General C Acc	571.77	-	3.76	0.76
LF Ruffer Equity & General C Inc	516.56	-	3.40	0.77
LF Ruffer Gold C Acc	255.03	-	9.86	0.00
LF Ruffer Gold C Inc	154.35	-	5.96	0.00
LF Ruffer Japanese C Inc	169.82	-	3.42	0.24
LF Ruffer Japanese C Acc	365.87	-	7.38	0.23
LF Ruffer Total Return C Acc	545.22	-	5.45	2.92
LF Ruffer Total Return C Inc	335.58	-	3.35	2.99

Rubrics Global UCITS Funds Plc (IRL)
www.rubricsam.com
Regulated

Fund	Bid	Offer	D+/-	Yield
Rubrics Emerging Markets Fixed Income UCITS Fund	$ 140.14	-	-0.19	0.00
Rubrics Global Credit UCITS Fund	$ 16.90	-	0.00	-
Rubrics Global Fixed Income UCITS Fund	$ 171.55	-	-0.04	0.00

Slater Investments Ltd (UK)
www.slaterinvestments.com; Tel: 0207 220 9460
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Slater Growth A Acc	607.60	607.60	-1.55	0.00
Slater Income A Inc	138.48	138.48	-0.07	5.22
Slater Recovery A Acc	315.82	315.82	-1.15	0.00
Slater Artorius	271.47	271.47	4.26	-

Stonehage Fleming Investment Management Ltd (IRL)
www.stonehagefleming.com/gbi
enquiries@stonehagefleming.com
Regulated

Fund	Bid	Offer	D+/-	Yield
SF Global Best Ideas Eq B USD ACC	$ 247.39	-	2.53	-
SF Global Best Ideas Eq D GBP INC	£ 300.02	-	4.74	-

Superfund Asset Management GmbH
www.superfund.com, +43 (1) 247 00
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Other International Funds				
Superfund Green Gold	$ 997.26	-	3.73	0.00
Superfund Green Silver	$ 874.01	-	-6.01	0.00
Regulated				
Superfund Green US$	$ 736.81	-	5.53	0.00

Toscafund Asset Management LLP (UK)
www.toscafund.com
Authorised Funds

Fund	Bid	Offer	D+/-	Yield
Aptus Global Financials B Acc	£ 5.06	-	0.01	3.49
Aptus Global Financials B Inc	£ 3.23	-	0.01	-

Toscafund Asset Management LLP
www.toscafund.com

Fund	Bid	Offer	D+/-	Yield
Tosca A USD	$ 453.88	-	17.64	0.00
Tosca Mid Cap GBP	£ 151.32	-	1.21	0.00
Tosca Opportunity B USD	$ 252.81	-	-15.03	0.00
Pegasus Fund Ltd A-1 GBP	£ 36.13	-	0.32	0.00

Troy Asset Mgt (1200) (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 608 0950
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
Authorised Corporate Director - Link Fund Solutions				
Trojan Investment Funds				
Trojan Ethical O Acc	127.24	-	0.14	0.07
Trojan Ethical Global Inc O Acc	100.73	-	-0.26	2.74
Trojan Ethical Global Inc O Inc	96.86	-	-0.25	2.78
Trojan Ethical O Inc	126.93	-	0.14	0.08

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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.

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ARTS

McGregor's vision of green energy

DANCE

Royal Ballet triple bill
Royal Opera House, London
★★★★☆

Louise Levene

Above: Wayne McGregor's 'Untitled, 2023'. Below: Christopher Wheeldon's 'Corybantic Games' — Alice Pennefather

Does Wayne McGregor have a secret twin? Given his output so far this year — a dance version of *The Dark Crystal*, a critically acclaimed new work for the National Youth Dance Company, plus the dance directorship of the Venice Biennale — it surely cannot be ruled out. His latest Royal Ballet piece, *Untitled, 2023*, kicks off a tutu-free triple bill, sharing a programme with Christopher Wheeldon's 2018 *Corybantic Games* and the original one-act version of Kenneth MacMillan's *Anastasia*.

The sets and costumes for McGregor's *Untitled, 2023* are taken from the angular, minimalist work of the Cuban-American artist Carmen Herrera. The score — explored with relish by Koen Kessels and the orchestra — is by Anna Thorvaldsdottir. The Icelandic composer's doomy 2018 *Metacosmos* imagines a journey through a black hole, while 2021's *Catamorphosis* ponders the climate emergency.

These preoccupations are not apparent in the choreography — McGregor likes to maintain a safe distance from his chosen music — but the extreme weather systems of Lucy Carter's lighting keep pace with the changeable moods of the soundscape. Bi-coloured stretchwear by Burberry's Daniel Lee highlights the Cunninghamesque moments in the text.

Anyone playing McGregor bingo will have crossed off the familiar tricks: extreme extensions, insectoid distortions, long wriggles through head, neck and spine; but the familiar acrobatics are both mellowed and energised by a terrific cast. Joseph Sissens kicks and swivels through his dazzling opening soliloquy. Calvin Richardson brings down the curtain with a solo that swirls and shimmies with boneless ease. Melissa Hamilton finds menace and sensuality in the tricksiest origami. There is a fine duet for William Bracewell and Fumi Kaneko, although her late flurry of *fouettés* and *chaînés* felt ersatz and out of place on the McGregor menu.

The weaknesses of *Untitled, 2023* were highlighted by the exhilarating *Corybantic Games*, a ballet fizzing with playful musicality. Wheeldon's choreography is fuelled and shaped by Bernstein's 1954 *Serenade*, itself inspired by Plato's *Symposium* on the nature of love. Wheeldon's pairwork is fashionably pansexual but there is a glorious centrepiece for Fumi Kaneko and Ryoichi Hirano (Melissa Hamilton and Reece Clarke on Saturday) and Mayara Magri unleashed her inner showgirl in the jazzy fifth movement.

MacMillan's overblown three-act *Anastasia* began life in 1967 as a 40-minute expressionist drama pondering the claims of Anna Anderson, a hospital patient who believed herself to be the daughter of Tsar Nicholas II. Laura Morera, in her final Covent Garden performances, brought all her dramatic intelligence to the role of this deluded woman.

The romance of the Anna Anderson story pretty much evaporated after the exhumation of the Romanov remains in 1991, which established that Anastasia had indeed died with the rest of her family. Or did she? On Saturday the title role was danced by Natalia Osipova. Somehow the Russian star's anguished virtuosity creates an alternative reality in which we forget the con artist and see only the Grand Duchess. She believes, and suddenly, in the teeth of all the evidence, so do we.

To June 17, roh.org.uk

OPERA

Dialogues des Carmélites
Glyndebourne, East Sussex
★★★★☆

Alastair Macaulay

What drives people to commit themselves to a belief system? Few works in the performing arts are serious about religion, let alone about the psychopathology of religion. One of those few is Poulenc's *Dialogues des Carmélites*. It is set during the final days of the French Revolution as anticlericalism reaches its peak and the Carmelite nuns take a vow of martyrdom. As the opera ends, they depart to the guillotine, one by one.

The first night at Glyndebourne of a new production of this singular masterpiece was followed by a full-throated and sustained ovation. Among other achievements, it is a fascinating sequel to the festival's double bill last year of Poulenc short operas, *La Voix humaine* and *Les Mamelles de Tirésias*, both intensely secular affairs. Poulenc emerges as a startlingly diverse composer and dramatist.

The protagonist of *Dialogues*, the aristocratic Blanche de la Force, has been fearful all her life. She chooses to become a Carmelite nun, at least in part because the convent offers refuge from the terrors of the French Revolution, which is shattering the society she has known.

She has not been there long before she encounters other terrors, not least death. By the end of the opera, Blanche, the last to go to face execution, has come through a complex journey. She has even, finally, conquered fear.

Robin Ticciati's conducting shows how richly layered this music drama is. At all points, the London Philharmonic Orchestra beautifully reveals the momentous pace and spacious sound-world of Poulenc's composition. *Dialogues* combines voices and orchestra in contrasting rhythms, now with the suspenseful plainsong-like metres of human conversation, now with the inexorable tread of larger events. When the nuns join voices in religious anthems, their singing has a melodic uplift like nothing else in this work. And the gentle, sustained chord that follows Blanche's death — a break from all that rhythm — is sublime: serenity, freedom.

Barrie Kosky's austere direction concentrates the drama, encouraging us to hang on words often by the use of physical stillness and attentiveness. Moments of violence are made all the more shocking. Everything occurs in the same single set by Katrin Lea Tag, a receding, funnel-like space that suggests dilapidation, bleakness, intensity. Gardens, beds and tables come and go economically. Then, towards the end, revolutionaries burst in, battering down the right wall in a visually powerful moment.

An equally shocking image occurs when the nuns are lined up against the opposite wall, as if expecting to be shot. Each loud descent of the guillotine is accompanied by the violent hurling of the last nun's shoes back on to the set. (The nuns die, but the Revolution can recycle their shoes.)

My only reservations concern the vocal side of two performances. Sally Matthews' Blanche is alternately tremulous or squally, with often indistinct diction; Paul Gay as her father, the Marquis de la Force, brays tensely. The performances by Katarina Dalayman (Madame de Croissy), Fiona Kimm (Mother Jeanne), Golda Schultz (Madame Lidoine), Valentin Thill (Blanche's brother, the Chevalier de la Force) and Florie Valiquette (Constance) are musically thrilling and dramatically individualised. We hear and see, as does Blanche, how wide a range of temperaments may be included within the Carmelite order.

The inspired exaltation of Schultz's singing, the spontaneous vulnerability of Valiquette's, the tormented force of Dalayman's and — above all — the startling vehemence of Kimm's all register gloriously.

To July 29, glyndebourne.com

Sally Matthews, left, and Florie Valiquette — Richard Hubert Smith

From frosted glass to frantic virtuosity

CLASSICAL

Berliner Philharmoniker/Petrenko
Philharmonie, Berlin
★★★★☆

Shirley Apthorp

ISHJÄRTA ("Ice hearts") is a brittle, evocative new work by Swedish composer Lisa Streich for the Berliner Philharmoniker. Cold is conjured viscerally through a range of familiar (strings applying the wood of their bows) and less familiar (an egg slicer placed on a drum) techniques.

Warmth is centred on the second violin section, whispering a tender melody throughout. Sometimes it feels like hearing an old-fashioned music box through frosted glass.

Delicate and deft, *ISHJÄRTA* is engaging throughout. Streich uses the formidable orchestral forces at her disposal with restraint and assurance, and her sense of narrative clarity makes for compelling listening.

The second work to receive its world premiere at this concert, Julia Wolfe's *Pretty*, is not. That is the whole idea. The title is a subversive dig at expectations of the feminine; the work is driving, strident and relentlessly ebullient. Wolfe's 25-minute work draws on traditions of folk fiddling, uses drum kits and has the strings imitate the sounds of electric guitar. The minimalist soundscapes of Steve Reich meet the animation of John Adams in a sound-world that is very much Wolfe's own, a brash New York in-your-face yelp of delight, well suited to the juggernaut of an orchestra that commissioned it.

Kirill Petrenko conducted both works with meticulous attention to detail and deep commitment to structure. He also elucidated the pieces in surprisingly charming little introductory lecture-demonstrations (given his reputation as a man of few words), framed by the awkward moderation of orchestral violist Sebastian Krunnies. Clearly the orchestra is experimenting with format. But to let a player mansplain to a composer by reading her own quotes back at her on stage is beneath this ensemble's dignity.

Mercifully, Tchaikovsky's *Francesca da Rimini* was deemed to require no introduction, and the orchestra tore straight into the piece. This is Petrenko's home turf. He stripped the piece of all pathos and tuned it up to a fever pitch of neurosis and frantic virtuosity. The trust evident between conductor and players was abundantly evident; together, they have moved from an introductory phase of strict discipline to one of high-octane risk-taking and the results were, frankly, breathtaking. Surely *Francesca da Rimini* doesn't get any better than this.

It is good to see the Berliners bringing more women into their programming; this concert came less than a month after Gustavo Dudamel's spirited account of Gabriela Ortíz's *Téenek — Invenciones de Territorio* with the orchestra. Equality is still a speck on the horizon, but at least the journey is picking up pace.

berliner-philharmoniker.de

Kirill Petrenko, chief conductor of the Berliner Philharmoniker — ullstein bild via Getty Images

FT BIG READ. TELECOMS

Amid geopolitical tensions, the US has prevented Beijing from becoming a major player in underwater cables — leading experts to warn the internet is in danger of dividing into eastern and western blocs.
By Anna Gross and Alexandra Heal

The subsea fight over internet plumbing

In 2018, China Mobile agreed to work with US tech giants Amazon and Meta to lay a fibreoptic cable connecting California to Singapore, Malaysia and Hong Kong.

Just two years later, the plans were abandoned after manoeuvres in Washington led to China Mobile pulling out of the consortium. Meta and Amazon filed a new application to the Federal Communications Commission for a scaled-back system in 2021, with no Chinese investment, no connection to Hong Kong, and a new name: Cap-1.

But last year the application for Cap-1 was withdrawn altogether — even though most of the 12,000km cable had already been built. China's original involvement remained a security concern for the US government, according to two people briefed on the discussions.

"There are hundreds of millions of dollars sunk in the Pacific," says a person involved in the aborted project. Meta and China Mobile did not respond to requests for comment. Amazon declined to comment.

The fate of Cap-1 is part of a wider cold war developing beneath the oceans, where almost 1.4mn kilometres of metal-encased fibre cables speed internet traffic seamlessly around the globe.

China, keen to embed itself in this vital infrastructure, started making inroads into a global market that had historically been dominated by companies from France, the US and Japan.

But over the past five years, as tensions between the US and China have mounted and fears have grown in Washington about the risks of espionage, the US government has sought to pull apart an interwoven network of internet cables developed through international collaboration over decades.

Chinese supplier HMN Tech has provided or is set to provide the equipment to only 10 per cent of all existing and planned global cables, where the supplier is known, FT analysis of data supplied by the consultancy TeleGeography shows. By comparison, the French cable maker ASN supplied 41 per cent and US group SubCom 21 per cent. Neither responded to requests for comment.

But Washington has not entirely succeeded; Chinese-owned vessels still undertake repair work on US-owned fibre lines, people with direct knowledge of such operations have told the Financial Times. Chinese companies also build and install international cables for China and allied nations.

That has led to fears of a dangerous division in who owns and runs the infrastructure underpinning the internet. Several countries, including China, Pakistan, Saudi Arabia and Russia, have been overt about their ambitions to create a more centralised internet over which their governments have greater control. They have also shown themselves willing to turn off access to certain sites, or even the whole internet, during times of political turbulence.

"One of the big risks right now is heading in the direction of bifurcated networks," says April Herlevi, an expert in China's foreign policy at the Center for Naval Analyses who fears "a quasi-cold war, eastern bloc versus the west".

"I don't think we're there yet . . . but I do worry that's the direction we're headed in."

How the web was spun

According to TeleGeography, there are more than 500 active and planned submarine cables that together transport 99 per cent of intercontinental data. It is this fibreoptic backbone that enables an internet user in London to receive an email within 70 milliseconds of a counterpart in New York sending it.

For years, intercontinental cables were financed by largely state-owned telecoms operators, but over the past decade tech giants such as Google, Meta and Microsoft have taken their place.

Over a similar timeframe, a parallel story was emerging. In 2015, the Chinese government announced a strategic initiative to invest huge amounts in developing countries' communications, surveillance and ecommerce capabilities in exchange for diplomatic influence. Internet cables were key to this "Digital Silk Road", which ran in parallel to Beijing's Belt and Road Initiative for above-ground infrastructure.

The Chinese telecoms champion Huawei began to carve out a niche in the submarine cable market via Huawei Marine, a joint venture with the UK-based cable installer Global Marine. It had captured about 15 per cent of the global market by 2019, according to Mike Constable, its chief executive at the time. But this was before, as he puts it, "the geopolitics went crazy".

Washington's crackdown

In 2019, the Trump administration imposed sanctions on Huawei and the telecoms group swiftly divested from the cable joint venture. A little-known Chinese cable manufacturer, Hengtong Group, bought Huawei Marine and renamed it HMN Tech.

The next year, the US government created the Clean Network initiative, in effect banning new cables directly connecting the US to China or Hong Kong. A cable being built by Meta and Google to connect the US with Hong Kong was blocked when construction was already under way. It now terminates in the Philippines and Taiwan.

HMN Tech felt the impact. "The bid [invitations] coming through the door started to dry up," Constable says.

In 2021, after pressure from the US government, the World Bank scrapped a cable project to connect three Pacific island nations to avoid awarding the contract to HMN Tech. Last year, a consortium planning a 19,000km cable from south-east Asia to Europe awarded the contract to SubCom after initially selecting HMN Tech.

Another consortium backing two linked upcoming cables — connecting Europe to Jordan and Jordan to India — did not invite HMN Tech to bid at all, according to a source close to the projects, because Google is a key investor. HMN Tech and Google did not respond to requests for comment.

As the tendrils of Washington's foreign policy weave across the globe, several consortiums building cables that neither connect to the US nor have US financing are now excluding HMN Tech, multiple interviews suggest.

"When you build a cable you have to look at which customers you're going to target. If you want to work with hyperscalers like Google, Meta, Microsoft, you have to think about if you want Chinese equipment," says Chris Van Zinnicq Bergmann, chief commercial officer of Mediterranean cable venture Unitirreno. Invariably, "the answer is no".

A new cable project connecting Singapore and Thailand to India, which has no American owners and will not touch US territory, is not expected to invite HMN Tech to bid because of the geopolitical situation, says a person with knowledge of the project.

Another person says they are involved in two separate cables "where for political and funding reasons" the investors "decided not to engage Chinese companies in the tendering process", even though there is no connection to the US or US investment.

Today, only one HMN Tech-supplied cable is due to come online in each of the years 2024 and 2025, each connecting China to south-east Asian countries.

The ever-stricter provisions of the Clean Networks Initiative are pushing companies to forge new routes for data traffic. Disputes over territorial waters, delays to permits and US government restrictions have led to the cable consortiums Apricot, Bifrost and Echo routing cables through Singapore, Indonesia, the Philippines and the US island territory of Guam, which is emerging as a hub for international data traffic.

A representative for the US state department says: "The continued health of the global internet depends on the free flow of data across borders, facilitated by trustworthy telecommunications infrastructure."

The department urges countries to put in place policies and regulatory frameworks "that fully exclude untrustworthy vendors from the entire ICT ecosystem, including wireless networks, terrestrial and undersea cables, satellites, cloud services and data centres".

China's response

Its ambition to become a significant player in the global market for subsea cables may have been thwarted, but industry insiders say Chinese state-owned telecoms companies have tried to shift their focus to regions where they have commercial and political influence.

"China is able to lead projects in some Asian, African and Latin American countries, mainly because state-owned telecom companies can fight price wars well," a person working for the Chinese government says.

China Unicom was a key investor in Sail, a 5,800km cable connecting Brazil with Cameroon that went live in 2020. China Mobile was also crucial to a flagship cable consortium, 2Africa, connecting large swaths of Africa with Europe. Work started in 2020, with Meta and Vodafone among its investors.

Peace, a cable that went live last year connecting Pakistan to France via Kenya, was entirely financed and built by Chinese companies, including HMN Tech, circumventing their need to be invited by western companies.

"Peace is really part of the new Silk Road, from China to Europe," says an executive at a big European telecoms company, noting that it is one of the early examples of China opting to finance and build a project without any input from international companies.

In Asia, where demand for bandwidth and the cables that carry it is growing faster than many other regions in the world, China Telecom, China Mobile and China Unicom are leading several big cable projects, including two that will connect China to Singapore and Japan. The three companies did not respond to requests for comment.

Several industry executives told the FT that HMN Tech routinely submits bids to work on international projects priced 20 to 30 per cent below what competitors would charge. "They are used as a stalking horse on pricing because they are known to [be] very, very aggressive," says an executive at a rival cable group.

China has other levers it can pull to fight back against international curbs. As well as becoming more protective of its offshore territory generally, it has started applying a lot of pressure on companies laying cables through Chinese waters and the South China Sea to use cable produced by HMN Tech, according to two industry executives working on projects in the region.

Chinese groups have commissioned three ships to lay and maintain cables, reducing their dependence on foreign vessels, according to Constable. "China now sees the ability to build its own cables as strategically important, because no one else can do it for them."

The person working for the Chinese government says the South China Sea area is "one of the most critical" in China's military strategy. "Every link and component of the infrastructure must be controllable."

The espionage threat

Growing anxiety about the vulnerability of cables to espionage and sabotage has led some governments to become more protective of their territorial waters, causing delays to the receipt of permits for laying and maintaining cables. Several countries, including Indonesia and Canada, insist that only certain ships and personnel can lay and maintain cables within their exclusive economic zones, industry executives say.

And because of complex, longstanding maintenance agreements, countries' most sensitive, critical infrastructure is repaired by adversarial nations surprisingly often. A fault last year on an intercontinental fibre cable owned by the US carriers AT&T and Verizon, among others, was repaired by Chinese engineers operating from a Chinese vessel.

The same ship fixed another faulty cable in the East China Sea, part-owned by Microsoft and the Japanese telecoms group SoftBank, according to people briefed on the activities. AT&T, Verizon, Microsoft and SoftBank did not respond to requests for comment.

"When governments think about subsea cables' exposure to faults and malicious disruption, I don't think they understand how the maintenance market works," says Constable. The US "has been trying to bifurcate this global network . . . but didn't look at whose ships were repairing whose cables".

While tapping cables at sea is widely agreed to be very difficult, some say it is possible to insert data extraction devices into repeaters — the electronic components that connect different sections of cables to keep the signal moving over longer distances — when manufacturing or repairing the cables.

The UK intelligence service GCHQ previously collected bulk data from cable landing stations on the British coast, the Snowden leaks revealed. In 2020, a whistleblower accused the US National Security Agency of teaming up with Danish government agencies to spy inside landing stations.

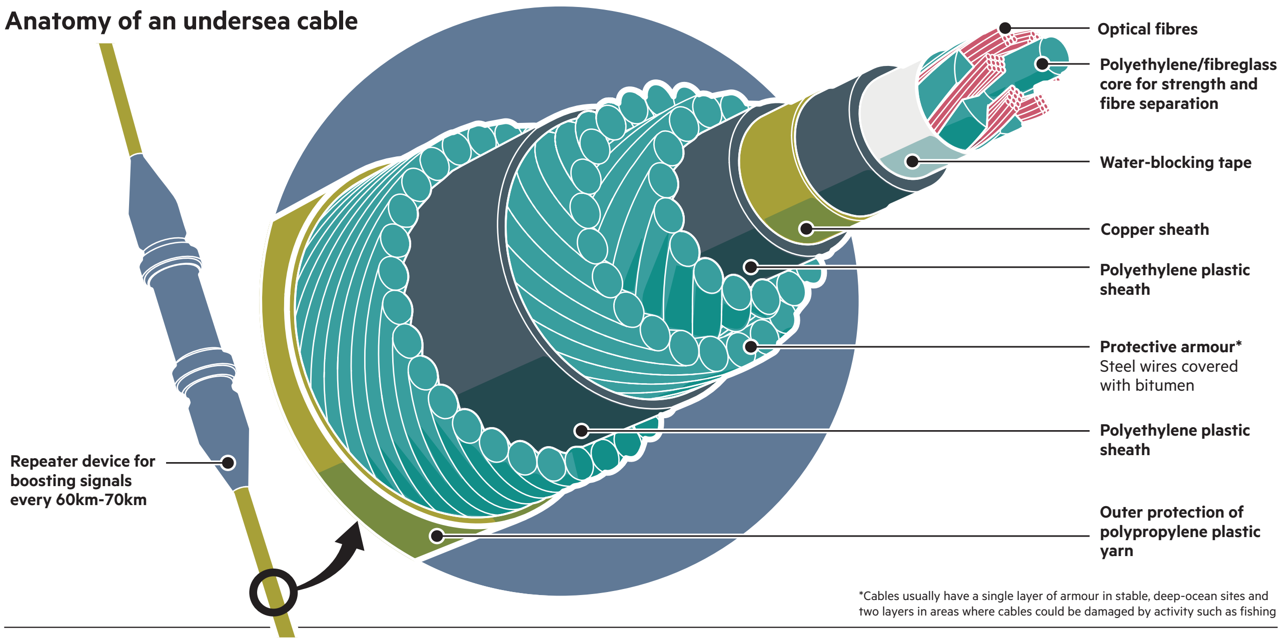
Some argue that who owns subsea cables and landing stations is something of a moot point. Alan Mauldin, research director at TeleGeography, points out that the rapid transmission and decentralised nature of the internet means that Washington's tightening restrictions "do nothing to stop the flow of data between China and the US".

James Lewis, director of technology and public policy at the Center for Strategic and International Studies in Washington, argues that fears around fragmentation are overstated. Beijing's main interest, he argues, is not a separated network, but instead greater access to information and trade.

"They want business," he says. "The Chinese don't want to break the internet, they want to own it."

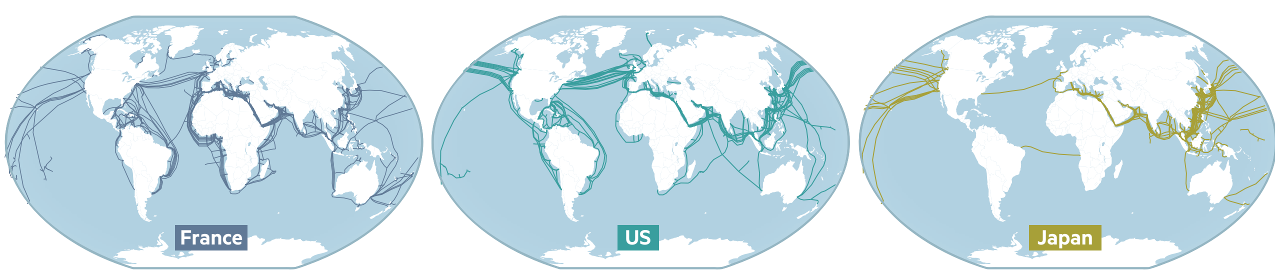
'If you want to work with hyperscalers like Google, Meta, Microsoft, you have to think about if you want Chinese equipment'

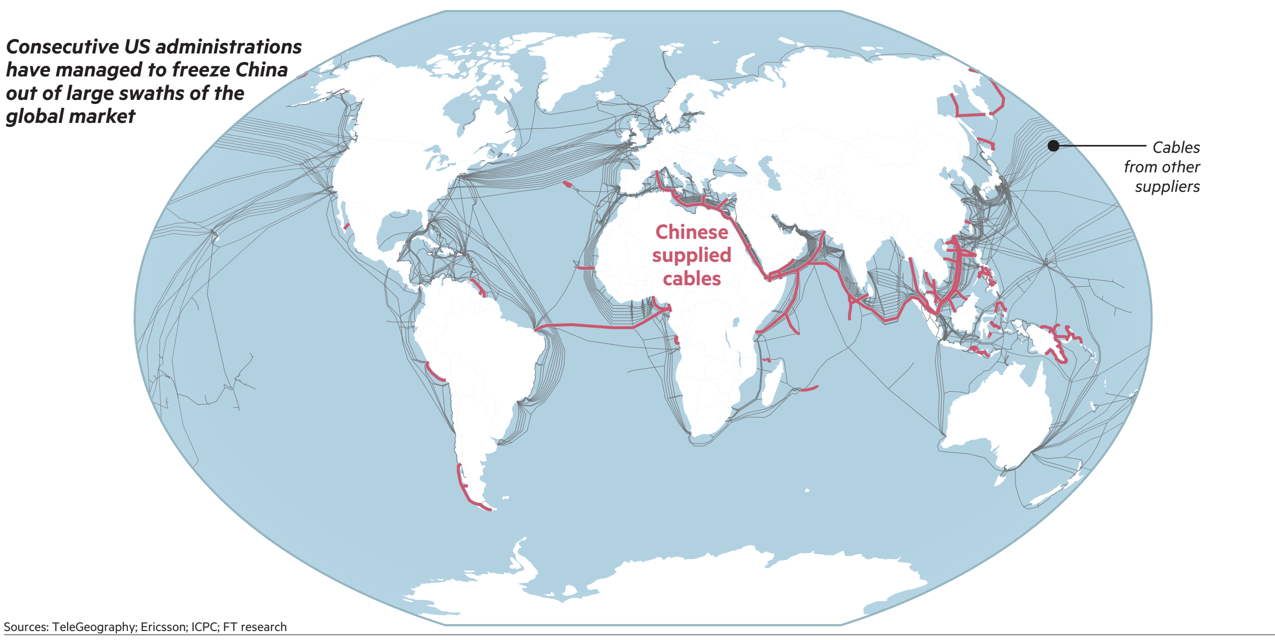
Anatomy of an undersea cable



*Cables usually have a single layer of armour in stable, deep-ocean sites and two layers in areas where cables could be damaged by activity such as fishing

The supply and installation of subsea internet cables have been dominated by companies from:





Sources: TeleGeography; Ericsson; ICPC; FT research

Data visualisation: Chris Campbell, Dan Clark, Ian Bott and Irene de la Torre Arenas

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Visual storytelling
Chris Campbell, Dan Clark, Ian Bott and Irene de la Torre Arenas contributed to this report. For more visual stories, go to **ft.com/visual-stories**

The FT View

FINANCIAL TIMES
'Without fear and without favour'

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An eyebrow-raising payout at LetterOne

States should consider appointing trustees of assets frozen by sanctions

The inviolability of property rights is the foundation of a well-functioning market economy. Most often, if not always, the owners of assets prove to be their best custodians. But when ownership rights are weak, or non-existent, it is often the managers of those assets who tend to take advantage, as the massive inflation of boardroom pay over the past few decades has shown.

So it has proved at LetterOne, the investment vehicle created by several Russian oligarchs who were last year sanctioned by western governments and had their property rights suspended. The malodorous whiff emerging from the investment company since then is an extreme case study of what can happen in an ownership vacuum.

LetterOne is an unusual property owner, founded in 2013 as an investment vehicle to manage part of the proceeds of the sale of the Russian oil company TNK-BP. Its co-founders, Mikhail Fridman and Petr Aven, who had built up the Alfa Group empire in Russia, decided to extract as much of their capital as possible from the lawless economy and put it to work in safer jurisdictions. By the end of 2021, LetterOne had acquired assets including the Holland & Barrett health food chain and a stake in the Turkish mobile phone operator Turkcell, and boasted $27bn of equity.

Some of the great and the good of UK business were recruited to oversee the organisation and win favour with European governments. LetterOne's chair is Lord Mervyn Davies, former chief executive of Standard Chartered bank and one-time Labour government minister.

The trouble began for LetterOne last year when several of its leading shareholders, including Fridman and Aven, were sanctioned in response to the invasion of Ukraine. Their majority shareholding in LetterOne was frozen, leaving the non-sanctioned but passive Russian shareholder Andrei Kosogov as the only significant minority investor. Fridman and Aven were strictly forbidden from exercising any control over LetterOne. The holding company faced a rocky time trying to preserve its banking relationships as a result of the tightening sanctions regime.

The managers claim they battled tirelessly to keep the fund alive, with regulators and bankers monitoring them to ensure they complied with the sanctions regime. But documents seen by the FT show the managers were astonishingly well rewarded for their efforts. Davies was paid $40mn over the past two years, although $22mn of this was approved by pre-sanctioned shareholders for 2021. Other managers also received lavish payments. Ten executives received a total of $65mn in discretionary bonuses and retention payments in 2022.

Any sympathy for Russian oligarchs complaining of possible mismanagement of their frozen assets is negligible. But the directors of LetterOne certainly appear to have exploited the unprecedented situation to the full. Their action is akin to taking a stack of plates to a help-yourself buffet. The suspicion is that the managers piled their plates high simply because they could.

> In the absence of any ownership oversight, the only real restraint on the investment vehicle's managers was a sense of proportionality. Unfortunately, that appears to have gone missing

Sanctioning individuals who are not directly part of the ruling circle is a relatively new tactic in responding to state aggression. But having enforced sanctions, western governments should surely consider a custodial regime to oversee frozen assets. In the absence of any ownership oversight, the only real restraint on LetterOne's managers was a sense of proportionality. Unfortunately, that appears to have gone missing.

The intent of the sanctions imposed on LetterOne's shareholders was to punish Russia and support Ukraine. In that spirit, if they have not already, LetterOne's managers should at least donate part of their fortuitously acquired fortunes to the Kherson flood relief fund.

Opinion Environment

El Niño's arrival spells out stark choices on climate

Andy Carter

Anjana Ahuja

When UK temperatures hit a record 40C last year, Imperial College climate scientist Friederike Otto responded to comparisons with the 1976 heatwave by observing: "By definition unprecedented means it hasn't happened before."

Prepare for more of the same. Last week, the US National Oceanic and Atmospheric Administration announced the official arrival of the El Niño weather phenomenon — which occurs about every two to seven years but not predictably. The change, linked to rising sea surface temperatures, will push more heat into an already-warming atmosphere: some scientists predict the symbolic 1.5C cap on global heating may soon be temporarily exceeded.

Whether or not that happens, El Niño's arrival heralds a new period of climate uncertainty — and one that, with its associated risk of extreme weather, economists and politicians ignore at their peril. Even the best-laid plans to tackle the escalating cost of living will need to factor in crop failures and spiralling commodity prices. It also offers a preview of what might be coming down the track.

> Plans to tackle the cost of living will need to factor in crop failures and spiralling commodity prices

El Niño can be seen as the "heating" phase of a naturally occurring climate cycle in the equatorial Pacific Ocean. Its opposing, cooling phase is called La Niña. Together, they make up the El Niño Southern Oscillation (Enso) cycle, respectively weakening and strengthening trade winds. Those changes influence the jet streams that steer storms around the globe.

Last week's NOAA declaration means, according to Richard Allan, professor of climate science at the University of Reading, that three criteria have been met: a defined area of the tropical eastern Pacific is more than 0.5C warmer than the long-term average; the warming is expected to continue; and the atmosphere is showing signs of responding to that warming.

The atmospheric response to El Niño, which is expected to strengthen throughout the northern hemisphere autumn and winter, is essentially altered wind and rainfall patterns: researchers expect it to become wetter in the southern US; and hotter and drier in northern South America, southern Africa, South Asia and southern Australia. But beyond that, uncertainty abounds, including on when El Niño might peak. This could happen this year or next; or it could fizzle out. "It's too early to say how the current El Niño storyline will unfold," Allan says. "But if it does unleash its full power in 2024 then it's very likely that yet another record global temperature will be breached."

Earlier this year, the World Meteorological Organization said temperatures could move into "uncharted territory", with impacts on health, food security, water management and the environment. The mood among climatologists seems to be uncertainty spiked with trepidation. One challenge is forecasting how countries should prepare: while climate models work reasonably well at the global scale, according to Professor Tim Palmer, a climate physicist at the University of Oxford, they are less effective for making long-term, country-level forecasts. That will matter in the coming years as nations invest in adaptation, such as building flood defences. Palmer is among those advocating for a "Cern for climate change", a multinational supercomputing effort to make higher-resolution forecasts and to explore how even the Enso cycle might alter in a warming world.

For the many countries directly affected by El Niño, Palmer says, that's the "trillion-dollar question": how might climate change affect the frequency and strength of El Niño and La Niña events in the future? "It's a phenomenally complex question which can't be tackled at the national level," he says, suggesting it should be modelled on the international particle physics effort at Cern in Geneva that found the Higgs boson.

For now, the reality is that the mercury is still rising and the climate is still changing. Global mean temperature now stands at least 1.1C above pre-industrial levels; the warming effect of El Niño, which limits the ability of the oceans to draw down heat from the atmosphere, pushes it to within striking distance of the 1.5C limit set out in the Paris agreement.

Any rise should be temporary — but it still represents a new extreme. Twenty-eight countries, including the UK and China, experienced their warmest years in 2022. It could have been worse: those temperatures were kept in check by the cooling effects of La Niña.

This year, meanwhile, has brought record-breaking April heat to Spain, extensive wildfires to Canada and, as a result of those, unbreathable skies over New York. That is the critical message: the unprecedented is becoming the norm.

The writer is a science commentator

Letters

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Extending the liabilities' time horizon is key to pensions reform

Martin Wolf is correct when he writes that "reforming the failing pensions system is a priority" for the UK (Opinion, June 12). The essential change is to the economic theory used. To achieve the full benefit, the time horizon of the liabilities needs to be extended for as long as possible.

Consensus economic theory holds that the returns on equities and bonds move with the real short-term rate of interest. We have long-term data that falsifies this assumption. The returns on all three classes, equities, bonds and real short-term rates of interest, are independent. The value of pensions' liabilities should therefore not be assumed to depend on inflation-linked bond yields. The real, and thus inflation-protected, return on equities is substantially higher than the return on bonds. Investing in equities thus reduces the cost of pension funds.

They are riskier over 20 years than bonds, but this risk falls sharply over longer time horizons. The longer a pension fund exists, the more it can thus invest in equities and the lower will be the cost of pensions to its members. The lives of companies are uncertain and pension funds for their members cannot thus reap the full benefit of the high long-term returns on equities. Wolf proposes therefore the creation of "collective defined contribution schemes" as a solution, and there may be others.

On the reasonable assumption that in future we will employ a similar, or larger, proportion of our population to teach university students, the Universities Superannuation Scheme is such a scheme. It seems clear that the way its liabilities have been valued is based on bad economic theory, and the error is thus neither the fault of the regulator, nor of the staff of the USS. The consequent and mistaken decision on members' contributions has caused much disruption, seriously damaging the education of many.

Reform of the pension system is a priority and university education would be an immediate beneficiary.

Andrew Smithers
London W8, UK

Convenience is only treat some people can afford

Everybody will agree that it's very enjoyable for Jemima Kelly to be able to pick her own elderflowers — no doubt as enjoyable as farming Le Petit Trianon was for Marie Antoinette ("We must stop worshipping at the altar of convenience", Opinion, June 1).

And it would undoubtedly be a good thing, for our high streets as well as our health and pockets, if more people rediscovered the joys of buying the ingredients for a meal and cooking it, rather than resorting to UberEats or Deliveroo.

The cost of living crisis is helping with this, if with nothing else.

Ever since the tech industry found out how to dissolve the physical world into digital equivalents, convenience and cat videos have been seducing us away from using our bodies and minds to do stuff for ourselves, making us sick, sad and stupid in the process.

But let's think for a minute about all the people who, as George Orwell discovered and Jack Shenker so vividly experienced while writing *Now We Have Your Attention*, are so exhausted, so busy working three jobs to make ends meet, or just so utterly immiserated by those jobs, that convenience is the only small treat they can afford.

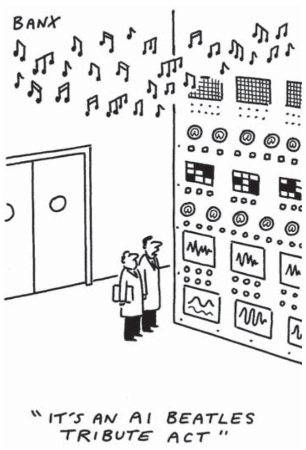
The parents who buy their kids a McDonald's Happy Meal to compensate for being out at work, again; the nurses so dead tired that TikTok is all they can face, and who can only dream of having the time and energy to cook from scratch.

To me, the real questions are how we got to a situation where the population of one of the world's richest countries is reduced to this?

And whether the next wave of convenience, in the form of generative artificial intelligence that can automate the boring bits of life, will actually fulfil the perennial promise of giving everybody the time and means to pick elderflowers — or only the lucky few who deploy it.

Finally, let's spare a thought for the equally vulnerable birds and small mammals, waiting for those elderflowers to turn into berries that will keep them alive next winter.

Sheila Hayman
Advisory Council, Minderoo Centre for Technology and Democracy, University of Cambridge, London NW1, UK



Banks don't deserve the greenwashing tag

The European Banking Authority, which writes the rule book enforced by the European Central Bank and national supervisors, is correct in its assessment that there has been an increase in the number of greenwashing cases across banks, asset managers and insurers ("Rising tide of greenwashing across finance flagged by EU supervisors", Report, June 2).

But that hides a more nuanced picture. The core business of a bank is to lend money and while doing so, they should support economic growth and prosperity for society at large. Green financing will only be truly green when economies reach net zero.

But the fact is we are not there yet, and as such this transition requires financing to businesses and economies that are not green. Financing brown companies today is not inherently bad, as long as those companies are doing their utmost to reduce their emissions over time and transform their businesses towards net zero.

The broadly undefined and wide umbrella used for greenwashing penalises banks unfairly. Banks are trying hard and they are going green. They're also committed to accompanying clients and customers on their own journeys to net zero.

They have developed a broad suite of sustainable financing solutions — for instance, banks cut their direct emissions and also those of their clients.

Many are providing clients (at no cost) with analytics, insights and end-to-end solutions for assisting them with their transition plans. They have invested heavily in environmental, social and governance training, skillsets and data infrastructure. And of course, we mustn't forget that they are heavily investing in climate tech innovation and circular economy solutions.

The progress is there for all to see, and we must ensure that these accusations of greenwashing do not backfire on us at such a pivotal moment in the green transition. More regulation will not fix the issue but rather create unnecessary tension on the journey to net zero global economies.

If we are to point the finger on the subject of greenwashing, let it not be pointed at the banks.

Fernando de la Mora
Managing Director (Spain and Portugal), Alvarez & Marsal, Madrid, Spain

Don't let private creditors free ride public debt relief

The opposition of private lenders to a New York bill requiring them to give the same debt relief as lender governments shows why the bill is needed (Report, June 6). Banks, hedge funds and asset managers have no intention of taking part in debt relief for lower-income countries on the same terms as government lenders.

Academic research has found that private creditors are typically paid first and lose less than bilateral official creditors. Now when legislation is suggested to change this, the finance sector lobbyists cry wolf once again.

In 2010, despite opposition from the finance lobby, the UK introduced a law requiring private lenders to take part in the Jubilee 2000 debt relief scheme. A subsequent UK government review stated that "no evidence has been found of unintended or adverse effects" from the legislation.

New York and the UK should ignore the scare tactics of profiteering financiers, and pass laws to ensure the private sector cannot free ride on the back of debt relief from the public.

Tim Jones
Head of Policy, Debt Justice
London E2, UK

On guns, Medicare for All and tax breaks for the rich

I'm routinely disappointed by the way the FT covers US politics, culminating in the op-ed by Michael Strain ("US debt, unruly politicians and unchecked spending", Opinion, May 27), in which he says "the extremist wings of both parties have increased their relative power over centrists".

In regard to the debt ceiling, Democrats' baseline position was a clean bill, increasing the debt limit, whereas Republicans were demanding cuts. I think if there were a shared amount of extremism, wouldn't Democrats have been demanding more spending and tax increases? Further, when one looks at the most pressing issue for "extreme" Democrats — Medicare for All — it is a policy favoured by over half of Americans, and one that seems almost mainstream. On guns, similarly, there is robust support to regulate firearms by polled Americans, which Democrats support, but Republicans don't. Republican success can be measured in their generous tax breaks for the wealthy (Tax Cuts and Jobs Act, 2017), which aren't supported by a majority of Americans (73 per cent think the wealthy should pay more, not less).

Finally, I saw no Democrats championing the efforts to upend a legitimate election, nor did I see Democrats attempt to storm the capital and prevent the peaceful transfer of power.

Douglas Mueller
Pacific Grove, CA, US

EU-Tunisia aid offer shows the bloc's penny-pinching

In 2011, a few months after the fall of the Tunisian autocrat Ben Ali, the west offered Tunisia and Egypt $20bn, a figure France's president Nicolas Sarkozy said could be doubled if Saudi Arabia and Gulf states put up $10bn.

The EU has this weekend just offered Tunisia a little over $1bn ("EU offers Tunisia over €1bn to stem migration", Report, FT.com, June 11).

The difference in the sums illustrates the penny-pinching policy of the EU, which is guided by fears of a large increase in illegal immigration from Tunisian shores rather than any attempt to promote a more ambitious partnership with that country.

Three points plead in favour of this interpretation of the package announced by EU leaders in Tunis on Sunday.

First, Tunisia will undertake to ensure no sub-Saharan immigrant in the country succeeds in moving to Italy, a similar undertaking to the one Brussels reached with Turkey in 2015. Algeria and Morocco have been steadfast in their refusal to act as the EU's policeman.

Two, the aid package, focused on industrial investment, will be geared to producing non-renewable energy for export to Europe, not for local needs.

And three, the easier access of Tunisians to the Erasmus student exchange network can only speed up what is already a huge brain drain, thus impeding the economic future of Tunisia.

This game of liar's poker illustrates the incapacity of the EU to rise to the challenge that lies on its southern frontier. Tunisia's dire financial situation, for which successive leaders are responsible, has deprived Tunisia of any serious leverage.

Professor Hachemi Alaya
Founder and Editor, Ecoweek, Tunis, Tunisia
Francis Ghilès
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It's just not cricket

A rather stubborn and ever-so-slightly pompous part of business jargon in the UK these days, that I would like bowled out, is the use of the term "close of play" instead of "close of business" on emails and the telephone.

It does not make sense to keep using it because close of play in cricket can vary on any given day, whereas close of business is the same every day.

Also, the phrase close of play means nothing to people living in most of the world — and to people who do not follow cricket.

With the Ashes to start this week, can we extinguish the use of close of play in business, please?

Hamant Verma
London HA5, UK

Opinion

No, British democracy is not safer than America's

POLITICS

Janan Ganesh

I read it somewhere over the weekend and thought, "Fair enough." I heard it from a colleague, and went, "OK, but . . . " By the time non-political friends were saying it, I knew the idea was so widespread that it must be shaky.

This is the claim that Britain is in better civic health than America. And that Boris Johnson's resignation as an MP is proof. First, let us grant that Conservatives in parliament are less far gone than Republicans in Congress. Hail Sir Bernard Jenkin, for example, a pro-Brexit rightwinger and still a conscientious member of the committee holding Johnson to account. If we judge a polity on the comportment of its centre-right party at one point in time, Britain wins.

But why would we? Here are some other things to consider.

America evicted Donald Trump in an election. Britain didn't do that to Johnson. This is because, when it had the chance, he was up against someone yet worse in Jeremy Corbyn. That 2019 election, the worst choice in the UK since the universal franchise, has no modern American equivalent. Both main parties in the US tend not to roll around in the ethical mud at the same time. Britain's did. With the police investigating the Scottish National party, the three most important parties in the kingdom have malfunctioned within a few years of each other. There is no equivalent of the Democrats, a party with lots of silly ideas but also a bare minimum of standards that anchors the overall system.

What else might an American observer find off about UK politics? Well, the last premier to attain the job in a general election was David Cameron 13 years ago. Since then, Theresa May, Boris Johnson, Liz Truss and Rishi Sunak have reached 10 Downing Street through the internal workings of the Tory party, which has fewer than

Both main parties in the US tend not to roll around in the ethical mud at the same time

200,000 people in a nation of 67mn. Imagine if the automatic prize for winning the Republican primaries was the White House.

The next UK election will be the fifth in my lifetime that might better be called a "ratification", with voters keeping or ditching an unelected incumbent who has already changed their lives. When May closed off the option of European single market membership for Britain, and Truss did her tragicomic budget, each had fewer votes to their name than a Wyoming senator. In a parliamentary system, to be clear, this is legitimate. It is also licence for the utmost abuse.

And even this isn't the most invidious comparison with America. That is the House of Lords. More than 700 unelected people can claim a tax-free sum of up to £342 a day for clocking in to an upper chamber that is — a global rarity, this — larger than the lower one. And they can do so forever. If this racket did no practical harm, you could string together some Burkean bromides about leaving well alone. But look around. The Lords is such a treat that politics is increasingly distorted by the clamour to get in. How much of the cringing deference to Johnson, or any leader, boils down to the hope that it will lead to ennoblement?

I suppose it comes down to this: if you were a demagogue, would you choose to operate in Britain or America?

Even with a Republican Congress, Trump was boxed in. His main legislative achievement was a tax cut that a Bush or Reagan might have passed. His wall never materialised. The Supreme Court trammelled him. It is true that a UK premier cannot infuse the judiciary or executive bureaucracy with allies. But in most other ways, the office is a megalomaniac's dream. In normal times, there is a debate to be had between Britain's Napoleonic executive and America's separation of powers. In *these* times, when a rogue might be head of government, I'm not sure there is.

Britain is much too easy a country to wrench this way or that. It has changed relations with its own continent on the back of a 52 to 48 per cent vote in a referendum that was set up as an internal party management tactic. In the US, a mere amendment to the constitution must clear such daunting barriers that one hasn't passed since 1992 (and even that just wrapped up an old proposal from 1789). In a sense, the UK has *more* democracy, which perversely imperils the democracy it has.

The US, no doubt, is more given to anti-democratic violence. But at times, from the British discourse, you wouldn't know that MPs had been murdered, and the likely next governing party investigated for antisemitism. One other thing. Trump turns 77 today. Johnson is 58. If each is determined to haunt their respective democracies for the rest of their lives, Britain has to settle in for the longer ordeal.

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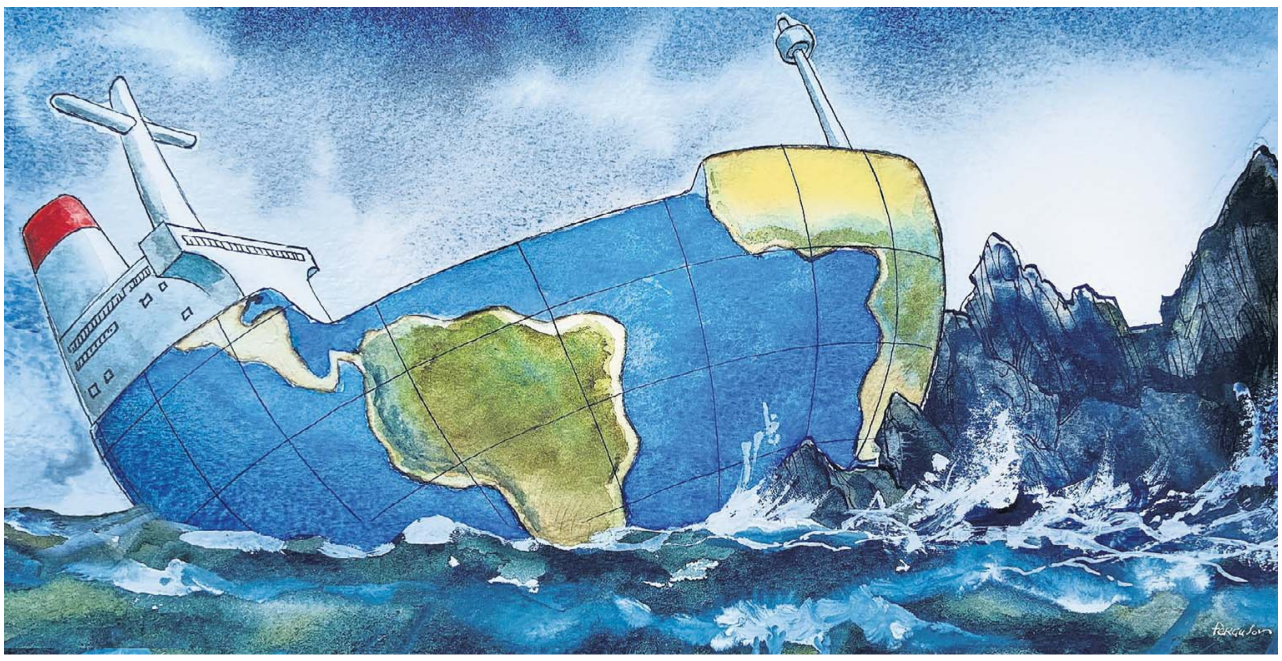
Developing nations have hit the rocks

Martin Wolf Economics

The dire situation on debt means there is no chance of eliminating extreme poverty without radical change



It is natural for people to focus on problems at home. But it is also essential to take a wider view. The succession of shocks — the pandemic, supply constraints, Russia's invasion of Ukraine, soaring inflation and tightening monetary and financial conditions — have adversely affected large parts of the world economy, but the weakest countries and the most vulnerable people within them, above all. All this has had (and will have) dire consequences for economic development, the alleviation of poverty and even political stability in poor countries. These challenges, which emerge clearly in the World Bank's latest Global Economic Prospects report must not be ignored. They certainly give its new president, Ajay Banga, a formidable in-tray.

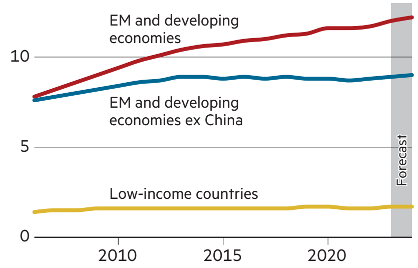
The World Bank's summation of the consequences of these shocks, made worse by the longer-term slowdown in the growth of world trade, rising protectionism, the build up of debt and the worsening climate crisis, is grim. What can justly be called a "polycrisis" has "dealt an enduring setback to development in emerging and developing countries, one that will persist for the foreseeable future. By the end of 2024, economic activity in these economies is expected to be about 5 per cent below levels projected on the eve of the pandemic." Worse, in more than one-third of the poorest countries, incomes per head will be below 2019 levels in 2024. This will have far-reaching effects: the impoverished and insecure will find it hard to improve their own human capital or that of their children. Today's disasters will radiate far into the future.

As has long been the case, east Asia and south Asia are expected to perform relatively well. But performance elsewhere, notably in Latin America and sub-Saharan Africa, is forecast to be poor. Yet this has to be seen in a longer-term perspective. The report indicates that, without China, incomes per head of emerging and developing countries have stagnated relative to those in high-income countries since the middle of the last decade. The relative incomes per head of the low-income countries have stagnated for even longer. In brief, the reduction in global inequality seems to have stalled. (See charts.)

The causes of this long-term stagnation in relative incomes are many and complex. They lie in domestic policy and politics, as well as in the global environment. But one factor must be rising protectionism and the slowdown in the growth of world trade. Notably, the volume of world trade grew at an average rate of 5.8 per cent a year between 1970 to 2008, while gross domestic product growth averaged 3.3 per cent: trade was an engine of growth. Between 2011 and 2023, the average growth of world trade was a mere 3.4 per cent, while that of global GDP fell to 2.7 per cent. This is not deglobalisation. But it is definitely what some now call "slowbalisation".

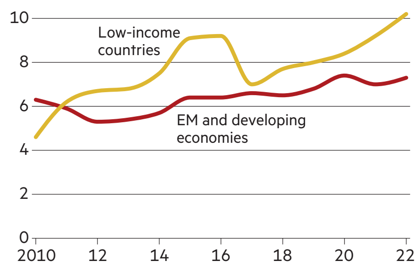
Today, however, many of the most daunting challenges are financial. The long-term accumulation of debt, espe-

The relative output per head of emerging and developing countries is stagnating
GDP per capita as % of advanced economy level



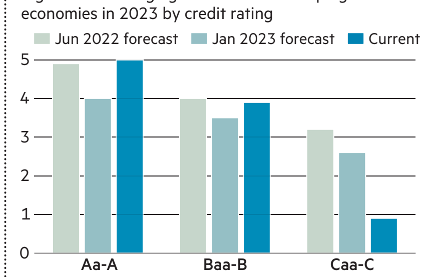
Source: World Bank

The interest cost of public debt is greater for low-income than emerging countries
Government net interest payments as % of revenue



Source: Kose et al. (2022), World Bank

Growth prospects for countries with weak credit ratings have collapsed
% growth of emerging market and developing economies in 2023 by credit rating



Source: Moody's Analytics, World Bank

cially by low-income countries, is interacting with higher interest rates and turbulent credit markets to create serious debt difficulties. As usual, these include not just higher cost but reduced supply: credit, once again, is rationed. Thus, the report notes that one out of every four emerging and developing economies has now in effect lost access to international bond markets.

The evidence supplied on the impact of tightening credit conditions is both striking and disturbing. Since February

There is an overwhelming case for urgent, effective and generous action to help low-income countries

2022, the cost of borrowing for C-rated borrowers has jumped by an extraordinary 14.4 percentage points. As a result, the growth forecast for 2023 for these countries has collapsed from 3.2 per cent a year ago to just 0.9 per cent now.

Yet debt pressures on the poorest countries are not a new phenomenon. Net payments of interest on public debt as a share of government revenue in low-income countries have not only risen significantly since the pandemic but have long been above that of the average of all emerging market and developing countries. Substantial debt relief is needed. Much of that will have to come, in one way or the other, from China. Today, remarkably, bilateral debt owed by low-income countries to the high-income members of the Paris Club has become less than half that owed to non-Paris Club countries, mainly China.

The dire situation on financing and debt has become pressing. There is no chance that extreme poverty will be eliminated without urgent and radical change. The same is true if needed investments are to be made in climate mitigation and adaptation. Nor is it conceivable that the problems of poor countries with weak credit ratings will be addressed by the private sector on its own. There is an overwhelming case for urgent, effective and generous action.

Next week's "summit for a new global financing pact" in Paris offers a valuable opportunity to make rapid progress. But it is important that such progress be made cooperatively with China. The needed changes must build on the recognition that what is going on now is as unsustainable as it is undesirable. They must be addressed at the urgent needs of both people and planet. They must bring down the cost of existing debt and provide the resources and risk-sharing instruments needed to generate affordable financing in future.

Yes, the shocks of recent years have made generous and effective action more politically difficult in high-income countries. Frightened people become inward-looking. But these shocks have also, beyond any doubt, made action more vital. Banga has inherited what is, if wisely used, an institution more valuable as a pulpit than as a bank. In these hard times, he must use it well, to bring the world together to tackle these highly urgent challenges.

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Food delivery apps are getting lost in transit

BUSINESS

Brooke Masters

Grubhub's new chief executive had "tough" news on Monday for its 2,800 employees. Though the food delivery app had boomed during the pandemic, 15 per cent of workers will now lose their jobs.

"We operate in a highly competitive and constantly evolving industry, and we need to continually look at whether we are set up in the right way," Howard Migdal wrote in a company-wide email.

The US app, which is owned by Amsterdam-based Just Eat, is not alone. Zomato recently shut operations in 225 Indian cities, Deliveroo exited Australia and DoorDash cut 1,250 workers, or 6 per cent of its corporate workforce.

Meal delivery was overdue for a reckoning. While Domino's has been bringing food to customers for decades, today's apps inserted themselves into what was already a relatively tight-margin business by tapping into excess capacity. They linked stay-at-home diners with drivers and restaurants with the ability to serve more customers than they could attract to dine in or pick up.

Estimates of the global meal-delivery market range from $167bn to $300bn. But revenue leapt up in recent years due to two factors that have since disappeared. Expansion was funded by cheap capital that covered the gap between the true cost of delivery and what customers actually paid. And pandemic lockdowns supercharged growth by limiting competition from dine-in restaurants and other entertainment.

The boom was so extraordinary that existing food service brands, such as US burger chain Wendy's and UK Indian group Dishoom, tried to capitalise by not only listing their restaurants on the delivery apps but also opening delivery-only "ghost kitchens".

Lockdowns supercharged growth by limiting competition from dine-in restaurants

Now those tailwinds are gone, and the available profits from eat-at-home meals have been eroded by higher food and other costs and squeezed diner budgets. "The whole delivery space is problematic. It's getting difficult to make money," says Peter Backman, an independent food sector analyst.

Restaurants have on-site customers again and pandemic-era caps on app charges are expiring. They are now less enthusiastic about partners who siphon off 15 to 30 per cent.

Several restaurants in my New York suburb have shifted to proprietary online ordering systems. One local pizza place even included a note with my recent DoorDash order reminding me that I could save nearly 30 per cent if I contacted them directly. US brands Wendy's and Applebee's have also scaled back their ghost kitchen plans.

Jefferies analyst Giles Thorne remains convinced that food delivery apps can create sustainable earnings, particularly as comparisons with the extraordinary pandemic period fade away. "There are large sectors of society that are willing to pay $4 to buy back 45 minutes of their time," he argues.

But it is going to be a struggle to keep that delivery charge down now investors are demanding profits rather than just growth. Lay-offs will help reduce overheads but they aren't sufficient. Food delivery apps need to find other ways to cut costs, particularly if they want to expand to new areas without relying on big subsidies.

Some have turned towards "batching" orders, with one courier making multiple stops. This can work in densely populated urban areas filled with busy restaurants. It also explains why DoorDash and Uber Eats routinely offer to make a second stop for diners who have already ordered. But batching done badly alienates app customers who watch in real time as their burgers take a circuitous route and their fries get soggy.

It can be a fool's errand to promise to deliver everything to everybody. Well-known local restaurants can strengthen their bottom line and preserve their reputation for good food by focusing on dine-in and takeaway.

Realistically, many communities will end up with the latest version of ghost kitchens, which cook multiple cuisines under virtual brands. That makes it easier to attract enough customers to keep delivery affordable. ClusterTruck, an Indianapolis pioneer, aims for entrées to go from stove to front door in less than seven minutes, allowing drivers to make at least four trips an hour.

Foodies may sneer at the idea of ordering pad Thai, pizza and a burrito from the same kitchen. But the current situation isn't much better: a single Manhattan deli tries to maximise orders by listing itself on Grubhub and the other apps as 27 different restaurants including a taco bar, a bagel store and several burger joints.

The pipe dream of cheap gourmet food on every doorstep is giving way to today's leaner reality.

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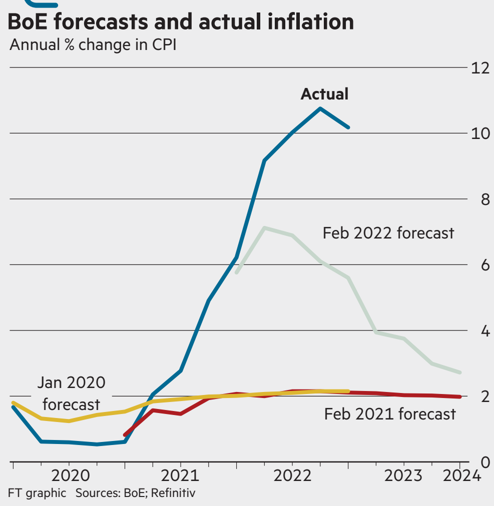
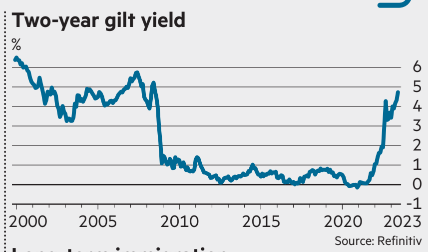
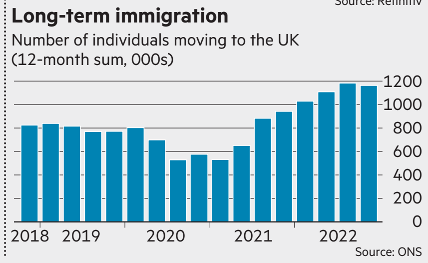
Bank of England: the foresight saga

Gilt yields have hit their highest levels since 2008. Investors are betting that the Bank of England will need to announce further interest rate rises to tame inflation. The central bank has previously underestimated the problem, owing to forecasting mistakes. Incorrect migration assumptions contributed to the BoE's errors.







Economic forecasters are used to ridicule. Their role is to confer respectability on astrologers, quipped JK Galbraith. But the Bank of England's forecasting failures are no joke. Yesterday, strong wage data pushed gilt yields above the mini-Budget levels of last autumn.

Two-year yields rose 0.23 percentage points to 4.86 per cent. They peaked at 4.64 per cent after unfunded tax cuts in September last year. Then, the Truss government took the blame. This time, it is the Old Lady and Andrew Bailey, governor, who need to take cover.

The BoE's struggle with inflation is partly a consequence of its failure to predict its rise and persistence. It is in good company. Its forecasting flops partly reflect relying on futures to predict energy prices. Other flaws are less defensible. Its model was based on an era when no shocks hit energy and food prices. The Monetary Policy Committee's decision to stop following that model is welcome.

Some of the bank's worst errors have been avoided by private sector forecasters, says Panmure Gordon's Simon French. The BoE's forecasts are based on announced government policy, however implausible. Everyone else can use their common sense.

Last August the BoE assumed energy prices would be capped at an unrealistically high £3,500. Many private sector forecasters bet on state intervention. The BoE's failure to keep pace with record immigration figures could also have been mitigated. The BoE's miscalculations are a problem for credulous investors. Some fled the UK unnecessarily last November when the BoE warned that the country was at risk of the worst recession since the second world war.

Big domestic fund managers with the savvy to discount the BoE's forecasts have had — and continue to have — a home advantage.

Until recently, the BoE's record during its 25 years of independence had been strong. But the deference its forecasters show to government policies creates an impression of political subservience.

Unless the BoE does better, investors will discount its estimates more heavily, alongside gilt prices.

Microsoft/Activision: consolidation exorcise

Activision Blizzard recently said that in the first few days after its release, the video game *Diablo IV* had grossed sales of $666mn. It called that appropriately occult figure "auspicious".

The same day, the US Federal Trade Commission went to court to try to stop the video game maker from closing its $75bn deal to sell itself to Microsoft. The FTC had earlier sued to enjoin the tie-up. But without an injunction, the companies could take the risk of completing the combination.

Microsoft described that action from the regulator as its own stroke of good luck. The software titan believes it can press its legal case sooner and that it will prevail in court. Activision and Microsoft are committed to the deal as merger contracts demand their "best" efforts to complete. But both sides will not be too broken up, as it were, if the government forces them to break up.

When the deal was struck 17 months ago, Activision was reeling from a governance and internal culture scandal. Since then, the collective sense of shame has moderated. At the same time, Activision's standalone prospects have rallied.

Following the deal announcement, analysts' consensus earnings estimate for 2023 bottomed at just over $3 per share. That figure has now rallied to about $4 per share on the strength of *Diablo* and other games.

As for Microsoft, its shares are up 40 per cent since the start of 2023. Its software machine seems unstoppable. It is riding a wave of hype around generative artificial intelligence.

The theory of the FTC is that Microsoft will use Activision's gaming portfolio to force consumers to use its less competitive Xbox console hardware. The two companies say that gaming, however, is migrating to mobile devices. This remains a fragmented and competitive area.

If the deal collapses, Microsoft would owe a $3bn reverse termination fee, though the sides could negotiate a lower figure. Closing the acquisition seems, at the least, complex and time-consuming, considering a legal fight is being waged in the US and the UK has blocked the deal.

Wall Street and corporate America will quietly pray the two companies will keep up the fight. A win would chasten a Biden regime that has battled industry consolidation.

But the partners may lack the devilry to persist, no matter how infernally Activision spins its game releases.

China/EVs: Nio noir

China's electric-vehicle price wars are recharged to full power. Tesla slashed prices in China in late 2022 to increase sales and regain market share.

Rivals such as BYD followed suit. Nio remained above the fray. Now it has started a fresh fight.

Chief executive William Li had once said the group would not follow Tesla's lead. A 23 per cent quarter-on-quarter drop in sales in the first three months of the year and a gloomy outlook for the second quarter appear to have changed his mind. Nio's move to cut prices by Rmb30,000 ($4,200) means buyers save about a tenth on the cheapest models. New buyers will no longer receive free battery swaps. The lossmaking company is shelving R&D projects to lower costs.

Nio listed in the US in 2018. It makes most of its sales in China, but the company is gaining a foothold in European markets. It is expected to enter the US in 2025.

Within China, this should be a more lucrative year than 2022, when Covid-19 led to frequent lockdowns. But subsidy removals have dragged on sales growth. Electric and hybrid sales rose 46 per cent year over year, say the China Passenger Car Association. That is down from more than 100 per cent the previous year.

Nio's shares trade nearly 90 per cent below their 2021 peak.

Nio has delivered 43,854 vehicles in the first five months of the year. That leaves more than 206,000 to go if it is to meet its annual target. Lower prices will help. The ES6, a new, inexpensive SUV model, had strong pre-orders.

A national campaign to encourage car purchases, including EV adoption in the countryside, could help lift sales, too. But only national subsidies will return growth to previous levels.

Even more importantly, Nio needs to prove that it can rein in spending. At the end of the last quarter, Nio had Rmb37.8bn in cash. If first-quarter losses are repeated and no new funding is raised, Nio will have less than two years before it needs to break even.

Bunge/Viterra: cereal thriller

Bunge has worked hard to get its balance sheet in shape. Under Greg Heckman, who took over as chief in 2019, the US grains trader has cut debt, shed underperforming assets and improved earnings and returns.

Now it is ready to flaunt its beach body. It is buying rival Viterra for $18bn, including debt. The cash and shares deal will transform it into one of the world's biggest agricultural commodities trading houses. The combined revenues of the pair, which totalled $140bn in 2022, would put it in the same league as industry leaders Cargill and Archer Daniels Midland.

The logic of buying Viterra is hard to fault. Bunge is the world's biggest oilseed processor; Viterra is a big grain buyer and exporter. Joining forces brings vertical integration and plenty of cost savings. Both groups are benefiting from the boom in renewable diesel and conflict-induced jumps in the prices for oilseeds and grains.

Bunge's judicious offer values Viterra at 8.6 times enterprise value to ebitda. That compares with 6 times for Bunge itself but lower than ADM's multiple of 10 times.

A 140 per cent share price rise over three years has given Bunge a handy takeover currency. Viterra's owners — Glencore, Canada Pension Plan Investment Board, and British Columbia Investment Management — will receive about 65.6mn shares of Bunge stock, valued at about $6.2bn and about $2bn in cash.

The latter would be covered by the $250mn in cost savings forecast three years post-closing. Bunge's financial discipline means it should be able to assume Viterra's $9.8bn debt with little strain. The debt to ebitda ratio is expected to stay under 2 times. S&P has raised its rating on Bunge.

Regulators may yet stop Bunge in its tracks. Might this deal cut competition to buy farmers' crops? Expect antitrust scrutiny from governments in the US, Brazil, Argentina and even China.

Bunge may yet end up having to put its shirt back on.

European banks/AT1s: CoCo a gogo

Swiss cheese is full of holes. So is the market for additional tier 1 bonds, after Switzerland's clumsy rescue of Credit Suisse. Yesterday, two banks showed that AT1s are no longer a no-go zone for issuers — if yields are high enough.

Credit Suisse AT1s, a form of contingent convertible bond or coco, were wiped out when UBS was strong-armed into taking over its weaker rival. In theory, ordinary shares should have evaporated first. The risk of a repeat performance raised secondary market yields and halted issuance. Bank of Cyprus and Spain's BBVA were the first banks to chance their arms.

The case for refinancing is clear at BoC. It was forced to bail in depositors during the 2013 eurozone crisis. It is now in better shape. It will pay its first dividend this year from a forecast return on tangible equity of 17 per cent.

This allows BoC to issue €220mn of new AT1s on better terms. It will buy in a 2018 issue of the securities.

If the lender had not chosen to call or refinance the bonds, the coupon would have reset from 12.5 per cent to 15.6 per cent at the end of the year to reflect higher interest rates. The new issue, with a coupon of 11.9 per cent, reflects the bank's improved financial outlook and stronger credit profile. BBVA has set a coupon of 8.4 per cent on its own offering of €1bn in AT1s.

In the wider market, European AT1s have tracked bank share prices since March. That correlation now shows signs of breaking down. Confidence in creditor protection is returning, reversing investor losses on AT1s.

Much debate has ensued over the status of AT1s since Switzerland cancelled $17bn of the securities to sweeten UBS's deal for Credit Suisse. Disgruntled investors are bringing legal proceedings. European regulators have sought to reassure AT1 holders that the bonds remain senior to equity. Some experts warn that national officials can still invert the order.

But the more fresh AT1s that banks issue, the more the Credit Suisse debacle will seem like a one-off.

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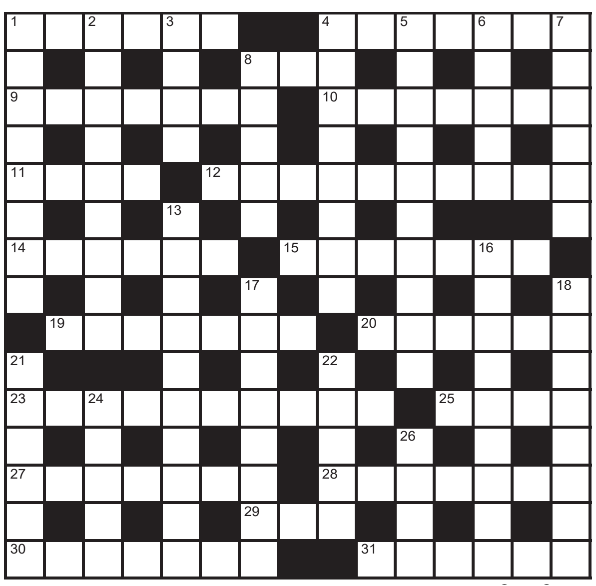
CROSSWORD

No 17,442 Set by CHALMIE



ACROSS

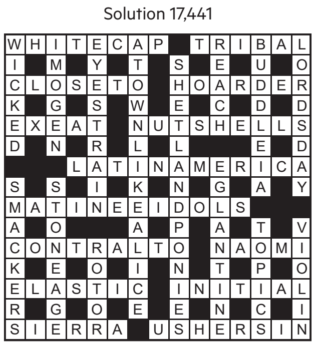
1 Male member's sports car (6)
4 Cosmetic ultimatum as car appears trapped (7)
8 John in American court endlessly cheats (3)
9 Judge cases I prepared for Shylock's daughter (7)
10 Appoints substitute to get journalist in position to the left (7)
11 Piece which flies (4)
12 Spirit writing adds little weight to Hitchcock film (10)
14 Put in order — oddly, this expired (6)
15 Imagine not opening cut-price stew (7)
19 Men fear bothering City privilege-holder (7)
20 Provoke visible sound (6)
23 Story Presley can ruin (10)
25 ____ 15, 6 (1ac 19), 27 (9 22), 5 6, 23, and possibly 4ac: 21 for 28 26 8dn (4)
27 Bishop's occasional interlocutor's car sets off (7)
28 Pushing director finally into Olympic sport (7)
29 Go Conservative, but lose nothing (3)
30 Partners notice timeless exploits (7)
31 One exhibiting 13 perhaps behind us (6)

DOWN

1 Officer, sex unknown, having reached 18 (8)
2 Think about Sweden first, she answers (9)
3 Keen on American film (4)
4 Chalmie unconscious after psychoactive drug turns up in US health system (8)
5 For wearing outside: uniform with plastic front (10)
6 See schedule put up accommodates performer (5)
7 Take on a problem in the Home Counties (6)
8 Tandem-rider lives through 24 hours (5)
13 Austerity sees nerves shredded (10)
16 Hock tangled in henwire (5,4)
17 Said to consider blog comments as travellers' guides (8)
18 Exercise books disappear in an adminstrative building (8)
21 Wilde, Peterson and Hammerstein showing no lasting damage (6)
22 80s computer pliant and yielding to some extent (5)
24 Proportion helping to get rid of nitrogen (5)
26 Fail to see Mars's first satellite (4)

JOTTER PAD

Solution 17,441



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How AI is reshaping patents

Rapid advances in AI set to upend intellectual property

Illustrations: Øivind Hovland

Technology

Can machines be classified as inventors, asks *Nick Huber*

Rapid advances in artificial intelligence chatbots are challenging centuries-old principles in intellectual property — and prompting calls for changes to patent and copyright laws.

A new wave of powerful "generative" AI chatbots — such as ChatGPT from OpenAI and Google's Bard, both of which can produce plausible text and images in response to conversational prompts – has given fresh urgency to ongoing debates in the legal profession and wider society. Should an AI system be considered an inventor and granted a patent for its invention? And how should regulators respond to copyrighted material being fed into AI systems?

Stephen Thaler, a US-based AI expert, has been at the forefront of the debate after he filed two patent applications that named his AI machine Dabus as the inventor of a food container capable of changing shape, and of a flashing light. He has brought legal challenges against IP offices around the world after they rejected his applications and ruled that an AI system cannot be named as the inventor on a patent.

The European Patent Office seems to agree. Its spokesman, Luis Berenguer, says that, for the foreseeable future, AI will remain "mainly a tool for a human inventor".

Thaler has had some success, however. In 2021, Australia's Federal Court ruled that Dabus can be an inventor for the purposes of Australian law. And, in South Africa, Thaler has obtained a patent listing Dabus as the inventor. He is waiting to hear the verdict of the UK Supreme Court.

"There must be some concessions, otherwise AI systems will be conceiving inventions in the shadows as humans falsely claim authorship and accusations of cheating fly," Thaler told the Financial Times.

Some lawyers say he has a point. Companies are increasing investment in AI and using it to create inventions. And they want to protect the resulting IP, which can be used to secure more investment. The logical response, they argue, is to change IP law so that AI can either be listed as either the inventor of a patent, or the co-inventor.

"It's unfeasible to keep AI out from the patent system in the long run," says Bernd Holzgartner, a partner at 2SPL, a German patent law firm. "The current legal framework was not made for this situation and high degree of uncertainty."

He adds, however, that any change to AI and patent law may take longer than two to three years because patent law "always evolves slowly".

First, courts must be convinced that the AI system, rather than the human, is in control. And, despite rapid advances in generative AI systems since late last year, experts say that it still requires considerable human guidance — for example, data scientists entering "prompts" or instructions.

But, if AI does become capable of developing patentable inventions with negligible human input, would that make patents, which are designed to spur human innovation and economic growth, irrelevant?

"If AI makes everything so easy to invent . . . if it's just a case of clicking a button and everyone has access to it, in theory, policymakers may decide that they don't need to grant patents," says Mike Williams, partner and AI specialist at Marks & Clerk, an intellectual property law firm.

Elsewhere in IP, litigation over AI is also increasing.

One of the most high-profile legal cases is between picture agency Getty Images and Stability AI, an AI company. In a case filed in London's High Court, in January, Getty Images claimed that Stability AI, had "unlawfully copied and processed millions of images protected by [its] copyright . . . to benefit Stability AI's commercial interests and to the detriment of the content creators".

> 'It's unfeasible to keep AI out from the patent system in the long run'

One possible industry-wide compromise could be a collective licensing scheme, whereby AI companies pay artists to compensate them for using their copyrighted data to train AI systems, suggests Noam Shemtov, professor of intellectual property and technology law at Queen Mary University of London.

Such a scheme would be similar to the licence fee paid by restaurants, cafés, hotels and other businesses to play music to the public.

Lawyers keep an eye on regulatory changes

Copyright

Strictest rules expected to set global standard, writes *Miriam Rozen*

Lawyers are paying close attention to the proposed regulation of generative artificial intelligence in Europe, the US and China as their clients contend with the unclear risks of violating intellectual property rights.

These AI platforms are trained using existing works and can then produce new works in response to a prompt. And Ceyhun N Pehlivan, co-leader of Linklaters' telecommunications, media and technology and IP practice in Madrid, points out that the generative AI platforms on the market — ChatGPT, AlphaCode, GitHub Copilot, and Bard — "are collecting all the information out there, this includes texts, images, and videos, and the problem is some of those are protected by copyrights".

At the same time, it is not clear what steps generative AI developers and users might take to enforce their own IP rights for whatever is created by these new tools. "It is very difficult to answer that question," Pehlivan says.

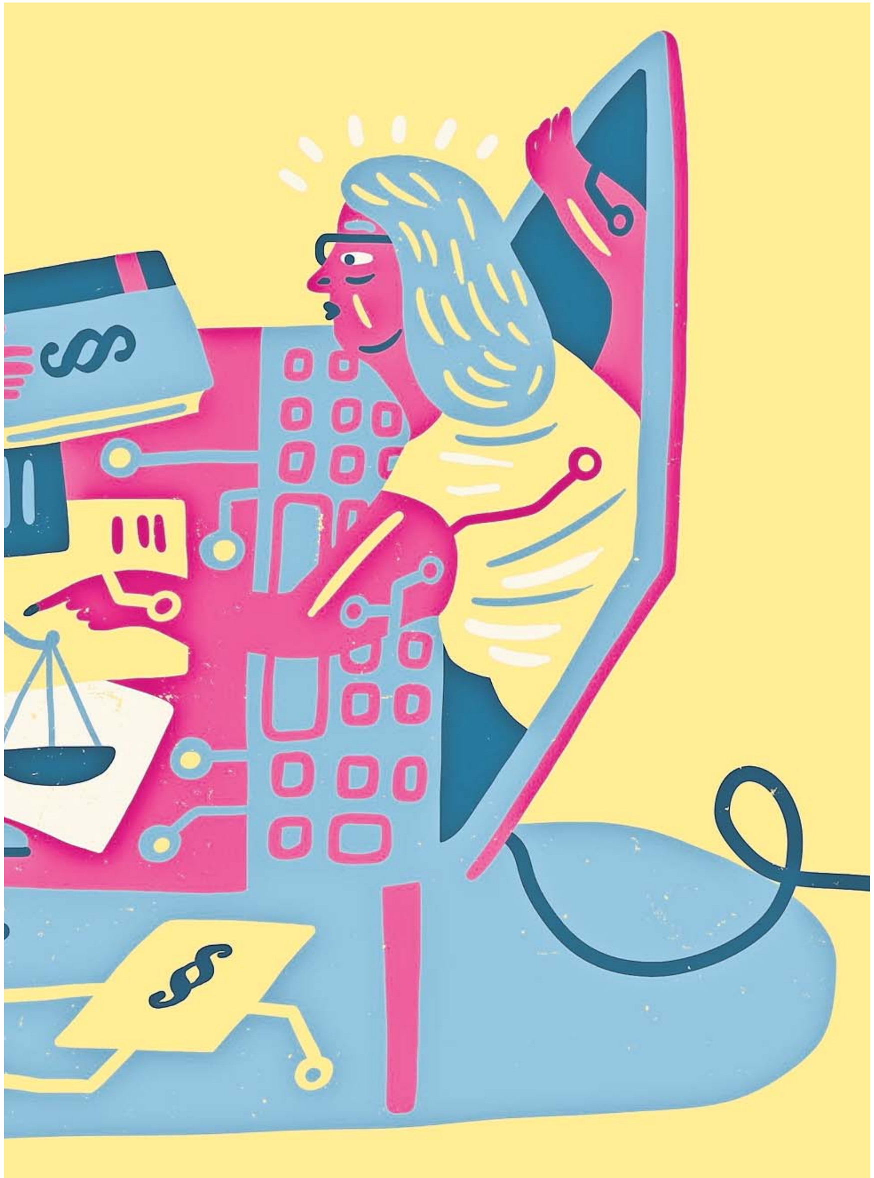
As a result, Pehlivan, and other IP lawyers trying to identify best practice in this uncertain environment, are paying close attention to proposed generative AI regulatory schemes that are under consideration across the world.

They expect the strictest rules adopted by the European Union, the US, or China to set a globally accepted standard.

"If I need to comply with both US and EU law, and one of them lets me do it, and the other one doesn't, I still can't do it," says Mark Lemley, a Stanford Law School professor and counsel at Lex Lumina, which is defending London-based Stability AI and other generative AI companies against copyright infringement claims filed by picture agency Getty Images.

The EU might be first to enact sweeping generative AI regulations — the bloc is working on an AI Act that is due to be finalised next year. Copyright was not addressed in the initial drafts but, last month, the European parliament added a clause that requires generative AI developers to "make available summaries of the copyrighted material that was used to train their systems". However, what the "summaries" should include is not specified, Pehlivan notes.

Under the EU Copyright Directive, which took effect in 2019, it falls to copyright holders to thwart use of their data if generative AI tools or other types of web-searching software can find it, Pehlivan says. It "is permitted" to train a generative AI engine using lawfully accessed works, provided



How machine learning can help or hinder innovation

Applications

AI can be used to target inventions en masse — but also to protect creators, writes *Yasmin Lambert*

Intellectual property lawyer Damien Riehl and computer programmer Noah Rubin were talking in a hotel bar when they came up with an idea: what if you could use a computer to create every possible musical melody, in the same way that hackers might use "brute force" to run through every possible combination of a secure password?

That night, they built a prototype program that created 3,000 melodies. And so began the "All the Music" project — the melodies soon grew to 68bn and, as of today, 417bn. Copyright for the melodies is waived and they are released for public use, which prevents songwriters from accidentally infringing rights on existing music, helping them avoid frivolous or opportunistic lawsuits.

Then, Riehl and his collaborators saw that this model could also be applied to patents, and have started work on a successor project called All the Patents.

"What the project will do is take all the claims that have ever been filed in all the patents, and then recombine them using a machine to create every conceivable combination on every conceivable claim in every prior patent," says Riehl. Once published, they would serve as 'prior art' — a patent law concept which states that, if an invention has already been described, is obvious, or is not new, it cannot be patented.

The aim is to disincentivise businesses from machine-generating thousands of new patents which recombine existing patents for purely strategic purposes: when they have no intention of developing the invention, but aim to prevent others from developing similar innovations, or make some financial gain.

Riehl's project means that "the likelihood of those recombinations of old things getting denied [for a patent] is very high, therefore it's not worth the expense", he explains. "Instead, they need to innovate on their products, not on their patents."

What both of the initiatives demonstrate is how artificial intelligence can be applied to intellectual property — both to support and hinder innovation.

While AI cannot currently be named as the inventor on most patents, it can speed up both innovation itself and the process of drafting and filing applications. "When it comes to drafting, AI can help write text, just as it can for many other applications," says Mark Lemley, professor at Stanford Law School. "And it speeds the process up and makes it cheaper." But he adds that "there are tools out there that let you write the patent claim you want to own, and the AI will draft the actual text of the supposed technology for you. That's the opposite of how patent law is supposed to work."

Intellectual property lawyer Damien Riehl, who helped devise the 'All the Patents' engine

While the use of generative AI has increased hugely since the launch of the ChatGPT chatbot in November 2022, older forms of AI have been used in the patent field for well over a decade. One of the first examples was Lex Machina, software that uses machine learning to comb data sources and provide legal analytics. A Stanford university spinout, it was created by Lemley with George Gregory and Joshua Walker in 2006.

Walker, an IP lawyer and AI consultant, says that patenting is well ahead in its use of AI because engineers and computer scientists care about how their inventions are patented — making them more likely to create these solutions — but also because patent information is publicly available, and there is enormous economic value tied to patents.

At Toyota North America, one of the busiest patent filers in the US, IP managing counsel Gunnar Heinisch's team had been using AI for many years before ChatGPT arrived. "We've been using algorithms and machine learning to evaluate patent quality," he says. "We can assess a potential idea, what might be a good invention to consider, and whether it's patentable." In the short term, he expects the new generative AI tools to help with searches of prior art and summarise patent applications in plain English for non-technical readers.

In the longer term, AI may replace more and more of the human labour involved in patent processes. This will require a rethink of not only how patents are produced and assessed, but the roles of patent attorneys and other specialists.

"Patenting is getting much more complex," says Vasheharan Kanesarajah, head of strategic development for intellectual property at analytics company Clarivate. "And the traditional model of a patent attorney being a specialist in a single domain is being broken."

For their part, large AI companies are hopeful that a legal balance can be struck between the benefits of AI and the rights of copyright holders.

"Copyright and IP law has adapted to new technology in the past and we believe it will do the same with AI," says OpenAI. "We want everyone to benefit from AI technology and are working with creators, rights owners, policymakers, academics, and other stakeholders on these issues."

Given how fast AI is changing, IP law may be playing catching up for some time.

Holzgartner, of 2SPL, likens the use of AI in intellectual property to a painting that has only just been started.

"So far, we have a white canvas, with maybe two or three lines drawn on it. We are far away from having a complete picture . . . on how to handle things."

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that the rights holder has not opted out, he says.

In the UK, by contrast, unfettered data mining from web sources is barred, points out Pehlivan — except for non-commercial purposes. When the UK's Intellectual Property Office, in an effort to tweak the rules to accommodate the new technology, proposed an exception to that rule for generative AI, the plan triggered such a big backlash from the creative industries that it was aborted. Whatever eventually becomes effective will not include such a loophole.

> A 'bigger danger' looms for users of GAI if the output appears 'too similar to something . . . on [the] input side'

In the US, the "fair use doctrine" in its copyright law has raised expectations that there will be only a minimal risk of generative AI developers and users infringing copyrights, according to Lemley.

A "bigger danger" looms for users of GAI if the output appears "too similar to something . . . on [the] input side," Lemley says. But that only happens with existing GAI systems if the user asks for the output to be similar to a specific input, he notes.

"If you go ask ChatGPT to write me a children's story about kids who go to a wizard school, it's not going to write anything close to Harry Potter," he says. "But if you say: 'Write me a children's story about kids who go to a wizarding school that begins' and you give it the first paragraph of Harry Potter, it will actually spit out several pages of Harry Potter."

Another old case that may have a bearing on the use of this new technology concerned Andy Warhol paintings. The US Supreme Court ruled last month on a case between the late artist's estate and a photographer who shot a portrait of the late singer Prince. The justices ruled that Warhol had infringed the photographer's copyright when he made and sold an artwork based on the photo, in a ruling that hinged on Warhol's work being insufficiently "transformative".

The Copyright Alliance, which advocates for rights holders, noted that "it's not hard to see how the Court's treatment of transformative use could impact artificial intelligence developers' approach to their unauthorised copying and ingestion of copyrighted works for training purposes".

Amid the uncertainty about which rules will become effective and how courts will interpret them, vigilance over contractual obligations will go a long way to providing protection for generative AI users and developers, says Jennifer Maisel, an IP lawyer and member of Rothwell, Figg, Ernst & Manbeck in Washington, DC.

As a first step for users, Maisel advises: "Look at your agreement with the software provider," to determine what warranties exist about the content that the generative AI was trained upon — and whether it reassures that guardrails are already in place to prevent third-party copyright infringement claims.

Given the fierce competition for market share among generative AI tool developers, she believes that such clauses will start turning up in users' contracts. "We've seen this in other software contexts," she says, "liability tends to be pushed to the software owner."

But if, or while, such assurances are absent, she believes users should take "risk-mitigation measures" including establishing audits or indexes, as much as possible, for the sources their generative AI tool trained upon before spitting out its creation.

The changes will affect Standard Essential Patents, which cover technologies that are part of a standard, such as 5G or Bluetooth — Stefan Wermuth/Bloomberg

European patent reforms gain speed

Legal changes

Proposals are next step in harmonisation, says *Stephanie Forshee*

Just as the European Union adopted the Unitary Patent system on June 1, a trio of complementary reforms known as the "patent package" was also being refined. But these three proposed rules from the European Commission are not without their critics.

This patent package is intended as a continuation of EU harmonisation efforts in the area of intellectual property. Its draft rules, first put forward in April, will "make the patents system more effective by further eliminating Single Market fragmentation, reducing red tape, and enhancing efficiency", according to a statement from the Commission. "This solid framework will empower economic operators and competent authorities to better protect innovation while ensuring fair access, including during emergency situations," it explains.

Among the proposed changes is the creation of a more transparent and standardised method for Standard Essential Patents (SEPs). These are written for technology that has been declared essential for the implementation of a technical standard — for instance, 5G, WiFi, or Bluetooth, as well as audio compression and decompression standards.

The proposed rules would make these patents available for licensing to those who need them, in order to legally sell products that require them.

"In principle, the rules are a very good step," says Daniel Scola, managing partner at Hoffmann & Baron.

In the area of SEPs, the European Commission believes the existing self-regulation was not enough.

So the Commission's objective with the proposed new framework is to ensure that the patent owners and implementers can innovate while remaining competitive in global markets. Another goal is to ensure that SMEs and consumers benefit from "fair and reasonable prices".

However, the new SEP rules are facing pushback. Klaus Grabinski, chief judge of the Unified Patent Court's Court of Appeal, said last month that the rules, as written, fail to comply with the EU Charters of Fundamental Rights. "I fully support the Commission's aim to enhance transparency, but access to justice is a core fundamental right," he told ManagingIP.com. But he added that he was confident the "regulation will be fully compliant . . . once it has gone through the [full] legislative process".

Antje Brambrink, counsel at Finnegan, Henderson, Farabow, Garrett, & Dunner in Munich, believes the SEPs changes are the most highly debated among the three.

Overall, she says, the rules emphasise that "it's important to protect such innovations and attract a venue in Europe for these companies to go on with their research and development." They should simultaneously consider the need to compete on manufacturing and marketing, she adds, which would "really strengthen the European market".

> Package aims to 'further eliminate Single Market fragmentation'
>
> **European Commission**

The patent package also includes the introduction of a Unitary Supplementary Protection Certificate, which the Commission views as complementary to the Unitary Patent.

As it stands, SPC protection is available only at a national level, which the Commission said: "suffers from fragmentation, which leads to complex and costly procedures, as well as legal uncertainty".

Under the proposed rules, the SPCs would undergo a centralised examination procedure, a streamlined process which would be overseen by the EU Intellectual Property Office and national IP offices.

Another measure aimed at strengthening the EU's Unitary Patent is compulsory licensing in a crisis, which allows the use of a product without the consent of the patent holder. In the "aftermath of Covid-19", the Commission said it envisaged that the measure would "help provide access to key crisis-relevant products and technologies as a last resort in times of crisis".

Jan Walter, senior policy adviser at Akin, Gump, Strauss, Hauer & Feld, says many "see it as a surprise". However, he suggests that should not be, given the EU's "evolving narrative and position in international organisations" such as the World Trade Organization throughout the pandemic, coupled with the Commission's long-term efforts to harmonise on IP, EU-wide.

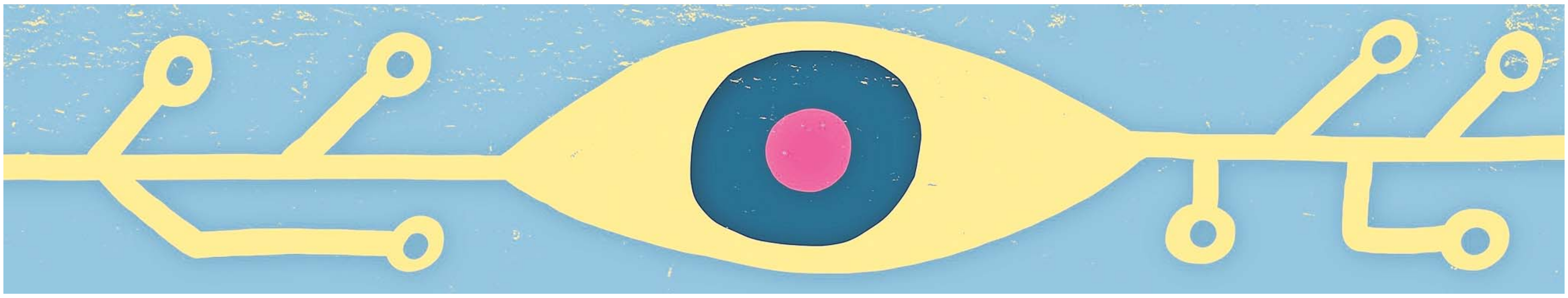
Walter adds that, while a lot of new EU legislation often takes years to finalise and adopt, he believes this package will be "pushed hard" by proponents, including the Commission, to be adopted before the European parliament's election next June.

The result "will demonstrate a new balance of IP rights as the EU understands it emerging from the pandemic," he says.

But, even if the rules are adopted, whether they will be effective is another matter.

"Implementation is always the most difficult part of any legislation," said Hoffmann & Baron's Scola.

It remains to be seen "whether the final rules and their implementation will be easy enough to be effective and encourage compliance."



Top-rated firms by A-Z and sector

Best of the bunch Listings based on recommendations made by clients and peers to FT research partner Statista

Europe's Leading Patent Law Firms 2023

Patent law firm	Country of origin
2SPL	Germany
AA Thornton	United Kingdom
AAA-Patent	Germany
Abel + Imray	United Kingdom
ABG Intellectual Property	Spain
ABP Burger Rechtsanwaltsgesellschaft	Germany
aera	Denmark
Allen & Overy	United Kingdom
AOMB	Netherlands
AOMB Polska	Poland
Appleyard Lees	United Kingdom
Arnold & Siedsma	Netherlands
August Debouzy	France
AWA	Sweden
Balder	Spain
Bandpay & Greuter	France
Bardehle Pagenberg	Germany
Barker Brettell	United Kingdom
Bauer | Vorberg | Kayser	Germany
Beau de Loménie	France
Becker & Associés	France
Berggren	Finland
BESTPATENT	Germany
BETTEN & RESCH	Germany
Bianchetti & Minoja	Italy
Bird & Bird	United Kingdom
BOEHMERT & BOEHMERT	Germany
Botti & Ferrari	Italy
Boult Wade Tennant	United Kingdom
Braun-Dullaeus Pannen Emmerling	Germany
Brinkhof	Netherlands
Bristows	United Kingdom
Budde Schou	Denmark
Bugnion	Italy
Buzzi, Notaro & Antonielli d'Oulx	Italy
Carpmaels & Ransford	United Kingdom
Casalonga	France
CMS	Germany
Cohausz & Florack	Germany
COPA	Denmark
Curell Suñol	Spain
D Young & Co	United Kingdom
De Clercq & Partners IP	Belgium
De Vries & Metman	Netherlands
Dehns	United Kingdom
df-mp	Germany
Dompatent	Germany
Dr. Bakuri Lanchava	Germany
DREISS Patentanwälte	Germany
DTS Patent- und Rechtsanwälte	Germany
Durán-Corretjer	Spain
EIP	United Kingdom
Eisenführ Speiser	Germany
Elkington + Fife	United Kingdom
EP&C	Netherlands
Epping Hermann Fischer	Germany
Forresters	United Kingdom
Germain Maureau	France
Gevers	Belgium
GJE	United Kingdom
GLAWE DELFS MOLL	Germany
GLP	Italy
Gramm, Lins & Partner	Germany
Grosset-Fournier & Demachy	France
Grünecker	Germany
Guardian IP Consulting	Denmark
H&A	Spain
Hamm & Wittkopp Patentanwälte	Germany
Håmsø Patentbyrå	Norway
Hansepatent	Germany
Harber	Czech Republic
Heeschen Pültz	Germany
Herzog IP	Germany
HGF	United Kingdom
HLK	United Kingdom
Hoefer & Partner	Germany
Hoffmann Eitle	Germany
HØIBERG	Denmark
Horn Kleimann Waitzhofer	Germany
Hoyng Rokh Monegier	Netherlands
IK-IP	United Kingdom
Inspicos	Denmark
isarpatent	Germany
Isenbruck Bösl Hörschler	Germany
Isler & Pedrazzini	Switzerland
J A Kemp	United Kingdom
J. Pereira da Cruz	Portugal
Jacobacci & Partners	Italy
Kador & Partner	Germany
karo IP	Germany
Kehl, Ascherl, Liebhoff & Ettmayr	Germany
Keller Schneider	Germany
Keltie	United Kingdom
Kilburn & Strode	United Kingdom
Kohler Schmid Möbus Patentanwälte	Germany
König Szynka Tilmann von Renesse	Germany
Kransell & Wennborg	Sweden
Kraus & Weisert	Germany
Kroher Strobel	Germany
Kutzenberger Wolff & Partner	Germany
Laine IP Oy	Finland
Lambsdorff & Lange	Germany
Lavoix	France
Lederer & Keller	Germany
Lippert Stachow	Germany
LLR Intellectual Property	France
Lorenz Seidler Gossel	Germany
Maikowski & Ninnemann	Germany
Maiwald	Germany
Marietti, Gislon e Trupiano	Italy
Marks & Clerk	United Kingdom
Mathys & Squire	United Kingdom
Meissner Bolte	Germany
Mewburn Ellis	United Kingdom
MHP	Germany
Michalski · Hüttermann & Partner	Germany
Mitscherlich	Germany
Modiano & Partners	Italy
Müller-Boré	Germany
Murgitroyd	United Kingdom
NLO	Netherlands
OXON ip	United Kingdom
Page White & Farrer	United Kingdom
Papula-Nevinpat	Finland
Patendibüroo Ustervall	Estonia
PATENTREE	Portugal
PATERIS	Germany
PELSTER BEHRENDS	Germany
Plasseraud IP	France
Plougmann Vingtoft	Denmark
Ponti	Spain
Potter Clarkson	United Kingdom
Prinz & Partner	Germany
Puchberger & Partner	Austria
Reddie & Grose	United Kingdom
Regimbeau	France
Reitstötter Kinzebach	Germany
Rentsch Partner	Switzerland
Richardt - Patentanwälte	Germany
Sagittarius IP	United Kingdom
Samson & Partner	Germany
Santarelli Group	France
SBGK	Hungary
Schiweck Weinzierl Koch	Germany
Schoppe, Zimmermann, Stöckeler, Zinkler, Schenk & Partner	Germany
Script IP	United Kingdom
Simmons & Simmons	United Kingdom
Sirius IP	United Kingdom
Slingsby Partners	United Kingdom
Società Italiana Brevetti (SIB)	Italy
SSM	Germany
Ström & Gulliksson	Sweden
Studio Torta	Italy
TBK	Germany
Ter Meer Steinmeister & Partner	Germany
Uexküll & Stolberg	Germany
UNGRIA	Spain
V.O.	Netherlands
Valea	Sweden
Venner Shipley	United Kingdom
Viering, Jentschura & Partner	Germany
Vossius	Germany
Vriesendorp & Gaade	Netherlands
Wallinger Ricker Schlotter Tostmann	Germany
Weickmann & Weickmann	Germany
Westphal, Mussgnug & Partner	Germany
Wilson Gunn	United Kingdom
Withers & Rogers	United Kingdom
WITTEWELLER	Germany
WTS Patent Attorneys Witek, Śnieżko and Partners	Poland
WUESTHOFF & WUESTHOFF	Germany
Wynne-Jones IP	United Kingdom
Zacco	Denmark
Zardi	Switzerland
ZBM Patents & Trademarks	Spain
Zimmermann & Partner	Germany
ZSP Patentanwälte	Germany

Europe's Leading Patent Law Firms

Patent law firm	Country of origin	Rating
Biotechnology, Food & Healthcare		
ABG Intellectual Property	Spain	Gold
Carpmaels & Ransford	United Kingdom	Gold
CMS	Germany	Gold
EIP	United Kingdom	Gold
GJE	United Kingdom	Gold
HGF	United Kingdom	Gold
Hoffmann Eitle	Germany	Gold
J A Kemp	United Kingdom	Gold
Keltie	United Kingdom	Gold
Murgitroyd	United Kingdom	Gold
PATENTREE	Portugal	Gold
Potter Clarkson	United Kingdom	Gold
Sagittarius IP	United Kingdom	Gold
Vossius	Germany	Gold
ZBM Patents & Trademarks	Spain	Gold
De Clercq & Partners IP	Belgium	Silver
HLK	United Kingdom	Silver
Kilburn & Strode	United Kingdom	Silver
Maiwald	Germany	Silver
Mewburn Ellis	United Kingdom	Silver
WTS Patent Attorneys Witek, Śnieżko and Partners	Poland	Silver
Appleyard Lees	United Kingdom	Bronze
Becker & Associés	France	Bronze
Bird & Bird	United Kingdom	Bronze
BOEHMERT & BOEHMERT	Germany	Bronze
Boult Wade Tennant	United Kingdom	Bronze
Buzzi, Notaro & Antonielli d'Oulx	Italy	Bronze
Cohausz & Florack	Germany	Bronze
D Young & Co	United Kingdom	Bronze
df-mp	Germany	Bronze
Forresters	United Kingdom	Bronze
Germain Maureau	France	Bronze
GLP	Italy	Bronze
Grosset-Fournier & Demachy	France	Bronze
Grünecker	Germany	Bronze
H&A	Spain	Bronze
Håmsø Patentbyrå	Norway	Bronze
Hansepatent	Germany	Bronze
HØIBERG	Denmark	Bronze
Inspicos	Denmark	Bronze
König Szynka Tilmann von Renesse	Germany	Bronze
Marks & Clerk	United Kingdom	Bronze
Mathys & Squire	United Kingdom	Bronze
NLO	Netherlands	Bronze
OXON ip	United Kingdom	Bronze
Papula-Nevinpat	Finland	Bronze
Plasseraud IP	France	Bronze
Plougmann Vingtoft	Denmark	Bronze
Prinz & Partner	Germany	Bronze
Regimbeau	France	Bronze
V.O.	Netherlands	Bronze
Venner Shipley	United Kingdom	Bronze
Withers & Rogers	United Kingdom	Bronze
Wynne-Jones IP	United Kingdom	Bronze
ZSP Patentanwälte	Germany	Bronze

Patent law firm	Country of origin	Rating
Chemistry & Pharmacy		
ABG Intellectual Property	Spain	Gold
Carpmaels & Ransford	United Kingdom	Gold
EIP	United Kingdom	Gold
GJE	United Kingdom	Gold
HGF	United Kingdom	Gold
HLK	United Kingdom	Gold
Hoffmann Eitle	Germany	Gold
J A Kemp	United Kingdom	Gold
Maiwald	Germany	Gold
Murgitroyd	United Kingdom	Gold
PATENTREE	Portugal	Gold
Potter Clarkson	United Kingdom	Gold
Sagittarius IP	United Kingdom	Gold
Vossius	Germany	Gold
ZBM Patents & Trademarks	Spain	Gold
CMS	Germany	Silver
De Clercq & Partners IP	Belgium	Silver
df-mp	Germany	Silver
GLP	Italy	Silver
Grosset-Fournier & Demachy	France	Silver
Keltie	United Kingdom	Silver
Kilburn & Strode	United Kingdom	Silver
Mewburn Ellis	United Kingdom	Silver
Regimbeau	France	Silver
WTS Patent Attorneys Witek, Śnieżko and Partners	Poland	Silver
Abel + Imray	United Kingdom	Bronze
Appleyard Lees	United Kingdom	Bronze
AWA	Sweden	Bronze
Balder	Spain	Bronze
Bandpay & Greuter	France	Bronze
Bardehle Pagenberg	Germany	Bronze
Becker & Associés	France	Bronze
Bianchetti & Minoja	Italy	Bronze
Bird & Bird	United Kingdom	Bronze
BOEHMERT & BOEHMERT	Germany	Bronze
Botti & Ferrari	Italy	Bronze
Cohausz & Florack	Germany	Bronze
D Young & Co	United Kingdom	Bronze
Dehns	United Kingdom	Bronze
Dompatent	Germany	Bronze
Durán-Corretjer	Spain	Bronze
Eisenführ Speiser	Germany	Bronze
Elkington + Fife	United Kingdom	Bronze
Forresters	United Kingdom	Bronze
Germain Maureau	France	Bronze
Grünecker	Germany	Bronze
H&A	Spain	Bronze
Hamm & Wittkopp Patentanwälte	Germany	Bronze
Håmsø Patentbyrå	Norway	Bronze
Harber	Czech Republic	Bronze
Herzog IP	Germany	Bronze
HØIBERG	Denmark	Bronze
Hoyng Rokh Monegier	Netherlands	Bronze
Inspicos	Denmark	Bronze
Isenbruck Bösl Hörschler	Germany	Bronze
Kutzenberger Wolff & Partner	Germany	Bronze
Lederer & Keller	Germany	Bronze
LLR Intellectual Property	France	Bronze
Marks & Clerk	United Kingdom	Bronze
Mathys & Squire	United Kingdom	Bronze
Meissner Bolte	Germany	Bronze
NLO	Netherlands	Bronze
OXON ip	United Kingdom	Bronze
Plasseraud IP	France	Bronze
Prinz & Partner	Germany	Bronze
Reitstötter Kinzebach	Germany	Bronze
Schiweck Weinzierl Koch	Germany	Bronze
Ter Meer Steinmeister & Partner	Germany	Bronze
UNGRIA	Spain	Bronze
Venner Shipley	United Kingdom	Bronze
Weickmann & Weickmann	Germany	Bronze
Wynne-Jones IP	United Kingdom	Bronze
ZSP Patentanwälte	Germany	Bronze

Patent law firm	Country of origin	Rating
Electrical Engineering & Physics		
2SPL	Germany	Gold
Bardehle Pagenberg	Germany	Gold
Buzzi, Notaro & Antonielli d'Oulx	Italy	Gold
Dr. Bakuri Lanchava	Germany	Gold
EIP	United Kingdom	Gold
GJE	United Kingdom	Gold
GLP	Italy	Gold
HGF	United Kingdom	Gold
HLK	United Kingdom	Gold
Keltie	United Kingdom	Gold
Murgitroyd	United Kingdom	Gold
PATENTREE	Portugal	Gold
ZBM Patents & Trademarks	Spain	Gold
ABG Intellectual Property	Spain	Silver
df-mp	Germany	Silver
Durán-Corretjer	Spain	Silver
Forresters	United Kingdom	Silver
Germain Maureau	France	Silver
Grünecker	Germany	Silver
Håmsø Patentbyrå	Norway	Silver
Lippert Stachow	Germany	Silver
LLR Intellectual Property	France	Silver
Marks & Clerk	United Kingdom	Silver
Mathys & Squire	United Kingdom	Silver
Potter Clarkson	United Kingdom	Silver
Prinz & Partner	Germany	Silver
Westphal, Mussgnug & Partner	Germany	Silver
Withers & Rogers	United Kingdom	Silver
AOMB	Netherlands	Bronze
Balder	Spain	Bronze
Bird & Bird	United Kingdom	Bronze
BOEHMERT & BOEHMERT	Germany	Bronze
Boult Wade Tennant	United Kingdom	Bronze
Braun-Dullaeus Pannen Emmerling	Germany	Bronze
CMS	Germany	Bronze
Cohausz & Florack	Germany	Bronze
D Young & Co	United Kingdom	Bronze
DREISS Patentanwälte	Germany	Bronze
Eisenführ Speiser	Germany	Bronze
Epping Hermann Fischer	Germany	Bronze
H&A	Spain	Bronze
Hoffmann Eitle	Germany	Bronze
Horn Kleimann Waitzhofer	Germany	Bronze
Hoyng Rokh Monegier	Netherlands	Bronze
IK-IP	United Kingdom	Bronze
J A Kemp	United Kingdom	Bronze
J. Pereira da Cruz	Portugal	Bronze
Jacobacci & Partners	Italy	Bronze
Kilburn & Strode	United Kingdom	Bronze
Kransell & Wennborg	Sweden	Bronze
Kraus & Weisert	Germany	Bronze
Kroher Strobel	Germany	Bronze
Lambsdorff & Lange	Germany	Bronze
Maikowski & Ninnemann	Germany	Bronze
Maiwald	Germany	Bronze
Marietti, Gislon e Trupiano	Italy	Bronze
Meissner Bolte	Germany	Bronze
Mewburn Ellis	United Kingdom	Bronze
MHP	Germany	Bronze
Müller-Boré	Germany	Bronze
Papula-Nevinpat	Finland	Bronze
Plasseraud IP	France	Bronze
Puchberger & Partner	Austria	Bronze
Reddie & Grose	United Kingdom	Bronze
Regimbeau	France	Bronze
Samson & Partner	Germany	Bronze
Schoppe, Zimmermann, Stöckeler, Zinkler, Schenk & Partner	Germany	Bronze
Slingsby Partners	United Kingdom	Bronze
Ström & Gulliksson	Sweden	Bronze
UNGRIA	Spain	Bronze
Viering, Jentschura & Partner	Germany	Bronze
WITTEWELLER	Germany	Bronze
Wynne-Jones IP	United Kingdom	Bronze
Zacco	Denmark	Bronze
Zimmermann & Partner	Germany	Bronze

Patent law firm	Country of origin	Rating
IT & Software		
2SPL	Germany	Gold
Bardehle Pagenberg	Germany	Gold
EIP	United Kingdom	Gold
GJE	United Kingdom	Gold
HGF	United Kingdom	Gold
HLK	United Kingdom	Gold
Keltie	United Kingdom	Gold
Murgitroyd	United Kingdom	Gold
PATENTREE	Portugal	Gold
Buzzi, Notaro & Antonielli d'Oulx	Italy	Silver
CMS	Germany	Silver
Dr. Bakuri Lanchava	Germany	Silver
Germain Maureau	France	Silver
GLP	Italy	Silver
Marks & Clerk	United Kingdom	Silver
Withers & Rogers	United Kingdom	Silver
ZBM Patents & Trademarks	Spain	Silver
ABG Intellectual Property	Spain	Bronze
Appleyard Lees	United Kingdom	Bronze
Balder	Spain	Bronze
Barker Brettell	United Kingdom	Bronze
BESTPATENT	Germany	Bronze
Carpmaels & Ransford	United Kingdom	Bronze
D Young & Co	United Kingdom	Bronze
De Vries & Metman	Netherlands	Bronze
df-mp	Germany	Bronze
DREISS Patentanwälte	Germany	Bronze
Durán-Corretjer	Spain	Bronze
Forresters	United Kingdom	Bronze
H&A	Spain	Bronze
Håmsø Patentbyrå	Norway	Bronze
Hoffmann Eitle	Germany	Bronze
IK-IP	United Kingdom	Bronze
Kilburn & Strode	United Kingdom	Bronze
Kransell & Wennborg	Sweden	Bronze
Mathys & Squire	United Kingdom	Bronze
Meissner Bolte	Germany	Bronze
Page White & Farrer	United Kingdom	Bronze
Potter Clarkson	United Kingdom	Bronze
Prinz & Partner	Germany	Bronze
Samson & Partner	Germany	Bronze
Ström & Gulliksson	Sweden	Bronze
UNGRIA	Spain	Bronze
Wynne-Jones IP	United Kingdom	Bronze
Zimmermann & Partner	Germany	Bronze

Europe's Leading Patent Law Firms

Patent law firm	Country of origin	Rating
Materials & Nano Technology		
ABG Intellectual Property	Spain	Gold
GJE	United Kingdom	Gold
PATENTREE	Portugal	Gold
ZBM Patents & Trademarks	Spain	Gold
Dr. Bakuri Lanchava	Germany	Silver
EIP	United Kingdom	Silver
GLP	Italy	Silver
Håmsø Patentbyrå	Norway	Silver
HGF	United Kingdom	Silver
HLK	United Kingdom	Silver
J A Kemp	United Kingdom	Silver
Keltie	United Kingdom	Silver
AAA-Patent	Germany	Bronze
Boult Wade Tennant	United Kingdom	Bronze
Buzzi, Notaro & Antonielli d'Oulx	Italy	Bronze
Carpmaels & Ransford	United Kingdom	Bronze
Germain Maureau	France	Bronze
Maiwald	Germany	Bronze
Marks & Clerk	United Kingdom	Bronze
Meissner Bolte	Germany	Bronze
Murgitroyd	United Kingdom	Bronze
Papula-Nevinpat	Finland	Bronze
Potter Clarkson	United Kingdom	Bronze
Prinz & Partner	Germany	Bronze
UNGRIA	Spain	Bronze
Vossius	Germany	Bronze
Wynne-Jones IP	United Kingdom	Bronze
Zimmermann & Partner	Germany	Bronze
Mechanical Engineering		
2SPL	Germany	Gold
EIP	United Kingdom	Gold
Forresters	United Kingdom	Gold
GJE	United Kingdom	Gold

Patent law firm	Country of origin	Rating
GLP	Italy	Gold
HGF	United Kingdom	Gold
HLK	United Kingdom	Gold
Keltie	United Kingdom	Gold
Marks & Clerk	United Kingdom	Gold
Murgitroyd	United Kingdom	Gold
PATENTREE	Portugal	Gold
Potter Clarkson	United Kingdom	Gold
ABG Intellectual Property	Spain	Silver
Balder	Spain	Silver
Bardehle Pagenberg	Germany	Silver
Buzzi, Notaro & Antonielli d'Oulx	Italy	Silver
Dr. Bakuri Lanchava	Germany	Silver
Germain Maureau	France	Silver
Grünecker	Germany	Silver
Håmsø Patentbyrå	Norway	Silver
Hoffmann Eitle	Germany	Silver
Inspicos	Denmark	Silver
J A Kemp	United Kingdom	Silver
Lippert Stachow	Germany	Silver
Maiwald	Germany	Silver
Meissner Bolte	Germany	Silver
Plasseraud IP	France	Silver
Prinz & Partner	Germany	Silver
Regimbeau	France	Silver
Withers & Rogers	United Kingdom	Silver
ZBM Patents & Trademarks	Spain	Silver
Abel + Imray	United Kingdom	Bronze
AOMB Polska	Poland	Bronze
AWA	Sweden	Bronze
Barker Brettell	United Kingdom	Bronze
Bird & Bird	United Kingdom	Bronze
BOEHMERT & BOEHMERT	Germany	Bronze
Bugnion	Italy	Bronze
Carpmaels & Ransford	United Kingdom	Bronze

Patent law firm	Country of origin	Rating
CMS	Germany	Bronze
Curell Suñol	Spain	Bronze
D Young & Co	United Kingdom	Bronze
Dehns	United Kingdom	Bronze
df-mp	Germany	Bronze
DREISS Patentanwälte	Germany	Bronze
DTS Patent- und Rechtsanwälte	Germany	Bronze
Durán-Corretjer	Spain	Bronze
Eisenführ Speiser	Germany	Bronze
Gramm, Lins & Partner	Germany	Bronze
H&A	Spain	Bronze
Heeschen Pültz	Germany	Bronze
Horn Kleimann Waitzhofer	Germany	Bronze
Hoyng Rokh Monegier	Netherlands	Bronze
Jacobacci & Partners	Italy	Bronze
karo IP	Germany	Bronze
Keller Schneider	Germany	Bronze
Kilburn & Strode	United Kingdom	Bronze
Kohler Schmid Möbus Patentanwälte	Germany	Bronze
Lavoix	France	Bronze
LLR Intellectual Property	France	Bronze
Maikowski & Ninnemann	Germany	Bronze
Marietti, Gislon e Trupiano	Italy	Bronze
Mathys & Squire	United Kingdom	Bronze
Müller-Boré	Germany	Bronze
PELSTER BEHRENDS	Germany	Bronze
Puchberger & Partner	Austria	Bronze
Studio Torta	Italy	Bronze
Wallinger Ricker Schlotter Tostmann	Germany	Bronze
WTS Patent Attorneys Witek, Śnieżko and Partners	Poland	Bronze
Wynne-Jones IP	United Kingdom	Bronze
Zacco	Denmark	Bronze
Zimmermann & Partner	Germany	Bronze

Methodology

The list is composed of the most recommended patent law firms for services around patent prosecution and patent strategy consultation in Europe.

It is based on an online survey of patent attorneys working in patent law firms and as experts in the patent departments of companies (peer- to-peer survey); and clients who have consulted with or commissioned a patent law firm.

Survey and sample

More than 10,000 patent attorneys and clients were invited to take part in the survey. The sample was collected via research conducted by Statista on company websites, in publications, and from the Institute of Professional Representatives before the European Patent Office, the professional body representing European patent attorneys. Patent attorneys and clients could also participate via a link on FT.com.

Participants could recommend patent law firms in general, as well as for six selected sectors: Chemistry & Pharmaceuticals; Electrical Engineering; Mechanical Engineering; Biotechnology & Food; Materials & Nanotechnology; IT & Software.

The survey was conducted February 8-March 17 2023. The recommendations of more than 3,300 clients and peers were considered.

Self-recommendations and attempts to participate multiple times were prohibited and not taken into consideration.

Top lists

Firms are selected based on the number of recommendations. In total, 177 firms made it into the overall top list.

Firms that were highly recommended for their services in one of the six selected sectors were ranked in three classes: gold (very frequently recommended), silver (frequently recommended), and bronze (recommended).

All lists were created through a complex process. However, the quality of firms that are not included is not disputed.

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Courts gain sweeping overhaul

Unitary patents Reformed system is intended to be more efficient, writes *Jane Croft*

The first judges are sworn in at a Unified Patent Court appeal court in Paris this month
Raphael Lafargue/Reuters

A new patent system aimed at making the protection of intellectual property easier and cheaper finally became operational in Europe this month, after years of delays.

The Unified Patent Court has been launched to play a crucial role in hearing lawsuits relating to a new type of patent issued by the Munich-based European Patent Office that covers 17 EU countries.

The EPO will be able to grant a single "unitary" patent covering all the countries that have signed up to the UPC, including Austria, Belgium, Germany and France. It has described the new system as "the most significant development" since the signing of the European Patent Convention 50 years ago.

The change is significant because, until now, patents in Europe have been national in scope and issued on a country-by-country basis by national patent offices or the EPO. This has meant companies seeking patents in Europe have ended up with a bundle of individual national patents for the same invention. As a result, legal disputes over patent infringement result in parallel cases in courts across the continent.

From June 1, the new unitary patent system allows companies to apply for one patent and to use a single legal system so that any disputes are heard before one court — the Unified Patent Court.

The goal is to cut costs, streamline procedures and increase transparency.

Although the new regime starts this month, there will also be a transition period of at least seven years during which companies can use the existing system, with the UPC running in parallel — so companies can still file patents with national patent offices and take disputes to national courts if they do not want to use the UPC. It is unclear what will happen after the transition period.

Klaus Grabinski, president of the Court of Appeal of the UPC, says the court is "is like a one-stop shop. It increases the consistency of patent case law in Europe and increases harmonisation".

Alex Wilson, partner at law firm Powell Gilbert, says that "in extreme cases you have court proceedings in 10-15 different jurisdictions between the same parties and so there is the potential for rationalising these cases to a small number".

The UPC can also issue injunctions against a possible patent infringement — seen as a powerful legal weapon when a single court order would cover 17 countries with up to 300mn consumers.

This new system, which is open only to EU member states, has been years in the making. The EU first set it up in 2012 to simplify Europe's patent protection and cut costs for inventors. The court is not housed in a single building — under its distributed system, the UPC will have a network of local and regional courts, and a court of appeal in Luxembourg. The EPO, itself, is a non-EU body with 39 member states, including Norway and Turkey.

> 'There is a sense of loss and regret among patent lawyers that the UK is not in [the UPC]'

António Campinos, president of the EPO, said in a recent statement that the new patent regime would bolster Europe's position as a critical market for innovation: "Users can look forward to a more accessible form of patent protection that will deliver growth for our businesses and economies, and help our inventors to deliver sustainable solutions to tackle the great challenges of our day."

The lengthy delays to its launch have been partly due to Brexit and because Germany's constitutional court had to rule on a complex complaint filed against the country's participation in the UPC.

The UK had been due to play an important role in the UPC — London was to host a court dealing with chemicals, pharmaceuticals and life sciences patents. But hopes that the UK could continue with the system despite Brexit were dashed under Boris Johnson's government, which stated in 2020 that it could not participate in a court that applies EU law and is bound by rulings of the European Court of Justice.

Some lawyers have expressed disappointment that the UK is not involved in such a significant project. "My impression is there is a sense of loss and regret among patent lawyers that the UK is not in it and UK judges can't sit as patent judges . . . people see it as a big missed opportunity," says Alexander Robinson, patent attorney at Mathys & Squire.

But Robinson says that UK-based patent attorneys can still act to obtain patents through the EPO because of the way that the rules of representation for the UPC have been set up. This means UK citizens who are European Patent Attorneys will also be eligible to act as litigators at the UPC as long as they have certain additional qualifications — which most do have.

Wilson believes companies may be wary about using the court initially — because losing a patent case at the UPC could be a high stakes option and an adverse ruling would be binding in 17 countries — rather than in just one jurisdiction. "The downside of any ruling is magnified," he says. "There are plenty of people who will wait and see how the system develops," he suggests.

Lawyers say that whether a company decides to opt in or out of the UPC may also depend on what sector they operate in and how important patents are to their business model. "For some firms, a patent could be invalidated in 17 countries by a single court ruling," points out Robinson. "It's a new system with rules of evidence and we do not know how it will work, and so some companies will opt out and choose to go through a system which is known."