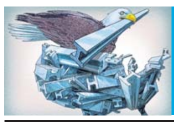
FINANCIAL TIMES

TUESDAY 6 JUNE 2023 EUROPE



America's 'de-risking' has spooked its allies
GIDEON RACHMAN, PAGE 17

The AI boom does not mean dotcom déjà vu
JOHN PLENDER, PAGE 9

Bank summit
Green finance tops agenda

A worker shovels plastic bottles for recycling in Machakos, Kenya, yesterday as the world marks Environment Day with a focus on plastic pollution.

The World Bank has faced a call for $100bn in new capital to drive climate and development finance ahead of a summit in Paris that will be co-hosted by the leaders of Barbados and France.

The proposal for $100bn in foreign exchange guarantees will be put forward by Barbados's prime minister, Mia Mottley, in a consultation document seen by the Financial Times. The proposal forms part of last year's so-called Bridgetown Initiative to overhaul the World Bank and the IMF.

Meanwhile, those affected by environmental disasters are turning to the courts for redress, stoking debate on who should pay to bring the cases.

World Bank green funding page 2
Who pays for climate lawsuits? page 15

Daniel Irungu/EPA-EFE

US banks braced for losses in rush to exit teetering commercial property

● Alarm sounds over sector's slowdown ● Levels of debt worry regulators ● Loans sold off at discount

STEPHEN GANDEL, JOSHUA CHAFFIN AND ERIC PLATT — NEW YORK
JOSHUA OLIVER — LONDON

Some US banks are preparing to sell off property loans at a discount even when borrowers are up to date on repayments, in a sign of their determination to reduce exposure to the teetering commercial real estate market.

The willingness of some lenders to take losses on so-called performing real estate loans follows multiple warnings that the asset class is the "next shoe to drop" after the recent turmoil in the US regional banking industry.

"The fact that banks want to sell loans is coming up in a lot of conversations," said Chad Littell, an analyst at CoStar, a research company focused on commercial property. "I am hearing more about it than any time in the past decade."

HSBC USA is in the process of selling off hundreds of millions of dollars of commercial real estate loans, potentially at a discount, as part of an effort to wind down direct lending to US property developers, according to three people familiar with the matter.

Meanwhile, PacWest sold $2.6bn of construction loans at a loss last month. A clutch of other banks are making it easier to execute similar sales in the future by changing the way they account for commercial real estate debt.

> Lenders preparing to close the second quarter 'are super-focused on keeping a clean loan book'

Typically, banks are reluctant to accept losses on big blocks of loans that will retain their full value as long as borrowers make repayments on time. But some are taking the plunge amid fears of an increase in delinquencies — especially on debt secured against office properties that have experienced falling demand because of the enduring popularity of working from home.

A slowdown in demand for commercial mortgage-backed securities has left banks of all sizes holding more property debt than they or regulators would like.

While the practice of offloading performing loans is not as prevalent as it was during the 2008 crisis, many market participants expect the volume of deals to increase this year and next.

As banks prepare to close the second quarter "they are super-focused on keeping a clean loan book", said David Aviram, a principal at Maverick Real Estate Partners, a private fund that specialises in commercial real estate loans.

"The banks don't want to raise the concerns of regulators or investors."

The moves by banks to offload the loans come as executives and regulators raise alarm bells over the health of the commercial real estate sector.

Wells Fargo chief executive Charlie Scharf said last week the bank, which has $142bn in commercial real estate loans, is managing its exposure. "We will see losses, no question about it."

Martin Gruenberg, chair of the US Federal Deposit Insurance Corporation, warned last week that the values of real estate loans, especially those backed by offices, "continue to soften".

Citizens, which has been reducing its commercial property lending, more than doubled its stock of loans available for sale to $1.8bn during the first quarter. Like many other banks, it does not disclose what percentage of those loans are to commercial real estate borrowers.

According to two people briefed on the HSBC sales process, the loans were likely to take a loss of as much as 5 per cent. The bank has not decided whether it is willing take a loss on the sale or how large one might be, according to another person familiar with the process. HSBC declined to comment.

Sarah O'Connor page 17
Lex page 18

Briefing

▸ Ukraine forces step up attacks on Russian targets
Kyiv has intensified strikes as its counter-offensive in the east of Ukraine entered a new phase after weeks of preparation.— PAGE 2; FT VIEW & TIMOTHY GARTON ASH, PAGE 16

▸ Binance sued by SEC
The US watchdog has sued the largest crypto exchange, accusing it of violations including mixing customer cash with a firm owned by chief Changpeng Zhao.— PAGE 5

▸ IMF warns on AI and jobs
First deputy managing director Gita Gopinath has urged leaders to quickly craft rules to govern the technology, as she warned of jobs market disruption.— PAGE 4

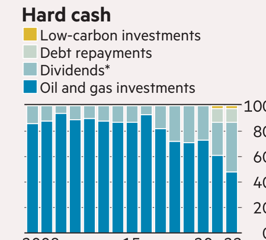
▸ London-Tirana accord
Albanian premier Edi Rama has praised counterpart Rishi Sunak for implementing a joint police task force that has cut migrant numbers entering the UK.— PAGE 2

▸ Airlines' profits to soar
The industry has doubled its profit forecast for the year, with the sector's trade body predicting net profits will rise to $9.8bn on the back of a travel boom.— PAGE 5

▸ European moon mission
The European Space Agency has drawn up proposals to develop a spacecraft over the next decade capable of taking astronauts into orbit and to the Moon.— PAGE 4

Datawatch

Hard cash



Source: IEA *Plus buybacks minus issuance

The oil and gas industry invested less than half of its cash in traditional supply and just 1 per cent on clean technologies last year, despite a windfall in profits. Most spending went on debt repayments, share buybacks and dividends

Tinseltown stars seek fair pay for 'digital doubles'

Analysis ▸ PAGE 6

Macron says Nato must focus on north Atlantic as he objects to Tokyo outpost

DEMETRI SEVASTOPULO AND KANA INAGAKI — TOKYO
HENRY FOY — BRUSSELS
LEILA ABBOUD — PARIS

Emmanuel Macron has objected to a Nato proposal to open an office in Tokyo because he believes the transatlantic security alliance should stay focused on the north Atlantic region.

The resistance from the French president has complicated months of talks within Nato to create its first outpost in the Indo-Pacific region, according to people familiar with the situation.

The push to open a base in Tokyo next year comes as the US and Japan urge Europe to become more involved in Asia's security issues, particularly as concern mounts over possible Chinese military action against Taiwan.

Beijing has criticised US efforts to create what it describes as an anti-China coalitions in the Indo-Pacific, which it compares to an "Asian Nato".

One French official said Paris believed Nato's charter required the alliance to limit its geographic reach to the "north Atlantic". But the official also suggested it could undermine European credibility with China in regard to the war in Ukraine, particularly in terms of asking Beijing not to supply arms to Russia.

One of the people familiar with the debate inside Nato said France was reluctant to back anything "that contributes to Nato-China tension".

Speaking at a conference last week, Macron said Nato should not expand its reach beyond the north Atlantic and added: "If . . . we push Nato to enlarge the spectrum and the geography, we will make a big mistake."

Macron's resistance comes two months after he angered US and other allies by suggesting, on a visit to China, that Europe should distance itself from US-China tensions over Taiwan.

Setting up a new Nato office requires unanimous support from the North Atlantic Council, Nato's highest political body, which means France has power to stop the move. Nato declined to give details of "ongoing deliberations".

The Japanese government did not comment but an official said Tokyo wanted to strengthen ties with the alliance. The White House did not respond to a request for comment.

Japan and Nato have been discussing opening a Tokyo office since then prime minister Shinzo Abe visited Nato headquarters in 2007. Tokyo opened a Nato branch office in Brussels in 2018. Fumio Kishida will join the forthcoming meeting in Lithuania in July.

Gideon Rachman page 15

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
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World Markets

STOCK MARKETS

	Jun 5	Prev	%chg
S&P 500	4292.31	4282.37	0.23
Nasdaq Composite	13304.96	13240.77	0.48
Dow Jones Ind	33678.41	33762.76	-0.25
FTSEurofirst 300	1820.65	1828.74	-0.44
Euro Stoxx 50	4291.95	4323.52	-0.73
FTSE 100	7599.99	7607.28	-0.10
FTSE All-Share	4150.89	4155.37	-0.11
CAC 40	7200.91	7270.69	-0.96
Xetra Dax	15963.89	16051.23	-0.54
Nikkei	32217.43	31524.22	2.20
Hang Seng	19108.50	18949.94	0.84
MSCI World $	2873.37	2831.66	1.47
MSCI EM $	984.36	961.80	2.35
MSCI ACWI $	663.25	653.02	1.57
FT Wilshire 2500	5538.42	5448.95	1.64
FT Wilshire 5000	43181.60	42471.60	1.67

CURRENCIES

Pair	Jun 5	Prev	Pair	Jun 5	Prev
$/€	1.071	1.073	€/$	0.934	0.932
$/£	1.241	1.248	£/$	0.806	0.801
£/€	0.863	0.859	€/£	1.159	1.164
¥/$	139.655	139.660	¥/€	149.591	149.792
¥/£	173.306	174.331	£ index	80.908	81.170
SFr/€	0.971	0.973	SFr/£	1.125	1.132

CRYPTO

	Jun 5	Prev	%chg
Bitcoin ($)	25887.90	27122.90	-4.55
Ethereum	1816.86	1889.98	-3.87

COMMODITIES

	Jun 5	Prev	%chg
Oil WTI $	72.74	71.74	1.39
Oil Brent $	77.24	76.13	1.46
Gold $	1963.25	1974.35	-0.56

GOVERNMENT BONDS

Yield (%)	Jun 5	Prev	Chg
US 2 yr	4.50	4.48	0.01
US 10 yr	3.68	3.68	0.00
US 30 yr	3.87	3.87	0.00
UK 2 yr	4.43	4.35	0.08
UK 10 yr	4.32	4.27	0.05
UK 30 yr	4.46	4.43	0.03
JPN 2 yr	-0.07	-0.08	0.00
JPN 10 yr	0.43	0.41	0.02
JPN 30 yr	1.27	1.27	0.00
GER 2 yr	2.88	2.80	0.08
GER 10 yr	2.38	2.31	0.06
GER 30 yr	2.54	2.49	0.06

Prices are latest for edition
Data provided by Morningstar

Counter-offensive

Ukraine steps up attacks in Donetsk

Russia says move 'did not achieve its goals' but Kyiv warns of misinformation

ROMAN OLEARCHYK — KYIV
MAX SEDDON — BRUSSELS

Ukraine stepped up attacks against multiple Russian positions in the east of the country as Kyiv's counter-offensive entered a new phase after weeks of preparation.

Officials refused to discuss whether the increase in offensive activity in Donetsk province over the weekend and into yesterday amounted to the start of a full-blown counter-offensive. But deputy defence minister Hanna Maliar admitted "in some directions we are moving to offensive actions".

Maliar said Bakhmut, now largely under Russian control, remained the "epicentre" with Ukrainian forces advancing along high ground flanking the city.

Russian officials and military bloggers said Ukrainian forces had intensified their offensive in multiple places along the frontline, although their claims could not be verified.

Russia's defence ministry claimed Ukrainian troops attacked in five locations in the south of Donetsk province on Sunday, using six mechanised and two tank battalions.

Igor Konashenkov, Russia's defence ministry spokesman, said the multi-pronged attack "did not achieve its goals". Ukrainian officials described the Russian claims as an "informational and psychological operation" intended to "demoralise Ukrainians".

Kyiv has been planning a counter-offensive to win back territory from Russian occupation for several months, backed by supplies of western weapons.

Kyiv has insisted it will not announce any operations in advance, urging caution about reporting news on the counter-offensive from the front. A Ukrainian military social media video posted this weekend showed soldiers holding their fingers up to their lips urging "silence" about military operations.

On the Russian side, Alexander Khodakovsky, commander of a battalion based in the Donetsk region, said Ukraine had attempted a breakthrough and captured one position but "took significant losses" on Sunday.

He added the attack was "not in itself the promised counter-offensive" but predicted Ukraine could send more units as reinforcement if the push was successful.

Yevgeny Prigozhin, founder of the paramilitary group Wagner, claimed yesterday that Russian regular forces had lost control of Berkhivka to the north-west of Bakhmut. Such a move by Ukrainian troops could potentially result in the semi-encirclement of the bombed-out eastern city that Russian forces have not fully captured despite nine months of battles and huge losses.

Colonel-General Oleksandr Syrsky, commander of Ukraine's ground forces, posted a video on social media yesterday showing tanks and infantry vehicles firing on Russian positions near Bakhmut. "Tanks of the third separate assault brigade destroyed the position with the Russians during the assault on enemy positions in the Bakhmut direction," Syrsky wrote. "We continue to move forward."

Additional reporting by John Paul Rathbone in London

See FT View

English Channel

Albania PM hails Sunak's co-operation on migration

MARTON DUNAI — TIRANA

Albania's prime minister has praised his UK counterpart, Rishi Sunak, for tackling migration across the English Channel with practical co-operation rather than spending money on "crazy things that never work" as his predecessors did.

Edi Rama told the Financial Times that the recent drop in Albanian migrants using boats to enter the UK was directly linked to a joint policing task force, which he unsuccessfully asked three previous UK prime ministers to set up.

UK law enforcement officials were sent to work in Tirana, while Albanian officers interviewed migrants in Dover, a Channel port, returning those who had no legitimate asylum claim. The co-operation included undercover agents on both sides.

Rama said the shift in British policy came after he visited London and met Sunak in March.

"Sunak did it. Did it in a couple of weeks," Rama said in an interview.

The UK prime minister visited Dover yesterday to highlight the joint task force, which had helped bring Albanian immigration down by about 90 per cent in the first quarter of 2023. The drop comes after an immigration surge last year that caused diplomatic strife between London and Tirana as thousands of Albanians attempted to cross in rubber boats.

> 'Repeating the same things and expecting different results is insane'
> Edi Rama, Albania prime minister

The Albanian leader, in office for a decade, spoke of his frustration with previous British leaders and ministers, who were spending money on "crazy things that never work" instead of setting up the joint task force.

He said he told Boris Johnson when he was foreign secretary to send a handful of "top-notch guys" from British law enforcement who would be granted full access to real-time data and to allow Albanian officers to operate in the UK.

"'Great idea,' he said, 'let's do it.' Nothing. I told the same to Theresa May, to Priti Patel, to Liz Truss, everyone: what are you doing? Bring these people, otherwise you're fighting there, and we stay here, and it will never work."

The UK launched programmes to help young Albanians find meaningful work at home and worked in other ways to stem the flow. But the two countries' police forces co-operated in only a limited way and even got into a diplomatic spat after home secretary Suella Braverman called the wave of Albanian immigrants an "invasion [of] criminals". Rama said targeting Albanians "makes for easy rhetoric but ignores [a] hard fact. Repeating the same things and expecting different results is insane."

Fleeing a general sense of poverty and crime, young Albanians were lured by a growing flood of traffickers to cross to the UK for a fee of several thousand euros each. "I am confident that in the summer . . . maybe the numbers will go up but they will not pick up the way they did before," Rama said. "Now the Albanian-side traffickers, they are afraid. They are afraid to be caught."

Summit. Bridgetown Initiative

World Bank pressed for $100bn in green funding

Barbados PM leads drive by smaller nations for new capital to help tackle climate change

AIME WILLIAMS — WASHINGTON
ATTRACTA MOONEY
AND CAMILLA HODGSON — LONDON
ALICE HANCOCK — BRUSSELS

The World Bank is under increasing pressure to reform, following a call for $100bn in fresh capital to drive climate and development finance ahead of a summit in Paris to be co-hosted by the leaders of Barbados and France.

The proposal for extra capital and $100bn in foreign exchange guarantees are central to a big update, put forward by Barbados prime minister Mia Mottley, of last year's so-called Bridgetown Initiative to overhaul the lending institutions, in a consultation document seen by the Financial Times.

Mottley has led a push over the past year by smaller, less wealthy nations to secure more funds to help tackle climate change through reforming the World Bank and the IMF, which were set up after the second world war.

The Bridgetown 2.0 consultation document calls for new funding proposals to cut the "excessive risks" that poorer countries have to take to borrow to fund green investments.

The World Bank's big shareholders, led by the US, have previously rejected calls for more cash. The pandemic, inflation and the European energy crisis have all squeezed government budgets, leading countries to argue that the bank should aim to do more with existing funds. But Germany's minister for economic co-operation and development, Svenja Schulze, said it was potentially open to providing more funding.

"I have called for 'a better bank' before 'a bigger bank'," she said. However, if reforms were substantial and tangible, "Germany is willing to embark on a discussion about more funding".

A US official also said that as broader reforms were carried out across the bank, the Biden administration would examine whether any more paid-in capital was needed. The official added that fully implementing reform measures would make any paid-in capital more effective.

If new World Bank president Ajay Banga, listed as an attendee in Paris, outlined strong reforms and began to put these in place, "that question [of an increase in paid-in capital] becomes a much more open one", said Michael Jacobs, visiting senior fellow at the Overseas Development Institute think-tank and a former UK government climate adviser.

Mottley and her advisers are consulting with other world leaders to try to secure support for the updated agenda to the initiative that aims to expand low-interest lending for climate-related projects, according to several people familiar with the talks.

Foreign exchange risk was one of the "major inhibitors of investments in green infrastructure", according to one summit participant, because of the "premium for foreign investment in non-major currencies".

An independent review of development banks commissioned by the G20 found that with "very manageable changes to risk tolerance", the World Bank and other institutions could boost lending by "several hundreds of billions of dollars over the medium term" while maintaining the AAA credit rating that allows it to borrow at advantageous terms in capital markets.

The Paris summit is expected to focus on several other areas, such as tackling debt for borrower countries, new sources of finance to deal with climate change, including selling carbon credits, and involving the private sector. Mineral supply chains and efforts to preserve biodiversity would also be discussed, a French official said.

Working groups, some numbering more than 100 delegates including national representatives, non-governmental organisations, sovereign wealth funds and philanthropists have been involved in preparing for the summit, according to people involved.

President Emmanuel Macron of France is also pushing for greater collaboration between the international development banks and other banks working at regional and national level to ensure projects go ahead.

A US official said it was pushing for new ways to assess which borrowers should be prioritised for concessional financing, and exploring new allocation models for funds to tackle climate change and pandemics. Other US priorities included mobilising private capital and speeding up debt restructurings for poorer economies, an official said.

> With 'very manageable changes to risk tolerance', the World Bank and others could boost lending by 'several hundreds of billions of dollars'

France has promoted the gathering, on June 22-23, as a chance to build consensus for a more inclusive financial system. Claire Healy, of the E3G think-tank in Washington, said the gathering was an opportunity for fresh climate policy suggestions to "get some heft" and a a "political, leader-level push".

At least 21 leaders have confirmed they will attend, organisers have said, including German chancellor Olaf Scholz, the presidents of Gabon, Mozambique, Congo and Mauritania, and European Commission president Ursula von der Leyen. Narendra Modi, India's prime minister and chair of the G20, is not expected. UK prime minister Rishi Sunak has not yet confirmed, despite being urged by NGOs to do so.

See FT Big Read

Welcome: Emmanuel Macron greets Barbados prime minister Mia Mottley in Paris in March. They will co-host a summit in the French capital this month
Yoan Valat/EPA-EFE

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Environment

Strawberries at the centre of Spanish water conflict

BARNEY JOPSON — MADRID
LAURA PITEL — BERLIN
ALICE HANCOCK — BRUSSELS

A clash over water use on Spain's farms risks damaging one of the country's most recognisable exports in European supermarkets: strawberries.

Teresa Ribera, Socialist environment minister, said some farmers were facing "real reputational risk" as a German activist group campaigns for a boycott of what it called "drought strawberries".

The dispute is rooted in legislation proposed by the conservative government of Andalucía, which critics say would allow the use of up to 1,000 wells and threaten to drain the Doñana, one of Europe's most important wetlands.

Water scarcity is a critical issue for Europe, where temperatures are rising faster than on any other continent and putting at odds water users and demands for environmental protection. The conflict is stoking tensions between the ruling Socialist party and the conservative People's party. Prime minister Pedro Sánchez called a snap general election last week the day after suffering a stinging defeat in regional polls at the hands of the PP, which won in several regions held by the Socialists.

Ribera, who is also deputy prime minister, said the Andalucían plan was "generating panic". She accused Juan Manuel Moreno Bonilla, the regional president, of "calculated ambiguity" for suggesting farmers could use all the water they wanted without acknowledging that it would deplete Doñana's groundwater.

The proposal has prompted Campact, a leftwing German activist group, to call on supermarket chains such as Lidl and Aldi to stop buying produce grown around Doñana, part of the berry-producing Huelva province of Andalucía.

The group claims Spain is risking a disaster to grow cheap strawberries for German consumers. Its online petition has attracted about 160,000 signatures. After Germany, which imported €196mn of Spanish strawberries last year, the sector's biggest export markets are the UK, France and Italy.

Ribera said she was deeply concerned by the boycott call. "Strawberry producers in Spain who comply with the law, who have water rights, do not deserve the reputational risk that Moreno Bonilla's move represents," she said.

Aggravating the situation, 35 per cent of Spain, Huelva included, is in the midst of a "prolonged drought", according to the central government.

A cross-party delegation of nine German MPs will visit Spain this week on a "fact finding" mission and are set to hold talks with the Andalucía administration and central government.

Aldi Nord, a division that includes Spain and northern Germany, said that since mid-2022 it had required all its Andalucían fruit and vegetable suppliers to be certified in accordance with accepted standards for sustainable groundwater use and irrigation.

Hot spot: tensions are rising along with temperatures on Spanish farms

The PP says its plan is designed to address the legitimate concerns of farmers by reversing a 2014 law, passed when the Socialists ran Andalucía, that ended the classification of territory as agricultural land and removed its water rights. The conservatives, who increased their share of the vote in the area around Doñana in the latest regional elections, have the backing of the hard-right Vox party to change the law.

Any wells opened in the area since 2014 are illegal. Ribera said Madrid had closed 700 such wells. But the authorities struggle to identify all of them or their users as they are often hidden by vegetation and accessed early in the day.

The European Commission has said the Andalucían proposal contravenes a European Court of Justice ruling in 2021 that ordered Spain to take action.

The PP said its proposed bill would "in no way harm the Doñana aquifer" but would allow for the collection of surface water. Madrid has rebuffed that stance.

INTERNATIONAL

US cancer drug crisis blamed on supply chain

Shortage means hospitals are forced to ration life-saving treatments or use alternative therapies of lesser efficacy

JAMIE SMYTH — NEW YORK

Thousands of US patients are being denied life-saving treatment because of a severe shortage of cancer therapies, healthcare organisations have warned.

Regulators have listed 14 oncology medicines as "in shortage", among them cisplatin and carboplatin, the generic chemotherapy first-line treatments for many common types of cancer.

Julie Gralow, chief medical officer at the American Society of Clinical Oncology, said hospitals were rationing some drugs, and doctors were having to make difficult decisions about delaying chemotherapy treatment or using substitute medicines that might not be as effective.

"The concern there, of course, on the part of patients and their clinicians is: 'Are we sure this [substitute drug] is equally effective? Are we potentially in some way reducing the chance for cure?' I don't think we have solid data on that but that is a serious concern."

Gralow said the crisis was acute because of the widespread use of chemotherapy drugs. Between 100,000 and 500,000 patients could be affected by shortages of cisplatin and carboplatin, highlighting the urgent need to strengthen supply chains, she said.

Drug shortages are not new. But experts warn that a growing reliance on offshore supplies, increasing demand, market consolidation and pricing pressure have made the US vulnerable.

There were 301 drugs across all therapeutic areas listed as "in shortage" at the end of March, the highest number in almost a decade, said the American Society of Health-System Pharmacists.

The Society of Gynecologic Oncology, which is conducting a survey to determine the extent of the crisis, said initial results found shortages of key cancer drugs across 40 US states. "This is a public health crisis. We have never seen a shortage like this one," said Angeles Alvarez Secord, president of the society.

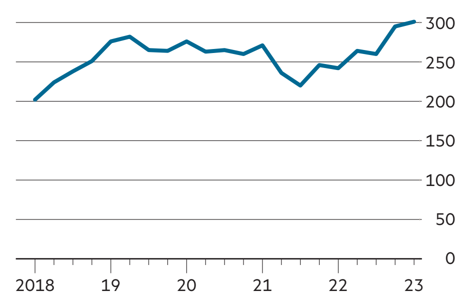
New treatments such as Pluvicto, Novartis's prostate cancer therapy, are in shortage. The company stopped taking on new patients in February following quality control issues flagged by the US Food and Drug Administration at two manufacturing sites.

But supply chain experts say generic drugs that require complex manufacturing processes and yet tend to be sold very cheaply are most prone to shortages. They make up 90 per cent of drugs sold in the US but just 18 per cent of all drug costs, according to a March report by the Senate committee on homeland security and governmental affairs.

"We need to rethink the entire marketplace for generics, which is where most of the shortages can be found," said Laura Bray, founder of Angels for Change, a non-profit group advocating for action to end drug shortages.

She said the generics industry had become a race to the bottom on price that made quality control more difficult, particularly for complex medicines such as chemotherapy drugs. When a few of companies supplied a medicine, a single event could cause the type of "perfect storm" that was occurring with chemotherapy drugs, said Bray.

Sharp end: quality control issues, company closures and a 'race to the bottom' on generic drug prices have added to the shortages problem
FT montage/Alamy/Getty



Drug shortage has surged in past five years
Number of active shortages in the US by quarter
Source: University of Utah Drug Information Service

Most generic companies rely on active pharmaceutical ingredients produced in lower-cost countries, mainly China and India, to make drugs.

The cisplatin shortage is linked to quality control problems at a factory in India run by Intas Pharmaceuticals, which provides around half the US supply of the drug. Intas ceased production of cisplatin and carboplatin destined for the US following an FDA inspection in December that detailed a "cascade of failure" in its quality control unit.

Intas and Accord Healthcare, its US unit, said they were working with the FDA on a plan to return to production.

Oncologists said they found it more difficult to obtain supplies of both drugs soon after production halted at Intas. "In late April and May, for newly diagnosed ovarian cancer patients I had to make drug substitutions because we did not have the sort of first-choice drugs available," said Jennifer Rubatt, an oncology specialist in Denver.

She said patients reported more severe side effects when using the substitute drugs, rather than the platinum-based cisplatin and carboplatin.

Michael Griffith, a cancer patient in Sacramento, said he was taken off cisplatin in April because his condition was not deemed curable by Kaiser Permanente, his healthcare provider.

"Cisplatin is now under protocol reserved for curable cancers and since mine is not curable, it's not something I've qualified for at the moment," said Griffith, 51, a father of three. A recent CT scan suggested his tumour had grown slightly since he was taken off the drug.

Kaiser Permanente said patients affected "may feel anxious" during a national shortage of a medication. "Our physicians and pharmacists are working with their patients to ensure their treatment plan is as effective as possible and to identify alternative treatments when necessary," the company said.

The scale of the shortage has prompted authorities to consider short-term fixes. The FDA is weighing plans to allow the importation of chemotherapy drugs from foreign manufacturers that are not currently approved for distribution in the US on a temporary basis.

But health experts and the generics industry say reforms are needed to encourage manufacturers to stay in the market to strengthen supply chains.

The closure in April of Akorn Pharmaceuticals, a big US generics company, and Teva Pharmaceuticals' decision last month to trim its generics portfolio highlight the extreme pressure the industry is under, they say.

"A consistent thread here is pricing and vulnerability. Typically what you see is market forces driving down prices, which is great for patients and everyone involved, except for manufacturers," said Craig Burton, senior vice-president of policy and alliances at Association for Accessible Medicines.

When only one or two manufacturers were left in a market for a drug, then if something happened there was a greater risk of shortages, Burton added.

A Senate hearing on the crisis in March raised the prospect of providing tax incentives to encourage investment in more US-based production or mandating stockpiling of critical medicines.

Burton said consolidation in the drugs purchasing market had enabled bulk buyers to squeeze manufacturers on price in the retail and hospitals market.

Three big buyers — Red Oak Sourcing, the Walgreens Boots Alliance Development and ClarusOne, which includes Walmart and McKesson — control about 90 per cent of the retail prescription market. The market to supply generics to hospitals is similarly concentrated.

For patients such as Griffith, who fear their lives could be shortened because they cannot access standard drugs, change cannot come soon enough. "This is weighing on my mind every day. I just don't know why the country, an association or the FDA wouldn't step in for the greater good?" he said.

Employment

IMF warns of tech threat to jobs

Fund official sees risk of 'substantial disruptions' to global labour markets

COLBY SMITH — WASHINGTON

The IMF has warned of the risk of "substantial disruptions in labour markets" stemming from generative artificial intelligence, with a senior official calling on policymakers to quickly craft rules to govern the new technology.

In an interview with the Financial Times, Gita Gopinath said AI breakthroughs, especially those based on large-language models such as ChatGPT, could boost productivity and economic output but warned that the risks were "very large".

"There is tremendous uncertainty but that . . . doesn't mean that we have the luxury of time to wait and think of the policies that we will put in place in the future," the fund's first deputy managing director said. "We need governments, we need institutions and we need policymakers to move quickly on all fronts, in terms of regulation but also in terms of preparing for probably substantial disruptions in labour markets."

Gopinath's comments on AI follow other warnings over the potential of the technology to result in societal upheaval if workers lose their jobs en masse.

Automation in manufacturing over past decades served as a cautionary tale, she warned, after economists incorrectly predicted workers laid off from car production lines would find better opportunities in other industries.

"The lesson we have learnt is that it was a very bad assumption to make," she said. "It was important for countries to actually ensure that the people . . . left behind were actually being matched with productive work."

The failure to do so had contributed to the "backlash against globalisation" following the great financial crisis.

To avoid history repeating itself, governments needed to bolster "social safety nets" for workers who were affected while fostering tax policies that did not reward companies replacing employees with machines.

Gopinath also warned policymakers to be vigilant in case some corporations emerged with an unassailable position in the new technology. "You don't want to have supersized companies with huge amounts of data and computing power that have an unfair advantage," she said, also citing privacy concerns and AI-fuelled discrimination.

The EU has proposed new legislation to regulate AI, which she said was an "encouraging start", while US President Joe Biden's administration is in the process of formulating regulatory plans.

The push for co-ordinated global action comes amid fresh evidence that generative AI, once more widely adopted, could be transformative.

In a speech to be delivered late yesterday, Gopinath cited numerous studies that tried to quantify the economic impact, including a Goldman Sachs report that estimated 300mn jobs could be automated, leading to higher productivity and a 7 per cent increase in global output over a decade. "AI could be as disruptive as the industrial revolution was in Adam Smith's time," she was to tell an audience in Scotland at an event commemorating the economist.

Gopinath said new technologies such as ChatGPT had "widescale appeal" and needed to be taken more seriously than other advances such as self-driving cars that had been billed as game changers.

"Usually when you see a technology behaving like a general purpose technology . . . that is when we think this could have a wide-ranging impact on the economy," she added.

Mexico poll
State victory lifts hopes for ruling party

Celebration: Morena candidate Delfina Gómez Álvarez reacts in state capital Toluca on Sunday after preliminary results are announced — Henry Romero/Reuters

Mexico's ruling party has won a gubernatorial election in the country's most populous state, ending almost a century of one-party rule in the region and giving momentum to its bid to retain the presidency in polls next year.

Former schoolteacher Delfina Gómez Álvarez, the candidate for President Andrés Manuel López Obrador's Morena party, won 52.7 per cent of the vote in the State of Mexico with 96 per cent of the ballot counted early yesterday. Alejandra del Moral of the Institutional Revolutionary party (PRI), which has held the state's governorship for almost 100 years, won 44.3 per cent of the vote.

The election in the State of Mexico, which surrounds much of the capital Mexico City and has almost 17mn inhabitants, has been seen as a critical test ahead of polls next June, when voters will choose a president, congress and leaders of nine states.

Pre-election polling had favoured Gómez Álvarez. Analysts said it indicated a clear advantage for López Obrador's party in the national race.

"Morena is reshaping the political map," said Jesús Silva-Herzog Márquez, professor of political science at Tecnológico de Monterrey.

"Territorial control is definitive for the prospects in next year's election."

For many voters, the state poll was a referendum on López Obrador, a leftist populist who has maintained high levels of support since his term began in December 2018.

The president has called his government the "fourth transformation", and his supporters cite social programmes aimed at the elderly and rural populations as well as a corruption-free image.

"We're making progress," López Obrador said, arguing that the 2024 election will be an opportunity to keep strengthening the country's democracy.

"How can there be democracy when the government is just serving one group," he added, referring to an "oligarchy" of powerful elites whose interests, he claims, are represented by the opposition parties and media.

"We are really happy with this new transformation . . . because our president has a vision, he is really looking out for Mexicans," said university professor Margarita Ángel Esparra after casting her vote for Gómez Álvarez in Tlalnepantla de Baz.

In another state election on Sunday in Coahuila, which borders Texas, the PRI and its allies easily maintained power. With more than 99 per cent of votes counted, it had 57 per cent of the vote, compared with 21.4 per cent for Morena's alliance. Coahuila is now one of just two states still ruled by the party, which held power at the national level for more than 70 years until 2000.

But the alliance between the PRI and centre-right National Action party has struggled to identify a clear presidential candidate to challenge Morena. López Obrador's party, along with its allies, now commands two-thirds of the governorships and simple majorities in the senate and lower house.

Christine Murray and Karla Ruizin in Tlalnepantla de Baz

Mature economies. Workplace

AI 'productivity revolution' will take a decade or more, say experts

Pandemic has failed to alter trend of stagnant real growth across advanced countries

DELPHINE STRAUSS — LONDON

A boom in generative artificial intelligence and pandemic-induced workplace shifts will unleash a new era of productivity growth across the rich world, economists say, though it could take a decade or more for advanced economies to reap the full benefits.

After surging during the start of the pandemic, The Conference Board, a global business research organisation, said this month it expected productivity to barely grow this year in mature economies. The board said this weakness was set to continue over the next decade, citing the rising cost of capital and ongoing economic and geopolitical uncertainty.

The forecasts highlight the challenges facing advanced economies, where the struggle to boost productivity since the financial crisis in 2008 has held back increases in output and wages.

However, economists say the boom in investment into AI — plus trends in workplaces during the pandemic — will eventually produce compelling results.

Chad Syverson, a professor at the Chicago Booth School of Business, said there was now a "data-driven case for optimism" on productivity, with AI, the formation of new businesses and people switching jobs all set to yield results.

> 'Very little of this stuff is plug and play. Companies have to invest a lot of resources to reconfigure'

While productivity growth remained weak on paper, he said the pay-off from the recent changes in workplace practices — plus the eventual benefits of AI — would take time to feed through. "Very little of this stuff is plug and play . . . Companies have to invest a lot of resources to reconfigure their business model for this new thing," said Syverson. "New software, regulatory issues, all that stuff has to be figured out. There is a period where the technology is around and you can see the benefits but for lots of reasons . . . productivity goes down."

John Haltiwanger, professor at the University of Maryland, agreed that AI breakthroughs involving large-language models would eventually boost the economy. The US was, he said, now undergoing a transition similar to that of the late 1980s, when the economist, Robert Solow, said: "You can see the computer age everywhere but in the productivity statistics."

The radical shifts brought about by generative AI could eliminate what John Van Reenen, professor at the London School of Economics, described as "a lot of drudgery" in workplace practices, enhancing efficiency and growth in the process. However, earlier technological leaps have taken decades to deliver meaningful pay-offs in productivity.

"It takes an enormous amount of time for companies to change," said Nick Bloom, a professor at Stanford University, citing the example of the invention of electric motors in an era when most industrial buildings were configured for water or steam power.

There are big claims for generative AI's transformational effects on productivity. A recent paper by the Brookings Institution — written with assistance from the GPT-4 model — cites evidence that it can help coders work at twice the speed, halve the time to complete some writing tasks and make call centres 14 per cent more productive.

Investment banks, meanwhile, are encouraging clients to buy into generative AI. Researchers at Morgan Stanley say US productivity is "poised to rebound", in part because demographic trends, combined with state "friend-shoring" policies, will make it harder for multinationals to tap global cheap labour and force them to automate.

An AI-focused "productivity revolution" could be broader than that seen after the introduction of personal computers, they suggested in a recent note, with sectors such as retail and manufacturing "primed to invest".

Haltiwanger pointed to a surge in the creation of new companies, much of it driven by the shift from city centres to suburban homeworking. Provided these businesses can weather the rise in US interest rates and regional bank woes, the rewards should follow. "Any time you go through a change in the way you're doing business, spatially as well as in areas of the economy, there is productivity growth down the line," he said.

Van Reenen was more sceptical that labour shortages would drive innovation. While a smaller pool of workers could force technological change — as in Japan, where an ageing workforce has spurred investment in robotics — it was likely to also mean fewer new ideas.

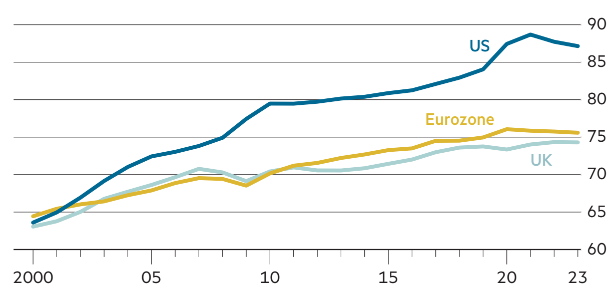
The Conference Board also sought to temper what it called the "excitement" around technological breakthroughs.

Bloom, meanwhile, warned that it was hard to predict when the big turning points in productivity would come. "The development of the steam engine, electric engine, personal computer and internet did not generate a measurable impact on productivity within five years. So it is hard to think what will. I include [generative] AI in this."

See Markets Insight and Lex

Productivity growth has been lower since financial crisis

Labour productivity (GDP per hour worked in 2022 constant $)



Source: The Conference Board

Exploration

Europe envisages sending astronauts to the Moon in space agency's own craft

PEGGY HOLLINGER AND CLIVE COOKSON
LONDON

The European Space Agency is drawing up proposals to develop spacecraft over the next decade capable of taking astronauts into orbit and to the Moon, according to its director-general, Josef Aschbacher.

Speaking ahead of the Financial Times Investing in Space summit in London, Aschbacher said developing an independent human launch capability was crucial for Europe to catch up in a rapidly evolving global race to space.

"What is happening in the US, China and India is quite impressive," he said. "If you step back and see where Europe stands globally, you see that Europe has not engaged at the same level. I see so many opportunities, some of them lost opportunities."

A recent independent report commissioned by the ESA on human and robotic exploration of space found that more than 100 lunar missions before 2030 had been announced, by both national space agencies and private companies. "At present, Europe is only leading two of them," it stated.

The report noted that Europe had no independent human launch capacity and relied on non-European partners to send people into space, "threatening its future as a credible actor in space".

At present, the ESA is working as a junior partner with US space agency Nasa on lunar exploration projects. "There is no timetable agreed [with Nasa] on when a European astronaut will be on the Moon," said Aschbacher, "but my hope is that we can achieve this before the end of the decade."

The ESA's programme to develop a spacecraft capable of carrying European astronauts to low-Earth orbit and beyond could improve the way in which Europe manages space procurement, Aschbacher said.

Nasa's decision in the early 2000s to buy cargo transportation services from the private sector, rather than developing its own vehicles, was the driver behind the rise of Elon Musk's SpaceX, which is now the dominant launch provider. "That is exactly the model we are discussing," he said.

The ESA was preparing "different scenarios and different cost estimates" to present to a meeting of member-state ministers in November. A decision on whether to go ahead with a fully funded programme will be made next year.

The Ariane 6 rocket in French Guiana, which has been subject to years of delay Manuel Pedoussaut/ESA

The agency, which is independent of the EU but acts as its procurement agency, includes non-EU member states such as the UK and Switzerland. "We certainly will have enough elements on the table for politicians to give us clear guidance on how Europe wants to proceed," Aschbacher said.

However, Europe is still struggling to resolve a crisis over existing satellite launch capability after losing access to Soyuz rockets following Russia's full-scale invasion of Ukraine. Its Ariane 5 rocket, which in April launched Europe's €1.6bn Juice spacecraft on a mission to Jupiter's icy moons, is due to make its last flight this month, while successor Ariane 6 has been subject to years of delay. The new Vega C rocket is grounded pending an investigation into a failed mission last year.

But Aschbacher said Europe already had many of the building blocks required to develop its own human launch capability in the next decade.

These included the European service module, which provides electricity, water and oxygen to Nasa's Orion spacecraft that will send astronauts to the Moon. Europe also has the automated transport vehicle that hauls cargo to the International Space Station in low-Earth orbit every year.

While Ariane 6 could eventually be upgraded to have a human launch capability, this was not a given. "Other vehicles could be developed," in the same way that Nasa's strategy had encouraged the emergence of SpaceX, he said.

In November, the ESA unveiled 17 new members of its astronaut corps — including the world's first disabled para-astronaut — at a ministerial summit in Paris, which agreed to lift spending 17 per cent to €16.9bn over five years.

Rocket relaunched One of Europe's most aggressive venture capital firms morphs into conservative investment house PAGE 7

Companies & Markets

US watchdog sues Binance over 'calculated evasion of law'

- Crypto exchange faces SEC charges
- Move follows lawsuit from CFTC

SCOTT CHIPOLINA — LONDON
STEFANIA PALMA — WASHINGTON

The US securities market watchdog has sued Binance, the world's largest crypto exchange, accusing it of violations including mixing billions of dollars of customer cash with a separate trading firm owned by its chief executive.

The 13 civil charges filed yesterday by the Securities and Exchange Commission are the latest blow to Binance and its chief, Changpeng Zhao, after another US financial agency sued it in March.

The SEC's alleged violations include operating unregistered exchanges, broker-dealers and clearing agencies as well as misrepresenting trading controls and oversight on Binance's US platform. Between mid-2018 and mid-2021, Binance earned at least $11.6bn in revenue, the SEC's complaint said.

> 'We allege Zhao and the Binance entities not only knew the rules of the road but chose to evade them'

The SEC alleged Binance and Zhao had control of clients' assets which allowed funds to be merged or rerouted, with billions of dollars sent to a crypto asset trading firm incorporated in the British Virgin Islands owned by Zhao called Merit Peak Limited.

Assets were also allegedly diverted to a separate entity owned and controlled by Zhao, Sigma Chain, which the SEC said engaged in "manipulative trading" that inflated the Binance US platform's trading volume.

"Through 13 charges, we allege that Zhao and Binance entities engaged in an extensive web of deception, conflicts of interest, lack of disclosure, and calculated evasion of the law," Gary Gensler, SEC chair, said in a statement.

Binance.com, Binance's offshore trading platform, said it was disappointed and disheartened by the SEC's action, and added that while it took the allegations seriously, it "should not be the subject of an SEC enforcement action". Binance US called the suit "baseless".

The SEC alleged that although Binance and Zhao "publicly claimed" that US customers were barred from Binance.com, they "subverted their own controls to secretly allow" top US clients to trade on the platform.

"We allege that Zhao and the Binance entities not only knew the rules of the road but they also consciously chose to evade them and put their customers and investors at risk — all in an effort to maximise their own profits," said Gurbir Grewal, director of the SEC's division of enforcement. According to the SEC complaint, Binance's chief compliance officer in 2018 told a colleague: "We are operating as a fking unlicensed securities exchange in the USA bro."

The SEC's action comes after the US Commodity Futures Trading Commission, a derivatives markets regulator, in March filed a lawsuit against Binance claiming it illegally served US customers, and that much of Binance's reported trading volume and profitability have come from "extensive solicitation of and access to" US customers.

"Battling two powerful regulators at the same time will take precious time and resources, and Binance will no doubt feel the impact," said Charley Cooper, a former CFTC chief of staff.

Also in March, the Financial Times revealed Binance — which has long claimed to have no formal headquarters — hid extensive links to China for several years. One month earlier, New York regulators shut down further issuance of a Binance-branded stablecoin, BUSD, which represented about 40 per cent of Binance's trading volume.

Fanning out Axa makes first film studio foray with €150mn deal to expand site near Paris

Bry-sur-Marne Studios, east of Paris, produced Sofia Coppola's 2006 film 'Marie Antoinette' — Allstar/Columbia Pictures

JOSHUA OLIVER

Axa Investment Managers has struck a €150mn deal to buy a French film studio and expand the site near Paris into one of Europe's largest filmmaking facilities, as big real estate investors continue to snap up scarce motion-picture and television production space.

The real estate arm of the French insurance company has agreed to purchase Bry-sur-Marne Studios, east of Paris, which produced director Sofia Coppola's 2006 film *Marie Antoinette*, one of the *Hunger Games* series and this year's screen adaptation of *Astérix et Obélix*.

Film studios have emerged as a popular niche for property investors seeking opportunities outside traditional sectors such as offices, which are suffering from post-Covid trends for online working and shopping.

Investors say the rise of streaming services such as Netflix has boosted demand for studio space, which is in short supply — especially near large cities.

"Film studio space is still lagging behind, notably in Europe," said Louis Leveillé Nizerolle, head of transactions for France at Axa IM Alts.

"We have conviction that it will be a long-lasting trend."

Nizerolle said that the movie studio should benefit from pressure on streamers to invest in domestic production in European countries.

He continued that the facility would ultimately be aiming to compete with the UK for contracts for international productions.

British production companies are expecting to use more studio space in the coming year to keep up with demand, according to research by real estate adviser CBRE.

"The recent growth in the industry has meant the demand for production space is high and outweighs the available supply," CBRE said.

Axa said it was planning a "significant development programme" across the 12-hectare site it acquired from developer Nexity, which will more than double the studio's production capacity to create "one of the largest studios in continental Europe".

The French investor's first foray into the studio sector follows moves by other big asset managers in recent years. Blackstone and Hudson Pacific Properties, a US-based studio and office investor, in 2021 acquired a 91-acre site in Broxbourne, north of London, in a £700mn project to create a new studio.

However, the new investment by Axa comes at a time when streamers and other content producers are expected to sharply slow original TV production as they try to control costs and weather an economic downturn.

Airlines' profit forecast soars to $9.8bn amid boom in travel

ROBERT WRIGHT — LONDON

The global airline industry has more than doubled its profit forecast for this year, with the sector's trade body predicting net profits will rise to $9.8bn on the back of a travel boom that has lifted carriers' recent results.

The sector has benefited from a resurgence in demand since the pandemic eased that has boosted passenger numbers and freight at a time when fleet growth has been constrained by production difficulties at Boeing and Airbus.

The International Air Transport Association forecast compares with net losses for the industry of $3.6bn in 2022 and the association's forecast in December of $4.7bn in net profits for this year.

Iata expects revenues for 2023 to rise 9.7 per cent to $803bn, exceeding the $800bn mark for the first time since the pandemic forced carriers to slash capacity, leading to industry-wide losses.

It gave a strong forecast for North American airlines, predicting that revenue passenger kilometres (RPKs) in the region would be 2 per cent above the levels in 2019. RPKs measure the number of passengers carried multiplied by the distance each was carried. Worldwide, Iata predicted RPKs would reach 87.8 per cent of the 2019 level.

Willie Walsh, Iata's director-general, said that airlines' financial performance for the year was beating expectations, with stronger profitability helped by "several positive developments". China lifted Covid-19 restrictions earlier than anticipated, he said, adding that cargo revenues were above pre-pandemic levels although volumes were not.

The improved profit outlook partly reflects Iata's projection that costs will rise 8.1 per cent compared with 2022, more slowly than projected revenues.

"Jet-fuel prices, although still high, have moderated over the first half of the year," Walsh said.

Iata predicted that passenger revenues in 2023 would be $546bn, 27 per cent higher than 2022 levels but still 10 per cent below the level reached in 2019.

The group forecast cargo revenues for the sector of $142bn compared with $210bn in 2021 and $207bn in 2022.

In both those years, cargo yields were pushed up by a combination of a shortage of capacity in the holds of aircraft on passenger flights and strong demand to move consumer goods.

The projected figure is still well above the $100bn achieved in 2019.

Pensions lifeboat put forward as the saviour of UK equities

INSIDE BUSINESS
FINANCE

Patrick Jenkins

In March, 16 of the City of London's finest minds traipsed to Duke's Hotel in Mayfair for dinner with UK security minister Tom Tugendhat. The topic of conversation was not Russia sanctions or the world's growing cyber risks, but pensions.

Tugendhat has form when it comes to campaigning for pension reform — he once accused then prime minister David Cameron of failing to tackle schemes' large hidden fees.

On this occasion, he was focused on another topic, teaming up with his friend Michael Tory, a financier at boutique adviser Ondra Partners. They argue the pensions industry could be made more efficient — and more productive — if schemes were merged and encouraged to invest more in the UK, particularly in equities.

By last week, the idea had been distilled, via the Tony Blair Institute, into a concrete proposal for the UK's Pension Protection Fund, a lifeboat for defined benefit (DB) schemes, which promise payouts to members in retirement based on member salaries while in work. TBI proposes that the PPF should become more than a giant repository for schemes that have been left stranded by collapsed corporate parents but also take on "performing" funds.

It would also be run more along defined contribution (DC) scheme lines, where pension payouts are based on payments made into funds and investment returns. The proposals, the Institute argued, would create an efficient superfund, able to take more investment risk and get better returns.

The paper draws inspiration from Tory's native Canada, with its large-scale public and private schemes. It also echoes developments in another vast pensions market, the Netherlands. Politicians there last week voted for a shift in the country's occupational pension system from a DB to a DC model.

This aligns with British politicians' thinking, too. Chancellor Jeremy Hunt plans to include the PPF proposal in a number of pension reform ideas. Rachel Reeves, the shadow chancellor, has similarly pushed pension reform. Both believe pensions could invest more in UK assets, particularly equities.

> It is a hard sell for trustees, and the pensioners they represent, to shift from a defined benefit environment

The pensions industry has been divesting UK equities over a long period. Since 2008, according to PPF data, the UK's £1.4tn DB pensions system has slashed its exposure to listed UK equities from 29 per cent of its assets to 2 per cent.

There are clear reasons for this. One is diversification. Another is the growing importance of other markets, particularly the US. Most important, though, was the introduction of accounting rules that obliged schemes' corporate backers to calculate a snapshot estimate of their long-term liabilities, using returns from current bond yields. This recognition spurred funds to cut risk, particularly exposure to equities.

The disinvestment is set to increase. As rising interest rates reduce projected liabilities, it has become more economic for the companies that stand behind DB schemes to transfer the risk of funding them to insurance companies.

According to advisers Lane Clark and Peacock, 2023 is set to be a record-breaking year for buyouts and buyins (a form of partial buyout), with a projected volume of up to £60bn of deals — double the average of recent years. Bought-out schemes do not typically invest in equities.

But is the PPF idea the fix? The fund is widely seen as a success. Less than 20 years after its creation, it manages about £40bn of assets on behalf of more than 5,000 schemes and has delivered strong investment returns, averaging about 9 per cent a year over 10 years, compared with 6 per cent for the average smaller DB scheme.

As a not-for-profit organisation, the PPF should be able to price buyouts more attractively for pension trustees and sponsoring companies than commercial businesses. It would also be less likely to sell out of equities. But it is a hard sell for trustees, and the pensioners they represent, to shift from a guaranteed DB environment.

Whatever the pros and cons of the PPF idea, reform of the system is vital. At least three other things need to happen. Accounting rules need to be re-examined. Any reforms must not involve government-directed asset allocation (though tax-based or other incentives could be effective). And plans to loosen some investment restrictions under Solvency II regulations must be carefully implemented.

Tugendhat's interest in the topic is telling: portraying it as a matter of national security might be a stretch, but reform should certainly be a priority on the grounds of economic efficiency.

patrick.jenkins@ft.com

Travel & leisure

Football teams handed to Saudi fund

Riyadh transfers four top clubs to PIF in sign of ambitious sporting plans

JOSH NOBLE — LONDON

The Saudi government has handed ownership of four top domestic football teams to its deep-pocketed sovereign wealth fund, putting increased financial firepower behind the country's ambitious plans in the sport.

The Public Investment Fund said yesterday that Al Ittihad, Al Ahli, Al Hilal and Al Nassr — where Portuguese star Cristiano Ronaldo plays — had been converted into corporate entities, having previously been run by the state. The $600bn fund will own 75 per cent of each of the four clubs, with the remaining shares held by new non-profit foundations.

The move to change the ownership structure of the biggest domestic clubs coincides with a push to bring more top players to the country. After Ronaldo arrived in January, lucrative offers have reportedly been made to Argentina's World Cup winning captain Lionel Messi, and Karim Benzema, winner of the 2022 Ballon d'Or.

The trio are among the greatest footballers of the past 20 years, although all of them are nearing the end of their careers. Messi already has a promotional deal with Visit Saudi, the country's tourism board.

The Saudi Press Agency said that the changes to the clubs were aimed at wooing investment into the sport, improving competitiveness in the league, and making the game more professional and financially sustainable. Riyadh wants the Saudi Pro League to be one of the top 10 leagues in the world and hopes the privatisation project will help quadruple annual revenue in the league to 1.8bn rials ($480mn), SPA said.

PIF said the new structure would "unleash various commercial opportunities" and enable "further investment and sponsorship".

The wealth fund chaired by Crown Prince Mohammed bin Salman is steering the country's economic reform plan to diversify revenues beyond oil.

It has acquired or invested in companies ranging from electric-vehicle manufacturers to construction and green energy.

Saudi Arabia has been pouring money into sport globally, including football, Formula One and a $2bn assault on golf.

LIV Golf, now in its second year, has sought to disrupt the sport by luring some of its best known players on to its rebel tour with huge pay packets.

Riyadh also launched an events-investment fund for culture and sports in January.

Football is a particular focus owing to its popularity both at home and globally. PIF led the £310mn takeover of English Premier League club Newcastle United in 2021. Under Saudi ownership, the team has climbed rapidly up the league table, and qualified for next year's Champions League after finishing above Manchester United and Liverpool.

In a sign of Saudi ambitions in the sport, PIF has committed more than $2bn to long-term sponsorship deals in the domestic league.

Saudi Arabia has also been mooted as a potential World Cup host, following the successful tournament held in neighbouring Qatar late last year.

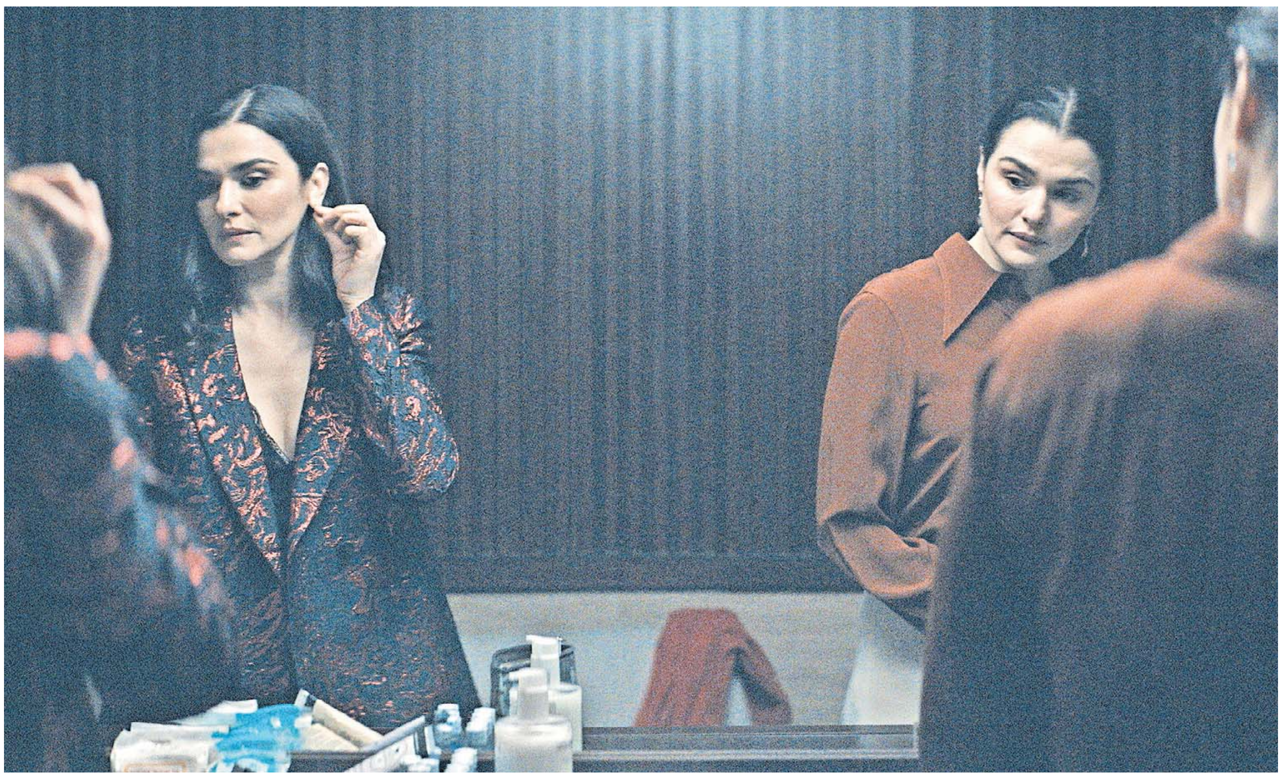
Additional reporting by Samer Al-Atrush in Riyadh

Technology. Remuneration

Hollywood actors seek deal over AI doubles

Unions to start pay talks amid worries about consequences for performers and writers

CHRISTOPHER GRIMES — LOS ANGELES



Rachel Weisz played twins in TV mini-series 'Dead Ringers'. In future, actors may be replaced by digital versions. Below, creative workers protest over pay last month
Prime Video/Michael M Santiago/Getty Images

Hollywood's largest union will start talks over pay in the artificial intelligence age as part of contract negotiations with studios this week, debating how human performers should be remunerated for the work of their "digital doubles".

Concerns about the disruptive potential of AI have rattled Hollywood talent, who worry that the technology could result in fewer jobs for screenwriters, voice performers and others. Actors are also concerned about losing control of their image, as AI technology has been used to create "deepfake" videos featuring the likenesses of actors such as Keanu Reeves and Tom Cruise.

"The rapid advances in generative AI technology over the last 18 months has been something we have been observing in real time [and] it's already affecting our members," said Duncan Crabtree-Ireland, chief negotiator at the SAG-AFTRA actors' union.

SAG-AFTRA will meet its Hollywood studio counterparts tomorrow to begin hammering out a new three-year contract. The talks come at a tense moment in Hollywood: the Writers Guild of America has been on the picket line for more than a month, and SAG-AFTRA has asked its members to authorise a strike if an agreement is not reached by June 30.

If the actors strike, it will be the first time by their union since 2000. It would bring Hollywood to a halt just as movie studios are beginning to recover from the pandemic. A new contract agreement was reached on Sunday between studios and the Directors Guild of America, which some hope could form the basis of a deal with the actors and writers.

A top priority for the actors' union is to ensure that there is "informed consent" about the use of performers' AI-created likenesses and that they are paid fairly for the work of their digital doubles, Crabtree-Ireland said.

"I don't think we want to see our members in a race to the bottom with their own digital doubles," he said. "All of our members' work is subject to negotiation above a certain minimum [and] the starting point would be union scale" payments for AI-created likenesses.

Attorneys, producers and talent agency executives say this kind of arrangement could prove to be a financial windfall for top stars. It would be possible for an actor to shoot a film on location, while the actor's digital version could be earning money shooting an advertisement at the same time, they say. "Actors . . . could end up being in multiple places at once because these tools could help them execute different projects at different stages," said Hilary Krane, chief legal officer at Creative Artists Agency.

A veteran Hollywood negotiator added: "George Clooney can probably only physically produce two or three movies a year [but with a digital double] you can maybe put him in six movies. As long as you can get paid a fair rate for that, it's definitely an opportunity."

There is less optimism about AI from Hollywood writers, who fear that the technology could put them out of work. Such concerns have grown since the launch of ChatGPT in November demonstrated the potential of generative AI.

The Writers Guild opposes the use of AI in the screenwriting process except as a research tool, said Charles Slocum, an assistant executive director at the union. "Going beyond that is imprudent," he said, labelling generative AI software programmes "plagiarism machines".

The writers' stance on AI — along with their concerns about remuneration practices brought about by streaming — has led many to conclude that the strike could last well into the summer.

"The [writers'] main concern is that the studios are going to replace them with AI," said the veteran Hollywood negotiator. "They look at the AI issue right now as an existential thing."

> 'George Clooney can probably only physically produce two or three movies a year [but with a digital double] you can maybe put him in six'

The group representing the studios and streamers, the Alliance of Motion Picture and Television Producers, had offered to hold annual meetings on AI, saying that the technology was moving too fast to wait for the three years between contract talks — a proposal that was greeted with derision by the writers' union.

Ivy Kagan Bierman, an entertainment labour lawyer at Loeb & Loeb, said the subject of AI had driven the studios and unions even further apart.

"Understandably, the studios do not want to negotiate something that will put obstacles in the way of using AI technology," she said. "On the other side of the table, you've got the writers, directors and actors that have concerns that this technology may be used in ways that aren't in their best interests."

She has argued for an industry-wide task force to study the impact of AI, but so far the idea has not caught on. "AI is not something we should be addressing out of fear, nor is the bargaining table the best place to initially try to resolve concerns," she said.

See Markets Insight and Lex

Financials

Mortgage group HDFC expects India's youth to spur loan demand

CHLOE CORNISH — MUMBAI

The head of India's biggest private mortgage provider has forecast the youth bulge will propel demand for housing for years, as rising incomes in the world's most populous country have made homes more affordable.

"What gives me confidence that the growth will remain strong for a number of years is the fact that India has a young population," said Keki Mistry, chief executive of Housing Development Finance Corporation (HDFC), in an interview with the Financial Times at the company's Mumbai headquarters.

Well over half of India's population is under 30, while the average first-time homebuyer is aged 37-38, said Mistry.

"All these younger people will get to an age where they will necessarily need to buy a home," he added. "To my mind, there will be a structural demand for housing and therefore demand for housing financing."

Mistry, 68, is preparing for partial retirement into a non-executive role, as HDFC readies a merger with subsidiary HDFC Bank, India's biggest private lender, in the country's largest ever corporate combination. The merger is scheduled to complete next month.

As India's economy has recovered from the pandemic and its population grown to become the world's largest this year, consumers have borrowed faster than companies in order to buy goods from houses to cars or fund education.

> 'The fear of borrowing money, which was there 50 years ago, is not there today'

In March banks increased the amount of personal loans they wrote by 20.6 per cent year on year, compared with 12.6 per cent a year earlier.

The Reserve Bank of India, which publishes the data, said that the rise was "primarily driven by 'housing loans'", while lending to industry grew at a more sluggish 5.7 per cent, slowing from a 7.5 per cent increase the previous year.

Mistry said he was unconcerned by the rapid growth in unsecured lending.

"Even in unsecured loans there's not been any real credit issue which has ever cropped up," he said, arguing that "regulations in India are extremely tight".

Robust house-buying spurred a 21 per cent jump in HDFC's net profits for the year ending this March, to Rs460bn (about $5.6bn), as development ramps up in smaller towns and cities.

India has one of the lowest rates of housing loans to gross domestic product, though the ratio has almost doubled every decade this century — from 3.2 per cent housing loans to GDP in 2001-2, to 10.6 per cent in 2021-22 — according to the National Housing Bank.

However, rising incomes, relatively stagnant housing prices and government incentives are making property buying a more realistic prospect for many middle-class consumers. "Affordability today is a lot better than what it historically has been," said Mistry.

Rising interest rates, which have hurt housing demand elsewhere, have barely registered in India where mortgage rates have historically been high.

Mistry said people were increasingly comfortable with taking loans: "The fear of borrowing money, which was there 50 years ago, is not there today."

Financials. Disruption

Generative tech is 'ripe' to shake up private banking, says Israeli entrepreneur

Shashua's recently launched One Zero bank plans push into affluent European market

JAMES SHOTTER — TEL AVIV

Artificial intelligence tools are "ripe" to disrupt the private banking sector, Amnon Shashua has said, as his new digital bank One Zero prepares to expand its activities outside Israel.

Shashua last year launched One Zero — whose investors include Swiss private bank Julius Baer, US private equity group Cerberus and China's Tencent — as the first new Israeli bank to be set up in more than 40 years, and is planning to apply for a licence in Italy by the end of the year.

The venture is one of a number of projects deploying AI spawned by the 63-year-old computer scientist, who co-founded and still heads the autonomous driving group Mobileye, and comes as the success of a new wave of generative AI products, such as OpenAI's ChatGPT and Google's Bard, has triggered a frenzy of investor interest in the sector.

Shashua said deploying AI technologies, such as large language models, in private banking would radically increase the efficiency of relationship managers and make it possible to offer services previously accessible only to the very wealthy to a much broader selection of clients.

"This is really disruption in the world of banking," he said in an interview with the Financial Times. "And you can only do it in a neobank because you don't have the legacy core systems."

Relationship managers at Switzerland's private banks, which dominate the global wealth management industry, typically each manage the affairs of about 100 to 200 wealthy clients.

One Zero's Israeli business — which has acquired 60,000 customers accounts since its launch last summer — has 1,000 clients per relationship manager, and is planning to reach 2,000 by the end of the year.

But Shashua said that the company's longer-term target was a ratio of 1:10,000, enabling One Zero to provide services previously accessible only to very wealthy clients, such as bespoke financial advice, to a wider market.

"The plan is to be the first pure play pan-European digital private bank for the mass affluent," he said, referring to clients that One Zero characterises as having disposable assets of between $50,000 and $500,000.

One Zero — which has raised $250mn and was valued at $385mn in its latest funding round in February — uses AI to analyse clients' portfolios and provide the bankers dealing with them with advice to share.

But Shashua said he expected the greatest gains in scalability to come from deploying generative AI — the powerful technology that lies behind services such as ChatGPT — to allow One Zero's chatbot to field sophisticated customer queries, and free up bankers' time for other tasks.

"If people don't get answers, they feel like they are not being served, so you need to handle this either through human bankers or automation," he said. "The rise of language models . . . is ripe to create this automation."

Amnon Shashua says neobanks have an advantage in deploying AI

Many banks already use chatbots to deal with customers, but the range of queries they can answer is constrained by the fact that they generally function by offering clients the chance to choose from a pre-determined set of questions, rather than responding to free text.

Nizan Geslevich Packin, a professor of business law at City University of New York, said generative AI had the potential to improve the efficiency with which banks could provide certain services.

But she added that applying it to personal financial data posed a series of challenges relating to the technology's biases and tendency to "hallucinate" — when AI confidently gives inaccurate responses — as well as issues around customers providing informed consent for the use of their information. "We're still in the infancy of trying to understand what this means," she said.

Gal Bar Dea, One Zero's chief executive, said dealing with hallucinations and data privacy issues were the two main challenges the bank had faced in developing its generative AI chatbot, as well as making sure it did not answer questions — such as stock tip requests — that it was not allowed to.

But he said that it was already being tested internally and that the bank planned to roll it out for clients "in the coming months".

Since studying maths and computer science at Tel Aviv university, Shashua has founded companies applying AI in areas from robotics to natural language learning. His biggest success, however, was Mobileye, which Intel bought in 2017 in the biggest deal in Israeli history, before listing last year.

Asked whether he would consider selling One Zero, Shashua said it was "too early to talk about M&A".

Rocket Internet shuns start-ups as tech sours

Founder of Berlin-based venture capital firm reins in 'blitzkrieg' tactics to gain market share amid debt financing shift

IVAN LEVINGSTON — LONDON
LAURA PITEL — BERLIN

Oliver Samwer, one of Europe's leading tech investors, once told entrepreneurs to adopt "blitzkrieg" tactics to win market share rapidly. "I am the most aggressive guy on internet on the planet," he wrote in an email to colleagues more than a decade ago. "I will die to win and I expect the same from you!"

His Berlin-based firm, Rocket Internet, went on to back groups such as meal-kit maker HelloFresh and online retailer Zalando that later held initial public offerings at multibillion valuations.

Over recent years, however, Samwer's firm has quietly left its roots as an early investor in the continent's hottest start-ups. Instead, Rocket has morphed into something more diverse but, potentially, more lucrative: a complex investment house that manages various types of capital, from debt to public stocks.

This account of Rocket's finances and operations is based on company documents, several people with knowledge of the firm and other investors and executives.

Together, they provide a detailed look at the company since it began a delisting process from Frankfurt's stock exchange markets three years ago with a market capitalisation of about €2.5bn. Rocket's management did not respond to requests for comment.

In one deal, it provided more than £100mn in debt financing to financial technology company Revolut in 2019, according to filings and people familiar with the transaction. Rocket has also built significant stakes in public technology companies such as Amazon and Alibaba.

Meanwhile, over the past couple of years, Rocket has slashed staff at its venture funds, closed one of its investment units, abandoned plans to raise a new start-up fund, and urged certain nascent tech companies it has invested in to adopt more conservative spending plans. These moves, according to people close to Samwer, reflect a dramatic shift in response to a tech downturn that has hammered the valuation of start-ups around the world.

Florian Heinemann, a founder of Project A ventures and a former Rocket executive, praised Rocket for its shrewd investments and for seeding the next generation of European tech founders and venture capitalists. But he added that while Samwer's firm was once considered "huge", it has "over the last few years definitely lost relevance".

Rocket was founded about 16 years ago by Samwer with his brothers, Alexander and Marc. The company attracted attention — and criticism — for its practice of taking successful Silicon Valley business models and then launching in markets outside the US.

After its share price halved during six years as a public company, the firm made plans to delist in 2020. The take-private process was contentious, after Rocket offered to buy shares below their trading price and the activist investor Elliott Management amassed a blocking stake. Eventually, Rocket succeeded but had to pay nearly double its initial offer and included a special deal for Elliott.

"The reputation just completely got shattered," says one Berlin-based tech executive about the delisting process. "They behaved very badly on the capital market."

In its latest annual filing for 2021, Rocket revealed that it had swung away from a loss to generate an annual net income of €134mn, with a portfolio of about €2.1bn in company investments. In total, it listed €4.4bn of assets.

Meanwhile, Samwer has further consolidated control by buying out his brother Alexander from the business, according to people familiar with the matter. With that control, he has pushed Rocket to develop strategies away from what made its name — incubating fast-growing internet start-ups.

Rocket's best-known unit is Global Founders Capital, the venture capital investing team. Its two €1bn funds have been bolstered by early bets on companies such as the $12bn remote-hiring firm Deel and $8.5bn human resources start-up Personio.

But a less prominent arm is Global Growth Capital, which launched in 2016 to provide debt financing. It has been a key profit generator from its two funds of €200mn and €300mn each, according to people familiar with the matter.

The unit has made large deals, such as lending more than £100mn each to financial technology companies Revolut and SumUp. It generated a gross internal rate of return in the low teens, the people said.

Rocket also has built a substantial public stock portfolio. It had about €673mn of public equities in 2021.

According to the most recent publicly available accounts, the company's largest equity positions were a €326mn stake in Amazon and a €107mn holding in Alibaba.

In the meantime, it appears to have largely abandoned new deals for start-ups. In 2020, Rocket launched Flash Ventures, a start-up fund that eventually invested about €30mn.

Flash grew to about 40 people scattered across the globe from Australia to Latin America, who together made dozens of investments. Its strategy was to take a roughly 30 per cent stake in companies at their earliest stages of development, including investing in ecommerce company Razor Group, which was last valued at more than $1bn.

Three years later, the entire Flash team has been disbanded and has stopped making investments, despite having made some promising deals, according to people familiar with its operations.

This is a reversal from Rocket's move to hire rapidly and deploy venture capital aggressively during the pandemic tech boom. Since then, Samwer has become wary of a prolonged downturn, according to those with knowledge of his thinking. He has urged portfolio companies to maintain years of cash reserves — far more than the two years consensus among other VCs.

"Oli's thinking correlates with the market . . . if he's in a bad mood and the market goes really low he forgets all the values that he's been preaching before," said one person familiar with the firm.

After the pandemic, Rocket slashed staff, according to people with knowledge of the matter. They said that at the start of 2022, it employed about 130 people across its units. That was cut to 75 staff by November 2022. Today, just a couple of dozen employees operate its various investment functions.

The company has faced other challenges. In late 2021, Global Founders Capital attempted to raise a third fund of a similar size at €1bn, only to back off owing to a lack of interest, according to people with knowledge of the move.

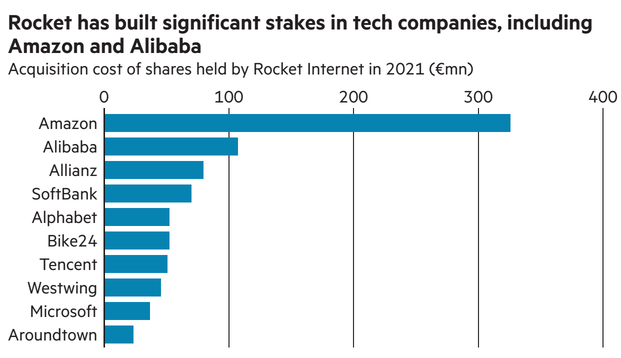
And a decision to launch a special purpose acquisition company — a blank-cheque vehicle to merge with another firm — ended without a deal this year.

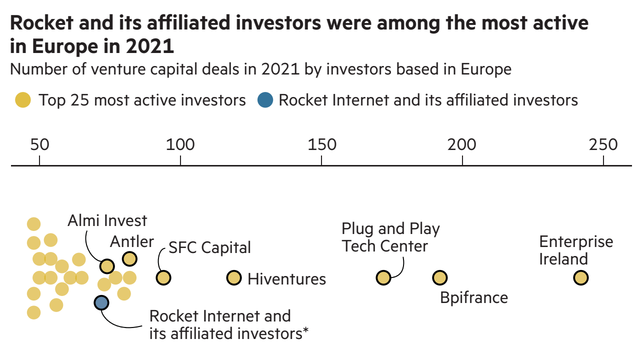
There has also been turnover among Rocket's top team, with investors such as Soheil Mirpour, Johann Nordhus Westarp and Hugues de Braucourt leaving, a blow to start-up founders who had built close relationships with them. Mirpour and de Braucourt did not respond to a request for comment, while Westarp declined to comment.

Those close to Samwer said that Rocket's pivot has come alongside personal changes, even as he keeps close tabs on the business.

"He just turned 50. He has loads of money," said one former executive. "He wants to spend time with his family, ski in Alaska and kitesurf."

Rocket's Oliver Samwer, above, backed groups such as HelloFresh and Zalando that later held IPOs at multibillion valuations
FT montage/Reuters/Dreamstime





Sources: Company Register; PitchBook

* Rocket Internet and its affiliated investors include Global Founders Capital, Rocket Internet and Rocket Internet Capital Partners

> 'If he's in a bad mood . . . he forgets all the values that he's been preaching before'

> 'He just turned 50. He wants to spend time with his family, ski in Alaska and kitesurf'

Food & beverage

Diageo's new chief takes reins a month early

MADELEINE SPEED

Diageo's new chief executive Debra Crew has taken up the position a month earlier than expected after the company said that outgoing leader Sir Ivan Menezes was in hospital recovering from emergency surgery.

The drinks group said yesterday that Crew would commence as interim chief executive with immediate effect, ahead of her planned July 1 start date in the permanent role, following setbacks in Menezes' recovery from medical conditions including a stomach ulcer.

"Our thoughts are with our much-loved colleague, Ivan, and his family," the company said in a statement.

Diageo announced in March that Menezes was stepping down after 10 years running the group. During his tenure he prioritised a push into high-end brands and expanded Diageo's portfolio with big-name acquisitions.

The appointment of Crew makes the producer of Johnnie Walker whisky and Smirnoff vodka one of a handful of FTSE 100 groups with a woman at the helm.

Before her appointment to chief operating officer last October, Crew ran Diageo's operations in North America, the company's largest market, and has previously held positions at consumer-goods groups including PepsiCo, Kraft Heinz, Nestlé and Mars.

Crew, who has also served as a US military officer, takes over at a rocky time for the drinks maker. In a January trading update Diageo reported slowing growth in North America, raising concerns that a pandemic-period surge in expensive spirits sales was beginning to abate.

Diageo's revenues have, for the most part, been resilient in the face of record inflation as consumers continue to spend money on higher-end alcohol despite trading down to cheaper food and household products. But Menezes warned that the "operating environment remains challenging".

At the time of her appointment, Crew said that she would focus on "continuing Diageo's extraordinary record of building world-leading brands", while seeking to enhance its reputation as a "responsible business".

Fixed income. Vulture creditors

Investors braced for new law on sovereign debt workouts

In deep water: Zambia's debt default has led to protracted negotiations with creditors
Michael Runke/Alamy

Critics warn measure will raise financing costs for developing nations and increase litigation

JONATHAN WHEATLEY

A law close to approval in the state of New York would force commercial creditors including bondholders to give the same relief as lender governments when developing countries restructure sovereign debts.

Its backers say it would streamline debt workouts — agreements between lenders and borrowers to renegotiate terms following a default — that have dragged on for months or even years in countries such as Zambia and Sri Lanka.

It would also stop "holdout" or "vulture" creditors from bringing protracted lawsuits to get a better deal than other lenders.

But its opponents say the bill, which supporters hope will be passed into law before the state assembly term ends on June 8, is misguided and will have the opposite of its intended effect.

They say it will make it more expensive for developing countries to raise finance on international capital markets and open the door to a flood of legal challenges.

Its progress will be watched closely in the UK, where a parliamentary committee has called for legislation to compel private creditor participation in debt workouts. Almost all developing country sovereign bonds are issued under New York or English law.

"This bill is badly needed," said Eric LeCompte, head of Jubilee USA, an NGO that campaigns for debt relief for poor countries. "We saw that when private creditors held out and refused to come to the table during the pandemic."

Speaking outside the state assembly in Albany, New York, LeCompte said "hundreds" of supporters were there pushing to get the bill through before the recess, against opposition from "vulture funds that are putting in millions of dollars to try to kill it".

Critics say the bill's attempt to force commercial lenders into restructuring will backfire, despite the strong case for laws to thwart holdout creditors from disrupting restructurings that can stop defaulting countries from regaining market access for years. They say it has two serious flaws.

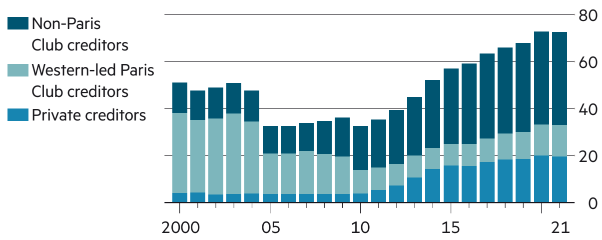
First, it will make investors, typically pension funds and other big institutions, less willing to buy the sovereign bonds of developing countries on both primary and secondary markets, making it harder and more expensive for them to finance their development.

Second, its poorly defined terms and scope will be an invitation to litigation by both issuing countries and their creditors.

Leland Goss, general counsel of the International Capital Markets Association, said that, while the bill was well-intentioned, it would "hurt the very governments that the proposals are intended to help".

Poor countries turn to private sector and new bilateral lenders

Debts of low-income countries subject to restructuring ($bn)



Excludes debts to IMF and multilateral development banks
Source: World Bank

Deborah Zandstra of law firm Clifford Chance said the bill's drafters should think again. "If I were them I would push it into the next session and undertake some market consultation."

She said the bill or one like it could serve a useful purpose if it made it harder for holdout investors to gain advantage over conventional bondholders.

Actions brought by holdouts against Argentina after its default on $80bn of debt in 2001 were only resolved in 2016.

Several distressed debt investors made multiples of the knockdown prices they had paid for the country's bonds — after more than 90 per cent of creditors had accepted 30 per cent of their face value.

But Zandstra argued that this issue has been largely dealt with through collective action clauses — widely used in sovereign bond contracts since 2014 — which make it hard for a minority of creditors to hold up a deal accepted by the majority.

An IMF working paper found that of $1.3tn of foreign law sovereign bonds outstanding in March 2020, just 4 per cent did not have collective action clauses.

If the bill's aim is to force conventional bondholders to engage with developing countries in debt distress, Zandstra said: "That problem does not exist. If that's what's driving this, it's misguided".

Debt campaigners and many others including David Malpass, who stepped down as president of the World Bank this month, have slammed bondholders and other commercial creditors for not taking part in the G20 Debt Service Suspension Initiative launched early in the pandemic.

This enabled 48 out of 73 eligible low-income countries to postpone $12.9bn of repayments to foreign governments due between May 2020 and December 2021.

At least three of the 48 asked private creditors to defer payments under the scheme of which two — Zambia and Chad — defaulted or restructured soon after. The rest refrained for fear of harming their credit ratings and raising their cost of borrowing or losing market access altogether.

The G20's follow-up initiative, known as the Common Framework, obliges participating countries to seek relief from private lenders that is comparable with what they first obtain from bilateral creditors. But the initiative has gained little traction and only four countries have signed up — Zambia, Ethiopia, Chad and Ghana.

'We are willing to sit down, we are willing to take haircuts'

Kevin Daly, investment director at asset manager Abrdn and member of a committee of investors holding defaulted bonds issued by Ghana, said bondholders had been quick to engage.

But they have been able to do so only after bilateral lenders, in many cases dominated by China, have agreed an outline deal. "We are willing to sit down, we are willing to take haircuts, and to say we are not is completely disingenuous," he said.

Asset management

Pension funds recoiling from China risks, warns APG

JOSEPHINE CUMBO

APG, one of the world's largest asset managers, said its pension fund clients were shying away from China in a growing pullback by investors alarmed at rising geopolitical risks.

The Netherlands-based group, which manages about €532bn of assets for Dutch pension plans serving around 4.8mn participants, is an established investor in China and opened an office in Hong Kong about 15 years ago.

However, Thijs Knaap, chief economist with APG Asset Management, told the Financial Times that concerns about China were rising among its pension fund clients.

"Five years ago, we'd say 'China, it's growing fast and it's opening up' and the funds would say 'yes, take our money there . . . no discussion'," Knaap said. "But this has become a lot harder to sell to our stakeholders. They're very conscious of the risks they are running. There is a very real geopolitical risk that has been added to the proposition."

He added: "We are still very much exposed at this point. We own real estate, we own equity, debt and we are very much invested in China."

APG did not disclose the total value of its China exposure.

The comments from one of Europe's most heavyweight investors came as other large institutional pension funds pull back from China with concerns growing over tension with the US.

'We are still very much exposed at this point . . . and we are very much invested in China'

Last week, the FT reported that Caisse de dépôt et placement du Québec, the C$400bn ($295bn) global investment group, had stopped making private deals in China and was closing its Shanghai office.

Singapore's sovereign wealth fund GIC has slowed the pace of its direct investments in China while Ontario Teachers' Pension Plan said in January that it had paused future direct investments in the country.

APG said it was in discussions with its clients about the regions and asset classes they wish to invest in, including China.

"On the one hand, it seems inconceivable to me that we would withdraw from such a large part of the world economy," said Knaap. "[But] at the same time, we've certainly seen some dark clouds around China."

He added: "We've always seen China as a place where we have to do some work. We can't just put money there and expect everything to be all right."

At the same time, European markets have gained more allure for investors — the Stoxx Europe 600 index has risen more than 7 per cent so far this year, in part because the region succeeded in dodging an energy crisis over the winter.

"No longer are we pulling money out of Europe, no longer are we exploring whole new asset classes," said Knaap.

Equities

Viaplay shares plunge 60% after profit warning and ousting of chief executive

RICHARD MILNE
NORDIC AND BALTIC CORRESPONDENT

Swedish streaming service Viaplay has ousted its chief executive, warned of a loss this quarter and scrapped its forecasts, sending shares in the group that bet heavily on a mix of football and Nordic noir drama down by more than 60 per cent.

The company, which had styled itself as a competitor to Netflix in Europe, shocked investors after disclosing the rapid deterioration in its business in a press release issued at 2am Swedish time yesterday.

Alongside the exit of Anders Jensen, who has had the top job since 2018, Viaplay also withdrew its long-term guidance for sales, subscriber and profit growth.

Instead of reporting a profit of up to SKr350mn ($32mn) in the second quarter, the company said it expected to lose as much as SKr700mn.

Meanwhile, its programme of cost-cutting has failed to keep pace with the slowdown in its business.

Jensen will be replaced with Jørgen Madsen Lindemann, former head of MTG, the ex-parent company of Viaplay. Shares in Viaplay plunged 62.7 per cent yesterday.

Its struggles are the latest sign of the slowdown hitting the broader streaming market, whose growth had been turbocharged by the pandemic.

The group had touted its position as the second-largest streamer in the Nordics but failed to expand profitably outside its home market.

It bought expensive sporting rights — something US streaming services such as Netflix and HBO Max have avoided — with the aim of sparking international growth.

Anders Jensen had been in the top job at streamer Viaplay since 2018

"The outlook for the markets in which we are operating has shifted considerably and at a very rapid pace, and the execution of cost-savings programmes has not been mitigating the effects from these conditions to a sufficient extent," said Pernille Erenbjerg, chair of Viaplay.

The company blamed the cost of living crisis for hurting subscription sales and "higher churn levels" of existing subscribers following recent price increases.

As recently as late April, Viaplay said the year had begun "in line with our guidance".

Analysts said the shares could find a floor if the market valued Viaplay's business outside its home market — where it has expanded into the Netherlands, Poland, UK, US and the Baltics in the expectation of big growth — at zero.

Erenbjerg added the "overall strategic direction" of Viaplay was "unchanged" but said the new chief executive would look into the "need for structural, operational, and capital allocation enhancements to the delivery of the strategy".

See Lex

Equities

UK regulator imposes record penalty on ED&F Man over role in tax scandal

NIKOU ASGARI — LONDON

The UK markets regulator has fined broker ED&F Man Capital Markets £17.2mn for its role in the "cum-ex" trading affair, marking the biggest penalty imposed by British authorities for one of Europe's largest tax scandals.

The Financial Conduct Authority yesterday fined the London broker for "serious failings" in its oversight of trading schemes that allowed clients to illegitimately reclaim tax on dividends in Denmark.

The regulator said ED&F Man had earned £5.1mn in fees as it oversaw the trading strategies, which resulted in at least £20mn in illegitimate claims to the Danish tax authorities between 2012 and 2015.

Regulators and tax authorities around Europe have followed a trail which stretches across the continent to Dubai, in which watchdogs have accused brokers of orchestrating a dodge for their clients that deprived authorities of billions of dollars in tax.

They have been accused of running a scheme in which brokers bought shares just before the cut-off date that established dividend payments and obscured their ownership in different countries.

Share ownership before and after dividend right cut-off dates is known in financial markets as "cum" and "ex".

Governments in countries including Denmark, Germany and France were duped into rebating billions of euros in dividend taxes that had never been paid.

"It is completely unacceptable for authorised firms to make money from this kind of trading," said Therese Chambers, joint executive director of enforcement and market oversight at the FCA.

'It is unacceptable for authorised firms to make money from this kind of trading'

ED&F Man, one of the oldest commodities brokers in London, was bought by rival Marex last year after falling into financial difficulties. "The FCA's action relates to a legacy business area that was shut down by[us] in 2015," ED&F Man said. "It was specifically excluded from the sale of assets to Marex and is a contingent liability that was ringfenced as part of that transaction."

The FCA said ED&F Man had "enabled significant volumes of dividend arbitrage trading on behalf of clients".

The broker set up an unregulated equity trading business in Dubai and traded in the over-the-counter market, where large deals can be struck away from a transparent stock exchange.

Yesterday's fine is the largest the FCA has imposed on London-based firms.

In 2021, it fined interdealer broker Sunrise Brokers, now part of BCG Partners, £642,000 for facilitating suspicious trades. Smaller brokers Sapien Capital and TJM were fined £178,000 and £2mn, respectively, for their roles in the scandal.

The regulator added that it was still investigating other UK-based brokers for similar failings.

The FCA said ED&F Man had "inadequate compliance checks" with the compliance team not having the necessary expertise to review the trading, and that it had failed to ensure trading was legitimate.

COMPANIES & MARKETS

The day in the markets

What you need to know

- US investor optimism pushes S&P 500 into bull market territory
- Tech-heavy Nasdaq also climbs with Apple reaching a record high
- Turkish lira extends losses to hit fresh all-time low against dollar

Wall Street rose yesterday, pushing the S&P 500 into bull market territory, while investors searched for clues as to the US Federal Reserve's interest rate stance ahead of next week's policy meeting.

The benchmark S&P 500 rose 0.2 per cent, lifting it to more than a fifth higher than its recent low in October 2022 — the technical definition of a bull run.

The tech-heavy Nasdaq Composite advanced 0.5 per cent as Apple shares climbed to an all-time high with the tech giant set to unveil an expensive "mixed-reality" headset — its most significant product launch in more than a decade.

Institute for Supply Management data yesterday showed that US services sector activity slowed in May after new orders softened under the weight of high borrowing costs.

A forecast by Morgan Stanley analysts also damped Wall Street optimism as it signalled that earnings per share for the S&P 500 are to decline 16 per cent from a year ago.

Across the Atlantic, the region-wide Stoxx Europe 600 slid 0.5 per cent while the CAC 40 in Paris lost 1 per cent and Frankfurt's Xetra Dax shed 0.5 per cent.

The moves came after European Central Bank president Christine Lagarde said in a speech that underlying price pressures remained strong in the eurozone, an indication that policymakers were likely to continue raising interest rates.

Brent crude, the global benchmark, jumped as much as 3.6 per cent after Saudi Arabia said it would cut oil production by 1mn barrels a day but later pared its gains to trade 1.3 per cent higher at $77.12 a barrel.

West Texas Intermediate, the US marker, rose 4.6 per cent before settling 1.2 per cent higher at $72.61 a barrel.

London's energy-heavy FTSE 100 equity index edged 0.1 per cent lower — unable to hold on to earlier gains.

Tokyo's benchmark Topix stock index rose 1.7 per cent and Hong Kong's Hang Seng index advanced 0.8 per cent.

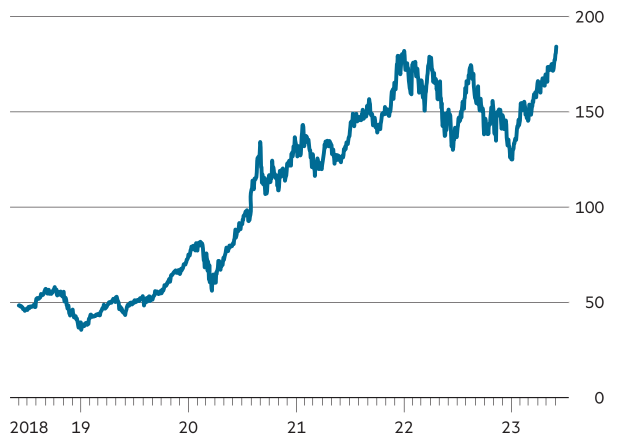
But China bucked the upward trend in Asia with the CSI 300 index of Shanghai and Shenzhen stocks down 0.5 per cent.

The Turkish lira extended its losses to hit a fresh record low of TL21.3 against the dollar despite the recent appointment of investor favourite Mehmet Şimşek as finance and treasury minister.

The move initially sparked hopes among investors that Turkey's president, Recep Tayyip Erdoğan, was preparing to change course on economic policy. **Daria Mosolova and Hudson Lockett**

Apple shares hit all-time high ahead of product launch

Share price ($)



Source: Refinitiv

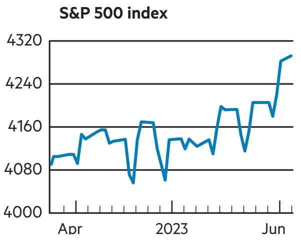
Markets update

	US	Eurozone	Japan	UK	China	Brazil
Stocks	**S&P 500**	**Eurofirst 300**	**Nikkei 225**	**FTSE100**	**Shanghai Comp**	**Bovespa**
Level	4292.31	1820.65	32217.43	7599.99	3232.44	112400.15
% change on day	0.23	-0.44	2.20	-0.10	0.07	-0.14
Currency	**$ index (DXY)**	**$ per €**	**Yen per $**	**$ per £**	**Rmb per $**	**Real per $**
Level	104.319	1.071	139.655	1.241	7.118	4.923
% change on day	0.292	-0.186	-0.004	-0.561	0.607	-0.669
Govt. bonds	**10-year Treasury**	**10-year Bund**	**10-year JGB**	**10-year Gilt**	**10-year bond**	**10-year bond**
Yield	3.679	2.376	0.429	4.316	2.740	11.023
Basis point change on day	0.300	6.400	1.850	4.900	-0.300	-1.900
World index, Commods	**FTSE All-World**	**Oil - Brent**	**Oil - WTI**	**Gold**	**Silver**	**Metals (LMEX)**
Level	438.65	77.24	72.74	1963.25	23.89	3686.60
% change on day	0.24	1.46	1.39	-0.56	1.68	-0.14

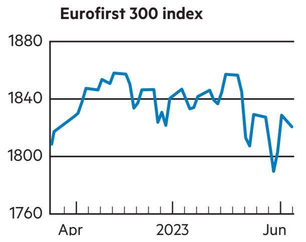
Yesterday's close apart from: Currencies = 16:00 GMT; S&P, Bovespa, All World, Oil = 17:00 GMT; Gold, Silver = London pm fix. Bond data supplied by Tullett Prebon.

Main equity markets

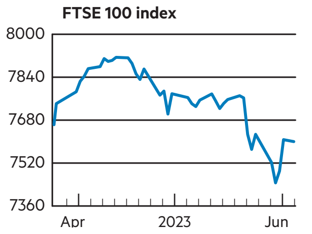
S&P 500 index



Eurofirst 300 index



FTSE 100 index



Biggest movers

%	US		Eurozone		UK	
Ups	Bath & Body Works	4.53	Danske Bank	2.99	Abrdn	3.19
	Cf Industries Holding	2.94	A.p. Moller - Maersk B	2.81	Vodafone	3.03
	Dexcom	2.74	Dt.telekom	2.50	London Stock Exchange	1.98
	Paycom Software	2.65	Oci	1.29	Airtel Africa	1.63
	Netflix	2.60	Porsche	1.26	United Utilities	1.50
Downs	Epam Systems	-18.08	Bollore	-6.57	Ocado	-4.13
	C.h. Robinson Worldwide	-4.67	Adp	-3.78	Endeavour Mining	-3.76
	Dollar General	-3.55	Pernod Ricard	-2.67	Natwest	-2.45
	Marketaxess Holdings	-3.42	Lufthansa	-2.57	Mondi	-2.44
	Intel	-3.10	Cnh Industrial	-2.39	Rightmove	-2.01

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

Sinking to the bottom of the S&P 500 index was software engineering group **Epam Systems**, which reduced its second-quarter and full-year outlook "due to continued uncertainty in the demand environment".

Arkadiy Dobkin, chief executive, said he had "seen our clients become even more cautious with spending" since Epam released its first-quarter results in May.

This meant pipeline conversions were "occurring at slower rates than previously assumed", said Dobkin.

Cyber security group **Palo Alto Networks** rallied on news that it would be joining the blue-chip benchmark index, replacing satellite TV group Dish.

Inclusion meant passive investments that track the popular S&P 500 would be buying the stock.

Tech behemoth **Apple** reached a record high ahead of its expected unveiling of a new headset.

Spotify climbed on news that the music-streaming group was reducing its overheads, cutting around 200 jobs from its podcast unit.

This follows an announcement in January that Dawn Ostroff, an executive hired to push forward Spotify's expansion into podcasting, was leaving.

Monthly podcast listening in the US fell last year, according to Edison Research, the first decline since 2013. *Ray Douglas*

Europe

Swedish streaming company **Viaplay**, formerly the Nordic Entertainment Group, tumbled to an all-time low after downgrading its outlook and announcing the exit of its chief executive.

The Stockholm-based group withdrew its medium-term guidance and lowered its organic growth target for 2023 sales to 16 per cent to 17.5 per cent, down from an earlier 24 to 26 per cent range.

The move reflected lower demand in the Nordic and global streaming markets, weaker wholesale subscription sales and an "accelerated deterioration" of the Scandinavian TV and radio ad markets, it said.

Citi said Anders Jensen's resignation caused "the most concern" as it raised questions around whether there had been "some form of operational mis-step".

Spain's **Deoleo** rallied following media reports that the olive oil producer may be a takeover target.

Newspapers El Economista and Expansión both relayed rumours that said food companies Acesur, Dcoop and Borges were eyeing the group behind the Bertolli brand.

Carmaker **Volvo** rallied after announcing global sales of 60,398 cars last month, up 31 per cent against 2022's pandemic-hit May when the company was still dealing with supply chain constraints. *Ray Douglas*

London

Heading the FTSE 100 index was asset manager **Abrdn**, which announced that it would be returning money to investors through a share buyback of up to £150mn.

But near the bottom of the blue-chip benchmark was **Mondi**, which revealed it was withdrawing from a Rbs95bn ($1.17bn) deal to sell its Syktyvkar mill in Russia to Augment Investment.

This followed "recent discussions with Augment on its lack of progress in gaining the necessary approvals", said the packaging and paper group.

Citi said the news weighed "on sentiment . . . as the probability, size and timing of the cash inflow" from a sale was reassessed.

At the top of the FTSE 250 index was pharma group **Indivior**, which announced on Friday a partial settlement of antitrust litigation claims.

Indivior has been embroiled in US legal action related to Suboxone, an opioid addiction treatment.

Joining Indivior at the top of the mid-cap index was online fashion retailer **Asos**, buoyed by takeover talk.

The Times said it had been approached in December with a proposal of between £10 and £12 a share — well above Friday's closing price of £3.50.

The article said there were currently "no live talks" between the Turkish suitor Trendyol and Asos. *Ray Douglas*

AI buzz does not foretell another dotcom bubble

John Plender

Markets Insight

The media hype over artificial intelligence since Microsoft announced its investment in ChatGPT in January inevitably calls to mind the excesses of the dotcom bubble.

The sense of *déjà vu* was reinforced last week as the market capitalisation of Nvidia, whose chips power AI applications at ChatGPT among others, briefly topped $1tn. So is it a case of here we go again?

In fact, no. There is much about this AI buzz in the markets that is healthy.

The plunge in Big Tech stocks last year was substantially to do with central banks raising interest rates. Applying a higher discount rate to distant future cash flows in the tech sector shrank the present value of those cash flows. This year's bounce, far from being driven by central banks, reflects something real.

The simulation of human intelligence in machines has dramatic potential to change the way the economy works. Some people will profit greatly from the process. In the case of Nvidia they have already made a killing this year.

It is easy, now the monetary tightening cycle has been under way for some time, to forget just how artificial market conditions have been and for how long. A new report from the McKinsey Global Institute points out that before the turn of the millennium, growth in global net worth largely tracked growth in gross domestic product. But then something unusual happened.

Around the year 2000, with timing that varied by country, net worth, asset values and debt began growing significantly faster than GDP. In contrast, productivity growth among G7 countries has been sluggish, falling from 1.8 per cent per year between 1980 and 2000 to 0.8 per cent from 2000-18. AI has the potential to help take us beyond this world of asset price levitation and debt-dependent growth through its capacity to improve productivity.

Dario Perkins of TS Lombard suggests that two mechanisms will drive this improvement. First, AI can make current processes more efficient. It is already helping workers make better informed decisions, optimise their processes and remove mundane tasks. The resulting increase in the efficiency of the workforce should boost overall output.

And then AI can help workers invent new things, make new discoveries and

> The simulation of human intelligence has dramatic potential to change the way the economy works

generate technological progress that can raise future productivity. Meanwhile, a number of studies have shown that Generative AI, which is capable of self-learning and performing several tasks, will boost the efficiency of workers and companies that use it.

Note, too, that this could all happen much faster than anything in the dotcom bubble. The public facing version of ChatGPT reached 100mn users in just two months. Data analytics firm GlobalData (which recently acquired TS Lombard) estimates the global AI market will be worth $383bn in 2030, a 21 per cent compound annual growth rate over 2022.

Much media commentary has harped on the scope for AI to cause unemployment to rocket — a fear that has been encouraged by AI enthusiasts talking about driving down labour costs. Yet Perkins points out that the ultimate impact of technology on labour markets is theoretically ambiguous.

This is because technological advancements have two contradictory effects: a substitution or displacement effect, where labour-saving technologies can displace workers, and an income or compensation effect, where technology makes all goods and services cheaper, raising real incomes and generating new sources of demand in other sectors of the economy. Throughout history the compensation effect has consistently outweighed the displacement effect.

No one can be certain whether AI will buck that historical trend or reach or exceed human levels of comprehension. In its current stage of development it can be untrustworthy and even spew out nonsense. Equally imponderable is whether AI's deflationary impact will outweigh the current inflationary forces of supply shortages and tight labour markets and the future upward price pressure from shrinking workforces in the developed world and in China.

Nvidia chief executive Jensen Huang detected last week "the tipping point of a new computing era". He could be right. It seems likely that Big Tech will continue to march to a different beat to more conventional companies in the S&P 500 index that are more sensitive to monetary policy. One lesson investors should recollect from the dotcom era is that much dross goes up alongside companies of real substance. At today's valuations, we may not be far from the winnowing of the dross.

john.plender@ft.com

MARKET DATA

WORLD MARKETS AT A GLANCE

FT.COM/MARKETSDATA

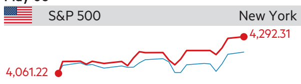
Change during previous day's trading (%)

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 $
0.23%	0.48%	-0.25%	-0.10%	-0.44%	2.20%	0.84%	0.24%	-0.186%	-0.561%	-0.004%	0.466%	2.59%	-0.56%

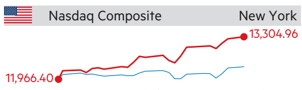
Stock Market movements over last 30 days, with the FTSE All-World in the same currency as a comparison

AMERICAS

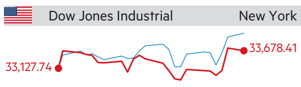
May 06 - -

S&P 500 New York


Day ↗0.23% Month ↗3.76% Year ↗4.46%

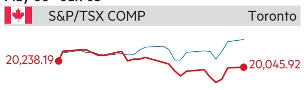
Nasdaq Composite New York


Day ↗0.48% Month ↗8.76% Year ↗10.78%

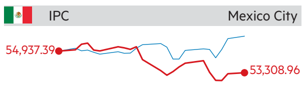
Dow Jones Industrial New York


Day ↘-0.25% Month ↘-0.01% Year ↗2.34%

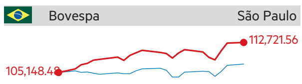
May 06 - Jun 05

S&P/TSX COMP Toronto


Day ↗0.03% Month ↘-2.49% Year ↘-3.66%

IPC Mexico City


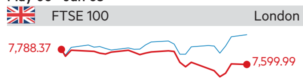
Day ↗0.58% Month ↘-2.54% Year ↗5.62%

Bovespa São Paulo


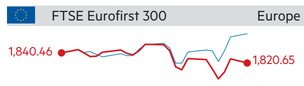
Day ↘-0.14% Month ↗6.86% Year ↗1.14%

EUROPE

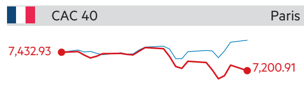
May 06 - Jun 05

FTSE 100 London


Day ↘-0.10% Month ↘-2.32% Year ↗0.86%

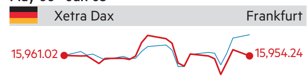
FTSE Eurofirst 300 Europe


Day ↘-0.44% Month ↘-1.10% Year ↗5.57%

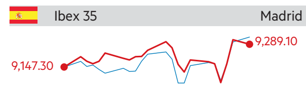
CAC 40 Paris


Day ↘-0.96% Month ↘-1.91% Year ↗11.03%

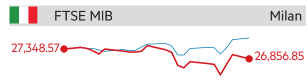
May 06 - Jun 05

Xetra Dax Frankfurt


Day ↘-0.54% Month ↘-0.13% Year NaN%

Ibex 35 Madrid


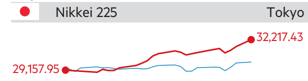
Day ↘-0.30% Month ↗2.71% Year ↗6.47%

FTSE MIB Milan


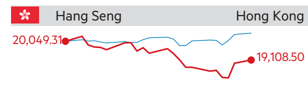
Day ↘-0.78% Month ↗0.70% Year ↗11.13%

ASIA

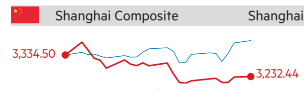
May 06 - Jun 05

Nikkei 225 Tokyo


Day ↗2.20% Month ↗10.41% Year ↗15.96%

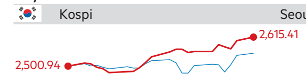
Hang Seng Hong Kong


Day ↗0.84% Month ↘-4.31% Year ↘-9.45%

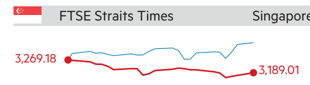
Shanghai Composite Shanghai


Day ↗0.07% Month ↘-3.52% Year ↗1.16%

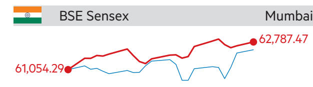
May 06 - Jun 05

Kospi Seoul


Day ↗0.54% Month ↗4.58% Year ↘-2.07%

FTSE Straits Times Singapore


Day ↗0.72% Month ↘-2.53% Year ↘-1.41%

BSE Sensex Mumbai


Day ↗0.38% Month ↗1.71% Year ↗12.61%

Country	Index	Latest	Previous
Argentina	Merval	358167.09	352936.83
Australia	All Ordinaries	7401.20	7331.20
	S&P/ASX 200	7216.30	7145.10
	S&P/ASX 200 Res	5986.60	5907.60
Austria	ATX	3140.67	3138.23
Belgium	BEL 20	3634.52	3632.83
	BEL Mid	10114.37	10138.26
Brazil	Bovespa	112400.15	112558.15
Canada	S&P/TSX 60	1203.97	1203.60
	S&P/TSX Comp	20030.47	20024.63
	S&P/TSX Div Met & Min	1791.42	1695.09
Chile	S&P/CLX IGPA Gen	28825.49	28874.59
China	FTSE A200	10075.22	10124.83
	FTSE B35	9000.71	8988.96
	Shanghai A	3388.33	3385.80
	Shanghai B	274.23	274.22
	Shanghai Comp	3232.44	3230.07
	Shenzhen A	2127.68	2129.69
	Shenzhen B	1111.98	1113.45
Colombia	COLCAP	1261.61	1260.21
Croatia	CROBEX	2013.05	2011.29
Cyprus	CSE M&P Gen	68.46	68.68
Czech Republic	PX	1315.06	1315.58
Denmark	OMXC Copenhagen 20	2027.12	2035.75
Egypt	EGX 30	17455.48	17533.31
Estonia	OMX Tallinn	1895.31	1898.56
Finland	OMX Helsinki General	10259.30	10266.85
France	CAC 40	7200.91	7270.69
	SBF 120	5495.25	5546.20
Germany	M-DAX	27104.83	27264.89
	TecDAX	3223.93	3239.24
	XETRA Dax	15963.89	16051.23
Greece	Athens Gen	1217.86	1209.05
	FTSE/ASE 20	2953.60	2923.64
Hong Kong	Hang Seng	19108.50	18949.94
	HS China Enterprise	6463.90	6428.33
	HSCC Red Chip	3774.48	3779.26
Hungary	Bux	48117.93	47869.61
India	BSE Sensex	62787.47	62547.11
	Nifty 500	15859.50	15811.20
Indonesia	Jakarta Comp	6633.44	6633.26
Ireland	ISEQ Overall	8605.93	8657.12
Israel	Tel Aviv 125	1728.73	1728.73
Italy	FTSE Italia All-Share	28958.54	29182.78
	FTSE Italia Mid Cap	42541.11	42834.82
	FTSE MIB	26856.85	27068.33
Japan	2nd Section	7228.27	7239.06
	Nikkei 225	32217.43	31524.22
	S&P Topix 150	1932.77	1897.70
	Topix	2219.79	2182.70
Jordan	Amman SE	2480.54	2481.35
Kenya	NSE 20	1546.83	1546.83
Kuwait	KSX Market Index	6633.44	6603.51
Latvia	OMX Riga	1150.20	1150.20
Lithuania	OMX Vilnius	996.20	996.20
Luxembourg	LuxX	1468.50	1467.17
Malaysia	FTSE Bursa KLCI	1381.26	1383.01
Mexico	IPC	53542.12	53232.71
Morocco	MASI	11150.78	11016.24
Netherlands	AEX	763.34	764.92
	AEX All Share	1032.59	1035.09
New Zealand	NZX 50	11880.90	11916.13
Nigeria	SE All Share	55820.50	55808.25
Norway	Oslo All Share	1017.37	1006.88
Pakistan	KSE 100	41667.94	41667.94
Philippines	Manila Comp	6521.64	6512.01
Poland	Wig	65661.56	65654.39
Portugal	PSI 20	5888.72	5901.62
	PSI General	4554.50	4572.50
Romania	BET Index	12133.87	12229.51
Russia	Micex Index	2436.57	2445.30
	RTX	1245.71	1212.57
Saudi-Arabia	TADAWUL All Share Index	11221.96	11014.95
Singapore	FTSE Straits Times	3189.01	3166.30
Slovakia	SAX	315.54	315.54
Slovenia	SBI TOP	-	-
South Africa	FTSE/JSE All Share	76602.84	77126.06
	FTSE/JSE Res 20	69347.83	70298.88
	FTSE/JSE Top 40	71421.55	71993.27
South Korea	Kospi	2615.41	2601.36
	Kospi 200	343.91	342.67
Spain	IBEX 35	9289.10	9317.30
Sri Lanka	CSE All Share	8766.60	8753.80
Sweden	OMX Stockholm 30	2293.06	2292.50
	OMX Stockholm AS	853.83	853.60
Switzerland	SMI Index	11415.00	11443.35
Taiwan	Weighted Pr	16714.43	16706.91
Thailand	Bangkok SET	1532.16	1522.20
Turkey	BIST 100	5360.69	5114.97
UAE	Abu Dhabi General Index	9222.93	9251.11
UK	FT 30	2757.00	2766.20
	FTSE 100	7599.99	7607.28
	FTSE 4Good UK	6953.35	6955.84
	FTSE All Share	4150.89	4155.37
	FTSE techMARK 100	6783.88	6820.51
USA	DJ Composite	11097.01	11132.93
	DJ Industrial	33678.41	33762.76
	DJ Transport	14024.48	14150.48
	DJ Utilities	904.48	900.04
	Nasdaq 100	14639.14	14546.64
	Nasdaq Cmp	13304.96	13240.77
	NYSE Comp	15308.13	15345.19
	S&P 500	4292.31	4282.37
	Wilshire 5000	42053.18	41446.59
Venezuela	IBC	33729.32	33039.73
Vietnam	VNI	1097.82	1090.84
Cross-Border	DJ Global Titans ($)	497.47	495.72
	Euro Stoxx 50 (Eur)	4291.95	4323.52
	Euronext 100 ID	1342.41	1351.29
	FTSE 4Good Global ($)	10914.40	10876.35
	FTSE All World ($)	438.65	437.59
	FTSE E300	1820.65	1828.74
	FTSE Eurotop 100	3616.91	3632.11
	FTSE Global 100 ($)	2944.09	2933.61
	FTSE Gold Min ($)	1906.43	1902.36
	FTSE Latibex Top (Eur)	4440.00	4432.20
	FTSE Multinationals ($)	3031.66	2991.59
	FTSE World ($)	800.60	798.72
	FTSEurofirst 100 (Eur)	4874.42	4900.12
	FTSEurofirst 80 (Eur)	5823.95	5862.31
	MSCI ACWI Fr ($)	653.25	653.02
	MSCI All World ($)	2873.37	2831.66
	MSCI Europe (Eur)	1865.30	1838.76
	MSCI Pacific ($)	2762.43	2729.85
	S&P Euro (Eur)	1897.66	1909.58
	S&P Europe 350 (Eur)	1866.56	1874.27
	S&P Global 1200 ($)	3184.07	3175.57
	Stoxx 50 (Eur)	3982.37	3998.51

(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	177.6	217.45	3.48
Nvidia	79.7	391.64	-1.63
Apple	68.5	184.10	3.15
Advanced Micro Devices	34.1	118.58	0.72
Microsoft	27.6	338.00	2.60
Amazon.com	26.9	125.46	1.21
Meta Platforms	26.3	275.13	2.52
Alphabet	16.2	126.88	2.21
Alphabet	14.4	127.48	2.25
Netflix	13.6	410.88	10.41

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Bath & Body Works	39.42	1.71	4.53
Cf Industries Holding	64.76	1.85	2.94
Dexcom	125.93	3.36	2.74
Paycom Software	301.09	7.77	2.65
Netflix	410.88	10.41	2.60
Downs			
Epam Systems	212.71	-46.94	-18.08
C.h. Robinson Worldwide	93.11	-4.56	-4.67
Dollar General	160.22	-5.90	-3.55
Marketaxess Holdings	271.88	-9.63	-3.42
Intel	30.34	-0.97	-3.10

Based on the constituents of the S&P500

LONDON

ACTIVE STOCKS	stock traded m's	close price	Day's change
Shell	241.7	2285.00	-5.00
Bp	218.6	472.95	-1.40
Astrazeneca	100.6	11794.00	46.00
London Stock Exchange Group	100.3	8662.00	168.00
Dechra Pharmaceuticals	98.2	3632.00	0.00
Unilever	92.7	4071.00	14.50
Rio Tinto	81.5	5055.00	-15.00
Diageo	81.0	3332.00	-40.50
Glencore	80.5	430.10	-3.80
National Grid	74.5	1062.00	7.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Indivior	1590.00	115.00	7.80
Asos	375.20	24.80	7.08
Ithaca Energy	156.40	8.40	5.68
Sirius Real Estate Ltd	88.30	3.45	4.07
Abrdn	210.00	6.50	3.19
Downs			
Ocado	343.40	-14.80	-4.13
Dr. Martens	134.10	-5.70	-4.08
Genus	2448.00	-96.00	-3.77
Endeavour Mining	2096.00	-82.00	-3.76
Just	83.30	-3.10	-3.59

Based on the constituents of the FTSE 350 index

EURO MARKETS

ACTIVE STOCKS	stock traded m's	close price	Day's change
Roche Gs	444.3	300.21	-1.39
Novartis N	344.9	93.10	1.04
Novo Nordisk B A/s	298.4	145.14	-2.36
Unicredit	274.1	18.42	-0.44
Dt.telekom Ag Na	247.0	19.62	0.48
Nestle N	215.3	112.05	-0.84
Asml Holding	209.2	675.80	1.20
Eni	172.3	13.10	-0.04
Iberdrola	170.8	11.57	-0.01
Intesa Sanpaolo	143.5	2.26	-0.01

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
A.p. M...ller - M...rsk B A/s	1647.40	44.98	2.81
A.p. M...ller - M...rsk A A/s	1629.95	40.28	2.53
Dt.telekom Ag Na	19.62	0.48	2.50
Mowi	16.36	0.30	1.89
Dsv A/s	183.07	2.15	1.19
Downs			
Pernod Ricard	198.85	-5.45	-2.67
Unicredit	18.42	-0.44	-2.33
Essilorluxottica	167.48	-3.84	-2.24
Hermes Intl	1916.60	-40.60	-2.07
Orange	10.81	-0.22	-1.99

Based on the constituents of the FTSEurofirst 300 Eurozone index

TOKYO

ACTIVE STOCKS	stock traded m's	close price	Day's change
Softbank	1399.3	6022.00	51.00
Advantest	1219.5	18330.00	600.00
Tokyo Electron	915.0	19420.00	145.00
Mitsubishi Ufj Fin..	770.8	975.20	25.00
Toyota Motor	684.2	2028.50	19.00
Keyence	573.8	71890.00	1860.00
Sumitomo Mitsui Fin..	500.5	5778.00	88.00
Fast Retailing Co.,	490.1	34160.00	1270.00
Mitsubishi	447.2	5987.00	157.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Hitachi Construction Machinery Co.,	3749.00	244.00	6.96
Mazda Motor	1278.00	80.00	6.68
Yaskawa Electric	6399.00	389.00	6.47
Kawasaki Heavy Industries,	3235.00	195.00	6.41
Sharp	802.00	43.00	5.67
Downs			
Tokyo Electric Power ,orporated	503.00	-19.00	-3.64
Rakuten	575.00	-10.00	-1.71
Chubu Electric Power ,orporated	1678.50	-13.50	-0.80
Kddi	4392.00	-15.00	-0.34
T&d Holdings,	1991.50	-4.50	-0.23

Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Jun 05 price(p)	%Chg week	%Chg ytd
Winners			
B&m Eur Value Retail S.a.	533.60	15.5	29.9
Airtel Africa	124.70	4.9	11.5
United Utilities	1052.00	4.7	6.3
Segro	823.20	4.6	8.2
Endeavour Mining	2096.00	4.3	19.6
Anglo American	2414.50	4.1	-
Land Securities	623.80	4.1	0.7
Ashtead	5124.00	4.1	8.6
Abrdn	210.00	4.1	11.0
Fresnillo	681.00	3.8	-
Relx	2581.00	3.8	12.8
Antofagasta	1441.50	3.7	-6.7
Losers			
Ocado	343.40	-15.6	-
Entain	1306.50	-6.8	-1.1
Diageo	3332.00	-4.9	-8.9
British American Tobacco	2570.50	-3.7	-
Natwest	258.50	-3.4	-2.5
Shell	2285.00	-2.6	4.8
National Grid	1062.00	-2.5	6.5
Auto Trader	610.60	-2.5	18.4
Unilever	4071.00	-2.4	-2.7
Bunzl	3124.00	-2.2	13.2
Burberry	2171.00	-2.0	6.9
Vodafone	77.92	-2.0	-7.4

FTSE 250	Jun 05 price(p)	%Chg week	%Chg ytd
Winners			
Rhi Magnesita N.v.	2564.00	25.1	15.3
Dechra Pharmaceuticals	3632.00	15.7	38.9
Bytes Technology	525.00	13.6	35.7
Darktrace	292.60	12.5	13.1
Sirius Real Estate Ltd	88.30	12.4	19.3
Uk Commercial Property Reit	57.10	11.5	-2.4
Hunting	224.50	11.4	-
[illegible]	4935.00	11.0	8.8
Carnival	871.80	9.4	50.5
Londonmetric Property	188.30	9.1	9.3
Iwg	155.10	8.4	-6.6
Pets At Home	386.80	8.1	35.9
Losers			
Dr. Martens	134.10	-16.9	-
Future	717.00	-7.6	-43.4
[illegible]	375.20	-7.6	-28.3
Hilton Food	678.00	-7.4	21.7
Drax	543.60	-7.4	-
Bodycote	610.50	-6.4	7.4
Dowlais	126.90	-6.0	-
Integrafin Holdings	249.40	-5.2	-
Bank Of Georgia	3030.00	-4.7	16.3
Synthomer	93.85	-4.7	-
Keller	673.00	-4.4	-15.9
Just	83.30	-4.4	2.1

FTSE SmallCap	Jun 05 price(p)	%Chg week	%Chg ytd
Winners			
Me Int	159.20	15.9	38.4
Hochschild Mining	81.45	13.0	15.9
Robert Walters	480.00	12.1	-
Ct Property Trust	86.20	11.5	25.7
Avon Protection	920.00	10.2	-
Aptitude Software	202.00	7.7	5.7
Ashoka India Equity Investment Trust	219.00	7.4	-4.9
Saga	119.60	7.4	-
Headlam	257.00	7.1	-
Helical	273.50	7.0	-
Wanton	257.00	6.6	-
Moonpig	143.40	6.2	28.4
Losers			
Dwf	54.00	-12.9	-
Sig	37.45	-9.7	26.5
Zotefoams	341.00	-8.1	13.0
Pensionbee	62.40	-7.4	15.8
Taylor Maritime Investments	81.80	-6.0	-9.1
Foresight Sustainable Forestry	100.50	-5.2	-5.0
Pod Point Holdings	71.00	-4.8	16.0
S & U	2370.00	-4.8	13.4
Marston's	30.85	-4.5	-
Severfield	61.40	-4.4	-1.0
Pendragon	16.98	-4.3	-11.6
Speedy Hire	32.55	-4.1	-

Industry Sectors	Jun 05 price(p)	%Chg week	%Chg ytd
Winners			
Real Estate Investment Trusts	2253.12	4.5	1.1
Industrial Transportation	3687.65	3.4	6.1
Mining	11262.46	2.8	0.5
Industrial Metals	6357.97	2.6	-
Media	9815.56	2.4	8.0
Household Goods	11264.19	2.3	13.8
Electronic & Electrical Equip.	10375.90	2.1	19.8
Support Services	10684.35	2.1	7.3
General Financial	13762.86	1.7	18.4
Software & Computer Services	2004.69	1.6	13.3
Chemicals	10822.71	1.3	-7.6
Life Insurance	6828.36	1.3	-3.2
Losers			
Beverages	25895.26	-4.6	-7.2
Automobiles & Parts	1774.36	-4.0	19.0
Personal Goods	30353.20	-2.8	-1.2
Tobacco	28319.94	-2.6	-
Food & Drug Retailers	4206.26	-2.1	2.1
Oil & Gas Producers	7976.68	-1.8	-1.5
Travel & Leisure	7606.57	-1.0	22.4
Construction & Materials	7972.97	-1.0	16.1
Banks	3574.30	-0.9	8.9
General Retailers	3861.13	-0.9	14.6
General Industrials	6361.84	-0.8	5.0
Gas Water & Multiutilities	6065.88	-0.8	7.2

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

CURRENCIES

Jun 5	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	242.5750	1.8015	259.8331	1.5922	301.0250	0.4789
Australia	Australian Dollar	1.5107	-0.0014	1.6182	-0.0036	1.8747	-0.0127
Bahrain	Bahrainin Dinar	0.3771	-	0.4039	-0.0005	0.4679	-0.0028
Bolivia	Bolivian Boliviano	6.9100	-	7.4016	-0.0097	8.5750	-0.0504
Brazil	Brazilian Real	4.9234	-0.0332	5.2736	-0.0425	6.1097	-0.0773
Canada	Canadian Dollar	1.3436	-0.0009	1.4391	-0.0028	1.6673	-0.0109
Chile	Chilean Peso	796.5250	-0.5250	853.1942	-1.6795	988.4530	-6.4667
China	Chinese Yuan	7.1179	0.0430	7.6243	0.0361	8.8329	0.0017
Colombia	Colombian Peso	4304.5200	-57.9450	4610.7682	-68.1810	5341.7234	-103.7370
Costa Rica	Costa Rican Colon	541.5850	-1.1800	580.1163	-2.0247	672.0835	-5.4243
Czech Republic	Czech Koruna	21.9764	-0.0469	23.5399	-0.0811	27.2717	-0.2189
Denmark	Danish Krone	6.9534	0.0088	7.4481	-0.0003	8.6289	-0.0397
Egypt	Egyptian Pound	30.8966	-0.0050	33.0948	-0.0487	38.3413	-0.2317
Hong Kong	Hong Kong Dollar	7.8372	-0.0002	8.3948	-0.0111	9.7256	-0.0574
Hungary	Hungarian Forint	344.2609	-0.8745	368.7535	-1.4205	427.2128	-3.6034
India	Indian Rupee	82.6800	0.3675	88.5623	0.2783	102.6023	-0.1445
Indonesia	Indonesian Rupiah	14890.0000	-100.0000	15949.3703	-128.1361	18477.8672	-233.4471
Israel	Israeli Shekel	3.7398	-0.0087	4.0058	-0.0146	4.6409	-0.0381
Japan	Japanese Yen	139.6550	-0.0050	149.5908	-0.2011	173.3058	-1.0252
..One Month		139.6544	-0.0063	149.5904	-0.2020	173.3051	-1.0265
..Three Month		139.6530	-0.0090	149.5894	-0.2039	173.3036	-1.0296
..One Year		139.6473	-0.0203	149.5852	-0.2124	173.3051	-1.0354
Kenya	Kenyan Shilling	138.9000	0.1000	148.7821	-0.0874	172.3689	-0.8886
Kuwait	Kuwaiti Dinar	0.3078	0.0002	0.3296	-0.0002	0.3819	-0.0020
Malaysia	Malaysian Ringgit	4.5775	-	4.9032	-0.0064	5.6805	-0.0334
Mexico	Mexican Peso	17.4730	-0.0100	18.7161	-0.0352	21.6832	-0.1400
New Zealand	New Zealand Dollar	1.6472	-0.0007	1.7644	-0.0030	2.0441	-0.0129
Nigeria	Nigerian Naira	464.7500	-	497.8149	-0.6514	576.7346	-3.3908
Norway	Norwegian Krone	11.0475	0.0308	11.8335	0.0176	13.7095	-0.0422
Pakistan	Pakistani Rupee	285.4500	-0.1500	305.7585	-0.5610	354.2311	-2.2698
Peru	Peruvian Nuevo Sol	3.6742	-0.0155	3.9355	-0.0218	4.5595	-0.0462
Philippines	Philippine Peso	56.2205	0.3255	60.2203	0.2703	69.7672	-0.0039
Poland	Polish Zloty	4.1787	-0.0113	4.4760	-0.0181	5.1856	-0.0447
Romania	Romanian Leu	4.6353	0.0070	4.9650	0.0011	5.7521	-0.0250
Russia	Russian Ruble	81.0250	-0.2750	86.7896	-0.4085	100.5485	-0.9344
Saudi Arabia	Saudi Riyal	3.7501	-0.0006	4.0169	-0.0059	4.6537	-0.0281
Singapore	Singapore Dollar	1.3497	0.0017	1.4457	-0.0001	1.6749	-0.0078
South Africa	South African Rand	19.2675	-0.2394	20.6383	-0.2838	23.9101	-0.4394
South Korea	South Korean Won	1308.1500	2.5000	1401.2190	0.8479	1623.3574	-6.4235
Sweden	Swedish Krona	10.8804	0.1078	11.6544	0.1004	13.5020	0.0552
Switzerland	Swiss Franc	0.9064	-0.0009	0.9708	-0.0022	1.1247	-0.0077
Taiwan	New Taiwan Dollar	30.6895	0.0455	32.8729	0.0058	38.0843	-0.1671
Thailand	Thai Baht	34.5375	-	36.9947	-0.0484	42.8595	-0.2520
Tunisia	Tunisian Dinar	3.1158	0.0088	3.3374	0.0051	3.8665	-0.0117
Turkey	Turkish Lira	21.2493	0.3593	22.7610	0.3555	26.3694	0.2934
United Arab Emirates	UAE Dirham	3.6729	-	3.9343	-0.0051	4.5580	-0.0268
United Kingdom	Pound Sterling	0.8058	0.0047	0.8632	0.0039	-	-
..One Month		0.8059	0.0047	0.8631	0.0039	-	-
..Three Month		0.8060	0.0047	0.8628	0.0039	-	-
..One Year		0.8058	0.0047	0.8616	0.0039	-	-
United States	United States Dollar	-	-	1.0711	-0.0014	1.2410	-0.0073
..One Month		-	-	1.0710	-0.1771	1.2410	-0.0073
..Three Month		-	-	1.0706	-0.1771	1.2411	-0.0073
..One Year		-	-	1.0692	-0.1771	1.2409	-0.0074
Vietnam	Vietnamese Dong	23500.0000	17.5000	25171.9242	-14.2012	29162.5110	-149.5925
European Union	Euro	0.9336	0.0012	-	-	1.1585	-0.0053
..One Month		0.9334	0.0012	-	-	1.1584	-0.0053
..Three Month		0.9330	0.0012	-	-	1.1582	-0.0053
..One Year		0.9317	0.0013	-	-	1.1570	-0.0053

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

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	£ Strlg Jun 05	Day's chge%	Euro Index	£ Strlg Jun 02	£ Strlg Jun 01	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	7599.99	-0.10	6868.67	7607.28	7490.27	7532.95	3.74	1.85	14.44	152.49	7964.75
FTSE 250 (250)	19113.55	-0.19	17274.32	19149.31	18827.76	20272.90	3.30	0.61	50.10	274.79	16150.10
FTSE 250 ex Inv Co (169)	19733.85	-0.25	17834.93	19783.54	19414.05	20997.64	3.41	0.79	37.00	291.91	17021.21
FTSE 350 (350)	4192.23	-0.11	3788.82	4196.79	4131.40	4197.38	3.67	1.69	16.06	80.74	8712.07
FTSE 350 ex Investment Trusts (266)	4138.88	-0.11	3740.61	4143.29	4078.46	4132.52	3.73	1.78	15.07	81.30	4446.81
FTSE 350 Higher Yield (135)	3511.19	-0.01	3173.32	3511.65	3454.25	3663.47	5.14	1.72	11.30	91.37	8286.70
FTSE 350 Lower Yield (215)	4470.10	-0.20	4039.96	4479.17	4412.72	4298.02	2.24	1.63	27.40	56.38	5576.55
FTSE SmallCap (226)	6242.35	-0.07	5641.67	6246.61	6150.46	6707.43	3.61	-0.57	-48.95	93.54	10673.18
FTSE SmallCap ex Inv Co (119)	5059.94	-0.14	4573.04	5067.27	4992.23	5645.64	3.72	1.00	26.81	77.60	8996.96
FTSE All-Share (576)	4150.89	-0.11	3751.46	4155.37	4090.64	4164.00	3.67	1.64	16.58	79.53	8710.10
FTSE All-Share ex Inv Co (385)	4063.62	-0.11	3672.59	4067.97	4004.36	4064.08	3.73	1.77	15.16	79.60	4432.60
FTSE All-Share ex Multinationals (515)	1090.62	-0.35	817.04	1094.49	1078.07	1163.27	4.06	1.13	21.85	19.46	2367.54
FTSE Fledgling (78)	11688.72	0.06	10563.96	11681.87	11630.18	12828.43	3.19	-1.26	-24.80	157.38	25714.30
FTSE Fledgling ex Inv Co (30)	15789.54	-0.09	14270.17	15803.46	15805.33	17970.71	3.47	6.20	4.64	247.11	33768.36
FTSE All-Small (304)	4354.74	-0.06	3935.70	4357.39	4293.10	4683.97	3.58	-0.60	-46.33	64.87	9549.30
FTSE All-Small ex Inv Co (149)	3811.79	-0.14	3445.00	3817.23	3762.98	4255.78	3.71	1.20	22.51	58.48	8583.56
FTSE AIM All-Share (715)	791.81	0.28	715.61	789.58	784.45	972.60	1.82	1.63	33.66	5.57	937.43
FTSE All-Share Technology (18)	2093.71	-0.34	1791.40	2100.77	2079.73	1811.73	1.83	1.50	36.46	20.62	3064.99
FTSE All-Share Telecommunications (6)	1386.76	2.03	1186.53	1359.19	1378.37	2043.40	7.60	1.52	8.66	1.03	2131.94
FTSE All-Share Health Care (13)	15091.18	0.60	12912.22	15001.77	14852.91	14705.99	2.37	1.14	37.10	216.02	14180.48
FTSE All-Share Financials (254)	4787.92	-0.17	4096.61	4796.16	4707.39	4606.73	3.94	1.58	16.13	124.44	5470.52
FTSE All-Share Real Estate (54)	824.07	-0.37	737.60	827.17	806.13	1084.07	4.33	-0.64	-36.13	15.09	886.05
FTSE All-Share Consumer Discretionary (82)	5127.16	-0.27	4386.87	5140.99	5078.06	4670.16	2.26	1.30	34.21	56.74	5501.13
FTSE All-Share Consumer Staples (22)	18347.86	-0.25	15698.68	18393.40	18249.71	19332.15	4.25	1.64	14.33	326.17	17174.40
FTSE All-Share Industrials (84)	6871.99	-0.28	5879.77	6891.01	6771.79	6142.29	2.26	1.13	39.14	84.75	8061.59
FTSE All-Share Basic Materials (21)	7720.11	-0.58	6605.43	7764.90	7478.52	9444.00	6.59	3.44	4.42	249.93	10849.77
FTSE All-Share Energy (14)	8246.32	-0.25	7055.67	8266.66	8089.24	8288.34	4.13	1.66	14.60	176.44	10233.86
FTSE All-Share Utilities (8)	9058.89	0.49	7750.91	9014.83	9032.53	9049.90	4.50	0.70	31.96	206.36	14149.21
FTSE All-Share Software and Computer Services (16)	2268.09	-0.33	1940.61	2275.71	2252.81	1948.51	1.82	1.52	36.35	21.94	3512.17
FTSE All-Share Technology Hardware and Equipment (2)	4028.04	-0.45	3446.45	4046.26	4021.05	5033.95	3.25	0.65	47.43	89.37	5333.48
FTSE All-Share Telecommunications Equipment (1)	399.46	-0.17	341.79	400.13	399.46	523.08	3.51	2.14	13.27	9.21	584.60
FTSE All-Share Telecommunications Service Providers (5)	2155.71	2.11	1844.46	2111.26	2142.22	3185.79	7.74	1.51	8.56	0.00	3019.28
FTSE All-Share Health Care Providers (2)	11335.43	0.33	9698.75	11298.27	11237.08	9434.58	0.48	2.90	72.12	18.58	10538.32
FTSE All-Share Medical Equipment and Services (2)	5829.29	0.83	4987.62	5781.31	5756.86	6032.76	2.58	1.16	33.27	92.56	5725.93
FTSE All-Share Pharmaceuticals and Biotechnology (9)	21569.90	0.58	18455.51	21444.63	21224.89	20980.53	2.37	1.13	37.28	310.15	18251.80
FTSE All-Share Banks (12)	3526.33	-0.20	3017.18	3533.57	3471.89	3263.49	4.56	2.67	8.22	136.68	3240.87
FTSE All-Share Finance and Credit Services (8)	11857.57	1.80	10145.50	11648.04	11577.42	9993.67	1.77	1.87	30.17	148.60	16155.26
FTSE All-Share Investment Banking and Brokerage Services (31)	9284.44	-0.29	7943.89	9311.64	9144.16	8813.03	4.82	2.36	8.78	179.72	13388.12
FTSE All-Share Closed End Investments (191)	11458.80	-0.12	9804.31	11472.76	11304.42	12022.04	2.86	-0.91	-38.62	144.62	7278.29
FTSE All-Share Life Insurance (6)	6946.62	-1.13	5943.62	7026.20	6740.65	6849.75	4.63	0.57	37.64	215.96	8770.91
FTSE All-Share Nonlife Insurance (6)	3724.15	-0.81	3186.43	3754.70	3699.00	3455.08	4.51	1.24	17.93	56.37	8056.84
FTSE All-Share Real Estate Investment and Services (10)	2094.39	-0.95	1791.99	2114.38	2083.97	2577.73	2.37	1.66	25.36	27.21	6350.28
FTSE All-Share Real Estate Investment Trusts (44)	2045.87	-0.27	1750.47	2051.42	1995.14	2723.37	4.69	-0.85	-25.12	39.47	3173.78
FTSE All-Share Automobiles and Parts (3)	1783.45	0.16	1525.95	1780.67	1757.81	2230.46	0.25	-25.17	-15.85	2.74	1858.16
FTSE All-Share Consumer Services (1)	3628.13	-0.27	3104.28	3638.02	3649.56	2920.50	1.43	1.37	50.88	36.27	4655.57
FTSE All-Share Household Goods and Home Construction (11)	9387.68	-0.22	8032.22	9408.68	9204.96	11058.29	7.32	1.95	7.00	287.84	8712.75
FTSE All-Share Leisure Goods (2)	26264.98	0.17	22472.68	26219.89	25785.57	18840.53	3.42	1.14	25.56	666.68	30139.94
FTSE All-Share Personal Goods (4)	26074.16	-1.16	22309.41	26380.08	25799.71	25148.48	2.17	2.93	15.75	21.42	20524.01
FTSE All-Share Media (10)	10072.43	0.22	8618.11	10050.61	9938.47	8976.75	2.44	1.91	21.44	140.44	7183.47
FTSE All-Share Retailers (22)	2175.47	-0.68	1861.36	2190.45	2145.44	2066.60	2.56	3.18	12.29	17.72	2864.47
FTSE All-Share Travel and Leisure (29)	7405.62	-0.49	6336.35	7442.09	7350.25	6496.80	0.72	-6.66	-20.86	34.10	7697.04
FTSE All-Share Beverages (5)	26005.68	-1.11	22250.82	26297.78	26085.76	27644.09	2.37	2.31	18.24	269.35	21062.65
FTSE All-Share Food Producers (8)	6635.56	-1.05	5677.47	6706.12	6634.66	6420.29	2.33	2.40	17.94	38.29	6501.15
FTSE All-Share Tobacco (2)	28319.99	0.03	24230.98	28311.09	28147.44	36827.48	8.50	1.58	7.46	752.81	27576.17
FTSE All-Share Construction and Materials (15)	8456.91	-0.62	7235.84	8510.04	8343.69	7461.54	2.99	0.53	63.29	185.09	10549.08
FTSE All-Share Aerospace and Defense (8)	6550.78	-0.95	5604.94	6613.88	6572.78	5020.33	1.88	0.16	331.90	74.85	8079.57
FTSE All-Share Electronic and Electrical Equipment (11)	12195.14	-0.19	10434.33	12218.03	12010.08	10773.11	1.48	2.32	29.18	72.60	12155.15
FTSE All-Share General Industrials (7)	5119.79	-0.53	4380.57	5146.88	5055.58	4962.79	3.42	1.32	22.12	93.04	6899.55
FTSE All-Share Industrial Engineering (6)	15838.51	-0.24	13551.65	15875.98	15528.12	15026.93	1.98	2.38	21.23	210.47	21545.72
FTSE All-Share Industrial Support Services (29)	10277.28	0.26	8793.38	10250.72	10059.64	9620.93	2.01	1.57	31.69	107.81	11966.39
FTSE All-Share Industrial Transportation (8)	5538.93	0.17	4739.19	5529.75	5366.76	4752.61	2.08	0.87	55.10	16.99	5826.47
FTSE All-Share Industrial Materials (1)	17053.18	-3.67	554.31	17703.30	17578.28	15652.92	1.99	1.34	37.44	231.04	21813.08
FTSE All-Share Industrial Metals and Mining (8)	6850.35	-0.53	5861.25	6886.54	6608.85	8518.67	7.13	3.54	3.96	243.73	10872.30
FTSE All-Share Precious Metals and Mining (5)	10635.31	-2.72	9099.71	10932.98	10889.06	10022.20	3.17	1.79	17.66	169.32	7624.12
FTSE All-Share Chemicals (7)	12013.41	-0.09	10278.84	12024.12	11795.77	13843.71	2.95	1.81	18.71	109.16	12170.63
FTSE All-Share Oil. Gas and Coal (13)	8005.19	-0.25	6849.35	8024.89	7852.66	8044.33	4.13	1.66	14.60	171.30	10303.07
FTSE Sector Indices											
Non Financials (322)	**5022.20**	**-0.09**	**4538.93**	**5026.64**	**4952.82**	**5099.43**	**3.59**	**1.67**	**16.72**	**85.93**	**9254.22**

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	7637.51	7642.07	7650.22	7643.51	7647.37	7646.00	7644.65	7628.61	7606.96	7654.79	7594.47
FTSE 250	19218.72	19268.70	19296.66	19270.07	19259.31	19257.89	19228.78	19170.92	19118.36	19298.73	19110.17
FTSE SmallCap	6261.86	6264.03	6265.31	6266.31	6266.63	6266.41	6266.86	6256.16	6246.32	6268.61	6242.35
FTSE All-Share	4171.54	4175.16	4179.75	4175.90	4177.34	4176.67	4175.18	4165.93	4154.29	4180.14	4148.97

Time of FTSE 100 Day's high:07:35:45 Day's Low14:14:30 FTSE 100 2010/11 High: 8014.31(20/02/2023) Low: 7335.40(17/03/2023)
Time of FTSE All-Share Day's high:08:51:00 Day's Low14:16:00 FTSE 100 2010/11 High: 4377.36(16/02/2023) Low: 4007.66(17/03/2023)

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FT 30 INDEX

	Jun 05	Jun 02	Jun 01	May 31	May 30	Yr Ago	High	Low
FT 30	2757.00	2766.20	2734.40	2726.10	2753.90	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
2766.2	2781.2	2784.8	2781.8	2783	2781.1	2773.4	2769.6	2758.8	2786.1	2756.4

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

FT WILSHIRE 5000 INDEX SERIES

	Jun 02		Jun 02
FT Wilshire 5000	43181.60	FT Wilshire Mid Cap	5443.16
FT Wilshire 2500	5538.42	FT Wilshire Small Cap	4952.51
FT Wilshire Mega Cap	5653.24	FT Wilshire Micro Cap	4621.01
FT Wilshire Large Cap	5619.85		

Source: Wilshire. Wilshire Advisors LLC (Wilshire) is an investment advisor registered with the SEC. Further information is available at https://www.wilshire.com/solutions/indexes . Wilshire® is a registered service mark. Copyright ©2023 Wilshire. All rights reserved.

FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Aerospace & Defense	21.77	Banks	8.64	Beverages	31.66
Electronic & Elec Eq	19.98	Support Services	7.58	Equity Invest Instr	-1.03
Fixed Line Telecomms	19.94	Gas Water & Multi	7.07	Nonlife Insurance	-1.16
Travel & Leisure	19.27	Utilities	6.43	Oil & Gas Producers	-1.79
Automobiles & Parts	19.20	Technology	5.15	Oil & Gas	-1.83
Construct & Material	16.17	Electricity	4.67	Personal Goods	-2.57
General Retailers	15.10	Financials	4.59	Life Insurance	-3.15
Consumer Services	14.11	Health Care Eq & Srv	4.14	Consumer Goods	-5.04
Leisure Goods	13.87	Real Est Invest & Se	3.95	Industrial Metals &	-6.33
Financial Services	13.85	Health Care	2.96	Mobile Telecomms	-6.69
Food Producers	13.00	Pharmace & Biotech	2.88	Beverages	-6.97
Industrials	11.15	FTSE 100 Index	1.99	Chemicals	-7.22
Household Goods & Ho	10.76	FTSE All{HY-}Share Index	1.86	Oil Equipment & Serv	-7.76
Software & Comp Serv	10.41	FTSE 250 Index	1.38	Industrial Transport	-9.58
Food & Drug Retailer	9.84	Telecommunications	1.13	Basic Materials	-17.35
Industrial Eng	9.17	NON FINANCIALS Index	0.96	Mining	-18.36
Media	8.71	Real Est Invest & Tr	0.36	Tobacco	-20.55
		FTSE SmallCap Index	0.04	Tech Hardware & Eq	-22.74

FTSE 100 SUMMARY

FTSE 100	Closing Price	Day's Change	FTSE 100	Closing Price	Day's Change
3I Group PLC	1955.5	-4.50	Jd Sports Fashion PLC	155.00	-1.90
Abrdn PLC	210.00	6.50	Johnson Matthey PLC	1804.5	-
Admiral Group PLC	2364	-10.00	Kingfisher PLC	238.10	-0.80
Airtel Africa PLC	124.70	2.00	Land Securities Group PLC	623.80	-1.80
Anglo American PLC	2414.5	-3.50	Legal & General Group PLC	234.40	-1.60
Antofagasta PLC	1441.5	-15.00	Lloyds Banking Group PLC	44.73	-0.72
Ashtead Group PLC	5124	12.00	London Stock Exchange Group PLC	8662	168.00
Associated British Foods PLC	1842	-27.50	M&G PLC	201.80	-2.20
Astrazeneca PLC	11794	46.00	Melrose Industries PLC	489.90	-2.80
Auto Trader Group PLC	610.60	-6.40	Mondi PLC	1259.5	-31.50
Aviva PLC	405.40	-3.70	National Grid PLC	1062	7.00
B&M European Value Retail S.A.	533.60	-6.20	Natwest Group PLC	258.50	-6.50
Bae Systems PLC	934.80	-7.60	Next PLC	6450	-52.00
Barclays PLC	155.78	-0.98	Ocado Group PLC	343.40	-14.80
Barratt Developments PLC	478.80	-3.00	Pearson PLC	818.00	-2.60
Beazley PLC	614.50	-6.00	Pershing Square Holdings LTD	2782	-8.00
Berkeley Group Holdings (The) PLC	4035	-9.00	Persimmon PLC	1247.5	-5.00
BP PLC	472.95	-1.40	Phoenix Group Holdings PLC	561.40	-5.60
British American Tobacco PLC	2570.5	-	Prudential PLC	1137	-16.00
British Land Company PLC	352.50	-2.80	Reckitt Benckiser Group PLC	6298	-10.00
Bt Group PLC	145.15	1.50	Relx PLC	2581	15.00
Bunzl PLC	3124	-32.00	Rentokil Initial PLC	647.40	-0.80
Burberry Group PLC	2171	-15.00	Rightmove PLC	526.00	-10.80
Centrica PLC	120.50	0.05	Rio Tinto PLC	5055	-15.00
Coca-Cola Hbc AG	2382	-7.00	Rolls-Royce Holdings PLC	147.30	-2.70
Compass Group PLC	2201	-6.00	Rs Group PLC	798.20	-0.80
Convatec Group PLC	208.20	-0.40	Sage Group PLC	870.20	-2.00
Crh PLC	3883	-28.00	Sainsbury (J) PLC	276.20	-2.30
Croda International PLC	6212	-18.00	Schroders PLC	458.60	-4.70
Dcc PLC	4718	-34.00	Scottish Mortgage Investment Trust PLC	688.20	-9.40
Diageo PLC	3332	-40.50	Segro PLC	823.20	-4.40
Endeavour Mining PLC	2096	-82.00	Severn Trent PLC	2745	39.00
Entain PLC	1306.5	-21.50	Shell PLC	2285	-5.00
Experian PLC	2926	28.00	Smith & Nephew PLC	1223	14.00
F&C Investment Trust PLC	907.00	1.00	Smith (Ds) PLC	315.70	0.10
Flutter Entertainment PLC	15790	-95.00	Smiths Group PLC	1626	7.00
Frasers Group PLC	694.50	-5.50	Smurfit Kappa Group PLC	2982	12.00
Fresnillo PLC	681.00	-10.80	Spirax-Sarco Engineering PLC	11215	35.00
Glaxosmithkline PLC	1382	14.40	Sse PLC	1863	-5.00
Glencore PLC	430.10	-3.80	St. James's Place PLC	1147	-6.50
Haleon PLC	330.20	3.00	Standard Chartered PLC	658.80	-5.20
Halma PLC	2463	1.00	Taylor Wimpey PLC	117.90	-0.15
Hargreaves Lansdown PLC	814.20	-3.00	Tesco PLC	263.10	0.70
Hiscox LTD	1162	-7.00	Unilever PLC	4071	14.50
HSBC Holdings PLC	606.10	3.40	Unite Group PLC	907.00	-8.50
Imperial Brands PLC	1733.5	2.50	United Utilities Group PLC	1052	15.50
Informa PLC	704.20	-0.60	Vodafone Group PLC	77.92	2.29
Intercontinental Hotels Group PLC	5392	-10.00	Weir Group PLC	1769.5	-13.00
International Consolidated Airlines Group S.A.	157.25	-0.65	Whitbread PLC	3341	-33.00
Intertek Group PLC	4303	35.00	Wpp PLC	873.20	-5.80

FTSE GLOBAL EQUITY INDEX SERIES

Jun 5 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	9493	741.26	1.6	2.3	9.0	1203.27	10.2	2.2
FTSE Global All Cap	9493	741.26	1.6	2.3	9.0	1203.27	10.2	2.2
FTSE Global Large Cap	1936	672.86	1.5	2.7	10.6	1126.15	11.9	2.2
FTSE Global Mid Cap	2228	918.31	2.0	0.7	4.0	1401.95	5.1	2.2
FTSE Global Small Cap	5329	946.18	2.6	2.3	5.0	1379.48	5.9	2.2
FTSE All-World	4164	437.59	1.5	2.3	9.4	752.38	10.7	2.2
FTSE World	2658	798.72	1.5	2.6	10.3	1843.28	11.6	2.2
FTSE Global All Cap ex UNITED KINGDOM In	9213	782.91	1.7	2.5	9.1	1246.04	10.3	2.2
FTSE Global All Cap ex USA	7703	517.79	1.6	-0.4	5.9	937.96	7.7	3.2
FTSE Global All Cap ex JAPAN	8071	772.50	1.7	2.3	9.0	1264.92	10.2	2.2
FTSE Global All Cap ex Eurozone	8851	781.78	1.7	2.7	8.7	1240.06	9.8	2.1
FTSE Developed	2148	733.53	1.5	2.5	10.4	1198.97	11.7	2.1
FTSE Developed All Cap	5775	760.39	1.6	2.5	9.9	1224.31	11.1	2.1
FTSE Developed Large Cap	815	695.89	1.4	2.9	11.9	1157.93	13.2	2.1
FTSE Developed Europe Large Cap	205	415.53	1.4	-1.9	9.8	844.33	12.5	3.1
FTSE Developed Europe Mid Cap	346	615.02	1.8	-2.5	8.6	1077.63	10.5	3.0
FTSE Dev Europe Small Cap	736	842.95	2.1	-1.9	5.4	1422.61	7.5	3.2
FTSE North America Large Cap	234	932.50	1.3	4.5	13.5	1414.01	14.4	1.6
FTSE North America Mid Cap	413	1127.37	2.3	1.8	3.2	1581.95	4.0	1.8
FTSE North America Small Cap	1319	1116.82	3.1	3.8	5.2	1500.42	5.9	1.7
FTSE North America	647	601.66	1.5	4.0	11.5	932.87	12.3	1.6
FTSE Developed ex North America	1501	281.06	1.4	-0.7	8.0	549.73	10.2	3.1
FTSE Japan Large Cap	175	410.39	1.1	3.9	10.6	611.84	12.0	2.4
FTSE Japan Mid Cap	339	554.91	0.9	0.2	4.9	786.68	6.2	2.5
FTSE Global wi JAPAN Small Cap	908	606.38	1.1	-1.6	2.0	894.26	3.5	2.8
FTSE Japan	514	167.63	1.0	3.2	9.5	279.90	10.9	2.4
FTSE Asia Pacific Large Cap ex Japan	1123	680.80	2.2	-0.2	1.4	1256.25	2.3	3.2
FTSE Asia Pacific Mid Cap ex Japan	839	990.58	1.7	0.1	3.0	1764.49	3.9	3.2
FTSE Asia Pacific Small Cap ex Japan	2092	559.12	1.2	0.7	4.7	964.82	5.5	2.8
FTSE Asia Pacific Ex Japan	1962	543.51	2.1	-0.1	1.5	1066.01	2.5	3.2
FTSE Emerging All Cap	3718	715.05	2.0	0.5	1.5	1262.62	2.6	3.5
FTSE Emerging Large Cap	1121	656.36	2.3	0.3	1.0	1165.31	2.0	3.6
FTSE Emerging Mid Cap	895	1047.76	1.4	0.0	2.5	1866.98	4.0	3.6
FTSE Emerging Small Cap	1702	791.18	0.9	2.4	5.0	1334.63	6.0	3.2
FTSE Emerging Europe	147	127.98	2.0	3.7	-0.4	273.66	1.5	3.0
FTSE Latin America All Cap	252	769.86	2.7	7.4	10.3	1578.19	13.3	8.8
FTSE Middle East and Africa All Cap	330	679.28	0.6	-4.7	-6.2	1273.19	-4.2	3.7
FTSE Global wi UNITED KINGDOM All Cap In	280	333.42	1.3	-1.9	6.1	696.28	8.2	3.7
FTSE Global wi USA All Cap	1790	1029.59	1.6	4.2	11.1	1504.46	11.9	1.6
FTSE Europe All Cap	1469	467.83	1.5	-2.0	9.1	911.28	11.6	3.1
FTSE Eurozone All Cap	642	462.90	1.5	-2.0	11.7	895.83	14.5	3.1
FTSE EDHEC-Risk Efficient All-World	4164	474.81	1.9	-0.4	2.5	758.97	3.7	2.6
FTSE EDHEC-Risk Efficient Developed Europe	551	337.26	1.7	-2.6	7.5	606.40	9.8	3.2
Oil & Gas	133	384.88	2.5	-0.7	-5.8	807.32	-4.0	4.8
Oil & Gas Producers	88	385.18	2.4	-1.2	-5.4	830.95	-3.5	5.1

Jun 5 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil Equipment & Services	25	259.79	3.4	0.0	-6.5	492.00	-4.9	4.7
Basic Materials	405	592.78	2.7	-3.0	-0.8	1114.35	1.0	4.2
Chemicals	202	799.98	2.3	-2.8	2.6	1440.81	4.1	3.1
Forestry & Paper	19	233.62	3.4	0.6	-7.3	485.57	-5.0	4.3
Industrial Metals & Mining	104	500.04	4.0	-2.0	1.2	977.67	2.9	4.6
Mining	80	915.37	2.5	-4.2	-6.3	1828.41	-4.2	5.7
Industrials	811	521.29	2.2	1.4	6.9	842.37	8.1	2.1
Construction & Materials	163	619.50	2.2	0.9	11.2	1057.58	12.6	2.1
Aerospace & Defense	36	926.61	1.8	-1.0	2.4	1461.31	3.3	1.6
General Industrials	79	262.49	2.6	2.1	10.0	471.52	11.6	2.4
Electronic & Electrical Equipment	158	657.25	1.9	3.1	9.6	952.10	10.4	1.5
Industrial Engineering	159	1044.80	3.6	0.8	6.3	1684.26	7.6	2.1
Industrial Transportation	129	929.18	1.6	-0.9	3.0	1541.59	4.7	3.6
Support Services	87	537.31	1.7	3.6	6.3	806.72	7.1	1.5
Consumer Goods	562	581.07	1.9	-1.1	8.1	992.14	9.4	2.4
Automobiles & Parts	132	548.62	2.8	10.9	25.8	904.03	28.1	2.1
Beverages	71	781.82	1.3	-4.5	0.9	1344.94	1.8	2.4
Food Producers	137	733.96	1.2	-4.4	1.8	1286.81	3.4	2.5
Household Goods & Home Construction	61	557.99	1.8	-4.6	3.9	953.74	5.2	2.6
Leisure Goods	54	263.10	0.9	4.7	14.5	374.99	15.3	1.1
Personal Goods	94	978.48	2.8	-7.5	5.9	1522.12	6.7	1.8
Tobacco	13	921.87	1.2	-5.6	-7.6	2698.75	-6.0	6.8
Health Care	337	723.23	1.2	-2.3	-0.7	1165.63	0.3	1.8
Health Care Equipment & Services	131	1377.81	1.1	-2.1	-0.1	1699.18	0.3	1.1
Pharmaceuticals & Biotechnology	206	489.43	1.3	-2.4	-1.1	851.43	0.2	2.3
Consumer Services	424	567.99	1.7	1.4	10.6	816.89	11.3	1.2
Food & Drug Retailers	69	299.22	1.1	-3.5	-4.8	482.04	-3.7	2.5
General Retailers	139	993.39	1.9	4.0	11.5	1366.01	12.1	1.0
Media	75	329.59	0.9	0.0	13.7	476.99	14.5	1.3
Travel & Leisure	141	502.34	1.9	-1.8	13.5	738.95	14.2	1.2
Telecommunication	83	126.44	-1.7	-5.7	-1.8	304.34	0.1	4.4
Fixed Line Telecommuniations	29	98.85	-1.4	-7.0	-1.8	274.26	0.2	5.3
Mobile Telecommunications	54	149.32	-1.9	-4.9	-1.8	309.08	0.0	4.0
Utilities	201	312.45	0.9	-3.9	-3.0	745.82	-1.3	3.5
Electricity	145	351.08	0.9	-3.5	-3.9	823.07	-2.4	3.3
Gas Water & Multiutilities	56	313.88	0.8	-4.8	-0.6	780.41	1.7	4.0
Financials	853	258.23	2.0	0.0	-0.5	506.36	1.2	3.4
Banks	271	192.28	1.9	0.1	-3.0	423.31	-0.6	4.5
Nonlife Insurance	72	370.32	1.6	-1.4	1.2	632.65	3.4	3.0
Life Insurance	51	216.08	3.0	-3.7	-5.1	425.41	-3.3	4.2
Financial Services	213	441.28	1.9	1.7	4.0	676.95	4.9	1.7
Technology	355	606.78	0.8	12.4	37.2	796.10	37.8	0.9
Software & Computer Services	180	911.91	1.1	11.4	34.5	1107.42	35.0	0.6
Technology Hardware & Equipment	175	540.57	0.4	13.4	40.1	764.35	40.8	1.2
Alternative Energy	20	162.73	0.6	8.3	-11.1	233.89	-10.9	0.4
Real Estate Investment & Services	139	238.00	3.2	-2.5	-5.2	470.82	-3.9	3.3
Real Estate Investment Trusts	107	428.63	1.9	-0.7	-1.6	1023.35	-0.2	4.2
FTSE Global Large Cap	1936	672.86	1.5	2.7	10.6	1126.15	11.9	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.

UK STOCK MARKET TRADING DATA

	Jun 05	Jun 02	Jun 01	May 31	May 30	Yr Ago
Order Book Turnover (m)	177.63	131.54	131.54	91.37	637.42	367.53
Order Book Bargains	488711.00	531888.00	531888.00	506321.00	653497.00	571538.00
Order Book Shares Traded (m)	1561.00	1648.00	1648.00	1806.00	4382.00	3044.00
Total Equity Turnover (£m)	5739.34	7432.78	7432.78	7474.03	10236.24	8823.42
Total Mkt Bargains	664075.00	720864.00	720864.00	687225.00	878224.00	764677.00
Total Shares Traded (m)	4865.00	4806.00	4806.00	5624.00	8793.00	7798.00

† 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.
For all queries e-mail ft.reader.enquiries@morningstar.com

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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	
Active Energy Group	Pre	**0.000**	0.000	**0.562L**	4.678L	**0.008L**	0.057L	**0.00000**	0.00000	-	**0.000**	0.000
Celadon Pharmaceuticals	Pre	**0.024**	0.002	**18.118L**	4.796L	**29.500L**	0.000	**0.00000**	0.00000	-	**0.000**	0.000
GETECH Group	Pre	**5.070**	4.280	**3.097L**	2.887L	**4.210L**	3.270L	**0.00000**	0.00000	-	**0.000**	0.000
Hercules Site Services	Int	**37.012**	19.958	**0.246L**	0.383L	**0.600**	0.600L	**0.60000**	0.60000	Aug 24	**1.720**	1.452
Itaconix	Pre	**5.600**	2.596	**2.455L**	0.448L	**0.005L**	0.001L	**0.00000**	0.00000	-	**0.000**	0.000
Roquefort Therapeutics	Pre	**0.000**	-	**1.634L**	-	**1.560L**	-	**0.00000**	-	-	**0.000**	-
Trident Royalties	Pre	**7.850**	0.083	**4.629L**	4.401L	**0.013L**	0.022L	**0.00000**	0.00000	-	**0.000**	0.000
ValiRx	Pre	**0.000**	0.000	**2.599L**	1.681L	**3.060L**	2.340L	**0.00000**	0.00000	-	**0.000**	0.000
Verici Dx	Pre	**0.000**	0.000	**11.407L**	8.329L	**0.069L**	0.059L	**0.00000**	0.00000	-	**0.000**	0.000

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

UK RECENT EQUITY ISSUES

Issue date	Issue price(p)	Sector	Stock code	Stock	Close price(p)	+/-	High	Low	Mkt Cap (£m)
05/25	5.00		ONE	Oneiro Energy PLC	6.75	0.48	7.25	5.98	300.5
05/17	10.00		ADMR	Admiral Acquisition UK Ltd	9.61	0.13	10.10	9.70	518.7
05/10	8.50	AIM	GMET	Golden Metal Resources PLC	7.00	-0.38	8.80	6.40	589.4
05/03	100.00		AWEM	Ashoka WhiteOak Emerging Markets Trust plc	102.50	0.50	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	Low	Yld	P/E	MCap m
Australia (A$)							
ANZ Bank	23.12	0.35	26.08	20.78	6.57	9.63	45864.31
BHP Group	44.00	0.75	50.09	35.83	9.40	10.26	147545.87
CmwBkAu	97.50	0.59	111.38	86.98	3.61	18.21	108763.46
CSL	310.73	2.73	314.21	254.30	0.98	44.19	99217.31
NatAusBk	26.05	0.26	32.83	25.43	3.47	13.78	54124.12
Telstra	4.37	0.03	4.43	3.62	2.30	25.31	33423.72
Wesfarmers	48.78	0.98	52.79	40.03	3.67	24.91	36616.48
Westpac Bank	20.77	0.23	24.50	18.80	4.30	15.01	48245.18
Woolworths	37.92	0.37	39.88	31.67	2.87	42.96	30590.76
Belgium (€)							
AnBshInBv	50.91	-	62.01	45.56	1.02	26.10	94732.85
KBC Grp	62.06	-0.70	72.46	45.53	5.39	10.37	27731.46
Brazil (R$)							
Ambev	14.38	-0.08	16.88	12.60	3.83	22.22	46013.48
Bradesco	13.92	0.44	17.71	11.15	5.87	6.54	14962.33
Cielo	4.72	0.01	6.22	3.66	3.01	16.34	2604.61
ItauHldFin	22.83	-0.06	26.04	18.86	3.31	9.24	22992.04
Petrobras	30.47	0.05	42.08	23.61	15.38	4.44	46060.46
Vale	67.25	-0.69	94.48	61.90	18.87	3.07	62000.12
Canada (C$)							
Bausch Hlth	10.82	-0.24	13.81	5.10	-	-3.33	2914.23
BCE	61.77	0.39	69.06	55.66	5.52	21.20	41933.97
BkMontrl	116.06	-0.59	138.85	111.88	3.80	9.15	61607.95
BkNvaS	66.20	-0.51	86.00	63.17	5.46	8.49	58036.89
Brookfield	58.88	11.29	63.88	41.28	1.09	19.91	69948.82
CanadPcR	105.08	-0.58	112.27	86.42	0.70	25.80	72818.82
CanImp	56.63	-0.73	71.10	53.58	10.34	4.02	38881.85
CanNatRs	75.32	0.05	86.59	58.75	2.58	11.96	61468.38
CanNatRy	157.41	-0.58	175.39	137.26	1.52	23.44	77710.91
Enbridge	50.44	0.18	59.69	47.66	6.45	18.03	76011.07
GtWesLif	38.78	-0.04	39.86	27.99	4.85	11.17	26877.73
ImpOil	64.28	-0.16	79.83	52.67	1.56	18.95	27947.85
Manulife	25.86	-0.03	27.50	20.81	4.41	7.92	35521.84
Nutrien	74.44	0.84	132.75	70.69	3.04	10.96	27486.01
RylBkC	123.54	-0.52	140.18	116.75	3.51	11.25	127875.35
SHOP	81.11	2.86	87.53	33.00	-	-2.88	72278.61
Suncor En	39.18	-0.07	53.62	36.39	2.61	14.51	38261.67
ThmReut	167.40	1.48	180.93	121.67	1.19	11.83	58680.97
TntoDom	78.27	-0.62	96.65	76.32	4.07	10.05	107166.68
TrnCan	55.19	-0.04	74.44	50.70	6.14	30.45	42288.37
China (HK$)							
AgricBkCh	3.01	0.05	3.28	2.20	7.23	3.86	11805.86
Bk China	3.12	0.02	3.45	2.51	7.28	3.77	33290.03
BkofComm	5.13	0.04	5.65	3.83	6.96	4.14	22917.72
BOE Tech	0.66	-	0.85	0.53	-	10.39	16.75
Ch Cons Cons	4.60	-0.02	5.52	3.09	4.52	3.73	2593.38
Ch Evrbright	2.46	0.01	2.78	2.03	9.94	3.25	3979.73
Ch Rail Cons	5.89	-0.11	7.46	3.75	4.54	3.06	1560.42
Ch Rail Gp	5.19	-0.04	6.30	3.41	4.05	4.08	2786.26
ChConstBk	5.10	0.08	5.64	4.10	7.43	3.62	156449.17
China Vanke	10.82	-0.02	19.90	9.87	13.43	4.76	3046.31
ChinaCitic	4.22	0.02	4.74	2.92	6.79	3.82	8013.45
ChinaLife	13.42	0.06	15.84	8.53	5.19	5.73	12741.9
ChinaMBs	36.75	-0.05	53.00	25.40	3.97	6.62	21527.52
ChinaMob	65.45	1.05	70.20	46.80	5.02	9.86	170875.01
ChinaPcIns	20.00	0.12	26.50	12.10	6.70	6.36	7082.37
ChMinsheng	3.17	0.03	3.52	2.19	7.92	4.00	3365.39
ChMrchSecs	13.88	-0.02	15.98	12.12	3.33	11.72	14473.13
Chna Utd Coms	5.06	0.01	6.45	3.30	2.34	24.01	22013.17
ChShenEgy	25.40	-	28.70	20.50	8.24	7.52	10946.25
ChShpbldng	4.63	-0.02	5.32	3.37	-	-325.57	14365.07
ChStConEng	6.00	0.08	7.35	4.68	3.78	4.40	34831.02
ChUncHK	5.91	0.06	6.58	3.27	2.72	12.71	23074.05
CNNC Intl	6.84	-0.09	7.33	5.78	1.93	16.91	18133.2
CSR	4.79	-0.01	5.26	2.37	4.41	12.85	2671.55
Daqin	7.47	0.02	8.25	6.80	10.70	15893.6	[illegible]
Denmark (kr)							
DanskeBk	148.30	4.30	165.35	86.90	1.31	10.43	18388.41
MollerMrsk	12270	335.00	22650	11100	2.70	2.05	14774.55
NovoB	1081	-17.60	1185.6	708.00	0.84	53.51	267018.53

FT 500: TOP 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
Softbank	6022.00	5971.00	51.00	0.85	849.00	11.6	28.67
Tesla Mtrs	217.45	213.97	3.48	1.63	20.80	12.6	27.86
Panasonic	1604.00	1525.00	79.00	5.18	84.00	11.3	20.17
Carnival	12.30	12.18	0.12	0.99	0.90	9.0	22.83
MitsuiFud	989.42	971.52	17.90	1.84	63.27	8.9	10.59
MTN Grp	125.25	124.05	1.20	0.97	9.05	8.9	5.92
MitsubshiEle	1953.50	1903.00	50.50	2.65	104.50	8.6	13.16
Netflix	410.88	400.47	10.41	2.60	21.59	8.4	27.26
MitUFJFin	975.20	969.30	5.90	0.61	62.80	7.6	12.67
SandsCh	26.50	26.50	0.00	0.00	1.80	7.3	-2.39
EquityResTP	63.94	63.09	0.85	1.35	3.45	7.2	0.88
Fuji Hvy Ind	2530.50	2431.50	99.00	4.07	69.00	7.1	14.45
Centene Corp	67.08	66.46	0.62	0.93	3.74	7.0	-1.97
DuPont	72.16	72.37	-0.21	-0.29	4.77	6.7	10.06
Cigna	260.55	257.03	3.52	1.37	12.93	6.7	-0.10
DiscFinServ	109.11	109.09	0.02	0.02	6.73	6.6	13.67
AmerExpr	167.50	168.56	-1.06	-0.63	11.32	6.5	9.71
Fanuc	5027.00	4809.00	218.00	4.53	89.00	6.5	17.77
Illumina	208.56	207.31	1.25	0.60	11.42	6.5	4.46
CapOne	109.50	110.49	-1.00	-0.90	7.64	6.5	24.39

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 %
Dollar General	160.22	166.12	-5.90	-3.55	-38.98	-21.9	-26.87
Pwr Cons Corp	5.93	6.32	-0.39	-6.17	-0.49	-12.9	-23.97
Cred Agr	10.80	10.95	-0.15	-1.39	-0.98	-9.5	0.58
ChinaPcIns	20.00	19.88	0.12	0.60	-1.92	-8.3	-21.80
Deut Tkm	19.62	19.14	0.48	2.50	-1.90	-6.8	-6.73
Advanced Micro	118.58	117.86	0.72	0.61	-9.17	-6.7	32.05
Target	130.43	133.22	-2.79	-2.09	-5.71	-6.1	-18.64
PernodRic	198.85	204.30	-5.45	-2.67	-6.60	-5.7	-7.45
ValeroEngy	107.38	109.27	-1.89	-1.73	-4.55	-5.7	0.25
Citic Secs	14.60	14.80	-0.20	-1.35	-0.64	-5.4	-13.47
ChShenEgy	25.40	25.40	0.00	0.00	-1.45	-5.4	-3.43
Hew-Pack	29.62	30.55	-0.93	-3.04	-0.75	-5.4	-1.71
OilNatGas	155.40	154.70	0.70	0.45	-9.05	-5.1	-3.48
Chugai	10.81	11.03	-0.22	-1.99	-0.35	-5.0	-7.39
SocGen	22.52	22.61	-0.09	-0.40	-1.09	-5.0	7.10
NovoB	1081.00	1098.60	-17.60	-1.60	-39.00	-5.0	-4.40
Heineken	94.78	94.32	0.46	0.49	-5.28	-4.8	-10.04
Diageo	3332.00	3372.50	-40.50	-1.20	-125.50	-4.7	-9.43
EssilorLuxottica	167.48	171.32	-3.84	-2.24	-4.04	-4.5	-8.45
BOE Tech	0.66	0.66	0.00	0.00	-0.03	-4.3	-1.49

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

Jun 05	Red date	Coupon	Ratings S*	M*	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-	115.75	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	B	102.88	5.43	0.14	0.87	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	0.64	0.25
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	03/25	2.75	-	Baa1	BBB-	106.48	-0.26	-	0.20	-
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 05	Red date	Coupon	Ratings S*	M*	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	-0.02	-
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	-0.10	0.40
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	137.45	2.19	-0.03	0.02	-

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INTEREST RATES: OFFICIAL

Jun 05	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	3.75	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 05 (Libor: Jun 02)	Over night	Change Day	Change Week	Change Month	One month	Three month	Six month	One year
US$ Libor	5.06557	0.001	4.140	0.026	5.18857	5.49629	5.62343	5.65729
Euro Libor	-0.64957	-0.064	-0.224	0.001	-0.61943	-0.58057	-0.55600	-0.48571
£ Libor	0.18063	-0.005	-0.043	0.001	4.20130	4.89270	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				0.008	3.21800	3.49000	3.72800	3.87500
Sterling CDs				0.000	0.50000	0.63000	0.78500	
US$ CDs				0.000	5.21000	5.45000	5.59000	
Euro CDs				0.000	3.22000	3.43000	3.65000	

Jun 05	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	2.89	3.19	2.93	3.23	3.07	3.37	3.28	3.58	3.50	3.80	3.56	3.86
Sterling					0.45	0.55	0.58	0.68	0.71	0.86	0.90	1.05
US Dollar	4.90	5.10	4.92	5.12	5.11	5.31	5.35	5.55	5.49	5.69	5.48	5.68
Japanese Yen	-0.30	-0.10	-0.30	-0.10	-0.25	0.05	-0.15	0.05	-0.20	0.10	-0.10	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	208.29	0.66	0.70	2.25	-0.59	1.96
Corporates(£)	324.55	-0.02	0.28	0.44	-2.40	-8.01
Corporates(€)	212.44	-0.19	-0.12	2.48	-0.20	-2.74
Eurozone Sov(€)	213.27	-0.13	0.00	2.77	0.14	-5.41
Gilts(£)	263.11	-0.12	0.33	-3.09	-3.86	-16.38
Overall(£)	272.52	-0.13	0.31	-2.14	-3.40	-14.17
Overall(€)	209.30	-0.15	-0.05	2.56	0.00	-4.92
FTSE						
Sterling Corporate (£)						
Euro Corporate (€)	104.47	-0.05	-	-	0.54	-1.73
Euro Emerging Mkts (€)	697.28	10.82	-	-	14.88	7.10
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	415.54	5.18	-11.15	-34.10	510.17	408.13
Europe 5Y	74.70	0.70	-2.61	-8.58	101.15	76.61
Japan 5Y	70.15	-1.74	-0.24	-9.89	99.54	69.88
Senior Financials 5Y	88.72	1.11	-2.85	-13.98	124.01	87.33
Markit CDX						
Emerging Markets 5Y	231.72	-9.90	-18.26	-15.77	265.81	229.64
Nth Amer High Yld 5Y	450.33	-14.94	-25.51	-42.27	511.98	450.33
Nth Amer Inv Grade 5Y	71.25	-2.43	-4.10	-9.24	88.71	71.25

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

VOLATILITY INDICES

	Jun 05	Day Chng	Prev	52 wk high	52 wk low
VIX	14.87	0.27	14.60	35.05	14.42
VXD	14.18	0.38	13.80	37.57	10.88
VXN	19.88	0.59	19.29	41.12	5.85
VDAX	16.17	0.11	16.06	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	81.85	3.64	0.03	-0.08	0.20	0.14
	02/50	1.00	99.79	1.64	-0.02	-0.06	-0.02	-0.13
Austria	02/29	0.50	87.97	2.81	-0.02	-0.09	0.10	1.49
	02/47	1.50	72.53	3.16	-0.02	-0.02	0.10	1.45
Belgium	06/27	0.80	92.82	2.70	0.06	-0.23	0.08	1.51
	06/47	1.60	70.64	3.41	-0.01	-0.21	0.13	1.37
Canada	03/25	1.25	94.92	4.32	-0.02	-0.01	0.46	1.47
	06/30	1.25	87.46	3.27	0.07	-0.06	0.27	0.60
	12/48	2.75	92.47	3.18	0.07	0.04	0.25	0.30
Denmark	11/29	0.50	88.12	2.52	0.06	-0.24	0.03	1.05
	11/52	0.25	52.04	2.62	0.04	-0.20	0.11	1.28
Finland	09/24	0.00	96.20	3.08	0.04	-0.11	0.05	2.72
	09/29	0.50	87.02	2.78	0.06	-0.22	0.03	1.45
France	05/27	1.00	92.85	2.83	-0.02	-0.11	0.08	1.71
	05/48	2.00	80.65	3.27	-0.02	-0.15	0.09	1.15
Germany	08/29	0.00	87.08	2.26	-0.06	-0.23	0.05	1.05
	08/50	0.00	52.47	2.40	0.03	-0.16	0.08	1.07
Greece	01/28	3.75	102.46	3.17	0.01	-0.17	-0.48	0.72
Ireland	05/26	1.00	95.07	2.77	-0.02	-0.19	0.28	2.20
	02/45	2.00	80.58	3.33	0.06	-0.08	0.12	1.31
Italy	02/25	0.35	95.26	3.32	0.02	-0.26	-0.04	1.49
	05/30	0.40	91.95	3.84	0.07	-0.22	-0.38	0.31
	03/48	3.45	85.30	4.58	0.05	-0.16	-0.19	0.91
Japan	04/25	0.05	100.09	-0.01	-0.02	0.00	-0.02	-0.10
	12/29	0.10	99.55	0.17	-0.02	0.02	0.02	-0.11
	12/49	0.40	84.79	1.15	-0.01	-0.01	0.16	0.17
Netherlands	07/27	0.75	92.77	2.69	0.06	-0.12	0.07	1.55
	01/47	2.75	100.18	2.74	0.02	-0.19	0.06	1.48
New Zealand	05/31	1.50	81.44	4.28	0.02	-0.07	0.18	0.50
	09/40	2.50	81.23	4.38	0.01	-0.07	0.24	0.49
Norway	08/30	1.38	87.45	3.36	0.04	-0.07	0.22	1.09
Poland	07/27	2.50	91.00	5.00	0.00	-0.09	0.01	-0.99
	04/47	4.00	77.02	5.80	0.00	0.04	-0.14	-1.08
Portugal	04/27	4.13	103.82	3.03	0.05	-0.15	-0.11	1.54
Spain	10/29	0.60	86.14	3.01	0.02	-0.20	0.17	1.53
	10/46	2.90	85.82	3.83	0.01	-0.13	0.16	1.31
Sweden	06/30	0.13	114.58	0.61	-0.03	-0.01	0.01	1.77
	03/39	3.50	112.87	2.50	0.00	-0.09	0.20	1.22
Switzerland	04/28	4.00	114.99	0.93	-0.01	-0.16	-0.30	0.11
	06/29	0.00	93.54	1.03	-0.09	-0.25	-0.40	0.22
United Kingdom	07/23	0.75	99.52	4.44	0.03	-0.06	0.46	3.24
	07/27	1.25	89.57	4.13	0.03	-0.12	0.52	2.60
	07/47	1.50	56.35	4.48	0.01	-0.10	0.42	1.81
United States	03/25	0.50	92.87	4.63	0.17	-0.05	0.66	2.58
	02/30	1.50	86.66	3.77	0.12	-0.07	0.41	0.89
	02/50	0.25	68.92	1.70	0.05	0.01	0.11	0.95

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

GILTS: UK CASH MARKET

Jun 05	Price £	Yield	Change in Yield Day	Week	Month	Year	52 Week High	Low	Amnt £m
Tr 0.75pc '23	99.54	4.38	1.15	-0.90	3.79	178.98	99.54	97.34	34.36
Tr 0.125pc '24	97.05	4.77	1.71	-0.83	16.06	182.25	97.53	95.13	36.51
Tr 2pc '25	94.58	4.56	2.47	-1.08	19.69	160.71	101.22	93.15	39.93
Tr 0.125pc '26	89.54	4.35	2.11	-2.25	20.50	160.48	95.25	86.33	35.32
Tr 1.25pc '27	88.69	4.27	1.91	-2.51	19.94	145.40	99.68	85.65	40.99
Tr 0.5pc '29	81.33	4.25	1.67	-3.19	16.76	122.51	95.06	78.21	28.92
Tr 1pc '32	77.19	4.17	1.71	-3.25	14.88	95.77	122.11	76.20	35.96
Tr 4.25pc '36	99.30	4.32	1.41	-3.57	13.39	84.62	125.01	94.91	31.68
Tr 4.5pc '42	100.24	4.48	1.13	-3.45	10.62	64.36	115.01	91.79	28.35
Tr 3.75pc '52	88.01	4.49	0.90	-3.23	10.05	88.66	132.80	82.51	20.51
Tr 4pc '60	92.80	4.40	0.92	-3.51	10.55	92.14	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	Jun 05	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
Fixed Coupon						
1 Up to 5 Years	80.42	-0.17	2331.59	-1.05	-2.84	4.46
2 5 - 10 Years	142.26	-0.43	3060.90	-2.83	-10.23	4.14
3 10 - 15 Years	149.96	-0.59	3493.49	-3.86	-14.89	4.32
4 5 - 15 Years	143.03	-0.48	3161.82	-3.15	-11.54	4.22
5 Over 15 Years	195.63	-0.70	3426.42	-5.22	-27.39	4.44
7 All stocks	129.22	-0.43	2921.36	-3.06	-14.88	4.36

Index Linked	Jun 05	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	324.46	0.03	-0.53	0.41	2757.67	-0.52	0.56
2 Over 5 years	509.25	0.38	-3.99	-26.53	3892.90	-3.88	-26.12
3 5-15 years	444.45	0.14	-1.83	-10.65	3610.32	-1.68	-9.89
4 Over 15 years	554.62	0.57	-5.53	-34.90	4112.15	-5.43	-34.66
5 All stocks	487.98	0.32	-3.41	-22.95	3806.92	-3.28	-22.46

Yield Indices	Jun 05	Jun 02	Yr ago		Jun 05	Jun 02	Yr ago
5 Yrs	4.19	4.11	1.86	20 Yrs	4.48	4.44	2.54
10 Yrs	4.23	4.16	2.26	45 Yrs	4.31	4.27	2.22
15 Yrs	4.40	4.35	2.49				

Real yield	inflation 0% Jun 05	Dur yrs	Previous	Yr ago	inflation 5% Jun 05	Dur yrs	Previous	Yr ago
Up to 5 yrs	1.61	2.27	1.62	-2.42	1.19	2.29	1.20	-2.90
Over 5 yrs	0.99	18.70	1.01	-1.06	0.96	18.76	0.98	-1.08
5-15 yrs	0.80	9.17	0.82	-1.52	0.72	9.21	0.75	-1.61
Over 15 yrs	1.03	25.49	1.06	-0.98	1.02	25.50	1.04	-1.00
All stocks	1.00	15.80	1.02	-1.10	0.98	15.88	0.96	-1.11

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

Data provided by Morningstar | www.morningstar.co.uk

COMMODITIES

www.ft.com/commodities

Energy		Price*	Change	Agricultural & Cattle Futures		Price*	Change
Crude Oil†	Jul	73.60	1.86	Corn♦	Jul	609.25	0.25
Brent Crude Oil‡		77.24	1.11	Wheat♦	Jul	622.75	3.75
RBOB Gasoline†	Jul	2.56	0.05	Soybeans♦	Jul	1355.00	2.50
Natural Gas†	Jul	2.28	0.10	Soybeans Meal♦	Jul	400.60	2.80
Base Metals (♠ LME 3 Months)				Cocoa (ICE Liffe)♥	Jul	2347.00	6.00
Aluminium		2248.50	-19.00	Cocoa (ICE US)♥	Jul	3016.00	-10.00
Aluminium Alloy		2150.00	-75.00	Coffee(Robusta)♥	Jul	2502.00	-35.00
Copper		8267.00	19.50	Coffee (Arabica)♥	Jul	181.55	1.25
Lead		2026.50	-9.50	White Sugar♥		689.00	6.40
Nickel		20885.00	-125.00	Sugar 11♥		24.57	-0.16
Tin		25550.00	25.00	Cotton♥	Jul	85.70	-0.35
Zinc		2284.00	-17.50	Orange Juice♥	Jul	275.80	10.10
Precious Metals (PM London Fix)				Live Cattle♣	Jun	176.60	1.70
Gold		1963.25	-11.10	Feeder Cattle♣	May	134.88	-
Silver (US cents)		2388.50	39.50	Lean Hogs♣	Jun	86.70	3.15
Platinum		1007.00	3.00				
Palladium		1419.00	47.00				
Bulk Commodities					Jun 02	% Chg Month	% Chg Year
Iron Ore		106.33	1.83	S&P GSCI Spt		549.78	0.77 / -31.98
Baltic Dry Index		939.00	20.00	DJ UBS Spot		100.32	-2.56 / -25.00
Richards Bay ICE Futures		98.75	1.10	TR/CC CRB TR		287.63	0.08 / -15.46
				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 02	Yield Jun 02	Prev	Month return	Value stock	No of Market stocks
Can 4.25%' 26	108.78	1.650	1.577	-0.12	5.25	71209.80	8
Fr 0.25%' 24	99.80	0.429	0.419	-0.14	17.92	263288.06	17
Swe 1.00%' 25	124.55	-0.232	-0.232	0.06	35.93	227081.88	7
UK 2.500%' 24	374.49	2.805	2.729	-0.06	6.82	523182.75	31
UK 2.500%' 20	374.49	2.805	2.729	-0.06	6.82	523182.75	31
UK 2.000%' 35	238.61	0.830	0.822	0.00	9.08	523182.75	31
US 0.625%' 26	96.22	2.117	2.021	-0.07	42.42	1654833.28	48
US 3.625%' 28	108.53	1.786	1.687	-0.18	16.78	1654833.28	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	1.64	1.38	-0.13	Netherlands	2.59	0.33	-1.19
Austria	2.81	0.55	-0.96	New Zealand	4.28	2.02	0.51
Canada	3.27	1.01	-0.50	Norway	3.36	1.11	-0.41
Denmark	2.52	0.26	-1.25	Portugal	2.63	0.37	-1.14
Finland	2.78	0.52	-0.99	Spain	3.01	0.75	-0.76
France	2.83	0.57	-0.94	Sweden	0.61	-1.65	-3.17
Germany	2.26	0.00	-1.51	Switzerland	1.03	-1.23	-2.74
Italy	3.84	1.58	-0.07	United Kingdom	4.13	1.87	0.36
Japan	0.17	-2.09	-3.60	United States	3.77	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	£ 2.2169	-	0.0232	2.07
Global Equity Fund	£ 3.4334	-	0.0569	1.35
Global Fixed Interest Fund	£ 0.7412	-	0.0007	6.38
Income Fund	£ 0.6352	-	0.0053	3.20
Sterling Fixed Interest Fund	£ 0.6617	-	-0.0025	4.55
UK Equity Fund	£ 1.9299	-	0.0177	3.66

Algebris Investments (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Algebris Financial Credit I EUR	€ 172.42	-	-0.53	0.00
Algebris Financial Credit R EUR	€ 147.84	-	-0.45	0.00
Algebris Financial Credit Rd EUR	€ 87.82	-	-0.27	6.08
Algebris Financial Income I EUR	€ 178.88	-	2.09	0.00
Algebris Financial Income R EUR	€ 162.06	-	1.89	0.00
Algebris Financial Income Rd EUR	€ 97.05	-	1.12	4.96
Algebris Financial Equity B EUR	€ 163.55	-	2.44	-
Algebris Financial Equity R EUR	€ 136.87	-	2.03	-
Algebris IG Financial Credit I EUR	€ 97.83	-	0.21	0.00
Algebris IG Financial Credit R EUR	€ 96.09	-	0.20	0.00
Algebris Global Credit Opportunities I EUR	€ 127.56	-	0.49	0.00
Algebris Global Credit Opportunities R EUR	€ 124.17	-	0.48	0.00
Algebris Global Credit Opportunities Rd EUR	€ 107.18	-	0.41	2.65
Algebris Core Italy I EUR	€ 146.65	-	1.53	0.00
Algebris Core Italy R EUR	€ 138.70	-	1.44	0.00
Algebris Sust. World B	€ 105.40	-	0.93	-
Algebris Sust. World R	€ 104.57	-	0.92	-

The Antares European Fund Limited
Other International

Fund	Bid	Offer	D+/-	Yield
AEF Ltd Usd	$ 555.67	-	-3.65	0.00
AEF Ltd Eur	€ 508.24	-	-3.46	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	96.63	-	-0.33	-
Artemis Positive Future Fund	68.22	-	1.19	0.00
Artemis Target Return Bond I Acc	106.25	-	-0.07	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	$ 121.99	-	2.41	-
Emerging Markets Equity ESG Fund	$ 142.03	-	2.77	0.00
Emerging Markets Frontier Equity Fund	$ 176.25	-	1.01	1.04
Emerging Markets Blended Debt Fund	$ 51.95	-	0.30	5.10
Emerging Markets Blended Debt ESG Fund	$ 88.69	-	0.49	0.00
Emerging Markets Active Equity Fund	$ 120.48	-	2.44	0.00
Emerging Markets Corporate Debt Fund	$ 57.99	-	0.09	7.67
Emerging Markets Debt Fund	$ 56.36	-	0.27	6.11
Emerging Markets Local Currency Bond Fund	$ 63.20	-	0.44	4.47

Atlantas Sicav (LUX)
Regulated

Fund	Bid	Offer	D+/-	Yield
American Dynamic	$ 8579.50	-	-77.51	0.00
American One	$ 7126.96	-	-26.86	-
Bond Global	€ 1541.77	-	6.91	0.00
Eurocroissance	€ 1399.18	-	-17.68	-
Far East	$ 1002.68	-	-19.91	0.00

Blue Whale Investment Funds ICAV (IRE)
www.bluewhale.co.uk, info@bluewhale.co.uk
FCA Recognised - Ireland UCITS

Fund	Bid	Offer	D+/-	Yield
Blue Whale Growth USD T	$ 10.02	-	0.25	-

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	€ 1.2121	-	-0.0033	2.50
High Income	£ 0.6335	-	-0.0020	3.77
Sterling Bond	£ 1.2215	-	-0.0042	2.06
Brooks Macdonald International Multi Strategy Fund Limited				
Balanced Strategy A	£ 0.9173	-	0.0086	0.56
Balanced Strategy	£ 0.9187	-	0.0086	0.09
Cautious Balanced Strategy A	£ 0.8818	-	0.0045	-
Growth Strategy A	£ 0.9317	-	0.0121	-
High Growth Strategy A	£ 0.9354	-	0.0144	-
Cautious Balanced Strategy	£ 1.2363	-	0.0063	0.00
Growth Strategy	£ 1.9544	-	0.0253	0.00
High Growth Strategy	£ 2.7496	-	0.0421	0.00
US$ Growth Strategy	$ 1.7451	-	0.0166	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	£ 132.85	133.45	-0.09	1.69
Capital Gearing Portfolio GBP P	£ 39537.10	39738.55	-11.14	1.71
Capital Gearing Portfolio GBP V	£ 177.70	178.68	-0.06	1.71
Dollar Fund Cls D Inc	£ 163.73	164.22	-1.34	1.24
Dollar Hedged GBP Inc	£ 94.53	94.82	0.18	1.21
Real Return Cls A Inc	£ 195.82	196.41	-1.37	1.73

Chartered Asset Management Pte Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
CAM-GTF VCC	$ 397097.45	397097.45	1722.97	-
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	€ 16.08	-	-0.06	-
EUR Accumulating Class (H)	€ 10.63	-	0.03	0.00
EUR Distributing Class	€ 11.51	-	-0.04	-
EUR Distributing Class (H)	€ 7.55	-	0.03	3.42
GBP Distributing Class	£ 12.15	-	-0.05	-
GBP Distributing Class (H)	£ 8.14	-	0.03	3.49
USD Accumulating Class	$ 12.49	-	0.04	-
Dodge & Cox Worldwide Funds plc-Global Stock Fund				
USD Accumulating Share Class	$ 29.47	-	0.42	-
GBP Accumulating Share Class	£ 38.69	-	0.27	0.00
GBP Distributing Share class	£ 25.97	-	0.18	-
EUR Accumulating Share Class	€ 41.12	-	0.30	-
GBP Distributing Class (H)	£ 13.56	-	0.20	0.79
Dodge & Cox Worldwide Funds plc-U.S. Stock Fund				
USD Accumulating Share Class	$ 37.42	-	0.32	0.00
GBP Accumulating Share Class	£ 46.46	-	0.06	0.00
GBP Distributing Share Class	£ 27.77	-	0.04	0.18
EUR Accumulating Share Class	€ 45.09	-	0.08	0.00
GBP Distributing Class (H)	£ 14.74	-	0.12	0.37

Dragon Capital
www.dragoncapital.com
Fund information:info@dragoncapital.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Vietnam Equity (UCITS) Fund A USD	$ 26.36	-	0.39	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	92.36	-	-0.16	-

Euronova Asset Management UK LLP (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
Smaller Cos Cls One Shares	€ 55.33	-	-0.01	0.00
Smaller Cos Cls Two Shares	€ 35.23	-	-0.02	0.00
Smaller Cos Cls Three Shares	€ 17.58	-	-0.01	0.00
Smaller Cos Cls Four Shares	€ 23.18	-	-0.01	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
OEIC Funds

Fund	Bid	Offer	D+/-	Yield
Index Sterling Corporate Bond Fund P-ACC-GBP	£ 0.81	-	-0.01	3.02
Sustainable Multi Asset Balanced Fund W-ACC-GBP	£ 0.94	-	0.01	-
American Fund W-ACC-GBP	£ 58.03	-	0.98	-
Cash Fund W-ACC-GBP	£ 1.05	-	0.01	1.80
Sustainable Emerg Mkts Equity Fund A-ACC Shares	£ 1.52	-	0.01	4.74
Sustainable Global Equity Fund W-ACC-GBP	£ 34.17	-	0.57	0.41
Global High Yield Fund W-ACC-GBP	£ 13.84	-	0.06	-
Japan Fund W-ACC-GBP	£ 6.09	-	0.11	1.46
Japan Smaller Companies Fund W-ACC-GBP	£ 3.68	-	0.07	-
Select 50 Balanced Fund PI-ACC-GBP	£ 1.14	-	0.00	-
Special Situations Fund W-ACC-GBP	£ 43.36	-	0.53	-
Short Dated Corporate Bond Fund W-ACC-GBP	£ 10.56	-	-0.04	3.79
Sustainable Water & Waste W-ACC-GBP	£ 1.17	-	0.03	0.54
Sustainable Water & Waste W-INC-GBP	£ 1.16	-	0.04	0.54
UK Select Fund W-ACC-GBP	£ 3.72	-	0.04	-
Global Enhanced Income W-ACC-GBP	£ 2.40	-	0.03	4.37
Index UK Gilt Fund P-ACC-GBP	£ 0.71	-	-0.01	-
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	€ 160.09	-	2.81	-
American Fund USD Class	$ 171.75	-	2.92	-
American Fund GBP Hedged	£ 83.89	-	1.43	0.00
American Fund GBP Unhedged	£ 137.57	-	2.74	-

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

Fund	Bid	Offer	D+/-	Yield
Foord International Fund | R	$ 49.37	-	0.60	0.00
Foord Global Equity Fund (Lux) | R	$ 16.72	-	0.37	-
Regulated				
Foord Global Equity Fund (Sing) | B	$ 19.55	-	0.18	0.00
Foord International Trust (Gsy)	$ 48.12	-	0.58	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	£ 103.57	-	2.09	-
LAPIS GBL MED DEV 25.YLD-Na-D	£ 96.50	-	1.24	-
LAPIS GBL TOP 50 DIV.YLD-Na-D	£ 117.76	-	2.38	2.98

Guinness Global Investors

Fund	Bid	Offer	D+/-	Yield
Guinness Global Equity Income Y GBP Dist	£ 18.74	-	-0.07	-
Guinness Global Innovators Y GBP Acc	£ 28.00	-	0.02	-
Guinness Sustainable Global Equity Y GBP Acc	£ 11.14	-	0.05	-

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

Fund	Bid	Offer	D+/-	Yield
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	£ 1.16	-	0.02	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	£ 1.06	-	-0.01	2.91
M&G Charibond Charities Fixed Interest Fund (Charibond) Acc	£ 38.54	-	-0.15	2.43
M&G Charity Multi Asset Fund Inc	£ 0.89	-	0.01	4.00
M&G Charity Multi Asset Fund Acc	£ 108.03	-	1.12	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	-	-0.30	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	$ 87.94	-	-0.62	0.00
Milltrust Laurium Africa Fund SP A	$ 90.48	-	-0.29	0.00
Milltrust Marcellus India Fund SP	$ 127.48	-	1.20	0.00
Milltrust Singular ASEAN Fund SP Founders	$ 126.34	-	-0.26	0.00
Milltrust SPARX Korea Equity Fund SP A	$ 120.54	-	2.14	0.00
Milltrust Xingtai China Fund SP A	$ 90.10	-	-1.33	-
The Climate Impact Asia Fund SP A	$ 77.68	-	0.67	0.00
The Climate Impact Asia Fund (Class B)	$ 76.88	-	0.67	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	$ 116.16	-	-0.01	0.00
Mir. - DiscEur D Cap GBP	£ 182.68	-	2.29	-
Mir. - UKEq HA Cap I GBP	£ 135.57	-	2.38	0.00

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

Fund	Bid	Offer	D+/-	Yield
Oasis Crescent Global Equity Fund USD A (Dist)	$ 34.95	-	0.39	-
Oasis Crescent Global Income Fund USD A (Dist)	$ 9.99	-	-0.01	3.17
Oasis Crescent Global Low Equity Fund USD D (Dist)	$ 12.21	-	0.09	1.04
Oasis Crescent Global Medium Equity Fund USD A (Dist)	$ 13.83	-	0.10	0.33
Oasis Crescent Global Property Equity Fund USD A (Dist)	$ 7.77	-	0.15	-
Oasis Crescent Global Short Term Income Fund USD A (Dist)	$ 0.93	-	0.00	2.29
Oasis Crescent Variable Fund GBP A (Dist)	£ 9.71	-	0.15	0.39

Omnia Fund Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Estimated NAV	$ 941.41	-	0.53	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	£ 12.03	-	0.06	0.00
Orbis OEIC Global Balanced Standard	£ 19.86	-	0.22	0.37
Orbis OEIC Global Equity Standard	£ 22.33	-	0.48	2.57

Platinum Capital Management Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Platinum All Star Fund - A	$ 147.71	-	-	-
Platinum Global Growth UCITS Fund	$ 8.31	-	0.11	0.00
Platinum Essential Resources UCITS Fund SICAV USD Class E	$ 9.43	-	0.14	0.00
Platinum Global Dividend UCITS Fund	$ 45.34	-	0.28	0.00

Polar Capital Funds Plc (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Automation & Artificial Intelligence Cl I USD Acc	$ 16.95	16.95	0.28	-
Asian Stars I USD Acc $	$ 14.00	-	0.04	0.00
Biotechnology I USD	$ 38.77	38.77	0.27	0.00
China Stars I USD Acc $	$ 10.06	10.06	0.07	-
Emerging Market Stars I USD Acc	$ 11.14	-	0.04	-
European Ex UK Inc EUR Acc	€ 15.21	15.21	0.09	-
Financial Opps I USD	$ 13.73	-	0.16	-
Global Convertible I USD	$ 13.51	13.51	0.10	0.00
Global Insurance I GBP	£ 9.73	-	-0.02	-
Global Technology I USD	$ 78.18	-	1.22	-
Healthcare Blue Chip Fund I USD Acc	$ 18.82	18.82	0.12	0.00
Healthcare Dis I Acc USD $	$ 12.79	-	0.09	-
Healthcare Opps I USD	$ 68.35	-	0.27	0.00
Income Opportunities B2 I GBP Acc	£ 2.94	2.94	0.00	-
Japan Value I JPY	¥ 161.87	161.87	1.87	0.00
North American I USD	$ 33.42	33.42	0.44	-
Smart Energy I USD Acc $	$ 9.87	9.87	0.20	0.00
Smart Mobility I USD Acc $	$ 9.05	9.05	0.13	0.00
UK Val Opp I GBP Acc	£ 12.62	12.62	0.17	0.00

Private Fund Mgrs (Guernsey) Ltd (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
Monument Growth 30/05/2023	£ 541.45	546.58	-9.02	-

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

Fund	Bid	Offer	D+/-	Yield
Prusik Asian Equity Income B Dist	$ 178.51	-	2.35	4.95
Prusik Asia Emerging Opportunities Fund A Acc	$ 182.05	-	-0.01	0.00
Prusik Asia Fund U Dist.	£ 202.44	-	1.47	0.00
Prusik Asia Sustainable Growth Fund A Acc	$ 88.09	-	1.22	0.00

Purisima Investment Fds (CI) Ltd (JER)
Regulated

Fund	Bid	Offer	D+/-	Yield
PCG B ✠	309.58	-	0.12	0.00
PCG C ✠	300.87	-	0.11	0.00

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

Fund	Bid	Offer	D+/-	Yield
RAM Systematic Emerg Markets Eq	$ 220.07	220.07	2.92	-
RAM Systematic European Eq	€ 531.46	531.46	6.31	-
RAM Systematic Funds Global Sustainable Income Eq	$ 149.61	149.61	2.85	0.00
RAM Systematic Long/Short European Eq	€ 145.62	145.62	-0.18	-
RAM Systematic US Sustainable Eq	$ 348.09	348.09	7.66	-
RAM Tactical Global Bond Total Return	€ 139.57	139.57	-0.20	-
RAM Tactical II Asia Bond Total Return	$ 146.60	146.60	0.10	-

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	100.47	-	0.13	1.88
LF Ruffer Diversified Rtrn C Inc	98.63	-	0.13	1.89
LF Ruffer European C Acc	765.85	-	-11.67	0.82
LF Ruffer European C Inc	137.38	-	-2.10	0.85
LF Ruffer Equity & General C Acc	568.01	-	-5.20	0.77
LF Ruffer Equity & General C Inc	513.16	-	-4.70	0.77
LF Ruffer Gold C Acc	245.17	-	-9.62	0.00
LF Ruffer Gold C Inc	148.39	-	-5.82	0.00
LF Ruffer Japanese C Inc	166.40	-	-0.84	0.24
LF Ruffer Japanese C Acc	358.49	-	-1.80	0.24
LF Ruffer Total Return C Acc	539.77	-	-4.28	2.95
LF Ruffer Total Return C Inc	332.23	-	-2.63	3.02

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

Fund	Bid	Offer	D+/-	Yield
Rubrics Emerging Markets Fixed Income UCITS Fund	$ 139.36	-	0.65	0.00
Rubrics Global Credit UCITS Fund	$ 16.95	-	0.02	-
Rubrics Global Fixed Income UCITS Fund	$ 172.31	-	0.30	0.00

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

Fund	Bid	Offer	D+/-	Yield
Slater Growth A Acc	606.69	606.69	2.62	0.00
Slater Income A Inc	138.37	138.37	1.06	5.22
Slater Recovery A Acc	316.62	316.62	1.82	0.00
Slater Artorius	267.21	267.21	-4.30	-

STONEHAGE FLEMING
GLOBAL BEST IDEAS EQUITY FUND

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	$ 244.16	-	2.20	-
SF Global Best Ideas Eq D GBP INC	£ 295.86	-	-0.32	-

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	$ 991.29	-	-9.98	0.00
Superfund Green Silver	$ 857.65	-	-6.14	0.00
Regulated				
Superfund Green US$	$ 732.61	-	2.52	0.00

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

Fund	Bid	Offer	D+/-	Yield
Aptus Global Financials B Acc	£ 5.10	-	0.11	3.49
Aptus Global Financials B Inc	£ 3.25	-	0.07	-

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	£ 197.03	-	10.74	0.00
Tosca Opportunity B USD	$ 252.81	-	-15.03	0.00
Pegasus Fund Ltd A-1 GBP	£ 35.81	-	-0.10	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	127.91	-	0.39	0.07
Trojan Ethical Global Inc O Acc	102.85	-	1.90	2.74
Trojan Ethical Global Inc O Inc	98.90	-	1.83	2.78
Trojan Ethical O Inc	127.59	-	0.40	0.08

Zadig Gestion (Memnon Fund) (LUX)
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Memnon European Fund - Class U2 GBP	£ 260.04	-	4.57	0.00

Data Provided by

MORNINGSTAR®

www.morningstar.co.uk

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The fund prices published in this edition along with additional information are also available on the Financial Times website, **www.ft.com/funds**. The funds published on these pages are grouped together by fund management company.

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Guide to pricing of Authorised Investment Funds: (compiled with the assistance of the IMA. The Investment Association, Camomile Court 23 Camomile Street, London EC3A 7LL. Tel: +44 (0)20 7831 0898.)

OEIC: Open-Ended Investment Company. Similar to a unit trust but using a company rather than a trust structure.

Different share classes are issued to reflect a different currency, charging structure or type of holder.

Selling price: Also called bid price. The price at which units in a unit trust are sold by investors.

Buying price: Also called offer price. The price at which units in a unit trust are bought by investors. Includes manager's initial charge.

Single price: Based on a mid-market valuation of the underlying investments. The buying and selling price for shares of an OEIC and units of a single priced unit trust are the same.

Treatment of manager's periodic capital charge: The letter C denotes that the trust deducts all or part of the manager's/operator's periodic charge from capital, contact the manager/operator for full details of the effect of this course of action.

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The symbols are as follows: ✠ 0001 to 1100 hours; ◆ 1101 to 1400 hours; ▲ 1401 to 1700 hours; # 1701 to midnight. Daily dealing prices are set on the basis of the valuation point, a short period of time may elapse before prices become available. Historic pricing: The letter H denotes that the managers/operators will normally deal on the price set at the most recent valuation. The prices shown are the latest available before publication and may not be the current dealing levels because of an intervening portfolio revaluation or a switch to a forward pricing basis. The managers/operators must deal at a forward price on request, and may move to forward pricing at any time. Forward pricing: The letter F denotes that that managers/operators deal at the price to be set at the next valuation.

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Barenboim frail but unbowed

CLASSICAL MUSIC

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

Shirley Apthorp

There is a particular kind of magic held by conductors over orchestras as their careers near their conclusions. "This might be our last concert together," they seem to say. "Pay attention!"

Daniel Barenboim has not been well. After a series of cancellations last year, he stepped down in January from his post as music director of the Staatsoper Berlin, citing "a serious neurological condition". This week's concert with the Berliner Philharmoniker at the Philharmonie was planned in better times, when Barenboim was still performing his strong, domineering persona. Ever the showman, Barenboim is now performing a frail persona, although once he had arrived at the podium, his first act was to demand the removal of the chair that had been placed there for him.

The audience applauded his small act of defiance rapturously, and he flashed an impish grin. You could almost see the accolade quickening his pulse. There was not a great deal of energy left for Fauré's *Pelléas et Mélisande* orchestral suite, which Barenboim conducted with minimal gestures. But the outcome was one of maximal delicacy, as the musicians paid immense attention both to his small commands and to each other; instead of orchestral force, we got chamber music.

The mood continued in Wagner's *Wesendonck Lieder*, with Elīna Garanča as soloist. This is where things could easily have turned to stodge, since the songs form a kind of pocket version of *Tristan und Isolde*, and Barenboim's Wagner has been getting steadily slower over the years. But they did not. Instead, Barenboim aimed for gossamer refinement, and Garanča's focus seemed to turn inwards, building washes of gentle colour with the players. Such intense concentration created a disarming sense of honesty and, with it, moments of almost shocking intimacy. Garanča's tone was creamy, her enunciation flawless, her musicality profound, and the instrumentalists listened with every fibre of their being. Everyone leaned forward, nobody dared to breathe. Or perhaps we all breathed together.

When Garanča pulled a flower from her bouquet to present to the concertmaster, it was more than a routine gesture of politeness. It was a recognition of the degree to which he, and through him, his peers shared responsibility for the outcome; at times like these, the intervention of a good concertmaster can save the day.

After the interval, César Franck's D Minor Symphony was a necessarily more bombastic affair. Barenboim conducted without a score; this was familiar territory for everyone. With less at stake, there were more moments when the orchestra was given free rein, and there was correspondingly less detail. Here, things did slow down and thicken.

No matter. The audience leapt to its feet. Barenboim glowed, and with trembling hands disassembled his bunch of flowers in order to present all the women he could reach with an individual bloom.

Then the effort became too much, and he shoved the rest of the bouquet at the next woman in line. Barenboim survives, unreconstructed.

berliner-philharmoniker.de

Daniel Barenboim conducts the Berliner Philharmoniker — Stephan Rabold

ARTS ONLINE

Contemporary African photography at Tate Modern is among the attractions in our guide to top art exhibitions in Europe and the US this summer

ft.com/arts

OPERA

Il trovatore
Royal Opera House, London
★★☆☆☆

Richard Fairman

The Royal Opera has spent the best part of 40 years searching for a successful production of Verdi's *Il trovatore*. One staging perched the singers precariously on volcanic rocks, another tried setting the opera during the industrial revolution and the most recent resorted to unconvincing, scattergun symbols of babies and butterflies. It seemed nothing could be worse than that, which just shows how wrong you can be.

This latest effort at least stays firmly with the medieval period. Adele Thomas, who directed a gripping production of Vivaldi's *Bajazet* last year, cites Hieronymus Bosch as a source of inspiration and has filled the stage with infernal creatures wearing horns and monster heads, representative presumably of a time when people believed in witches and the dark power of the underworld.

This was a doubtful idea to start with, but it might just have held up if it had been played out with a hellish intensity. Instead, the creatures' constant leaping up and down comes across as childish, Verdi meets *Dungeons and Dragons*. An opera that is hard-to-believe melodrama even on a good day has never felt so silly.

The production's saving grace is that the stage is generally cleared for the central characters. For much of the time the singers are left to stand and deliver, which a heterogeneous cast does with a wide mix of strengths and weaknesses.

Marina Rebeka's voice has been growing in size and she sings a Leonora of authority, but not much warmth. Her soprano has taken on a blade-like sharpness, which makes her coloratura impressively clean-cut, but the sound is not ingratiating at full volume. Riccardo Massi has a darker tenor than most native Italians, but his Manrico found a brighter core to the voice as the evening went on, singing in long phrases, at his best with welcome artistry. In the smaller role of Fernando, another Italian, bass Roberto Tagliavini, made a strong impression.

For a singer of her immense gifts, Jamie Barton has been seen very little at the Royal Opera House. So far, her engagements have been in Italian repertoire, when the richness of her mezzo would surely excel in German or French opera. As Azucena, she was as vivid as one could have hoped, but one worries that the determination to deliver Italianate drama to the hilt leads her to push her voice to its limits. Ludovic Tézier, French baritone now at his peak, has amplitude and power to spare, and sang a glamorously voiced Count di Luna, albeit rather solid and standing stock still for much of the time.

The pace and drive of Verdi's opera were supplied powerfully by Royal Opera music director Antonio Pappano, whose performances these days are distinguished by a focus on bold, brightly coloured orchestral detail and pounding energy. Ultimately, the headlong rush of the drama is what makes *Il trovatore* an Italian opera favourite. As for the production, it is hard to see how this silly nonsense could be revived in future. The Royal Opera's search goes on.

To July 2, roh.org.uk

Marina Rebeka, left, and Gabrielė Kupšytė — Camilla Greenwell

Gaming looks to the past for its future

Makeovers of vintage games such as 'System Shock' reveal much about the medium, writes Lewis Gordon

It's as if a rift has opened in the space-time continuum, catapulting players back to the 2000s or earlier. *Metroid Prime*'s sleek sci-fi interiors, the plague-infested villages of *Resident Evil 4*, *Dead Space*'s foreboding space station: these are the virtual playgrounds of some of 2023's best reviewed video games, and they are all remakes or remasters. Their paths have been trodden by many players before, but now they sparkle anew, and perhaps feel a little different too; crisper, snappier, more responsive — yesterday's classics reimagined with today's technology.

The video game remake is nothing new, but it occupies a newly enlarged presence in the release calendar and thus the minds of players the world over. If you peruse a critical aggregator such as Metacritic to find your next gaming experience, there's a good chance you will come away with a title that was first released 10, 20 or even 30 years ago. Hankering after a tactics game? Then give *Advance Wars 1+2: Re-Boot Camp* a shot. A first-person actioner? The recently released *System Shock* remake should do the trick.

Sometimes, though, it can feel as if time is speeding up, such is the dwindling gap between initial release and remake, remaster or re-release. The third highest rated game of the year on Metacritic is the "Complete Edition" of critically acclaimed RPG *The Witcher 3*, released just eight years ago for a generation of consoles many players still use now.

The Witcher 3 shows the semantic slipperiness involved in resuscitating the past. "Complete Edition" refers primarily to the newly high-resolution textures and a higher frame rate, so it is not a wholesale remake nor quite a remaster (a term that generally applies to much older titles). It's better described as an "upgrade", one that brings its presentation in line with what players expect from current consoles and PCs. Perhaps more than anything, this "Complete Edition" is a canny bit of marketing, updating the experience just enough in order to sell it to players once again, all while maintaining the brand's ongoing cultural relevance.

Remakes, though, generally go much further than upgrading or remastering original assets (3D models, textures, animations and the like). Rather, they recreate a game from the ground up, sometimes hewing close to their forebears (as with *Resident Evil 4*) and, at others, introducing more fundamental changes to game mechanics, if not the story (the remakes of *Resident Evil 2* and *3* swap fixed camera angles for a more modern third-person "free camera").

> For players of a certain age, these remakes may remind them what first drew them to gaming

The upcoming remake of another survival horror classic, *Silent Hill 2*, looks as if it will opt for the latter approach by introducing, according to producer Motoi Okamoto, a "more immersive" camera and, interestingly, combat that is "more fun than before". This detail will rankle some purists (like me), who consider the original's punishing combat a vital part of its storytelling.

As video games age (they are well over 50 now), so does their audience. The medium not only contains a rich history of beloved titles but an older demographic that enjoys revisiting them. In short, the current vogue for remakes, what cultural critic Simon Reynolds would describe as "retromania", is here to stay.

CEO and chair of Atari, Wade Rosen, almost said as much in a statement announcing the company's acquisition of Night Dive, maker of the recently released *System Shock* remake. For Rosen, the developer possesses "proven expertise" in "commercialising retro IP", highly prized attributes for a company such as Atari looking to leverage its extensive back catalogue.

While it's natural to feel cynical about the relentless retreading of old ground, these remakes do more than enrich long-established companies. Video games, like movies and music, are beholden to trends. Currently, the most popular games are either all-consuming open-world behemoths or never-ending "live service" experiences (both at once in the case of *GTA Online*). What the current crop of remakes does is let players peek beyond such trends to enjoy more focused, arguably tighter experiences. For players of a certain age, these remakes may remind them what first drew them to the medium. For younger gamers, they offer a chance to see how designers of yesteryear imagined its possibilities, only now with more pixels and better hardware. It's not that video games are necessarily bereft of ideas; some, it turns out, are timeless.

The recently released 'System Shock' is among a wave of remade games

Those affected by environmental disasters are increasingly turning to the courts for redress, stoking debate about the role of for-profit litigation funding in such cases.

By Camilla Hodgson

Who will pay to bring climate lawsuits?

In 2009, huge volumes of oil spilled into the Timor Sea from a well off the coast of Western Australia. The leak caused catastrophic damage to marine wildlife and upended the livelihoods of thousands of Indonesian farmers whose seaweed crops were destroyed.

At the end of 2022, the company that operated the well settled a years-long legal fight with more than 15,000 Indonesian farmers who had brought a class action suit against it. PTTEP Australasia agreed to pay them A$192.5mn, the equivalent of £102mn, in compensation without admitting liability.

"This was a strong settlement . . . it was quite a thrill when we settled," says Rebecca Gilsenan, a lawyer at Maurice Blackburn who represented the farmers. PTTEP declined to comment.

But it was not only the Indonesians who were relieved when the settlement was finally reached. Harbour Litigation Funding, a UK-based firm that provides financing for complex lawsuits in return for a share of the proceeds, spent more than £17mn on the case, a budget that covered a boat and off-road motorbikes needed to reach farmers in remote locations. In return, Harbour took £43mn, or just over two-fifths, of the award.

"It's always tough for people to have significant amounts deducted from their compensation," says Gilsenan. "But each and every one of [the farmers] struck that bargain."

The volume of international litigation relating to environmental and climate issues has grown rapidly over the past few years, with cases seeking compensation from companies for environmental damage of rising interest.

'It's always tough for people to have significant amounts deducted from their compensation'

In London, the mining company BHP is facing one of the biggest: a £36bn class action lawsuit brought by over 700,000 claimants for losses relating to the 2015 collapse of the Fundão tailings dam in Brazil. The disaster released huge quantities of mining waste and polluted hundreds of kilometres of waterways.

The case has already cost £70mn to bring, funded by litigation investors including Brazil's Prisma Capital and the UK's North Wall Capital.

BHP said it "denies the claims brought in the UK in their entirety and will continue to defend the case".

Litigation is also becoming a tool of choice for forcing faster action by governments and companies on climate change, with cases filed in courts from Europe to Australia.

"I think we're entering . . . a golden moment for climate litigation," says Jolyon Maugham, founder of the non-profit Good Law Project. "It's a function both of what resonates in their social milieu and an understanding of the limits of what can be done by politicians."

Such cases are "absolutely necessary to hold people to account for not taking enough action on climate change", according to Ian Fry, the UN's special rapporteur on the promotion and protection of human rights in the context of climate change.

The costs are often met by charities or supported by philanthropic groups such as the Children's Investment Fund Foundation and the Foundation for International Law for the Environment, along with crowdfunding campaigns.

But the growing interest in cases seeking compensation for climate and environmental damage, and the new focus of market regulators on corporate greenwashing, is turning legal fights into a business opportunity. Professional litigation funders, backed by investors ranging from pension funds to family offices, want to make money from climate-related claims.

While some have welcomed this development, others say investors have different priorities to non-profits and claimants, and that their fees are not always transparent. EU lawmakers, have gone as far as proposing new regulations to police the space.

There are also fears that profit-seeking funders will cherry-pick cases based on the likelihood of victory or the potential size of the payout, rather than for their environmental or societal impact.

But funders counter that they are needed. Stephen O'Dowd, senior director of legal finance at Harbour, says the amount of funding needed to bring the challenge against PTTEP was well beyond the means of Indonesian farmers, adding that "it was a very hard case . . . Everybody thought we were mad for funding the claim."

A seaweed farmer ties clumps of algae to iron rods along the seafloor near Nusa Lembongan, Indonesia. A class action suit was brought on behalf of local farmers following a Timor Sea oil spill, but the distribution of the subsequent settlement raised questions about the financing behind climate litigation cases

Jonas Gratzer/LightRocket/Getty Images

A turning point

Much environmental litigation has related to redress for specific incidents such as oil spills. But specialist law firms, scientists and non-profits are now investigating potential claims in which a company is held to account for its contribution to global warming. Lawyers say it is a matter of finding the right case.

"I am optimistic we will bring a case and we'll be successful," says Martyn Day, co-founder of the law firm Leigh Day. Such a case would "hopefully bring about significant change to how the multinationals operate . . . It's about us finding the right case with the right law, and funders who are happy to help."

Alex Cooper, a lawyer at research group the Commonwealth Climate and Law Initiative, says a wave of big corporate climate cases is "probably two to three years off".

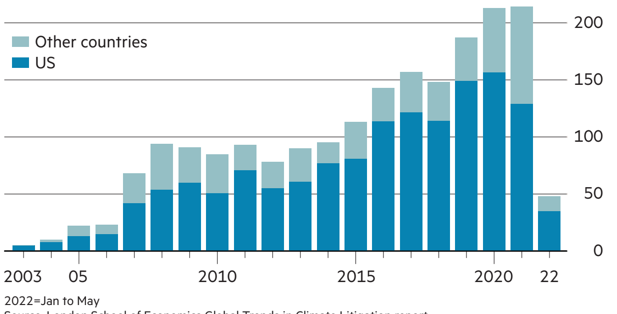
But two climate damages test cases against alleged corporate polluters — one against the energy giant RWE and one against the cement maker Holcim — are already under way. Companies also face growing legal risks now that regulators have corporate "greenwashing" and climate-related disclosures more squarely in their sights, and as activist groups become shareholders in polluting companies so they can challenge climate strategies.

Those groups producing or consuming fossil fuels are feeling the heat. In May, 9 per cent of investors in oil major ExxonMobil, including Norway's largest pension company, KLP, backed a shareholder resolution asking the company to disclose the risks it faced from environmental litigation. Exxon, alongside other oil companies including Chevron and Shell, is facing landmark legal challenges in the US from cities, counties and states for campaigns of alleged "deception" about climate change and the role its products played in causing it.

If even some of the US cases were successful, "you almost certainly are talking about the largest tort award in US history — this would be easily over $1tn," says Lee Wasserman, director of philanthropic group the Rockefeller Family Fund. "We're very close to the moment when a number of [law] firms take that leap" and start representing clients in such cases, and then the fossil fuel industry will be facing hundreds, not dozens, of cases, he adds.

Climate-related disputes are heading for the courts

Cases relating to environmental and climate issues



2022=Jan to May

Source: London School of Economics Global Trends in Climate Litigation report

What about the lawyers?

As climate litigation approaches a potentially transformational period of expansion, attention is turning to who funds it, and how.

Professional litigation funding is particularly suited to the US legal landscape, where damages awards can run into the billions and the losing side does not normally cover the winner's legal fees. It has also grown rapidly in Australia and the UK.

For investors looking for an asset class uncorrelated with broader financial markets, and investments labelled as "sustainable", climate-related cases have emerged as an intriguing option. Aristata Capital raised £39mn last year from backers including Capricorn Investment and the Soros Economic Development Fund to invest in cases with "measurable social or environmental impact", says founder Rob Ryan.

"Our investors are predominantly pure impact investors who are looking for good returns and significant measurable impacts," he says, adding that the group was looking to increase its fund size and use it to back about 20 cases.

Litigation funder Woodsford's ESG "engagement" business, which has grown over the past four years, helps identify, develop and fund cases that involve "significant breaches in environmental, social and governance [issues]," says Steven Friel, its chief executive. Most have been about governance issues such as alleged money laundering but "we're working towards the 'E' in ESG", Friel adds.

Funders invest in a portfolio of cases and might cover the costs of lawyers and expert evidence, and arrange insurance products. Most work on a "no win, no fee" basis, and are only paid if damages are awarded. Their cut of any winnings varies with case risk but is typically somewhere around 25 per cent.

Law firms can also fund cases under a similar no win, no fee model, but those taking on climate claims tend to be specialist firms rather than big commercial practices that may have conflicts of interest because of their work for other clients, such as oil majors or miners.

"A lot of firms [are] making a lot of money out of fossil fuel companies, and that's part of the reason why it's a small group of firms who are likely to be willing and able to take on climate cases," says Joe Snape, an associate at Leigh Day, which is bringing a case against Shell on behalf of the Ogale and Bille communities in Nigeria.

But what for-profit investors are prepared to fund often differs from what philanthropic groups will back. The landmark RWE case going through the German courts — brought by a Peruvian farmer who alleges that the group contributed to the warming that is melting the glacier above his hometown — might end up being of outsized significance if it ends in a precedent-setting victory. But such actions are by their nature risky and expensive — the RWE case has cost €750,000 so far, funded by donations — and may run for years.

'[We're] watching what's going on . . . Not a lot of litigation has actually been brought that would meet the criteria we need'

Patrick Moloney, chief executive of Litigation Capital Management, says he is "watching what's going on" in the ESG space, but that "not a lot of litigation has actually been brought that would meet the criteria we need".

"We tend to want the legal principles associated with the disputes to be reasonably well settled," he adds.

Lucas Macedo, a senior case manager at Nivalion, says the funder turns down nine out of every 10 cases brought to it, in line with the industry average. "Funders shy away from making new law," he says. "We do not want to be seen as a speculative investor."

At a non-profit like the Good Law Project, the priorities are different. "I could very easily only choose winning cases. We could have a 100 per cent win rate," says Maugham. "But we wouldn't have any impact because we'd be choosing easy, meaningless cases — and that's not the right thing for us to do."

Professional funders need cases with a damages element, even if policy or regulation change might have more of an impact. An example is tobacco, where cigarette makers have paid out billions in damages related to the health impacts of smoking, but the greater impact has come from smoking bans in workplaces and on public transport.

Duncan Hedar, a partner at law firm Lanier, Longstaff, Hedar & Roberts, says the profession "needs to be braver about the type of claims that we are willing to pursue". To really have an impact, he adds, lawyers and funders must "accept that new types of claims are going to have to be brought" and that there will be "more uncertainty about the outcomes of those claims".

Funding such claims will involve attracting "a new breed of investors, who are willing to take these extra risks", according to Robert Hanna, managing director at funder Augusta Ventures. "It's difficult for the corporate world to invest in riskier or test cases."

Chasing green ambulances

Some environmentalists wince at the very idea of professional litigation funding, particularly in cases that involve poor communities seeking redress for pollution by wealthy corporations.

Funders are sometimes branded "ambulance chasers" who exploit a bad situation to turn a quick profit without much regard for the ethics of a case. In the EU, lawmakers concerned with the potential for funders to exploit the model have proposed capping what they can take at 40 per cent of any winnings.

A 2021 research paper prepared for European lawmakers found that if not properly regulated, professional litigation funding "could lead to excessive economic costs and to the multiplication of opportunity claims, problematic claims and so called 'frivolous claims'".

Tensions could also arise given the potentially divergent interests of funders and claimants. Client Earth, one of the most prominent groups filing climate-related claims, does not work with investors in litigation. "This allows us the freedom to focus purely on delivering impact," the group says.

But Justice Michael Lee, who presided over the settlement hearings in the case against PTTEP, says that without Harbour's funding, "some 15,456 Indonesian seaweed farmers would not have had the ability to recover their losses".

Elena D'Alessandro, a law professor at the University of Turin, says if the "only way" to bring big environmental and climate cases is to use funders, and their fees are fair, "then why not?"

Alexander Rhodes, head of the for-profit sustainability arm of the law firm Mishcon de Reya, wants to back "commercially sustainable, large-scale litigation" to increase access to justice.

Lawyers working for free "is not a long-term sustainable model", he says, or one "that will allow us to bring sufficient litigation . . . to hold people to account or change behaviours".

The FT View

FINANCIAL TIMES
'Without fear and without favour'

ft.com/opinion

Ukraine needs long-term security guarantees

Nato should put Kyiv on the road towards membership at a summit next month

The Ukrainian counter-offensive that is showing signs of getting under way will be crucial in shaping the outcome of its conflict with Russia. Even now, though, officials in Kyiv and allied capitals are turning their attention to Ukraine's long-term place in the institutions that underpin Europe's peace and prosperity. President Volodymyr Zelenskyy is pushing for Kyiv to be given a road map for accession to Nato and security guarantees at an alliance summit in Vilnius next month. In a positive shift, France's president Emmanuel Macron signalled broad backing last week. His example ought to persuade others — including the US — to follow suit.

Nato declared at its 2008 Bucharest summit that Ukraine, and Georgia, would become members, but Kyiv's membership bid failed to advance for years afterwards. The resulting ambiguity both created a pretext for Vladimir Putin to invade Ukraine last year — claiming he was responding to the expansion of a hostile alliance — while convincing him, wrongly, that he would meet little western resistance.

Immediate entry into Nato when Ukraine is still at war with Russia is unrealistic. Ideally, the alliance at Vilnius would grant Kyiv a concrete timetable, or "membership action plan", leading to accession when the conflict is over. But, at the very least, the summit should demonstrate a conviction and commitment that Ukraine belongs in Nato, and unambiguously place it on a path of preparation for accession. The large Nato-supplied Ukrainian army that is taking shape is an additional argument for eventual membership.

Unlike in 2008 when the US championed steering Ukraine towards Nato, the Biden administration is cautious. Some European diplomats are optimistic that its objections — and any reservations in Berlin — may ease, as they have towards supplying Kyiv with more lethal weaponry. Intensive diplomacy is needed to secure a deal ahead of Vilnius. This would, no doubt, further antagonise the Kremlin. Yet Putin has long insisted Ukraine's membership was a fait accompli. Nato should be unequivocal that Russia's own aggression has made this outcome unavoidable.

> Putin has insisted the country's accession was a fait accompli. The alliance should be unequivocal that Russia's own aggression has made this outcome unavoidable

Members are unlikely to do more than begin to discuss potential security guarantees for Ukraine at Vilnius. But work on these should form part of preparations to embrace Kyiv — and to bridge any gap between the end of the conflict and the moment Ukraine is ready to join the alliance. While they might not involve a pledge from allies to go to war on its behalf were Ukraine to be attacked again, they would involve commitments to provide Kyiv with weapons, technology and support to deter threats. Macron suggested Ukraine needed "something between the security provided to Israel" and full Nato membership.

Credible guarantees capable of deterring Russia in future could reduce the need for a decisive defeat of Putin, should Kyiv fall short of retaking all territory Russia has seized since 2014, including Crimea. They would provide the confidence and stability needed for the rest of Ukraine to rebuild, recover and attract vital foreign investment.

Ukrainians have displayed extraordinary fortitude in defence of their homeland. They deserve to know that after hostilities are over they will be fully embraced into the European "family" — and that allies will do what is necessary to deter Moscow from again threatening their borders. The EU has made Kyiv an official candidate for membership, and is working on a four-year financing plan worth tens of billions of euros that would put its support for Ukraine on a more predictable long-term footing. Parallel moves are now needed on the military and security front.

Opinion Society

Will the 22ers become a new political generation?

Ewan White

Timothy Garton Ash

Do you think there'll be a generation of 22ers?" a student asked me recently in the German university town of Göttingen. A cohort of Europeans, that is, for whom the full-scale war in Ukraine that began with Russia's invasion in February 2022 shapes the way they think and act politically for the rest of their lives. It's an important question.

Today's Europe has been shaped by four key political generations: the 14ers (with their life-changing youthful experience of the first world war), the 39ers (the second world war), the 68ers (1968, in all its different manifestations) and the 89ers (the fall of the Berlin Wall and the cold war's end).

In each case the formative moment comes early in adult life, so there is a time lag before the cohort affected comes to power. The 68ers such as Germany's Joschka Fischer, the UK's Jack Straw and France's Lionel Jospin played a leading role in European politics well into the 2000s. The 89ers such as Czech prime minister Petr Fiala and German economy minister Robert Habeck are now at the helm.

> Experiences in 1989 were more intense in eastern Europe, yet they shaped an entire cohort of leaders

A few years ago, our Europe's Stories project at Oxford university investigated formative moments for today's young Europeans. Then, there seemed to be no single moment comparable with 1989, 1968 or the two world wars. Instead, we found a shared experience, that of freedom of movement across Europe, and a dominant concern: climate change. There were, however, some specific moments for geographical subgroups: the wars in former Yugoslavia for south-east Europeans; the eurozone crisis for young Greeks, Spaniards and Portuguese; Brexit for Britons and the Irish.

Surely, though, Putin's full-scale invasion of Ukraine must galvanise a new pan-European political generation. If the largest war in Europe since 1945 doesn't do it, then what?

People often respond enthusiastically to this idea. I, too, would love to see a new political generation with a sense of shared purpose to drive the European project forward. But neither opinion polls nor my conversations with young Europeans offer any strong evidence that it yet exists.

In Ukraine, I have met many young people for whom the war obviously will be the defining moment of their political lives: a cross between 1939 and 1989. In Poland and Estonia, I have seen a similar effect, although less strongly. It is far less visible, however, in western Europe. Here there is huge sympathy for Ukraine, enhanced by personal encounters with Ukrainian refugees, but the war has become one news story among many.

There are large differences in attitude even between those central and east European countries closer to the war zone. In recent polling done for the Globsec think-tank, roughly a third of Bulgarian and Slovak respondents say the west is primarily responsible for the war in Ukraine. A shocking 50 per cent of Slovaks agree with the statement that "the US poses a security threat to my country".

The generational breakdown is even less clear cut. In-depth analysis of polling done for our research project and the European Council on Foreign Relations shows that just 46 per cent of 18- to 29-year-olds describe Russia as an adversary, compared with more than 60 per cent of those aged over 60.

In some of the 10 European countries we polled, young people seemed pro-western, in others they were more critical of the west. Only in support of Ukraine's prospective EU membership are young Europeans generally more positive than the old. Globsec's analysts tell me they find an equally chequered pattern.

Moreover, these polls don't establish the relative salience of the issue. My conversations with young Europeans suggest that subjects such as climate change, socio-economic inequality and what they see as their blighted life chances are at least as important to them as this war.

Does this mean the 22ers are just a vape-dream of old 89ers? Or, at best, another geographical subgroup? Perhaps, but not necessarily. For obvious reasons, 1989 was experienced more intensely in eastern than in western Europe, yet it shaped an entire cohort of future leaders. The exhilarating forward march of liberty that followed the fall of the Berlin Wall gave them a lifetime commitment to advancing the goal of a "Europe whole and free".

Political generations are not born but made. So the question must really be put back to that Göttingen student and her peers. Are you going to create a political class of 22ers, combining the defence of freedom and restoration of peace in Europe with your own generation's concerns such as intersectional equality and a green energy transition? Old 89ers and 68ers certainly hope so; but it's up to you.

The writer is author of 'Homelands: A Personal History of Europe'

Letters

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Comparing pet to jet pollution is nonsensical

Writing as both a dog owner and the head of a global animal health association, I was aghast to see a luxury jet executive minimise his sector's environmental responsibilities at the expense of pets on the front page of the Financial Times ("It's a dog's life for luxury travellers as private jet executive insists pets pollute", Report, May 24).

Luxury travel for the world's elite is hardly comparable in any sense — let alone in its sustainability — to the pollution caused by dogs, cats and other companion animals, which provide immeasurable benefits for as much as half of the world's population. Comparing jets to pets is simply wrong.

From encouraging regular exercise to providing companionship and mental and physical health benefits, pets enrich the lives of a growing number of people. Pet ownership has been associated with lower blood pressure and risk of heart attacks, increased physical activity and psychological wellbeing — benefits that are present regardless of socio-economic status.

One study found 60 per cent of doctors have even recommended their patients adopt pets thanks to the health benefits they provide — a recommendation few doctors have likely ever made for private jet travel.

Carel du Marchie Sarvaas
Brussels, Belgium

US intervention was Credit Suisse's dagger to the heart

Whereas Robin Harding ("Scary reality of the Credit Suisse horror story", Opinion, May 31) makes a valid point about how depositors at well-capitalised banks are protected, the story behind Credit Suisse's demise is more complicated and, in many ways, not comparable to other large banks.

In fact, what the Credit Suisse collapse demonstrates is that any amount of capital might not have been enough to save it. The bank had many problems, but three which were critical and should have been mentioned in Harding's opinion article.

First, Credit Suisse suffered from bad management (and possibly lapses in trustworthiness), from the supervisory board down, for many years. This was a locally acknowledged risk affecting the institution. Second, the Swiss regulatory authorities were too lax with the bank: they highlighted weaknesses but the follow-up and eventual penalties for non-implementation of remedial actions were weak or non-existent. And third, US policymakers and regulators had a hand in the demise of the bank in two ways. First, in disregarding Swiss neutrality they imposed sanctions on business with Chinese clients, who were the main source of deposit withdrawals initially. Second, by announcing an investigation of the bank's prior year financial statements a year too late, ie when the new management team was already struggling, the announcement served as a dagger to the heart.

KC Korfmann
Herrliberg, Switzerland

Bagehot had much to say on the caution of bankers

The run on Credit Suisse "has got every thoughtful banker and regulator in the world looking over their shoulder", writes Robin Harding (Opinion, May 31).

Congratulations to them! They have understood the fundamental nature of the business they're in. Walter Bagehot, the great 19th-century economist and journalist, had already explained this in *Lombard Street* in 1873: "A banker, dealing with the money of others, and money payable on demand, must be always, as it were, looking behind him and seeing that he has reserve enough in store if payment should be asked for." Bagehot adds: "Adventure is the life of commerce, but caution is the life of banking."

Alex J Pollock
Senior Fellow, Mises Institute, AL, US

Kyiv should test western support with bond issue

In "Ukraine's rapid reconstruction will be in the EU's own interest" (Opinion, June 5), Martin Sandbu writes of the urgent need to plan and finance the rebuilding of Ukraine, to enable the country to be better, stronger and

greener. He wisely describes the benefits, stating "economic predictability, meanwhile, requires support ranging from war insurance to security guarantees and boosting Ukrainian air power".

To prod the west's leaders into action, Ukraine should immediately float small denomination reconstruction bonds on multiple exchanges to allow individual investors (voters) to invest and show their moral support. Countries that do not participate will have to reckon with the moral and economic consequences, both at home and abroad.

John Paris
Atlanta, GA, US

The milestones on the road to decarbonisation

Camilla Palladino is right to say that UK businesses need a solution to exorbitant energy costs (Opinion, May 31). But they need to be mindful of what is required to achieve net zero greenhouse gas emissions by 2050.

For this vital objective to be met, the International Energy Agency has concluded that all new oil exploration will have to have stopped, with nations switching entirely away from fossil fuels. It identifies seven "key pillars of decarbonisation" with milestones that span different sectors. These pillars are, in order of precedence, energy efficiency; behavioural changes; electrification; renewables; hydrogen and hydrogen-based fuels; bioenergy and carbon capture and storage.

Palladino concludes her survey of energy supply options with the blunt reminder "that reducing energy consumption should also be part of the answer". Indeed, it should. The IEA emphasises that business energy productivity measures need to be "front-loaded", intending them to play the biggest role over the next decade. Sadly, that is a priority yet to be enunciated by the present UK government.

Andrew Warren
Chair, British Energy Efficiency Federation, Cambridge, UK

Deliberative democracy keeps politicians grounded

I wholly agree with Martin Wolf that citizens' juries and citizens' assemblies are a fundamental cornerstone of democracy and would go a step further and say their potential, in informing politics and policy, remains underutilised (Opinion, May 29).

After nearly a decade's experience designing and running deliberative democracy initiatives, and in particular the experience of running citizen juries during difficult moments in the pandemic, I witnessed first hand how citizens worldwide can articulate their values, and engage in respectful and meaningful dialogue with politicians.

They have done this with great success on matters as complex as the pandemic response, artificial intelligence, economics, technology, justice and rule of law, and climate science.

Electoral democracy benefits from deliberative democracy by ensuring politicians and policymakers remain in touch with voters' preferences, needs and concerns. The benefit goes the other way as well — citizens can learn about lived experiences different to theirs, which is more important in countries that are increasingly diverse, and appreciate the difficult choices and challenges most policymakers are confronted with.

Last but not least, the insights, views and perspectives engaged with can help us develop more transparent, trustworthy and responsive evidence — creating better research outcomes in the process. Above all, deliberative democracy can help us recreate spaces for the cultivation of a common citizenship — something we have lost in a world where we are encouraged to think as individuals.

Reema Patel
Head of Deliberative Engagement, Ipsos London E1, UK

Irish assembly was fine, as long as it backed abortion

Martin Wolf makes the case for citizens' juries, which "would be more representative than professional politicians can ever be" (Opinion, May 29).

He cites the example of the citizens' assembly that advised the Irish parliament to repeal the ban on abortion.

How 100 people assembled by a polling company are more representative than 160 politicians elected by the whole population he does not say.

The Irish citizens' assembly also considered fixed-term parliaments, referendums, population ageing and climate change.

Since they only gave the "right" answer on abortion and climate change their other recommendations were ignored.

Blair Noonan
Dublin, Ireland

Ageing, the workplace and that Joan Collins quip

Pilita Clark ("What we get wrong about ageing and work", Work & Careers, May 29) rightly says that people in their late sixties and seventies are more present in the workforce in 2023. But there are other reasons why older people want to stay in the workforce.

Clark focused on mental agility, but I would like to add a few more points. First, older people are in better health today compared with 50 years ago. Therefore, life expectancy has improved and as people live longer they have to extend their working lives due to the current inflation rate and frequent recessions.

Second, in years past, work was more physical, before machines took over many tasks. Education levels have increased and people who are more educated are more likely to work at any age — especially after the pandemic, which ushered in homeworking.

Third, older people are more aware of their mental and physical health. The problem-solving skills and social engagement developed in work teams result in a sharper mind, and increased recreation and exercise in modern societies also boosts health. Compared with earlier generations, today's middle-aged population has more work experience, depth of knowledge, skills and ideas based on more varied life experiences.

Lastly, working past retirement leads to better health, longevity and a reduced risk of dementia and heart attacks. Therefore, as your columnist wrote: "The first thing to do is figure out the difference between perception and reality." Or as the actress Joan Collins said: "Age is just a number."

Aisha Amjad
Dubai, UAE

Wessex Water is example of a layered family tree

Your reporter, Gill Plimmer, rightly points to the highly layered corporate structures of so-called "UK" water companies, and their dealings being outside the scope of Ofwat supervision (Report, May 9). Wessex Water is a prime example. If the wholly owned subsidiary is Wessex Water Services, you have to climb the tree to the great great-great-grandparent YTL Power International Berhad, which is incorporated in Malaysia and quoted on that country's stock exchange.

This entity is in turn owned 55 per cent by YTL Corporation Berhad; the other 45 per cent presumably in private equity hands.

More troubling is that while subsidiary, parent and grandparent — YTL Utilities UK — are registered in the UK, its parent — YTL Utilities Holdings (purpose: prospector for global M&A in utilities) — is registered in the Cayman Islands.

One wonders why that might be. It is an interesting digression to compare this corporate structure to a human family tree. Such a dynasty would take more than 170 years to develop. This highly engineered corporate family tree has evolved in just 32 years.

Steve Priddy
Blandford Forum, Dorset, UK

Corrections

- Republic, the UK anti-monarchist group, has seven employees, not one as wrongly stated in an article on June 5.
- A quote from cryptocurrency trading venue GFO-X in an article about crypto trading addiction on June 3 was incorrectly attributed to crypto broker B2C2.

Opinion

The digital nomad is going corporate

EMPLOYMENT
Sarah O'Connor

The romantic dream of becoming a "digital nomad" is almost as old as the internet itself. Steven K Roberts — a pioneer who rode across the US on a computerised bicycle more than 30 years ago — wrote back in 1994 about creating a "Virtual Technomadic Flotilla . . . of travellers all over the world" on the basis that "physical location becomes irrelevant once you move the essence of your life to the vapours of the net".

But it wasn't until Covid-19 that the term really took off. The pandemic created the perfect circumstances: workers wanted change after the boredom of lockdowns; companies had realised they could trust staff to work remotely; and tourist-dependent countries were desperate for visitors. Suddenly it seemed possible for any white-collar worker to work wherever they wanted — not just footloose freelancers, some of whom did already, but ordinary employees too. Scores of countries launched "digital nomad visas" to formalise and capitalise on the trend.

Alas for the romantics, that dream of freedom has collided with the reality of tax, immigration, cyber security and labour laws. Companies haven't killed off digital nomadism for the masses, but they are wresting it into a less risky and more controlled form. In other words, digital nomadism is being corporatised.

Companies that want to keep their staff happy have "started thinking about how they can bring this into their employee value proposition — they want to control it, but they want their employee base to feel they're getting something back," says Claire Pepper at Vialto Partners, which advises companies on cross-border mobility issues such as immigration and tax.

That generally means telling employees they can work from an international location temporarily, but with limits on where and for how long. Pepper says companies will often "redline some countries that are high-risk for cyber security [or] corporation tax" and "have a shortlist of favourable locations". The most common permitted timeframe is 20 to 30 days — the safest way to avoid tax problems. When Vialto surveyed over 800 companies about their remote work policies last year, only 7 per cent supported it for more than 60 days.

> A romantic dream of freedom has collided with the reality of tax and immigration laws

Some have gone a step further and set up arrangements with specific locations. Technology company Cisco recently sent 17 employees to Rhodes for three months in a collaboration with the local government there. The staff worked remotely from the island but also took part in volunteer activities — an attempt to demonstrate that digital nomads can benefit the host community and don't have to be disconnected and aloof.

It is a reasonable worry. Already there are rumblings of anger from places such as Mexico City and the Portuguese island of Madeira, where digital nomads have been blamed for pushing up property prices and gravitating towards "Instagrammable" cafés with fast WiFi and fancy coffee, rather than getting to know the locals. The OECD, meanwhile, wrote last year that the "benefit for the host country brought by digital nomads remains unclear". In most countries, digital nomads would only become tax residents after 183 days, the OECD pointed out, and they're not usually allowed to participate in the local labour market, which means their main contribution is just consumption.

Gianpaolo Barozzi, an HR director at Cisco, told me that "the typical digital nomad is the freelancer, the website developer who can develop from anywhere, but what we are experimenting with — which is much more powerful for the place hosting — is these corporate digital nomads . . . We didn't send three people, we sent 17, so there is a certain critical mass. Those people have a certain common identity."

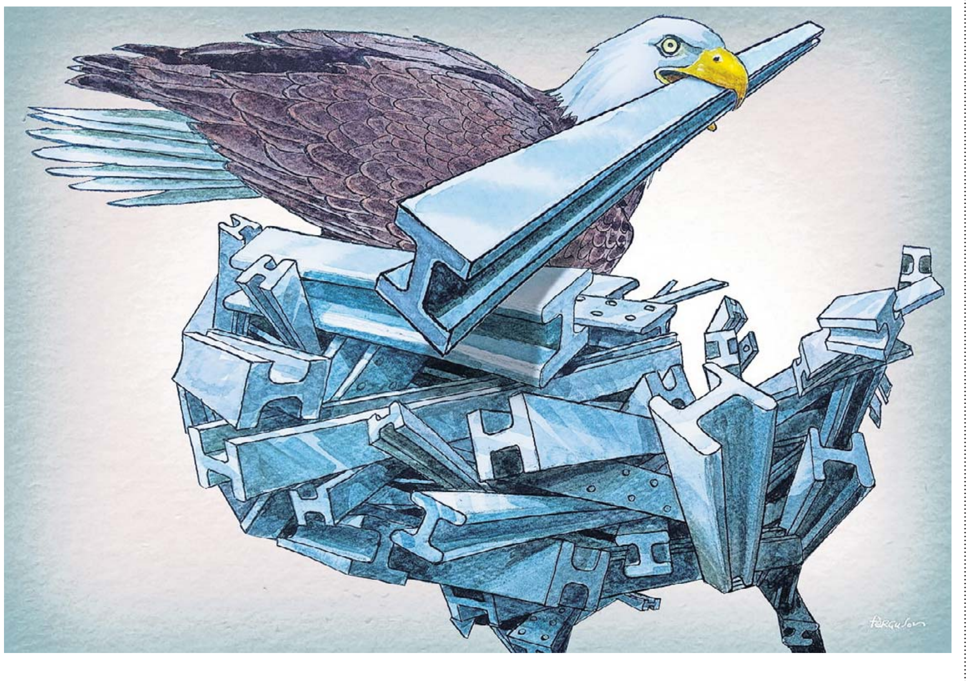
Cisco has a vested interest in the continued popularity of remote work, of course, but it seems nonetheless like a worthy and interesting experiment. More broadly, the fact that companies are allowing staff to work somewhere else for a short while is a good thing in my book. I'm not sure you can really call it "nomadism" though.

In contrast, I spoke last week to Lucy Rogers, a scientist and engineer who is writing a book. Last year, she thought: "If I'm working from my back bedroom, why not do it from anywhere?" She packed her stuff into storage, rented out her house for a year, and went to Chile where she stayed with a local family and did Spanish lessons. Now she is on an island in Thailand.

"I'm going to torment you," she said mischievously, before turning around her laptop so I could see her view — a cerulean sea and a swaying hammock. Call me an old romantic, but that's what I call living the true digital nomad dream.

sarah.oconnor@ft.com

How America is reshaping the world economy



GLOBAL AFFAIRS
Gideon Rachman

An unheralded revolution has taken place in America's approach to international economics. As the new thinking emerges, it is reshaping the global economy and the western alliance.

The approach was set out most clearly in a speech by Jake Sullivan on April 27. The fact that Sullivan is President Joe Biden's national security adviser is a clue. Strategic rivalry with China is central to the new thinking.

But Sullivan's speech ranged well beyond geopolitics. It was a highly ambitious effort to pull together the domestic and international goals of the Biden administration — and turn them into a coherent whole. The US intends to use a new strategic industrial policy to simultaneously revitalise the American middle-class and US democracy, while combating climate change and establishing a lasting technological lead over China.

Many of America's allies fear that the bit that slipped off the table was the interests of foreigners. They worry, in particular, that subsidies worth hundreds of billions of dollars to American industry and clean technology, set out in the Inflation Reduction Act, will come at the expense of producers and workers in Europe and Asia. Some also fear that pressure to "de-risk" trade with China will severely disrupt international trade. And many are concerned that US demands for reform of the World Trade Organization will end up crippling the guardian of free trade.

US officials bristle at these suggestions — pointing to Sullivan's repeated references to the interests of western allies and the global south in his speech. They argue that America is at last taking the lead in the battle against climate change — and that this should be welcomed around the world.

Sullivan is also at pains to emphasise that "de-risking" does not mean cutting China out of global supply chains. Speaking to me last week, he said: "We're trying to build a world in which there is more than one source for critical products . . . We're not saying that China should not build iPhones or produce solar panels, but that other countries should too."

Sullivan is keen to persuade America's friends that this "new Washington consensus" can work for everyone. He thinks the US made substantial progress at the recent G7 meeting in Hiroshima — arguing that the summit achieved a "really significant step forward". In particular, he believes America's allies are now reassured about its plans to subsidise the green transition and have embraced a similar approach. The drive for clean energy, he argues, is "going to be more of a source of co-operation than friction going forward".

There clearly was a significant convergence of language and approach in the G7 communiqué on issues ranging from de-risking to supply chains.

But, talking to American allies — both in the G7 and outside it — it is evident that there is still uneasiness about US policy. One repeated concern is that America will continue to roll out measures aimed at China that its "allies and partners" will then come under huge pressure to adopt.

Lawrence Wong, the deputy prime minister of Singapore — America's closest ally in south-east Asia — warned recently that: "If de-risking is taken too far . . . we will end up with a more fragmented and decoupled world economy." In Europe, there is still concern that a new global economic architecture designed in Washington will inevitably favour US producers and workers.

> The EU has less financial firepower than the US, so could be blown out of the water in a subsidy race

Different US allies are responding in different ways. There has always been a lobby within the EU that favours the creation of European champions, through an industrial policy. That lobby has been empowered by America's shift towards industrial policy. Last December, the EU committed itself to "an ambitious European industrial policy" for green and digital transitions.

But there are also Europeans who are concerned that if the EU goes down the subsidy route, it will undermine its own single market. The EU has much less financial firepower than the US government, so could be blown out of the water in a subsidy race.

American allies outside the EU — such as Britain, Japan and Canada — have a separate concern. They worry that if negotiations between the US and the EU become the main way of establishing a consensus in the "global west", those outside the two main blocs will be disadvantaged. As one diplomat puts it, the EU and the US are "like two giant pandas". They mate very rarely. But, if they do, it threatens to be an exclusive relationship (although, technically speaking, pandas are not monogamous).

In response to the panda problem, the Canadians are examining giving the G7 a formal role in proposing and crafting the new rules for the global economy.

The British are intrigued by Sullivan's talk of "innovative new international economic partnerships". On his trip to Washington this week, Rishi Sunak, Britain's prime minister, will explore areas where the UK might strike up that kind of partnership with the US — including defence technology and the regulation of artificial intelligence.

Hovering over all these economic discussions is a cloud of geopolitical fear. Russia is waging war on the borders of the EU. The Japanese fear China. All sides look to Uncle Sam for military protection. America's allies still have their reservations about the Sullivan doctrine. But this is no time to get into an argument with the US.

gideon.rachman@ft.com

Outcome of the vote on CBI's future is not a given

Brian McBride

For almost 60 years, the CBI has been the recognised voice of business in the UK, representing the common interests of enterprises across all sectors of industry and all regions and nations of the country. We have been at the heart of political and economic decisions and have fought tooth and nail for positive change on many fronts.

In the past few months, however, our position has been put into jeopardy following some disturbing allegations. Events have left us chastened, and members, the media and political stakeholders have all rightly questioned our culture, purpose and relevance.

In response, we have gone back to basics. Over the past 12 weeks, we suspended our policy work and undertook one of the biggest member listening exercises in the CBI's history. We reflected on our strengths and faults, worked with external experts and put together a map for the road ahead.

Today is the culmination of that hard work. During our extraordinary general meeting, members will decide whether they support our plan for a renewed CBI or not. Succeed and we can make a leaner, more accountable and inclusive organisation, fail and we lose precious time to fight for our members and a stronger economy and society.

To members, as well as the wider business community, I want to say that the outcome of today's vote isn't a given. We don't take the result for granted and we need you to support our plan — not just to get the organisation back on its feet but to build on our strengths, overhaul our weaknesses and create a CBI that works better for our staff, our members and firms across all sectors, regions and nations.

I know that this is something many of our members want to see. During these difficult months, I have appreciated their help, especially those who shared in detail the cultural journeys that their own organisations have had to undertake. This is a road that many of you can walk with us.

However, this all starts with our plan. Published last week, the prospectus is a comprehensive and ambitious document that draws on the independent insights of business ethics consultancy Principia's work with CBI staff. It outlines the concrete changes that we've already implemented, alongside how we can go even further in the future.

> We need support for plans to overhaul our weaknesses and create an organisation that works better

We have created a chief people officer to sit on our executive committee and ensure people issues are front and centre of our daily operations. By the EGM we will also have started implementing — or completed — the 34 recommendations outlined in the independent Fox Williams report on this crisis. The prospectus also outlines changes to our governance structures to make us more accountable to members — such as creating a people and culture subcommittee, refreshing our board and accelerating the search for my successor.

A vote in favour of the prospectus won't solve our problems overnight. But it would give us the tools we need to fix our culture long term and the backing to do what we do best: fight on behalf of business across the country.

With a general election a year away, it is crucial that we get back to that important policy and lobbying work. Businesses need a strong, collective, national voice to fight for UK-wide issues such as higher economic growth, lower inflation and a smooth transition to net zero. While trade associations and other business groups do a great and important job in representing their sectors and their members, no one else has the breadth and depth of economic and political expertise to fulfil this role. There is a reason why every major economy in the world has a CBI equivalent.

The CBI has repeatedly delivered real change for business and the UK for nearly 60 years. Acting as a collective voice, we secured the Energy Bill Relief Scheme, to help the firms who have been hit hardest by energy price rises. In the Spring Budget this year, we secured a vital investment replacement for the "super-deduction" tax break and the biggest expansion in childcare support in decades — which is expected to help over 75,000 parents back into work.

During the financial crisis, our breadth and scale allowed us to bring SMEs into detailed discussions with the Treasury about bank ringfencing debates. In the pandemic, we fought for one of the most ambitious economic rescue packages in the world.

Time and time again, we have been there to fight for business and our members. We have worked with governments, regardless of party, and persuaded politicians through evidence to implement policies that help the economy and improve the lives of households. With today's vote, we have a chance to regain our voice on the serious economic challenges the UK faces.

The writer is CBI President

Afghanistan's food crisis could have been avoided

Abdul Saboor Rahmany

As an Afghan citizen who has been living in the US since 2021, I have watched with dismay as the situation in my country deteriorates. The nation's growing hunger is particularly distressing — Afghanistan is on the brink of famine, with 9 out of 10 families unable to afford enough food.

The lead-up to this crisis has been long and complex. But as the country's former director of agricultural extension, tasked with modernising its subsistence farming system, I can't help but look back at all the missed opportunities, especially when it comes to food.

The US spent two decades in Afghanistan and yet there are many ways in which America, its allies and aid groups could have better supported agricultural growth. After the Taliban fell in 2001, agriculture was not prioritised, even though farming forms the backbone of Afghanistan's economy. Underinvestment in the sector, compared with spending on the military, infrastructure, and others, held back progress, especially in the first decade of the US occupation.

In addition, not enough development projects focused on wheat, Afghanistan's staple food crop. Afghan wheat yields are considerably lower than the global average, contributing to chronic hunger. Conflict drives low productivity, but even in times of relative stability farmers in the country lack high-quality fertiliser, improved seeds and training.

America's policy against helping nations develop crops that could compete against US exports may have contributed. This policy was modified in 2011 but, in my experience, it left a legacy of bias against staple Afghan crops.

> Conflict drives low productivity but even in stable times, farmers lack fertiliser, seeds and training

Agricultural projects in Afghanistan have also been plagued by other inefficiencies stemming from state corruption, miscommunication and poor understanding of local needs. During my years with the country's ministry of agriculture and the provincial government in Herat, there was no meaningful data exchange or co-ordination between international groups and the government. This led to low-impact projects while important needs, such as quality controls for fertilisers, went unmet.

Hunger forced many Afghan farmers to turn to more profitable endeavours. In Herat, I saw the Taliban's recruitment drive in rural areas, where fighting paid more than farming. Some farmers also resorted to growing opium poppies, which fuel the illegal drug trade.

Today, with the Taliban in control, applying these lessons is extremely challenging. But they also affect other fragile states. I recently co-authored a report, commissioned by the Farm Journal Foundation, which found that increased spending on agricultural research and development would mitigate geopolitical risks such as extremism and poverty in poor countries.

The US and others must prioritise agricultural development in their foreign policy agendas. Support for developing countries needs to go beyond emergency food aid. In particular, America's Feed the Future initiative requires continued robust funding to address the root causes of hunger and malnutrition.

America and its allies should also increase financial support for national agricultural research and extension systems in developing countries and scientific organisations such as CGIAR. This would help countries develop tailored solutions for their own challenges, such as seeds bred for specific climates and soils. It would also enable local farmers to access training on irrigation methods and planting.

Agriculture-led growth is one of the most effective ways to lift people out of hunger and poverty. Conflict is a major driver of hunger and Afghanistan is not the only country struggling with these challenges. Increasing support for agricultural research and development is vital for preventing food crises and promoting security on a global level.

The writer is the former general director of agricultural extension and development in Afghanistan

Lex.

Twitter: @FTLex

AI: open source means open question

In the 1960s, a scientist at the Massachusetts Institute of Technology created a natural language processing program that could mimic human conversation. Named ELIZA, it was an early iteration of the chatbots now running rampant across tech. ELIZA was not a profitable endeavour. Neither are the current versions.

There are clear transformational possibilities in generative artificial intelligence. Chatbots developed using large language models (LLMs) could allow seamless communications between humans and computers.

The question for investors is whether proprietary LLMs can reliably make money for Big Tech. Open source LLMs could be a cheaper alternative for businesses developing bespoke applications. LLMs have no formal definition. They are described as programs trained on huge volumes of data available online and able to predict the next word in a sentence.

As computing power has risen, the AIs have been able to perform unsupervised learning from unstructured data. LLM complexity has leapt forward. In 2020, OpenAI released its GPT-3. This LLM had 175bn parameters. The more parameters, the more data an LLM can generate.

Google's PaLM, which powers its Bard chatbot, has 540bn. OpenAI's latest version of its LLM is GPT-4. The company has not specified the number of parameters. Pundits believe 100tn would be an accurate figure.

The processing power required for such LLMs is vast. The rule of thumb is the larger the data set used, the better the performance. This, in theory, confines LLMs to a small number of well-financed companies.

But niche applications can function using smaller data sets. BloombergGPT, which is intended to aid analysis of information on Bloomberg data terminals, has 50bn parameters. Toronto-based start-up Cohere AI's base model LLM has 52bn parameters.

Of more concern for companies such as Google are open source LLMs. Meta gave away its system, LLaMA, as open-source software that can be copied and used by anyone. Smaller LLMs can be built on top of it.

If enterprise users decide there is little difference between proprietary and open-source LLMs when developing their own AI services, Google and OpenAI would lose their early mover advantage before they have a chance to break even.

Bank runs/regulation: hammer time

Financial stability is a confidence trick. Bank runs in the US and Europe showed us that complicated safeguards have little ability to forestall panic.

That will not stop regulators from adding bells and whistles to their regimes after the event. The Bank of England plans to bolster protection, probably by increasing deposit insurance. Big US banks may face higher capital requirements.

Silicon Valley Bank, First Republic Bank and Signature Bank in the US did not fail owing to inadequate capital or deposit insurance. Deficiencies in either area were not the reason Credit Suisse teetered on the brink.

A common problem for these lenders was their deposit bases. For example, SVB's customers were a concentrated group of interconnected tech entrepreneurs who lost their nerve after a bond deal implied the lender's assets were weaker than thought.

Deposit insurance is a compromise. It fosters confidence among the poor and modestly well off. It does so at the cost of greater moral hazard — a fancy term for the incentive for risky behaviour that comes with a safety net.

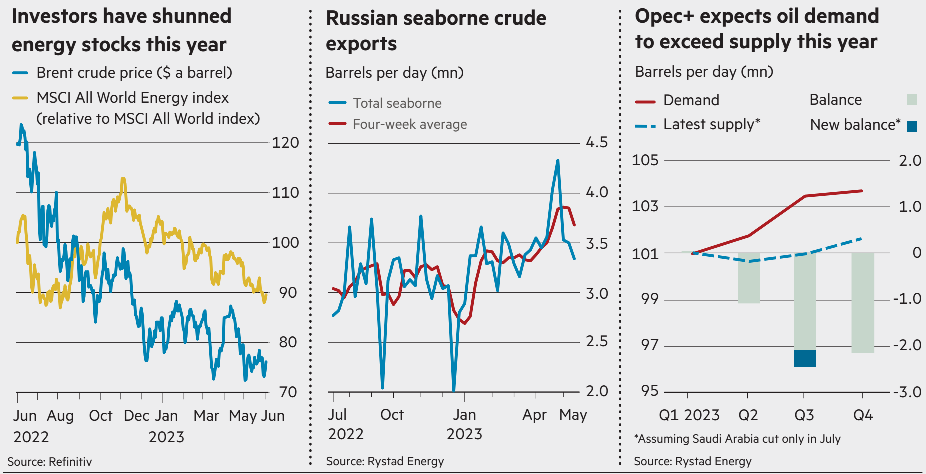
There is no evidence that the UK's £85,000 limit on deposit insurance per depositor, per bank, is too low. Most people keep a few thousand pounds in their current account and the average savings account balance is under £10,000. Nor is there any reason to believe that lifting the threshold to, say, £100,000 would make any difference to sentiment in a rout.

Higher capital requirements for big US banks seem equally superfluous. A 20 per cent rise, as reportedly proposed, would take JPMorgan from 14.5 times levered to 12 times. Credit Suisse was 13 times levered in the first quarter of this year. But higher capital buffers would suppress returns, raise costs and probably restrict lending.

If rules need to be tightened, then limiting deposit concentration should be a start. Rules currently resemble the proverbial man with a hammer who sees every problem as a nail.

Opec+: home on the range

Investors have been ditching oil stocks after discounting a strong rebound in crude prices. Opec+ cannot agree on further cuts to output because Russia continues to raise exports. Another reason is that some members expect demand to outpace supply anyway later this year.



Opec+ looks more like a minus for Saudi Arabia. The oil cartel is doing nothing to help the Gulf state lift oil prices. Blame the export surge from newcomer Russia.

Sunday's meeting of the expanded cartel went badly.

Opec+ members such as Nigeria and Angola balked at a proposal to cut output quotas for the rest of 2023.

That forced Saudi Arabia's energy minister, Prince Abdulaziz bin Salman, to propose a Saudi-only 1mn-barrel daily cut for July alone.

He threatened to extend the cut, but bulls had hoped for tougher action. Brent crude accordingly rose just 1.5 per cent yesterday.

Prices have slipped 9 per cent to $77 per barrel this year. Prince Abdulaziz bristles at oil traders' unwillingness to see the same positive fundamentals he does.

Demand should outpace supply for the rest of this year, he says.

Most oil strategists agree with him, but they do not run trading desks. The post-lockdown pick-up in Chinese oil demand has been weaker than anticipated.

Meanwhile, cash-strapped Russia is selling as much oil as it can. Since G7 and EU sanctions began, Russia's seaborne crude exports have jumped a fifth, according to Rystad Energy.

No wonder some Opec+ members will not play ball with Saudi Arabia.

Russian crude trades $20 below international benchmark prices.

Friendly refiners in countries such as India and China happily slurp it up. About 60 per cent of Russian crude lands in both places, says consultancy Bruegel.

Equity investors are avoiding oil stocks. Despite hefty payouts, the shares of majors such as ExxonMobil and BP have gone nowhere for the past year.

The MSCI All-country energy index has trailed the broader All-country benchmark since October, well after crude's value peaked last spring.

Russia needs export income to pay for its war. All things being equal, oil prices will remain rangebound.

To be taken seriously, Prince Abdulaziz will have to back up his threat with action at the next Opec+ meeting in November.

Viaplay: noir draws a blank

Nordic crime dramas are bleak but sophisticated, often with surprising plot twists. A profit warning yesterday from Swedish streaming group Viaplay felt more like a Hollywood slasher movie. Viaplay cut its short-term profit outlook, replaced its chief executive and abandoned its long-term guidance.

Spun out of Swedish media group MTG in 2019, Viaplay is a minnow with revenues of SKr15.7bn ($1.4bn) in 2022 compared with $31.6bn at Netflix. The Scandi group tried to persuade viewers outside its core Nordic market of the worth of its added streaming choices.

Viaplay uniquely offers original Scandinavian crime series. It also holds rights to stream sports, including Formula One and Premier League football in certain countries.

A rapid expansion since 2020 was costly, adding operations in Poland, the UK, the US and Canada among other places. Losses at the international division rose from SKr505mn in 2021 to SKr1.4bn in 2022. This dwarfed the SKr1bn of operating profit from the core Nordic business last year.

Viaplay said yesterday that losses at its international unit could widen this year to SKr1.5bn compared with a previously forecast loss of SKr1bn to SKr1.1bn. It had that hoped its offering would prove "very resilient" to wider problems in the streaming market. Not so. Bigger rivals have reported consumers dropping one or more service. Yesterday, it too warned of lower subscriber demand.

A downturn in the Scandinavian advertising market has added to its woes. Viaplay also blamed a "slower delivery" of cost-saving programmes. Then again, new chief Jørgen Madsen Lindemann formerly ran MTG. He will know the streaming group well and which cost savings could be stepped up.

At under 1 times forward revenues, compared with Netflix at more than 4 times, Viaplay might look like a cheap bet on European streaming services. But the grim conclusion of this Scandi noir drama is that its service is too specialised to have wide appeal.

Commercial real estate: pulse detected

US banks are facing a tricky dilemma when it comes to commercial real estate. They want to reduce their exposure to this $5.6tn market. But they need interest from high-yield loans to finance the generous deposit rates required to attract savers.

Property values have been falling, depressing landlords' equity and their willingness to service debt. Recent high-profile defaults in the US have involved the likes of Pimco's Columbia Property Trust and a subsidiary of Brookfield Asset Management.

Funding costs of US banks, especially smaller ones, have risen after the March crisis. To keep depositors from fleeing, many are paying higher deposit rates. Others have turned to pricey short-term borrowings from the Federal Home Loan Banks system.

Cumulative interest-bearing deposit betas, which measures the share of rate hikes passed on to depositors, rose 8 percentage points to 34 per cent between the fourth and first quarter, according to Morgan Stanley. Expect the figure to increase further this year.

One way banks can offset higher funding costs is to make more loans and charge more for them. There is plenty of demand in the CRE market. Some $730bn of CRE loans are set to mature in 2023, Moody's says. Most were originated a decade ago. Banks now have the opportunity to refinance these borrowers at higher rates.

No bank wants to be seen as chasing revenue growth at the expense of credit quality. Office developers are the riskiest borrowers. But these make up just a quarter of the CRE loans due for refinancing this year. Apartment buildings and storage facilities, which have proved more resilient than offices, account for a bigger slice.

Overall, net charge-offs for CRE loans (excluding farmland) held by commercial banks remain low, at 0.07 per cent, compared with more than 3 per cent in 2009, according to FDIC.

For banks willing to separate the wheat from the chaff, CRE may not be such a bad place after all.

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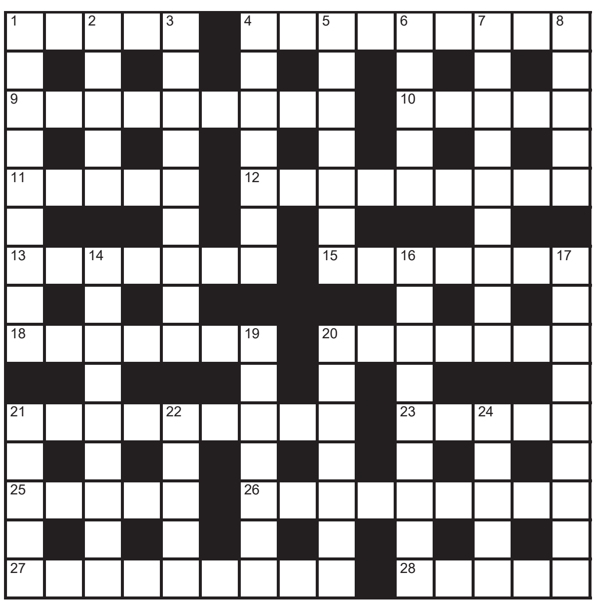
CROSSWORD

No 17,435 Set by BOBCAT



ACROSS

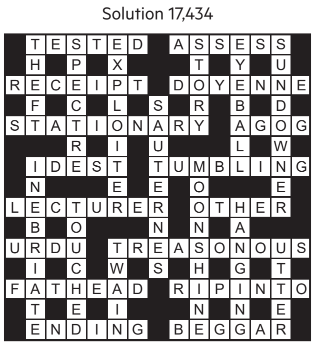
1 Butterfly effect of minute intervening in dormant state (5)
4 Something boring on the cards for punishment (4-5)
9 Long-term careers in supportive surroundings (9)
10 One held in honour by parish's leading insiders? (5)
11 Reduce student support (5)
12 For a dare, Miss Gwyn turned over, assuming king's role in charge (9)
13 One in temporary accommodation? No — at least two (7)
15 Ascetic revolutionary rebuffed Roman force at opening of hostilities (7)
18 Black sheep's stalling engines (7)
20 Pinches iron to replace odd bits of lead in posts (7)
21 Bighead achieving fame (9)
23 Unit of resistance introduced by article on origin of magnetism (5)
25 Symbol of note embodied by cat (5)
26 Faceless gnomes fail to develop tax haven (4,2,3)
27 Poor writer given zero points (9)
28 Cheeky twit representing Surrey's inhabitants (5)

DOWN

1 One gathering soldiers after prayer (9)
2 Clumsy players could use these to keep their hands in (5)
3 A&E to admit man beaten up with club. I'll deliver him (9)
4 One of the Trumps entertained by friends in big houses (7)
5 Perhaps Jack's making a case for just excluding starter and dessert? (7)
6 Has fear of him died down? Evidently not (5)
7 Current new money given without restrictions provides stimulus (9)
8 Abundant drink — "Bottom's up!" (5)
14 Corrupt mountebankery could be represented as okay here (6,3)
16 Something more than kissing cousins? (9)
17 Rhino intended to disable trap? (4,5)
19 Lister organised introduction of effective antiseptic (7)
20 50% of European capital maintained by French article to be pounds (7)
21 Retracted option to sell after discharging Greece's standing order (3,2)
22 *Times* employee covering *Independent* (5)
24 Raised aesthetic quality of crosswords, having abandoned attempt to win awards (5)*

JOTTER PAD

Solution 17,434



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