Dubai

Nikkei	26974.90	26890.58	0.31
Hang Seng	15180.69	16211.12	-6.36
MSCI World $	2462.42	2429.26	1.37
MSCI EM $	865.04	864.76	0.03
MSCI ACWI $	569.93	563.06	1.22
FT Wilshire 2500	4881.52	4772.41	2.29
FT Wilshire 5000	38128.26	37277.22	2.28

Ethereum	1338.55	1363.92	-1.86

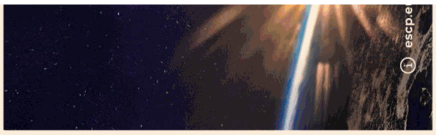
COMMODITIES

	Oct 24	Prev	%chg
Oil WTI $	84.82	85.05	-0.27
Oil Brent $	93.34	93.50	-0.17
Gold $	1643.25	1635.30	0.49

GER 2 yr	2.00	2.03	-0.04
GER 10 yr	2.33	2.41	-0.09
GER 30 yr	2.33	2.43	-0.10

Prices are latest for edition
Data provided by Morningstar

A Nikkei Company



INTERNATIONAL

Eastern Europe

Russian 'dirty bomb' claims rejected

Moscow allegation viewed by west as pretext to escalate war in Ukraine

MAX SEDDON — RIGA
ROMAN OLEARCHYK — KYIV

Russia's defence ministry has "readied forces and capabilities" to deal with radioactive contamination following Moscow's unsubstantiated and disputed claims that Ukraine is developing a "dirty bomb".

Igor Kirillov, commander of Russia's nuclear, chemical and biological defence forces, yesterday said Ukraine wanted to spread radioactive material on its own country with the intention of framing Russia to undermine support for Moscow worldwide.

Kyiv was allegedly reaching the "final stage" of building a nuclear weapon and was requesting support from the UK, Kirillov claimed. He provided no evidence for his allegations.

Ukraine has vehemently rejected Russia's accusations as "dirty blackmail". Kyiv has said Moscow is seeking to pressure western powers into dropping support for Ukraine and pushing it to accept a peace deal on Russia's terms.

Washington, London and Paris, Nato's three nuclear powers, issued a joint statement yesterday saying Russia's claims were "transparently false". They warned Moscow against using them as a pretext to escalate the war in Ukraine.

Kirillov's briefing marked the first time Russia had raised its level of preparation for potential nuclear use since the early days of President Vladimir Putin's war eight months ago. It follows warnings from the Russian president that he stood ready to use nuclear weapons to fend off Ukrainian counteroffensives in eastern and southern parts of the country, which he now deems part of Russia.

Putin said he was ready to use "all the means at our disposal" to defend Russia after announcing the unilateral annexation of four Ukrainian regions last month. On Sunday, defence minister Sergei Shoigu set alarms ringing in Nato capitals by initiating calls with his US, UK, French and Turkish counterparts to discuss Russia's claim of a "dirty bomb".

"Our countries made clear we all reject Russia's transparently false allegations that Ukraine is preparing to use a dirty bomb on its own territory," Paris, Washington and London said. "The world would see through any attempt to use this allegation as a pretext for escalation. We further reject any pretext for escalation by Russia."

However, the US has assessed Russia has not decided to deploy nuclear, biological or chemical weapons. "We still have seen nothing to indicate that the Russians have made a decision to employ nuclear weapons," a senior military official said.

Kyiv has said Moscow is seeking to pressure western powers into dropping support for Ukraine

The warnings from Kirillov, who commands troops responsible for dealing with radioactive contamination rather than for readying nuclear forces, echoed previous unsubstantiated Russian claims that Ukraine was preparing to use biological weapons in the conflict.

In a similar presentation in March, Kirillov accused Ukraine of setting up a network of US-backed labs he claimed developed "bioagents capable of infecting specific ethnic groups" and studied how migratory birds could spread the pathogens into Russia.

Ukraine accused Russia of making the claims to lay the groundwork for a possible chemical or biological weapons attack that did not materialise.

Additional reporting by Felicia Schwartz

Profile. Rishi Sunak

Pragmatist boasts allies on right and left

Brexiter who supports low taxes is more popular than other Tories among Remainers

HENRY MANCE — LONDON

Rishi Sunak has bungee-jumped back to the top of British politics. Just last month, his prospects plunged when he was soundly beaten to the Tory leadership by Liz Truss. He was banished from the cabinet and forced to deny rumours he would leave Westminster altogether, perhaps to work in finance in the US.

But Sunak's warnings about Truss's unfunded tax cuts proved prescient more quickly than he could have expected. Having trounced rival candidates among Tory MPs, he will be invited by King Charles to form a government.

Sunak, 42, will be Britain's first non-white prime minister — as well as the first with an MBA and a past life at Goldman Sachs. Politically, he is a contradiction. He is a rightwing Conservative who has relied on the centre and left of the party for his support.

A Brexiter and an advocate of low-tax free ports, he is more popular than other Tories among voters who wanted the UK to remain in the EU. That has much to do with his role as finance minister during the Covid-19 pandemic, dishing out billions of pounds of subsidies, as well as his suave, metropolitan demeanour. After the chaos of Truss and Boris Johnson, Sunak's appeal is that he projects competence.

Raised in Southampton, on England's south coast, he is the grandson of Indian migrants who arrived from east Africa in the 1960s. His father was a doctor and his mother ran a pharmacy. He was head boy at Winchester College, an elite private school, then studied philosophy, politics and economics at Oxford university.

Initially, he seemed more taken by business than politics. He joined Oxford's investment society, not its debating union. He spent three years at Goldman's private equity arm, did an MBA at Stanford and then worked as an analyst for hedge funds TCI and Theleme Partners. At Stanford, he met his future wife, Akshata Murty, daughter of Narayana Murthy, billionaire founder of IT company Infosys.

High office: Rishi Sunak outside his campaign headquarters in London yesterday
Hannah McKay/Reuters

In 2014, Sunak was selected as the Tory candidate for the safe seat of Richmond, North Yorkshire, in the north of England. As a southerner and a Hindu teetotaller who does not eat beef, he faced local scepticism but was elected as an MP in 2015. He backed Leave in the EU referendum but was too junior to have an impact on the campaign.

Sunak did not rebel against former prime minister Theresa May's Brexit deal, his pragmatism apparently coming to the fore. He was squeaky clean, his ambition evident to all. His ministerial break came after he backed Johnson for the Tory leadership. He was made deputy to finance minister Sajid Javid, and when Javid resigned in 2020, amid a power struggle with then Downing Street chief of staff Dominic Cummings, Sunak stepped up. His initial challenge as finance minister was finding tax rises to pay for Johnson's spending. Within weeks, he was dealing with a pandemic. He seemed remarkably unflustered. His signature measures included the furlough scheme and Eat Out to Help Out — a popular subsidy for eating in restaurants in the summer of 2020, which did not include incentives to eat outdoors and which was later implicated in fanning Britain's second Covid wave.

In a government that delighted in bashing civil servants, Sunak was a minister respected by his officials. Allies later claimed he had not taken a holiday during his two years as finance minister. "I have been an appalling husband and father for the past couple of years. It's as simple as that," he said this year.

As the pandemic waned, Sunak's Teflon image became scratched. For all his slickness, he could appear geeky and out of touch. He is slightly obsessive about *Star Wars* and Coca-Cola (he has seven fillings). He was photographed working with a heated travel mug that sold for almost £200. Last April, he admitted he had held a US green card until the previous year, and that his wife had benefited from non-domiciled status, allowing her to avoid UK tax on her foreign earnings while he was finance minister. She agreed to pay UK taxes.

The scandals around Johnson also put Sunak in a bind. When the prime minister falsely smeared opposition Labour leader Sir Keir Starmer for not prosecuting paedophile Jimmy Savile, a BBC presenter, in a previous role, Sunak gently distanced himself. But he did not resign in protest over Downing Street parties during lockdowns. Indeed, he was tarred himself, paying a £50 penalty for attending Johnson's birthday party in the cabinet room.

In July, as more scandals mounted, Sunak resigned from the cabinet — minutes after Javid, then-health secretary, did the same. Johnson resigned two days later, and his supporters did not forgive Sunak's role in his downfall. In the ensuing leadership contest, the former finance minister promised Tory members fiscal conservatism and "a grown-up conversation where I can tell you the truth". That was a strategic mistake: party members did not seem to want to hear about hard realities, opting instead for Truss's boosterism and tax cuts.

Sunak will be Britain's first non-white PM as well as the first with an MBA and past life at Goldman Sachs

During the contest Sunak also promised to review or repeal all 2,400 retained EU laws within his first 100 days as prime minister. He struck a critical tone about coronavirus lockdowns, saying scientific advisers had had too much influence.

When Truss took office, Sunak went to ground, trying to shed his image as a plotter. When she resigned, he was the obvious candidate to pick up the pieces.

See The FT View and Lex

GLOBAL INSIGHT
EUROPE

Valentina Romei

Attempts to compare economies of UK and Italy are overblown

It's a fashion of late to compare the UK to Italy. Because yields on their government bonds are at similar levels, commentators have been keen to claim that Britain has became as profligate as its southern European ally.

But fiscal profligacy is more a reality for the UK than it has been for Italy over the past 20 years.

UK gilt prices dived on the outgoing prime minister's announcement of large unfunded tax cuts. Drastic U-turns on nearly all the promises, a return to austerity and a record-quick defenestration have stabilised markets but left reputations shredded.

Meanwhile, Italy has just nominated its next finance minister after the election victory last month of Giorgia Meloni's arch-conservative coalition. The choice fell on Giancarlo Giorgetti, the former minister of economic development under Meloni's predecessor, Mario Draghi, who promoted a "debt brake" for Italy and is considered business-friendly. He takes control of a primary budget excluding debt interest payments that has been in surplus for nearly two decades.

This is not the case for the UK, which has recorded a deficit for most of that time. In fact, without debt interest payments, Italy has run a budget surplus similar to that of Germany. It has showed much more frugality than the UK and than the average of the most industrialised countries.

The UK's ill-fated fiscal announcements last month, which led to the demise of Liz Truss's premiership, would probably be closer to Italy's fiscal choices in the 1980s, when rapid increases in government spending were not matched by corresponding rises in revenues, resulting in a surge in government debt.

Without debt interest payments, Italy has run a budget surplus similar to Germany

The accumulated government debt still weighs on Italy's fiscal and economic outlook via the highest payments in the OECD. Coupled with the need for structural reform, Italy's economy has largely stagnated for the past two decades, compared with a 30 per cent expansion for the UK and Germany. This makes reducing Italy's debt-to-gross domestic product ratio, the second largest in Europe after that of Greece, particularly difficult.

This is what is risky about Italy for investors, not recent fiscal profligacy.

"The concerns in financial markets about the UK stem from a very accommodative fiscal stance, despite budget deficits already being high and a trade deficit on the back of that," said Bert Colijn, senior economist at ING. "This stands in sharp contrast with Italy, which suffers from high legacy debt from the 1980s and 90s, while they have actually delivered primary fiscal surpluses for most of the past two decades." This means "Italy has a structural problem of low economic growth and high debt, while the UK's concerns seem mainly related to the very expansionary budget proposals", Colijn added.

Even Italian households do not live beyond their means. Italy's households have one of the lowest debt-to-GDP ratios among all advanced economies, well below that of the UK and even lower that of Germans.

Overall, Italy is not spending more than it can afford, as it registered a healthy current account surplus until the energy crisis this year. The measure, which tracks how much more a country is importing than it exports, the value of foreign investment flowing in and out of the country and its net remittances, is deeply negative for the UK. In fact, the UK is running one of the largest current account deficits among advanced economies, adding to uncertainties for investors.

Rather too many commentators have focused on a stereotyped image of the Italian economy that risks shaping the reader's opinion away from the real issues affecting the country. In other words, commentators have *preso lucciole per lanterne* — they thought they were fireflies but they were lanterns — an Italian idiom to say, they got it wrong.

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Health concerns

US agency warns of rise in sexually transmitted infections

JAMIE SMYTH — NEW YORK

More funding is needed for sexual health services along with innovative testing and prevention tools to tackle an "alarming" rise in sexually transmitted infections across the US, the nation's top public health agency has warned.

Dr Leandro Mena, director of the divi-

year-to-year increases that we have ever seen," Mena added.

The resurgence of STIs in the US and elsewhere is causing concern among health officials, who warn services are already overstretched owing to Covid-19 and monkeypox. Last year, the CDC estimated one in five Americans had an STI at some point during 2018 and the lifetime cost of treating new infections

Preliminary data released last month by the CDC show 2.5mn bacterial STI infections were reported in 2021, a rise of 4.4 per cent on the previous year. The number of gonorrhoea and chlamydia cases grew by about 3 per cent year on year, while reported cases of syphilis, a potentially life-threatening disease when not treated, increased significantly faster.

almost 70 per cent, while the number of congenital cases — when a mother passes a syphilis infection to her baby during pregnancy — has surged by 184 per cent since 2017.

"Congenital syphilis can have devastating outcomes that affects perhaps the most vulnerable individuals in society, newborns. It is also 100 per cent preventable, so it represents in many ways

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Disease Control and Prevention, told the Financial Times that new data showing the number of syphilis cases surged by more than a quarter last year, highlighted the "crisis" unfolding in the sexual health of the US.

The rise in cases of syphilis and other bacterial STIs, such as gonorrhoea and chlamydia, is being fuelled by a combination of underfunding of sexual health services, reduced condom use among certain groups and stigma surrounding sexual diseases and access to treatment, he said.

"We find these [statistics] pretty alarming. For six or seven consecutive years, STI rates have been increasing in the US and last year's 26 per cent jump in syphilis cases was one of the largest

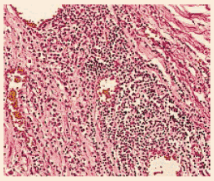
be up to $16bn.

Mena said US prevention and treatment services for sexual health had been underfunded for more than two decades, resulting in a more than 40 per cent reduction in per capita purchasing power when inflation is taken into account. This had resulted in a decrease in testing and screening services in many communities, he said.

"To address the crisis that we recognise that we have in the sexual health of America, I think we really need innovation," said Mena.

"We need to improve access to stigma-free, discrimination-free, affordable sexual health services . . . we need more tools to fight the national spike in bacterial STIs."

historical low in 2000-01, according to CDC data, but have steadily increased since then. Over a five-year period, reported cases of syphilis have surged



Medical data: a micrograph shows a case of cardiovascular syphilis

Mena said there had been a decline in condom use among some groups, including young people and men who have sex with men, as the availability of antiretroviral treatments for HIV expanded. Substance abuse and the opioids epidemic are linked to increases in risky sexual behaviour, and stigma played a role in keeping people away from accessing screening services and treatments, he said.

People needed access to "stigma-free and affordable" sexual health screening services to tackle increasing infection rates. The development and rollout of home test kits and point of sale testing in pharmacies or locations other than health clinics could also help, Mena added.

INTERNATIONAL

Brazil's judges become mired in poll battle between Bolsonaro and Lula

Clampdown on electoral disinformation has renewed accusations that judiciary is too politicised

MICHAEL POOLER AND CAROLINA INGIZZA — SÃO PAULO

Battling to hold on to power in an election that has descended into dirty tricks, Brazilian president Jair Bolsonaro has once again taken aim at the referees.

"On the part of some of the judiciary there is an interest in one candidate," he said last week, suggesting bias in favour of his leftwing rival, ex-president Luiz Inácio Lula da Silva.

In the final straight before a runoff poll between the two men on October 30, a series of rulings has drawn the country's top judges into the centre of a highly charged contest.

Brazil's uppermost electoral tribunal has intensified its clampdown on disinformation, forcing both camps and media outlets to stop airing allegations ranging from Satanism to paedophilia.

Together with a succession of Supreme Court decisions that have gone against Bolsonaro or his supporters since he assumed office in 2019, it has underscored the growing political role played by the highest organs of justice in the land. But there are warnings the interventions risk damaging the credibility of the institutions at a moment of polarisation in Latin America's biggest democracy.

"The judicial system has been politicised in a way that has compromised its legitimacy," said Filipe Campante, a professor at Johns Hopkins University. "Bolsonaro has drawn the Supreme Court further into the political arena. And the Supreme Court has played into his hands by acting in ways that were questionable."

The far-right populist has regularly clashed with the Supreme Court, referred to locally by the abbreviation STF, accusing it of frustrating government policy.

Among its most contentious decisions was the annulment last year of corruption convictions against Lula, which paved the way for his candidacy.

In parallel, the electoral court, which is known as the TSE and includes three STF justices among its seven judges, has strongly pushed back against Bolsonaro's unsupported assertions that Brazil's electronic voting machines are vulnerable to fraud. Opponents view the claims as a pretext to rejecting a possible election defeat. Backers of the courts' firm stance say they are justified to rein in the aggressive tendencies of the president and protect democracy from a tide of misinformation.

Confrontation: police in Rio de Janeiro state on Sunday after former lawmaker and Bolsonaro ally Roberto Jefferson allegedly fired shots and hurled a grenade at officers sent by the Supreme Court to take him to prison
Bruna Prado/AP

"We've been on a process towards authoritarianism, which did not materialise because there was resistance, in part from the judicial power," said Eloísa Machado, a constitutional law professor at the Getúlio Vargas Foundation.

One of the most high-profile confrontations between a politician and the STF erupted into violence on Sunday when, according to police, a former lawmaker and Bolsonaro ally fired shots and hurled a grenade at officers sent by the court to take him to prison, leaving two officers injured.

Roberto Jefferson, who was detained last year as part of an investigation into "antidemocratic digital militias", was found to have breached the terms of his house arrest by using social media to compare a female STF judge to a prostitute. Bolsonaro denounced him on Sunday as a "criminal".

The STF's outsize profile in Brazilian public life is partly down to design. Its 11 justices, usually career judges or prosecutors, are nominated by the sitting president, subject to Senate approval, and serve until age 75.

It is also a court of last instance and hears actions against politicians, such as the president and parliamentarians. This broad remit contributes to a large caseload — with almost 100,000 decisions last year — that dwarfs its US counterparts.

'Bolsonaro has drawn the Supreme Court further into the political arena. The court has played into his hands'

Unlike the US Supreme Court, the ideological sympathies of STF justices are less well-defined in Brazil, according to Campante. "It's more like they behave as other politicians . . . [with] decisions often informed by their own political interests and the wider political environment," he added.

But detractors — especially Bolsonaro voters — accuse the two courts of overstepping boundaries and even committing abuses against freedom of speech.

They cite a recent move by the TSE ordering YouTube to suspend the "monetisation" of four pro-Bolsonaro channels for publishing false information about Lula.

It has also forced the two candidates to air rebuttals from their opponent in TV ads, though the greater number conceded to Lula will give him more airtime in the final week of campaigning.

The electoral body's decisions have come in response to a flood of petitions by both sides alleging foul play.

But the unease over its reach increased last week after the court granted itself new powers to order social media sites to remove within two hours online content it has deemed to be false.

The TSE's head, Supreme Court justice Alexandre de Moraes, said there had been a 17-fold rise in complaints about misinformation compared with the previous election. Uziel Santana, from an Evangelical lawyers' association, argued the electoral body's recent actions "seriously harm the democratic state of law" and were potentially storing up problems for the ballot.

"Press freedom is under attack," he said. "The TSE is unbalancing the political game and this can be used, later, by any of the campaigns to claim state interference outside the constitutional limits."

Carlos Melo, a political scientist at Insper university in São Paulo, believes if Bolsonaro loses he might seek to blame defeat on a supposed "manipulation of electoral justice". He said: "That's the strategy and the narrative."

The TSE declined to comment.

Whoever wins the election, the political attention on the Supreme Court appears unlikely to fade, not least as the next president will have to replace two retiring justices in 2023.

Energy supplies. Midterm elections

US wields oil stockpile as weapon in price war

Biden administration's move to stabilise market signals change in intervention policy

MYLES MCCORMICK — NEW YORK

The US government has signalled a "new era" of activist intervention in international oil markets, experts said, with the White House increasingly willing to use its strategic stockpiles of crude to manage global prices.

President Joe Biden last week authorised the final instalment of a record 180mn barrel drawdown from the US Strategic Petroleum Reserve and told his officials to prepare for further releases, as the White House looks to keep a lid on prices ahead of midterm elections next month.

Market participants said further drawdowns were likely this winter to counter a rise in prices driven by a clampdown on Russian exports.

"I think we are in a new era of much more nimble and deft use of the SPR as both a market and a geopolitical tool," said David Goldwyn, a former senior energy official in the administration of Barack Obama.

Washington's willingness to intervene so directly in oil markets means that price risks once primarily associated with volatile producer governments or the Opec+ cartel now also emanate from the Oval Office.

Biden has relied on the SPR more than any of his predecessors since the facility was created in the wake of the 1973 oil shock as a tool to manage major market disruptions.

Deploying the reserves — held in huge salt caverns along the US Gulf Coast — has allowed the president to smooth some of the market turmoil caused by Russia's invasion of Ukraine. His announcement of a record drawdown in March was a pre-emptive move amid predictions that sanctions on Russia could remove as much as 3mn barrels of the country's oil from the market.

But he has come under fire from Republicans, who have accused him of recklessness in reducing volumes to their lowest levels since the early 1980s, hampering the country's ability to react to future oil shocks.

"Draining oil from the strategic reserve is a short-sighted and dangerous choice that imperils our energy security at a critical time of global uncertainty," Jerry Moran, the senior US senator from Kansas, wrote in a letter to the president this week.

Biden's initial drawdown from the reserves last November was blasted for being a brazenly political move aimed at bringing down petrol prices to placate voters at a time of no significant disruption. Many drew comparisons to President Bill Clinton's use of the SPR to douse prices at the pump ahead of the 2000 presidential election between his vice-president, Al Gore, and the Republican challenger, George W Bush.

Also significant, said analysts, was Wednesday's White House pledge to start buying back oil to replenish the reserve at a price of $67-$72 a barrel, another form of intervention designed to affect oil prices many months in the future. The move, Biden said, would "help create certainty around future demand for crude oil".

The president added: "That will encourage firms to invest in production right now, helping to improve US energy security and bring down energy prices that have been driven up by Putin's war in Ukraine."

His direction to officials to prepare for more drawdowns comes after Saudi Arabia and other Opec+ producers last month announced plans to slash output, enraging the White House.

Bob McNally, head of consultancy Rapidan Energy and a former adviser to the George W Bush administration, noted that, ironically, the motivation behind the White House's repurchase price — to put a floor in the market to give producers confidence to invest — was akin to the cartel's supply cut.

"The Biden administration and Opec+ are both basically saying: 'Hey investors — drill. Drill, baby, drill. We're not going to let prices collapse'," he said.

Goldwyn said the administration was "trying to change the calculus so that we can maximise US supply and maybe put a little bit of the fear of God into Opec+ about a return of the market share battles of a few years ago".

Recession fears

Eurozone business activity slides faster than expected

MARTIN ARNOLD — FRANKFURT

Business activity in the eurozone has suffered its biggest contraction for almost two years, adding to signs that the bloc is entering a recession as prices rise and output falls across the region.

S&P Global's flash eurozone composite purchasing managers' index, a key gauge of business conditions for the manufacturing and services sector, fell 1 point to 47.1, figures showed yesterday. That is its lowest level since November 2020 and the fourth consecutive month below the crucial 50 mark separating growth from contraction.

"The eurozone economy looks set to contract in the fourth quarter given the steepening loss of output and deteriorating demand seen in October," said Chris Williamson, chief business economist at S&P Global, adding that a recession looked "increasingly inevitable".

Growth figures for the third quarter for the region's two largest economies, Germany and France, are out on Friday and are set to show the impact of soaring fuel and food prices. Russia's squeeze on gas supplies to Europe has led energy-intensive companies to cut, or even suspend, production. Consumers facing rising energy, food and borrowing costs have cut back on spending as the boost from lifting Covid-19 curbs fades.

'Loss of purchasing power due to high inflation is leaving ever deeper traces on private consumption'

The grim outlook was underlined by the IMF, which warned in a report at the weekend: "Europe has been hit by a massive terms-of-trade shock that has weakened the growth outlook, further raised the level and persistence of inflation, and led to a cost of living crisis that threatens social cohesion."

The results of the monthly PMI survey, which signalled falling factory output, declining new orders, rising factory gate prices and weakening expectations, were worse than expected by economists polled by Reuters. S&P Global said eurozone manufacturers reported a fifth consecutive fall in factory output in October and their backlog of work fell for a fourth straight month. Services companies said their decline in new orders accelerated for a third month.

"In the euro area, everything points to a recession," said Christoph Weil, an economist at Commerzbank. "The continuing loss of purchasing power due to high inflation is leaving ever deeper traces on private consumption."

One of the few bright spots in the survey was that companies in all sectors reported a slight easing of cost pressures, price growth and supply chain constraints. However, prices charged for goods and services still rose at the sixth fastest rate since such data started in 2002. Jobs growth increased marginally from October, but remained low compared with the past 18 months.

"Following a few months of falling price pressure in manufacturing and services, the October print shows an overall stabilisation," said Jens Eisenschmidt, chief European economist at Morgan Stanley. "This could suggest the peak is behind us at this stage, but also that prices are stuck at a high level."

German businesses, at the hub of Europe's energy crisis, reported that manufacturing and services contracted, pulling the country's PMI down 1.6 points to 44.1, its lowest since May 2020.

Sanctions threat

Call to avoid Russian aluminium curbs

HARRY DEMPSEY — LONDON

European industrial users of aluminium have urged governments against imposing sanctions on Russian metal, warning it would destroy large corners of the region's manufacturing base.

Five trade associations based in Belgium, Germany and Italy demanded the EU and member states urgently intervene against moves to restrict the flow of Russian metal, which they believe could cause aluminium prices to rocket.

The comments come as the US is considering banning or applying tariffs to Russian aluminium, or putting sanctions on Rusal, Russia's largest producer of the lightweight metal used in cars, planes and cans.

At the same time, the London Metal Exchange is weighing a ban on Russian metal because of the risk that large volumes could be dumped in the exchange's warehouses should many buyers voluntarily opt to shun the product. That could then result in a distortion of global price benchmarks.

However, the trade groups, which include the Federation of Aluminium Consumers in Europe, fear the "massive unintended economic consequences" of any move to hit Russian aluminium supplies.

Aluminium: trade associations say sanctions on the metal could cause the closure of small businesses

In 2018, when the US imposed sanctions on Rusal, it caused the price of the metal to rise 35 per cent and resulted in turmoil for industrial supply chains in Europe. "Boycotting, banning or sanctioning Rusal amounts to no more than the destruction of the independent downstream European aluminium industry," the groups said.

They added that Rusal was a "strategic partner" for the EU because it supplied 30 per cent of the alumina and up to 20 per cent of the primary metal that the continent needed to support its downstream aluminium industry.

The trade associations added that sanctions on Russian aluminium could cause "thousands" of small business closures.

The LME, the world's largest metals marketplace, is receiving feedback on banning Russian metal from producers, traders and brokers until Friday.

Rusal has previously warned that an LME ban would fuel market volatility.

Corruption inquiry

South Africa revives anti-graft agency

JOSEPH COTTERILL — JOHANNESBURG

South African president Cyril Ramaphosa has re-established a permanent anti-corruption agency in his official response to the findings of an inquiry that blamed his governing African National Congress for the country's worst post-apartheid graft scandal.

Ramaphosa announced the overhaul in a televised address on Sunday as part of "a new chapter in our struggle against corruption" after a decade of accusations of looting under Jacob Zuma, the former president, that has been blamed for rolling blackouts and other ills holding back South Africa's economy.

The government will make permanent a special directorate of the national prosecuting authority that has been investigating the plunder, known locally as "state capture".

The move in effect revives a similar prosecutorial unit, the Scorpions, that was neutered years ago by the ANC, which has ruled the country since 1994.

"This response constitutes an ethical, moral and institutional departure from the abuses revealed [by the inquiry]," Ramaphosa said. "The people of South Africa are tired of corruption and want it to end," he added.

> 'The people are tired of corruption and want it to end'
>
> Cyril Ramaphosa, president

The inquiry, headed by South Africa's chief justice, concluded this year that Zuma "readily opened the doors" for looting of the Eskom power monopoly by the Guptas, three Indian-born brothers, and that he manipulated the national spy agency to pursue political opponents as part of a policy of wrecking institutions. Zuma quit power in 2018 after Ramaphosa was elevated from being his deputy to leadership of the ANC. The ex-president denies any wrongdoing, as do the Guptas. Zuma was briefly jailed last year for contempt of a court order to attend the inquiry. Hundreds died in violent unrest that followed his sentencing.

Tensions over the state capture saga are again flaring as Ramaphosa is set to run for re-election as ANC president at the end of this year, and as prosecutors make headway with big cases tied to the scandal. Two of the Gupta brothers were arrested in the United Arab Emirates this year over a case in South Africa, which is bidding to extradite them.

Third quarter

China's delayed data show growth target missed

Property crisis and strict zero-Covid controls take their toll on economy

THOMAS HALE — SHANGHAI
HUDSON LOCKETT — HONG KONG
EDWARD WHITE — SEOUL

China's gross domestic product grew well below target in the third quarter, intensifying falls in Chinese stocks as investors worried about the longer-term outlook for the world's second-largest economy.

GDP expanded 3.9 per cent year on year, better than the forecast of 3.3 per cent from analysts polled by Bloomberg but short of China's full-year target of 5.5 per cent, already its lowest in three decades. The release of the data yesterday, delayed from Tuesday last week, came after President Xi Jinping extended his rule for an unprecedented third term and tightened his grip on political power at the Communist party's 20th congress last week.

China is grappling with a property crisis and strict zero-Covid controls, which have largely curtailed the spread of the virus but crippled consumer activity.

The data added to pessimism in Chinese equities after investors were disappointed the party congress did not send more positive signals for the economy. The Hang Seng China Enterprises index in Hong Kong fell up to 7.4 per cent to a 14-year low. The benchmark CSI 300 index of Shanghai- and Shenzhen-listed stocks was down as much as 3.1 per cent.

"This is panic selling," said Dickie Wong at Kingston Securities in Hong Kong. "Quite obviously investors are simply not confident about the future of the Chinese economy."

While the government provided no explanation for the delay, the move was seen as an attempt to avoid distracting from the congress, which occurs every five years and overhauls the upper echelons of the Communist party.

At the congress, Xi made little reference to China's economic weaknesses and praised the coronavirus control measures, which include near daily testing and quarantine rules that have effectively closed the country off from the rest of the world. In the build-up to the event, China's top epidemiologist said there was no timeline for a relaxation.

> 'Quite obviously investors are simply not confident about the future of the Chinese economy'

Iris Pang, chief economist for China at ING, said while third-quarter growth was ahead of expectations, the bigger recovery picture was "mixed" and remained driven by Xi's zero-Covid policy. "This will continue to affect the job market and has a negative feedback effect on future retail sales," she said.

Pang cautioned that after the Communist party's personnel changes — including the departures of former economic tsar Liu He, central bank governor Yi Gang and top regulator Guo Shuqing from the leadership — China's economic team was now more centralised under Xi. "This implies President Xi has even more say in policy direction."

Third-quarter growth outperformed a rise of just 0.2 per cent in the second quarter, when Shanghai, China's biggest city and financial hub, was placed under a two-month lockdown. In September, retail sales rose just 2.5 per cent, missing a Reuters forecast of 3.3 per cent.

Industrial production, which powered China's growth in the first two years of the pandemic, rose 6.3 per cent last month. That was better than analysts' expectations of 4.5 per cent, as the country's manufacturing industry recovered from crippling supply chain disruptions and lockdowns.

Julian Evans-Pritchard, senior China economist at Capital Economics, said that while industry fared slightly better, the outlook was "gloomy" after most of the economy lost momentum last month. "There is no prospect of China lifting its zero-Covid policy in the near future, and we don't expect any meaningful relaxation before 2024. Recurring virus disruptions will therefore continue to weigh on in-person activity and further large-scale lockdowns can't be ruled out," he added.

Fixed-asset investment rose 5.9 per cent in the first nine months of the year. However, property sales, measured by floor area, were down 22 per cent and new construction starts have slumped 38 per cent, while property investment has dropped 8 per cent.

Goldman Sachs said: "Despite more local housing easing measures in recent months, we believe the property markets in lower-tier cities still face strong headwinds from weaker growth fundamentals than large cities."

See Opinion

Saudi Arabia. Investment conference

'Davos in the Desert' guests shrug off US tension

Western executives keen to tap kingdom's growing wealth amid petrodollar-fuelled boom

SAMER AL-ATRUSH — RIYADH
SIMEON KERR — DUBAI
ANTOINE GARA — LONDON
FELICIA SCHWARTZ — WASHINGTON

Relations between the US and Saudi Arabia may have plunged to a new low after the kingdom cut oil production in defiance of Washington's wishes, but for American banks and investors flocking to a Riyadh conference this week it is business as usual.

Jamie Dimon, chief executive of JPMorgan Chase, Blackstone co-founder Stephen Schwarzman and David Solomon, head of Goldman Sachs, are among western executives set to speak at the Future Investment Initiative.

The conference, dubbed "Davos in the Desert", opens today just two weeks after US president Joe Biden warned Riyadh there would be "consequences" after Opec+ cut its daily output targets by 2mn barrels. The White House accused Saudi Arabia of aligning with Russia, one of the other main producers in Opec+, and furious Democrats have called for the administration to freeze arms sale to the kingdom and end co-operation with Riyadh.

But for US banks, the allure of tapping into the kingdom's oil wealth means they have no such qualms about engaging with Riyadh and supporting Crown Prince Mohammed bin Salman's flagship annual investor conference.

While much of the rest of the world frets about the risk of recession, Saudi Arabia is enjoying its first oil boom in almost a decade as Russia's war in Ukraine has pushed up crude prices. The kingdom is forecast to have one of the world's fastest-growing economies this year, with its output predicted to expand by more than 7 per cent.

"In a world where capital markets are shut and investment bank earnings are down, the Gulf warrants attention," said an executive at a US bank.

The huge petrodollar windfall comes as Riyadh is pressing on with an ambitious plan to overhaul the economy and develop the conservative kingdom.

Oil producer: Crown Prince Mohammed bin Salman arrives at the opening session of the Future Investment Initiative in Riyadh last year
Saudi Royal Court/Reuters

assets and committing to spending $40bn annually in the kingdom as it oversees a string of megaprojects.

There has also been a number of initial public offerings there over the past year, while the PIF recently issued its debut bonds. Saudi Aramco, the state controlled oil company, has hired US bankers for an IPO of its trading arm.

"That's why FII will be so busy, the kingdom is engaging on a broad front," the banker said. "OK, they don't pay such good fees and the pipeline is relatively narrow, but the wallet is growing and will continue to grow."

An executive at a large European-based credit fund said the PIF was also becoming increasingly important in private markets as North American pension fund managers grapple with volatile markets and slow new commitments to private funds.

The Biden administration, however, will not be attending the conference. A US official said the decision not to send a delegation was owing to "scheduling issues" and was taken before Opec+ announced its oil production cut.

The White House denied a report by US broadcaster NBC that the administration sought to dissuade US executives from attending the conference.

The event's organisers say US officials were not invited. But Jared Kushner, former US president Donald Trump's son-in-law, and Steven Mnuchin, Trump's former treasury secretary, will be attending, according to a list of speakers. The more than $600bn PIF has reportedly committed to invest $2bn in Kushner's private equity firm, Affinity Partners.

It is not the first time tensions between the US and Saudi Arabia have

> 'In a world where capital markets are shut and investment bank earnings are down, the Gulf warrants attention'

Khashoggi by Saudi agents. The CIA concluded that the nation's day-to-day leader authorised the operation to "capture or kill" Khashoggi, who was killed at the kingdom's consulate in Istanbul.

The prince blamed the murder on rogue operatives who have since been imprisoned. The killing led to the US imposing sanctions on a number of Saudis and a campaign promise by Biden to turn Saudi Arabia into a "pariah".

But bankers were quick to re-engage with the kingdom and the current spat is considered a political dispute that does not compare to the moral outrage triggered by Khashoggi's killing. The American Chamber of Commerce in Riyadh said it was "optimistic that the enduring commercial relationship between US companies and Saudi Arabia will continue".

Monica Malik, chief economist at Abu

S&P Global index

US factories and services struggle amid rising gloom

STEFF CHÁVEZ — CHICAGO

US business activity shrank for a fourth consecutive month in October, missing economists' expectations for both the services and manufacturing sectors as inflation and slowing demand damped the outlooks.

The flash purchasing managers' index from S&P Global dropped to 47.3 in October from 49.5 in September, missing the consensus estimate of 49.3, according to a Refinitiv poll. A reading below 50 indicates a contraction.

The decline was "led by a downward lurch in services activity, fuelled by the rising cost of living and tightening financial conditions", said Chris Williamson, chief business economist at S&P Global Market Intelligence.

Companies' outlook optimism "deteriorated markedly in October", S&P pointed out in its report. "The resulting degree of confidence was among the lowest in survey history" in the index's second-fastest decrease since 2009, it added. While companies are hopeful that demand will increase after inflation peaks, they remained concerned about high prices, the cost of living and "the worsening broader economic outlook amid interest rate hikes and weak customer sentiment", the S&P report added.

47.3	49.9
Flash purchasing managers' index from S&P Global, down from 49.5	Manufacturing PMI in October, a 28-month low, down from 52

The flash services activity index declined to 46.6 in October from 49.3 in September, missing economists' forecasts of 49.2. The flash manufacturing PMI fell to a 28-month low of 49.9 in October, down from 52 the previous month. Economists had been anticipating a reading of 51.

While the sector has proved more resilient than its services counterpart,

Tug of war Rivalry within JPMorgan over a retired baseball player's fortune is at the centre of a two-year battle ➔ COMPANIES

Companies & Markets

Credit Suisse seals €238mn deal to settle French probe

- Money laundering case resolved
- Körner prepares to unveil shake-up

SARAH WHITE — PARIS

Credit Suisse has agreed to pay France €238mn to settle claims that it broke laws on money laundering by luring wealthy clients to Switzerland.

The deal resolves one of the Swiss lender's outstanding headaches before a restructuring this week.

It is the latest case to be resolved from a series of European investigations into undeclared Swiss bank accounts. In France alone, prosecutors have settled similar claims with HSBC and are pursuing penalties in court against UBS.

Yesterday's settlement with Credit Suisse, which involves no admission of guilt, is one of the larger deals using a new French legal structure that tries to resolve investigations faster.

It is the latest case to be resolved from a series of European investigations into undeclared accounts

The bank is set to unveil an overhaul under chief executive Ulrich Körner on Thursday and had been keen to clear the French probe beforehand, according to people familiar with the matter.

"We're trying to reduce the litigation docket," said one person close to Credit Suisse, which has been hit with a series of scandals and legal cases.

Credit Suisse might have waited for the next steps in a parallel court case involving UBS, "if this was a bank that was doing well and everything was fine",

settlement with US prosecutors over a case related to financial crisis-era mortgage bonds last week.

Credit Suisse was accused by French authorities of encouraging wealthy clients in France to set up bank accounts in Switzerland between 2005 and 2012, which were then beyond the reach of French tax authorities.

Part of the probe focused on the way the bank went about capturing 4,999 French clients, with assets under management amounting to a cumulative €2bn, according to the judge who oversaw the deal. The judge noted that Credit Suisse staff held client meetings "very discreetly, in hotels, in restaurants, and never in official buildings".

In that time, Credit Suisse is estimated to have made €65mn in profit from those clients, who have since settled their individual French tax claims under amnesty deals, prosecutors for the state said.

Credit Suisse said it was "pleased to resolve this matter". The sanctions imposed are split between a €123mn penalty and €115mn in damages and interest payments due to the state.

Credit Suisse settled a similar tax case in Italy in 2016 and still has a probe pending in the Netherlands.

In 2017, HSBC reached the first settlement using the new legal format in France, which allows parties to avoid a guilty plea in exchange for immediate penalties, similar to some US legal arrangements. HSBC agreed to pay €300mn to resolve claims it had lured French clients to its Swiss bank.

Airbus, the aviation group, has paid

Shock and flaw Philips to cut 4,000 jobs after taking losses from defective medical device


Philips's Amsterdam headquarters: the group is aiming to save about €300mn annually — Sem van der Wal/ANP/AFP/Getty Images

OLIVER TELLING — LONDON

Dutch health technology company Royal Philips plans to cut about 4,000 jobs as its new head begins an overhaul of the business that has been hit by legal action surrounding millions of faulty medical devices.

The group said redundancies, amounting to 5 per cent of the workforce, would be made immediately across its global network in an effort to save about €300mn ($296mn) annually, as it also faced pressure from supply chain challenges.

Shares in the company, best known for its branded lightbulbs, fell 3 per cent to €12.93 at one point yesterday, bringing their decline over the past year to about 68 per cent.

apnoea. The company recorded a net profit of almost €3bn during the same period a year earlier.

The job cuts are the latest sign of the toll that the discovery of a faulty component in the machines has taken on Philips, once one of the world's leading electronics groups. The controversy, which has resulted in personal injury claims and an investigation by the US Department of Justice, forced the exit this year of chief executive Frans van Houten, who led Philips's recent shift to health technology.

New chief executive Roy Jakobs, who was promoted this month, said the decision on job cuts was not taken "lightly".

"My immediate priority is . . . to improve execution so that we can

said, Philips was taking action to "improve patient safety and quality management", along with improving its supply chain operations.

Philips said it was expecting "prolonged operational and supply challenges", pointing to the deteriorating global economy and continued uncertainty over Covid-19 measures in China, which have forced its factories into shutdown this year.

The company, which has already twice cut its guidance for full-year sales, is expecting a single-digit decline in revenues during the fourth quarter.

Founded in 1891, Philips had bet that steering away from consumer electronics and towards health technology would revitalise its business

Saba hedge fund founder warns of Japan-style bear market

LAURENCE FLETCHER — LONDON

Global stock markets could be heading for a Japan-style bear market lasting decades, says the hedge fund manager credited with spotting the "London Whale" derivatives trader in 2012.

The unwinding of central banks' vast stimulus programmes in an effort to combat high inflation could lead to "doldrums" markets for a prolonged period, said Boaz Weinstein, whose New York-based Saba Capital was one of the world's top-performing hedge funds in the market turmoil of 2020.

"I'm very pessimistic. There isn't a rainbow at the end of all this," Weinstein told the Financial Times. "[Quantitative tightening] is going to be a real headwind for investors.

"There's no reason that this difficult [economic] period will only last two to three quarters [and] . . . no reason to think we'll have a soft landing or a shallow recession," he said.

Saba's Master fund, which bets on dislocations in credit and equity markets, had risen 73.2 per cent in 2020 and is up 31 per cent so far this year, according to a person who had seen the numbers.

According to the CBOE Eurekahedge Tail Risk Hedge Fund index, tail risk funds betting on equity market volatility are up 13.2 per cent this year.

Weinstein, whose firm manages $4.8bn in assets, said investors have to contend with the ending of central banks' programme of bond buying over the past decade and its reversal. The quantitative tightening policy involves selling bonds back into the market.

The US Federal Reserve has so far shown little sign it will slow the pace of tightening, which includes winding down the near-$9tn balance sheet it built up over years of loose policy, with core consumer price inflation in the US rising to 6.6 per cent last month.

Developed markets, he said, "could certainly" follow the pattern of the Nikkei 225, which is still around 30 per cent below its record high of 1989.

Weinstein, a former co-head of global

but had opted for certainty in a probe that began in 2016, the person said.

Another person close to the settlement said talks with Credit Suisse had taken two years and been complicated by a changing parade of executives as the bank went through various crises.

Credit Suisse also reached a $495mn

the biggest no-plea settlements of the 13 in France to date, with a €2bn penalty over bribery allegations.

But some of the sanctions have been much lower. LVMH paid €10mn last year to settle allegations that a former intelligence chief had spied for the luxury goods company.

The announcement was made as Philips reported a loss of €1.3bn in the third quarter, largely due to a €1.3bn writedown on its respiratory business, which has had to recall or repair more than 5mn machines that were used primarily to assist the breathing of patients suffering from sleep

start rebuilding the trust of patients, consumers and customers, as well as shareholders," he added.

"These initial actions are needed to start turning the company around in order to realise Philips' profitable growth potential."

As well as the redundancies, Jakobs

and win over shareholders.

But just weeks after the group announced the sale of its domestic appliance business in March last year, progress was dealt a blow by the discovery that foam used in its respiratory devices could degrade and risk exposing patients to toxic chemicals.

credit trading at Deutsche Bank, founded Saba in 2009. In 2012 he was credited with having taken the other side of the trade to JPMorgan Chase proprietary trader Bruno Iksil, nicknamed the "London Whale", whose outsized credit derivatives trades cost the bank $6bn in losses.

LDI debacle is spurring a fundamental shift in the gilt market

INSIDE BUSINESS
FINANCE

Patrick Jenkins

To describe the "mini" Budget of outgoing prime minister Liz Truss and outgone chancellor Kwasi Kwarteng as ill-thought-out is almost a compliment.

If they underestimated how spooked the markets would be by £45bn of unfunded tax cuts, they clearly had no notion at all about the collateral damage it would cause to mortgages, to government and corporate borrowing costs, and most alarmingly to the £1.4tn defined benefit pension system, via the now infamous LDI hedging structures buried in many schemes.

Happily, it seems that some of the harm caused by the dynamic duo's "growth" plan has receded as they have been turfed from office, though 10-year gilt yields, at just over 4 per cent, are about half a percentage point above where they were before the September 23 "mini" Budget.

Unhappily, other scars run deeper. Fixed-rate home loans, for example, remain stubbornly expensive. But it is back in the DB pension sector that the days of Truss and Kwarteng have left one of the worst, yet least obvious, scars.

Come with me into the murky world of LDI, or liability-driven investment strategies. Conceived a couple of decades ago as a way to help pension schemes better match their assets and liabilities, the mechanisms have been used increasingly to add leverage to schemes, potentially boosting returns amid persistently low interest rates and minimising the need for corporate sponsors to inject additional funds. Pension schemes are not allowed to invest with borrowed money, for good reasons of safety; but LDI, which uses derivative hedging strategies, can in effect allow schemes to do just that.

Reliable data on the scale and structure of the market are hard to come by, but experts estimate that the LDI leverage effect turned about £500bn of underlying assets into £1.5tn of invested money. Much of that was put into ostensibly low-risk gilts of various kinds. After gilt yields spiked following the "mini" Budget, pension funds scrambled to sell assets, particularly gilts, in order to meet margin calls on their LDI hedges.

> It is in the DB pension sector that the days of Truss and Kwarteng have left one of the worst, yet least obvious, scars

An emergency intervention to buy gilts by the Bank of England helped calm an early period of panicked unwinding, and LDI leverage fell from three times to an estimated two times. So far, so stabilising. But there is a nasty sting awaiting the next government and those that will follow.

Just as the UK prepares to jack up its volume of gilt issuance, some of the biggest historic buyers of gilts will be wanting to buy far fewer of them. DB schemes have more than half of their assets invested in government bonds.

Three forces are diminishing that demand. First, the unwinding of LDI schemes and the reduction of pension scheme leverage means that mathematically there will be less capacity to buy: as things stand, crudely, a scheme that might previously have bought £300mn of gilts would now have capacity for £200mn.

Second, most DB schemes are already in run-off, meaning that over the next 10, 20 or 30 years their liabilities will decline, reducing the need for long-dated gilts to match them.

Finally, there is an added technical consequence of the rise in gilt yields: despite the LDI liquidity scare, the funding position of most schemes, judged in actuarial terms, has improved markedly in line with higher rates. According to PwC, the country's 5,000 corporate-backed schemes have an aggregate surplus of close to £300bn, potentially spurring buyouts by insurance groups. That would further cool gilt demand.

Gilt bulls point to countervailing forces: higher yields will draw a new category of investors. But such demand will surely be dwarfed by supply increases. Investors are braced for gilt issuance to double next year to more than £250bn. On top of that, there is a twin overhang from the BoE: £875bn of gilts bought via its quantitative easing programme of bond buying that is being unwound; and the £19bn it soaked up under the LDI emergency scheme.

These factors add up to a fundamental shift in the gilt market. In particular, officials admit that LDI-driven demand for long-dated gilts looks set to recede to such an extent that average gilt tenures — 15 years, up from 11 when LDI first caught on — will decline again. Across the yield curve, upward pressure will remain.

The LDI saga was an explosive event. But it is also part of a long-drawn-out shift away from cheap government debt supported by an artificially gilt-hungry pension system.

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Technology

YMTC sheds staff to meet export regime

Restrictions imposed by Washington block sector talent pipeline

RYAN MCMORROW — SHANGHAI
QIANER LIU — HONG KONG
NIAN LIU — BEIJING

Chinese chipmaker Yangtze Memory Technologies Corp has asked American employees in core tech positions to leave, as it rushes to comply with new US export controls that are disrupting the country's chip industry.

Four people close to the company said it was unclear how many US citizens and green card holders would be forced to leave YMTC, but that several in China had already left. A senior YMTC engineer said some of the Americans were key to the company's breakthroughs on Nand memory chip production. "But there's no other way around [them leaving]," the person added.

The departures come as chip companies in China, the US and Europe are rushing to ensure they are compliant with the tough export restrictions unveiled by Washington this month.

US chip equipment suppliers Lam Research, Applied Materials and KLA Corporation have suspended sales and services to semiconductor makers in China. Netherlands-based ASML has told US staff to stop serving Chinese customers while it assesses the sanctions.

The rules require any US citizen or entity to seek permission from the Department of Commerce for providing support to fabrication plants, upending a pipeline of talent for China's chip industry. This includes hundreds of ethnic Chinese who were educated and trained in the US before returning to their country of birth.

YMTC's chief executive Simon Yang, a US passport holder, stepped down from his post just ahead of the sanctions announcement, in a move two people said was triggered by Washington's increasing pressure on the company.

Yang transformed YMTC into China's leading memory chip producer with the backing of Rmb220bn ($30bn) in funding, primarily from the government. The company was on the verge of clinching a spot for its semiconductors in Apple's iPhone this summer until political pressure and the new US sanctions clouded its prospects.

Three YMTC employees say Yang moved out of the chief role in September to become the company's deputy chair. The latest US restrictions leave his status at the company unclear, the people said. Chinese corporate records show Yang remains at YMTC for now.

Yang and YMTC did not respond to requests for comment.

A person briefed on the turmoil at YMTC said Washington's export controls left the group with little choice. "Asking staff to resign is necessary for the company and the right move for employees' personal risk," they said.

Lawyers say the US commerce department is unlikely to hand out licences to bypass the rules. "You either give up your citizenship or quit your job," said one Chinese executive.

Industry headhunters said the rules would cut down the pool of talent available for Chinese semiconductor companies, which are already struggling to find experienced staff.

The rules "have halved the number of available candidates for senior positions in chipmakers and toolmakers", said a Shanghai-based headhunter.

Corporate records in China show Americans dot the top ranks of leading Chinese semiconductor manufacturers and suppliers. Wayne Dai sits atop VeriSilicon. Chonghe Yang leads memory chip designer Montage Technology.

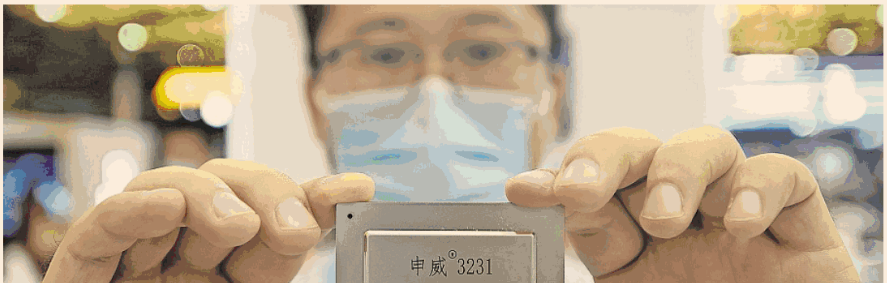
US chip curbs China's march slowed but far from arrested

FT REPORTERS

The US in October introduced expansive chip export controls in an effort to slow China's progress in artificial intelligence and super computers and make it harder for the country to manufacture advanced semiconductors.

The measures are arguably the toughest Joe Biden has taken against China and his first serious attempt to slow its military modernisation by targeting the technology behind everything from nuclear weapons modelling to hypersonic weapons development.

"When Huawei was targeted, it was trade tensions during peacetime. Now we're in a state close to war," said Hideki Wakabayashi, professor at Tokyo Uni-



Oil & gas

Satellite phone use landed top Aramco figure in India jail for nearly a week

ANJLI RAVAL — LONDON
JYOTSNA SINGH — NEW DELHI

A senior executive at Saudi Aramco spent almost a week in an Indian jail over the summer after he was arrested for having a satellite phone while on holiday near the border with China.

Fergus MacLeod, head of investor relations at the largest oil exporter, said he was arrested on July 12 at his hotel in the Valley of Flowers National Park, in the Himalayan state of Uttarakhand. The 62-year-old was held in prison in the town of Chamoli until July 18.

Authorities detained the British executive after picking up the coordinates of the phone, which MacLeod says he turned on and off at his hotel but did not use while on the holiday with friends, some of them Saudi Aramco colleagues.

It is illegal for foreign nationals to possess and operate satellite phones in India without government permission. The bans came after satellite phones were used by terrorists during the 2008 Mumbai attacks.

MacLeod, who has led investor relations at Saudi Aramco since 2017, said he was unaware of the ban and had passed through two Indian airports, carrying the phone openly, without being stopped.

The border with China has long been a source of tension and the region is closely monitored by Indian security forces, particularly since deadly border clashes two years ago.

Narendra Singh Rawat, a police

versity of Science.

Semiconductor Manufacturing International Corporation, which makes logic chips that power computers, will be hit by the restrictions as they bar US groups from supplying tech for chips that are more advanced than 14 nanometres or, in some cases, 16nm. The rules will make it harder for SMIC, China's top chipmaker, to continue production at the 14nm level because they will affect areas such as maintenance and equipment replacement.

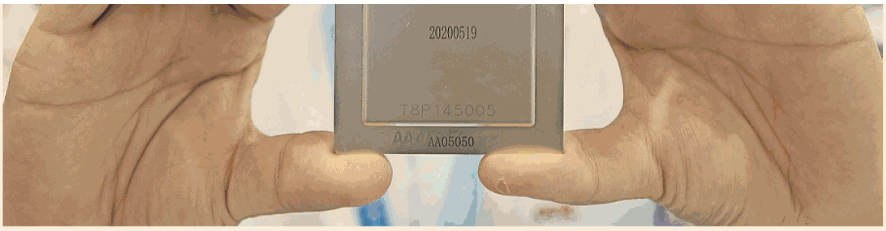
Memory chipmakers such as Yangtze Memory Technologies Corp and ChangXin Memory Technologies will be affected. Their more advanced products already meet the thresholds the US has set for memory chips. In the case of YMTC, the US has put restrictions on the export of tech to manufacture Nand memory chips with 128 layers or more — the level of the Chinese company's most advanced chips.

Without access to US tech, China will struggle to maintain its fast expansion in AI and supercomputing as well as cloud computing.

Douglas Fuller, an expert on the China chips industry, said the point of the US policy was to "kneecap" Chinese AI and high-performance computing that have military applications.

But Tudor Brown, a former independent director at SMIC, said the controls could backfire because they could "turbocharge" China's homegrown chip industry. "The US is being naive if it thinks this is going to slow them down for any length of time. I think it will slow them down for two to five years, not 10."

Analysts said the impact depended on how aggressively the US applied the controls. Many US firms that produce chips or chipmaking tools list China as their biggest market. China accounts for 33 per cent of sales at Applied Materials, 27 per cent at Intel and 31 per cent at Lam Research.



A staff member at SMIC displays a server chip. The Chinese company will be hit by the curbs, which bar US groups from supplying tech for chips more advanced than 14nm or, in some cases, 16nm — Costfoto/Future Publishing/ Getty Images

Applied Materials said the curbs would cut about $400mn, or 6 per cent, from next quarter's sales. Nvidia, which will be unable to export its advanced GPUs used in machine learning systems to China, also put the quarterly impact on revenues at $400mn, or 7 per cent of its sales. Lam Research, a big supplier to China's YMTC, said the export controls would slice as much as $2.5bn, or up to 15 per cent, from 2023 sales.

But some US companies could benefit, such as Micron, the memory chipmaker that is facing rising competition from YMTC.

Experts say Beijing has limited ability to retaliate. As one Chinese chip industry source put it, Beijing "doesn't have many levers to respond" in kind.

Last year China passed a law allowing countermeasures against sanctions. But it has not yet been used in response to Washington's tightening semiconductor controls or to retaliate against other moves from the US.

Some experts speculated that China could cut off tech groups, including Microsoft and Apple, from its consumer market. But one Chinese chip executive said this was unlikely. "China is keen to reach a truce in the tech war, rather than confrontation," said one expert.

On October 7 the US also added 31 Chinese groups, including YMTC, to the "unverified list" of entities for which Washington has been unable to conduct end-user checks to verify that US tech is being used for legitimate purposes.

If those concerns are not resolved within 60 days of a company being added to the list, they will almost certainly be put on the "entity list", which would in effect ban US groups from providing them with tech. In the case of YMTC, this would hit the company's less advanced memory chips since the restrictions would be broader.

European officials believe the US will probably widen its range of hard-hitting measures, which would create knock-on effects for EU business.

Some analysts warn that the majority of Chinese manufacturers could run out of inventory, sparking a chip shortage that would affect other sectors including aerospace, consumer electronics, medical devices and cloud computing.

"A chip shortage could cause downside risks including an overall slowdown of vehicle deliveries and or further deterioration of Chinese auto manufacturers profitability," said Gui Lingfeng, a principal at consultancy Kearney.

Taiwan Semiconductor Manufacturing Company, the largest contract chipmaker, said the immediate impact was "limited and manageable". But CC Wei, its boss, warned that it was "too early" to assess the long-term impact.

> 'The US is being naive if it thinks this is going to slow them down for any length of time'

South Korea's chipmakers won a one-year exemption to the controls. But they will have to apply for US export licences after the grace period. Experts said they would struggle to get US approval to export cutting-edge equipment to their factories in China based on previous US opposition to SK Hynix's plans to install extreme ultraviolet lithography equipment at its Wuxi factory.

Since the US imposed tough export curbs on Huawei in 2019, Japanese companies such as Sony have reduced their ties with Chinese chipmakers. But there is sharp division in the Japanese business community about how widespread the fallout would be. "We need to carefully check where US technology is included in our manufacturing equipment," said one Japanese executive.

In Europe, ASML, the Netherlands-based leader in chipmaking gear, said the controls would have "limited" impact on its shipment plans next year, as its business predominantly served more mature chip production tech in China than the advanced chip production targeted by Washington. Yet underscoring the far-reaching nature of the US controls, ASML was one of many companies that told US nationals on staff to stop serving Chinese customers while it assessed the impact.

See the FT Big Read

officer in Chamoli, confirmed MacLeod had been arrested. He had carried the phone "by mistake", Rawat said.

MacLeod said he had bought the device legally in the UK in 2017 for personal use and took it with him when travelling in the desert in Saudi Arabia in case of emergency.

One of the few foreigners to reach the upper ranks of Saudi Aramco, MacLeod said that while he was treated relatively well during his almost-week-long detention, prison authorities ignored his daily requests to contact his lawyer, the British High Commission, or his family.

"It was a frightening place and a highly traumatic experience, where I was in a communal cell with long-term prisoners who had committed very serious crimes," MacLeod said.

MacLeod, who co-operated with authorities, said his friends posted bail on his behalf, securing his release from prison. However, he was unable to leave the country until after a July 27 court hearing, when he pleaded guilty and paid a fine of Rs1,000 ($12).

MacLeod said he had sought help from the UK authorities by contacting a Foreign Office helpline en route to jail and visited the British High Commission in New Delhi after he was released on bail.

While the response from the Foreign Office in London was sympathetic, it "did not translate into any meaningful action to support me by the staff at the High Commission in Delhi", he said, adding that UK authorities told him they could not interfere with India's legal process.

The Foreign, Commonwealth and Development Office said it had "provided consular support to a British man in India" but did not comment further.

The episode comes as Riyadh seeks to forge deeper ties with India, an increasingly important buyer of its crude.

Saudi Aramco declined to comment.

Additional reporting by Chloe Cornish

Personal & household goods

AmorePacific shifts sales focus after second-quarter loss

SONG JUNG-A — SEOUL

AmorePacific, South Korea's leading cosmetics company, is accelerating its push into the US and Japan to make up for sluggish sales in China, as pandemic lockdowns disrupt business and domestic companies appeal to increasingly patriotic shoppers.

The shift in focus from the owner of the Innisfree and Sulwhasoo brands comes as the company suffered a second-quarter loss due to falling overseas revenues, with a double-digit drop in China over the first six months of 2022.

Investor concern over its Chinese business, which accounts for about half of the $4bn company's overseas sales, has made AmorePacific one of the most shorted stocks in South Korea, its stock price falling about 40 per cent so far this year.

"China is still an important market for us but competition is intensifying there as mid-range local brands rise with affordable quality products tailored for local tastes," said Lee Jin-pyo, the company's chief strategy officer.

"So we're increasingly focusing on the US and Japan these days, targeting the growing skincare markets there with our own unique ingredients and formulas," he said.

Expanding its US presence is critical for AmorePacific, which wants to be a "global beauty company beyond Asia," said Lee. "We aim to become a national brand in the US, not a niche player."

The company's US sales rose 65 per cent in the first six months of 2022 to account for 4 per cent of its revenue, driven by best-selling items such as the activating serum of the premium Sulwhasoo brand and the moisture cream and lip sleeping mask sold by its mid-priced Laneige brand.

South Korea is already the largest exporter of cosmetics products in the US, after France and Canada, the US Department of Commerce said, as cosmetics companies leverage the growing popularity of Korean pop culture to drive sales, using idols such as BTS and Blackpink for their marketing blitz.

"We have high expectations for the US market," said Lee. "We are looking at some possible acquisition targets as this would be a better way of understanding the market more quickly."

The company is buying Australian business Natural Alchemy, which operates luxury beauty brand Tata Harper, for an estimated Won168bn ($116.4mn) as demand grows for natural, environment-friendly cosmetics products, a category the company sees less affected by the looming global recession.

AmorePacific has been one of the most shorted stocks in South Korea

Although waning Chinese demand is taking a toll, AmorePacific sees the situation as "temporary" and expects a turnround next year after closing hundreds of its mid-market brand stores in China. As part of the restructuring, the company is trying to expand its presence in Hainan, the duty-free shopping hub, and strengthen marketing through Chinese digital channels.

"Our profitability in China will start improving next year once we complete our restructuring, " said Lee, adding it plans to focus on the premium market.

The company also expects a sharp increase in Japanese sales next year, as its mid-range brands such as Innisfree and Etude gain popularity. South Korea became Japan's biggest cosmetics importer in the first quarter of 2022.

Automobiles

Hyundai eyes record earnings driven by premium models

SONG JUNG-A — SEOUL

Hyundai Motor expects to post record earnings this year on strong sales of premium models including electric cars and sport utility vehicles, helped by the weaker local currency.

The South Korean company yesterday raised its full-year revenue growth forecast to 19-20 per cent, from the 13-14 per cent guidance made in January, while its expected 2022 operating profit margin was raised 1 percentage point to between 6.5 per cent and 7.5 per cent.

However, the automaker flagged potential headwinds of high inflation, supply chain disruption and fluctuating raw material prices, although global shortages of chips and other components are expected to ease.

The upbeat guidance came after Hyundai reported a 3.4 per cent fall in third-quarter operating profit at Won1.5tn ($1.04bn) due to a Won1.36tn provision for engine replacement costs. Sales in the three months to September rose 30.6 per cent year on year to Won37.7tn, buoyed by the weaker Korean won, which has fallen 17 per cent against the dollar this year.

Hyundai, which ranks among the world's top five automakers by sales together with affiliate Kia, said its third-quarter electric vehicle sales rose 27 per cent year on year to 52,000 units, accounting for 5 per cent of its total sales volume.

The company will break ground later this month on its first EV-dedicated US plant. The $5.5bn plant in Georgia is not scheduled to begin production until 2025, making it ineligible for tax credits laid out in the US Inflation Reduction Act.

COMPANIES & MARKETS

JPMorgan units go to war over prized clients

Dimon stays on the sidelines despite calls to intervene in battle to manage wealth of former baseball star

JOSHUA FRANKLIN — NEW YORK

Infighting at JPMorgan Chase over how to manage the fortune of retired baseball star Alex Rodriguez has escalated into a two-year battle in the bank involving figures such as pop sensation Jennifer Lopez, author Malcolm Gladwell and chief executive Jamie Dimon.

The tug of war has set JPMorgan's storied private bank against a wealth advisory business acquired as part of the 2008 purchase of Bear Stearns during the financial crisis.

At the centre of the battle is Gwen Campbell, a financial adviser who brought clients including Rodriguez when she joined from Bank of America's Merrill Lynch division in 2020 and set up shop at JPMorgan Advisors, as the Bear operation is now known.

Campbell has accused colleagues at JPMorgan's private bank of trying to lure away Rodriguez.

In one instance, the private bank tried to leverage a relationship with Lopez as part of their strategy, say people familiar with the matter.

Gladwell, a New York Times bestselling author of books including *The Tipping Point* and a longtime Campbell client, has rushed to her defence, firing off a letter to Dimon on her behalf, accord-

"low seven-figure amount" at the private bank, Campbell claimed in legal filings. As a result, when she joined, Rodriguez was designated as a shared client between JPMorgan Advisors and the private bank.

Campbell has argued her relationship with Rodriguez should have been protected by an agreement with JPMorgan that the approach to dealing with shared clients would be to "maintain the current nature of their relationship with the private bank". But she has accused the private bank of pitching several of her clients for business, with Rodriguez the chief target.

The private bank ended up winning more of Rodriguez's business by providing a loan for his acquisition of a minority stake in the Minnesota Timberwolves basketball team in 2021, Campbell alleged in court filings. This was after Campbell was told that JPMorgan Advisors would not finance the loan.

Before that loan, the private bank had also switched coverage of Lopez from its West Coast team to the New York bankers who had been tasked with cultivating a relationship with Rodriguez, according to people familiar with the decision.

At the time, Rodriguez and Lopez were engaged and the reassignment was

ing to messages seen by the Financial Times.

Dimon has not responded directly, instead tasking other executives to reply to clients' concerns.

"I thought he was supposed to be a statesman, Jamie Dimon. This is like a game an 11-year-old would play," Gladwell told the FT.

"Quite apart from what he's doing to Gwen, I'm a client. My life savings are with JPMorgan. My financial adviser has been exiled like Napoleon on Elba. Is that the way you treat your clients? I'm small fry but a lot of her clients are not small fry," he added.

Since December, Campbell has been seeking financial damages through arbitration for what she alleges is a breach of contract. A hearing is scheduled for July.

In the meantime, Campbell is still working at JPMorgan in San Francisco. Her team of advisers has lost three members and she has complained in legal filings of having been periodically locked out of the bank's computer systems.

"What JPMorgan is doing is not only hurting Gwen but having a direct adverse impact on her clients which are JPMorgan's clients. This is something that's known by Jamie Dimon and the board," said Michael Willemin, Campbell's lawyer and partner at Wigdor LLP.

JPMorgan said the bank had been "putting significant focus and investments" into JPMorgan Advisors and "set in place rules for situations where clients are served by more than one line of business".

"These rules allow us to bring clients the expertise they need while ensuring that they and our financial professionals are treated fairly," the bank said.

The infighting stems from JPMorgan having separate but overlapping businesses — both JPMorgan Advisors, where Campbell works, and the private bank cater to wealthy clients but are under different leadership.

Inside JPMorgan, financial advisers and private bankers regularly lament the internal competition for clients, according to current and former employees.

Cause célèbre: Alex Rodriguez and Jennifer Lopez, pictured in 2020, are among figures linked to the dispute between their financial adviser and JPMorgan, led by Jamie Dimon, below — Dimitrios Kambouris/Getty Images for Turner

In another instance involving a different adviser earlier this year, the private bank and JPMorgan Advisors battled over which division should manage money for a client who had inherited several hundred million dollars from a relative, according to a person familiar with the matter.

Dimon ended up intervening, telling both sides that the bank did not have the market share for turf wars, the person said. It was left up to the client to decide which division they would park their money at.

The dispute between Campbell and the private bank spilled into the open in December when she brought the first of several actions against JPMorgan, asking a court for a restraining order. That request was rejected.

Campbell has also filed for arbitration proceedings seeking financial damages and in April submitted a complaint with the US Equal Employment Opportunity Commission, alleging she has suffered gender discrimination.

Some of Campbell's clients have, like Gladwell, written to Dimon and urged him to intervene on her behalf, according to emails seen by the FT.

Gladwell emailed Dimon in June, asking him to "find a way to bring this dispute quietly and gracefully to an end". Gladwell received a response from Kristin Lemkau, chief executive of JPMorgan Wealth Management, who was involved in Campbell's hiring.

Lemkau told Gladwell that she could not comment on Campbell's allegations due to pending arbitration but that JPMorgan was "committed to exploring and addressing any issues she raised".

Gladwell, who has known Campbell for more than 20 years, said he was shocked by the way JPMorgan was treating her.

"It just strikes me that they're torturing her," Gladwell told the FT. "I don't understand why someone would willingly make someone's life miserable for no reason."

> 'I thought he was supposed to be a statesman, Jamie Dimon. This is like a game an 11-year-old would play'

> 'My financial adviser has been exiled like Napoleon on Elba. Is that the way you treat your clients?'

Jackie Reses, a former executive at payments company Square who is now chief executive of Lead Bank, is another unhappy Campbell client, telling the FT that JPMorgan "isn't doing right in this situation".

"JPMorgan should look at this as a client issue, not as a litigation issue," said Reses, whose net worth was pegged at over $1bn by Forbes last year.

Campbell came to JPMorgan Advisors in 2020 with almost $1.4bn in client assets and loans, according to a legal filing in December. This included millions of dollars belonging to Rodriguez, who earned an estimated $400mn during his 22-year career in baseball. Following his retirement from the New York Yankees in 2016, the slugger known as A-Rod has become a broadcaster, investor and entrepreneur.

Before Campbell joined JPMorgan, its investment bankers had already advised Rodriguez and Lopez on a failed attempt to buy the New York Mets baseball team in 2020. Rodriguez also kept a made with the hope this would facilitate future business with Rodriguez, the people said.

JPMorgan declined to comment. Representatives for Lopez and Rodriguez did not respond to requests for comment.

In a letter sent to JPMorgan's board of directors in April, seen by the FT, Campbell said that continued litigation was not her preference and that she wanted to "have the terms of my employment contract honoured".

"If that is not possible," Campbell wrote, "the third option is to part ways and resolve this matter in a way that reflects the value of the billion-dollar book of business that I brought to JPMorgan".

Additional reporting by Sara Germano

Retail

Inflation revives austerity habits in the shops

JUDITH EVANS

European, US and Asian consumers are returning to the kind of "austerity shopping" behaviour common in the 1970s and 1980s as inflation squeezes budgets for food and household goods, research has shown.

Data group IRI said households were turning back to measures such as making packed lunches, buying cut-price food that is out of date, curbing their alcohol intake and visiting several supermarkets to secure the cheapest deals.

The changes in how people shop for household essentials are cutting into sales growth for consumer products and boosting supermarket own-label products.

The research follows evidence of people cutting back on bigger-ticket items such as clothing earlier in the year as the economic outlook darkened.

Growth in the consumer packaged goods category has halved to 1.5 per cent in 2022 from a year earlier, according to IRI sales data, which cover 14 key markets. Alcohol sales through stores are falling, along with consumer spending on household products.

In Europe, supermarket own-brands, which yielded ground to branded goods during the acute phase of the pandemic, are returning to pre-pandemic levels. They account for 36 per cent of consumer packaged goods sales, up from 34 per cent in May.

The changes are cutting into sales growth for consumer products and boosting own-label products

Private-label products were even making inroads in areas such as baby food, where parents were traditionally loyal to brands, said Ananda Roy, senior vice-president at IRI.

Private labels' success was partly a result of the growth of discount supermarkets, which commanded far more of the market than in the recession that followed the financial crisis, said Roy.

"The growth in private-label that we're seeing now is primarily in food staples. That's because we are having to look at whether we can get a good deal in the Aldis and Lidls. People are now having to go to Aldi to buy butter and cheese."

Their rise posed a challenge to small and medium-sized makers of branded foods, he said.

"We are anticipating that in the first half of 2023 these manufacturers . . . are going to trigger a price war, because they are going to be desperate to maintain volumes."

Alcohol sales in stores had declined 6.7 per cent year on year during 2022 so far, said Roy.

The drop was partly driven by a return to pubs and bars as coronavirus restrictions lifted but has accelerated, in a sign that squeezed budgets are also coming into play.

Alcohol sales over the summer season were "nowhere near what they used to be", Roy said. "Consumption of alcohol has dropped, and that's quite significant."

Fixed income. Price pressures

Outperformance at risk for $4tn US muni bond trade

Commodities

European gas drops below €100 for first time since Russian cuts

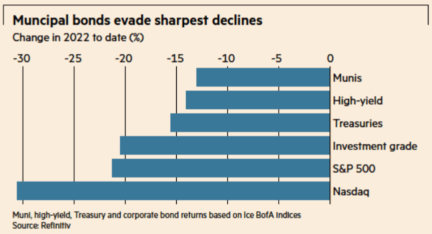
DAVID SHEPPARD AND SHOTARO TANI

European natural gas prices have dropped below €100 per megawatt hour for the first time since Russia slashed supplies this summer with warm weather and close-to-full gas storage easing concerns over winter shortages.

The price drop will come as a boost for the EU leaders who are working to place a cap on the price of the fuel as they fight high inflation and a slowing economy, and attempt to deny Moscow funds for its invasion of Ukraine.

Local government debt has avoided worst of sell-off but new deals outlook is less rosy

KATE DUGUID — NEW YORK



Muncipal bonds evade sharpest declines

Change in 2022 to date (%)

Muni, high-yield, Treasury and corporate bond returns based on Ice BofA indices
Source: Refinitiv

In a bleak year for fixed income markets, US municipal bonds issued by state and local governments have stood out as being among the least worst assets to own. But the outperformance is now looking more tenuous.

The $4tn market for "munis", often bought by individual investors attracted to their yields and tax advantages, has fallen by 13 per cent this year, according to the ICE BofA municipal bond index.

The decline has been sharp for the muni market but less severe than benchmarks for Treasury bonds, investment grade corporate debt or US equities.

Municipalities' fiscal balances are still in good shape thanks to stimuli they received in the Covid-19 crisis but the returns on their bonds reflect more than that.

Investors and strategists warn that munis' relative strength also reflects a dramatic slowdown in issuance and mispricing in the market.

The trend has been particularly clear since the end of September as munis have rallied while the supply of new bond issues has plummeted.

Issuance of the bonds governments use to fund projects such as school or bridge construction in the year to September has been the lowest since the first three quarters of 2019. Just $25.8bn of deals came to market in September, the slowest month since March 2020 at the outset of the pandemic.

Some now see a modest increase in new offerings, a supply that threatens to put pressure on prices.

Issuance rose to $10bn last week and Citigroup is expecting $10bn of issuance again this week.

"I had hoped to make a bullish call with conviction but I can't," said Vikram Rai, head of municipal strategy at Citi. "When supply picks up in the coming weeks, the recent outperformance of munis is going to go away."

Borrowing costs are rising as the US Federal Reserve pushes interest rates higher, which may force municipalities to act to avoid even higher rates.

Falling tax receipts may also drive new issuance. According to the most recent data from the Urban Institute, state tax revenue adjusted for inflation declined by 0.7 per cent during July and August from the same two months a year before.

Municipalities also often rush to issue bonds ahead of elections, fearing a change to policy.

"Issuance in our market was down dramatically in September," said Peter Block, a managing director at Ramirez & Co, an investment bank that specialises in municipal debt. "Usually October is a big month but we'll see. Issuers that have flexibility are saying — we'll delay our deal that we had planned for October until things settle down. But if you have to issue, you have to issue."

Munis are traditionally buy-and-hold assets, owned by investors who collect the tax-exempt interest payments until maturity. Infrequent trading means that prices in the market often do not reflect current sentiment.

More issuance could boost trading volumes and liquidity, assigning new prices to bonds that haven't traded for weeks during a volatile period in Treasury and other fixed income markets.

"Stale pricing is the defining characteristic of the muni market," said Steven Grey, chief investment officer of hedge fund Grey Value Management. "It has always been a stale, dysfunctional market with lousy price discovery. Everybody's sort of holding their nose and looking the other way."

The gap between the estimated valuation of munis and actual market prices is particularly wide at the moment because of this year's market volatility, said Nick Venditti, a muni fund portfolio manager at Allspring Global Investments.

"That is potentially dangerous for less sophisticated muni buyers, particularly if they are buying bonds at or near the [price evaluation determined by third-party providers], they are buying those bonds at what are almost certainly inflated levels," said Venditti.

If issuance fails to increase, the illiquidity of the market could continue to bolster prices.

"If you're talking about the performance of [a muni] index, if all the liquid bonds were to price overnight where they are supposed to trade, you will clearly have a big adjustment in the index," said Mikhail Foux, head of municipal research at Barclays. "But if the bonds don't trade, nothing happens."

Investors should not expect muni prices to drop because of issuance or liquidity issues, added Foux.

Shadowlands: municipal bonds fund projects such as school or bridge construction, attracting individual investors seeking their tax advantages
Michael Ciaglo/Bloomberg

'It has always been a stale, dysfunctional market with lousy price discovery'

Dutch TTF gas futures, the benchmark European contract, dropped as low as €93.35/MWh ($27 per mmbtu) yesterday, down nearly 20 per cent compared with Friday, the lowest it has been since mid-June.

European gas prices are now 70 per cent below levels seen in August, when they soared above €300/MWh, although they are still well above the €20 to €40/MWh range they largely traded at over the past decade.

UK gas contracts for delivery in November fell as much as 15 per cent, to £1.72 per therm ($19 per mmbtu).

James Waddell at Energy Aspects said prices were falling in the short term because of "limited storage capacity remaining, low gas demand because of mild weather and congestion in bringing in LNG and flowing it east within Europe".

Reduction in demand has also helped with storage — think-tank Bruegel's European natural gas demand tracker shows Europe has lowered its demand by 7 per cent year-to-date compared with the 2019-21 average.

The EU has agreed to reduce gas demand voluntarily by 15 per cent this winter.

Tom Marzec-Manser at ICIS said current consumption was about 20 per cent lower in Europe than usual for this time of year.

"Demand is really low, both because [the weather is] very mild and clearly actions of individuals and businesses to save gas are starting to come through," he said.

Increased imports of liquefied natural gas to replace Russian pipeline supplies, which now account for only 9 per cent of EU supply, down from 40 per cent last year, have helped European storage to reach more than 90 per cent capacity while warm weather has meant a delay in heating demand.

But whether Europe has enough gas for the winter still relies on the weather, said Alex Tuckett at CRU Group. "If we have a mild to average winter, we should probably avoid [energy] rationing. A cold winter will be much harder," Tuckett added.

See Lex

'The weather is very mild and actions of individuals and businesses to save gas are coming through'

Fixed Income

UK government debt rallies strongly on confirmation of Sunak as prime minister

TOMMY STUBBINGTON

Gilts rallied sharply yesterday as Rishi Sunak was confirmed as the UK's new prime minister with investors betting that the former chancellor would stick to the economic policies that have calmed markets in recent days.

UK government bond prices had leapt in early trading after Boris Johnson's exit from the Conservative party leadership race on Sunday.

They extended their gains after Penny Mordaunt pulled out to leave Sunak as the only remaining candidate, pushing UK government borrowing costs back down close to the levels seen prior to last month's controversial "mini" Budget, which triggered a gilt market meltdown.

The 10-year gilt yield sank 0.32 percentage points to trade at 3.73 per cent yesterday, reflecting a sizeable rise in price.

The pound climbed by as much as 0.9 per cent against the dollar in early trading before falling back amid a broad rise for the US currency to trade little changed on the day at $1.1295.

The departure of Johnson from the contest brought relief to markets that had wobbled on Friday at the prospect of the former prime minister's return to Downing Street.

Sunak is seen by investors as far more likely to back the fiscal plans of the new chancellor Jeremy Hunt, which helped to restore order to the gilt market.

"Rishi Sunak stands a much better chance of bringing stability to government," said Derek Halpenny, head of research for global markets at MUFG. "He will not have a privileges committee investigation into lying to parliament that Boris Johnson has and will command credibility from financial markets given his strong opposition to the economic policies of Liz Truss."

Ten-year yields remain above levels of roughly 3.5 per cent seen prior to Truss's ill-fated fiscal plans last month, which sent gilts and sterling into a nosedive, triggering a liquidity crisis at pension funds and prompting the Bank of England to step in with an emergency bond-buying programme.

But shorter and longer dated gilt yields fell back to roughly where they were before September 23.

Investors had also bet that the BoE would be forced to raise interest rates rapidly to prop up a falling pound and offset the inflationary effects of £45bn of unfunded tax cuts.

Interest rate expectations had begun to fall back down following Hunt's announcement last week that he would scrap most of Truss's tax-cutting measures. They moderated further on yesterday.

Traders expect BoE interest rates to rise to just above 5 per cent by next summer compared with 5.25 per cent last week.

Rishi Sunak is seen as likely to back fiscal plans that have calmed trading

Currencies

Yen swings sharply as traders debate possible third intervention by Tokyo

LEO LEWIS AND KANA INAGAKI — TOKYO

The yen swung against the US dollar yesterday as traders grappled with signs of a third round of currency intervention by Japanese authorities and analysts warned that further action risked stoking volatility.

After starting the morning in Japan at about ¥149.71 per US dollar, the yen reached ¥145.56 at 8.44am in the space of a few minutes. By yesterday afternoon, the yen was back at the level before the morning surge began.

The sharp moves occurred shortly after Shunichi Suzuki, finance minister, emphasised Japan's resolve to curb the yen's volatility as the currency hovered around a 32-year-low.

"We are robustly confronting market speculators," Suzuki told reporters in a morning press huddle. "We will respond appropriately as needed since we cannot tolerate excessive moves in the foreign exchange market based on speculation."

The yen is under significant pressure as the Bank of Japan sticks to its ultra-loose monetary policy in contrast with the central banks of most developed economies.

Despite the yen's appreciation, traders in Tokyo said it was still very difficult to tell whether Suzuki's latest attempt at verbal intervention had been accompanied by another yen-buying operation.

Masato Kanda, the country's top currency official, declined to comment on whether an intervention had been carried out on Monday.

On Friday, long after Japanese trading floors had closed and with dollar-yen trading in a less liquid part of the day, the Japanese authorities performed a yen-buying operation that dealers estimated at about $30bn.

The action, which sent the yen surging from ¥151.94 on the dollar to ¥144.50, followed a $20bn intervention in September.

The decision to take action during lower liquidity hours after Tokyo dealing rooms had closed was at odds with the Japanese government's suggestion that it was intervening to lower market volatility, currency strategists said.

"The market is on high alert for intervention given uncertainty about exactly what the objective is at this point," said Benjamin Shatil, foreign exchange strategist at JPMorgan. "Even as authorities have signalled their desire to smooth volatility, erratic or outsized intervention actually runs the risk of increasing market volatility."

Strategists said Friday's intervention had caused particular frustration for Tokyo traders, who were not able to respond to the action outside normal market hours in Japan.

Kenta Tadaide, a senior foreign exchange strategist at Daiwa Securities, said many traders were assuming that the yen's sharp movement yesterday was an intervention.

If it was another yen-buying operation, he said the authorities probably had to step in because the yen's depreciation following Friday's action was much faster than the currency's gradual erasure of gains after September's intervention.

'We cannot tolerate excessive moves in the foreign exchange market based on speculation'

COMPANIES & MARKETS

The day in the markets

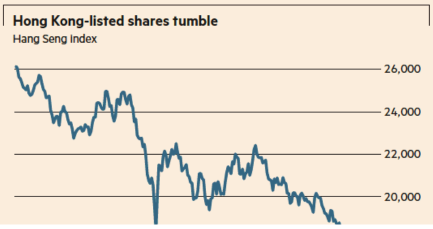
What you need to know

- **US stocks rise ahead of Big Tech earnings season**
- **European shares rally even after PMI slides to lowest level since 2020**
- **Gilts and FTSE 100 rally as Sunak becomes prime minister but pound slips**

US stocks rose yesterday in chopping trading ahead of a week of third-quarter earnings results for Big Tech companies, including Meta, Alphabet and Amazon.

Wall Street's S&P 500 was up 0.8 per cent by the late morning in New York.

The broad-based US index last week recorded its biggest five-session gain



Hong Kong-listed shares tumble

Hang Seng index

Bear run indicates an underlying earnings weakness

Alan Livsey

Markets Insight

Bear markets are a bit like freckles. Initially they all look similar but, on closer inspection, they can vary greatly.

emerging markets — have higher estimated rates of earnings growth for this year (partly because of currency effects from the strong dollar) but still

pumped up nominal sales growth, even though profit margins are beginning to fall, said Lapthorne.

Note that last week P&G reported a

recorded its biggest five-session gain since June, adding 4.7 per cent, as investors responded to reports that the Federal Reserve might begin to slow the rate at which it raises interest rates from December.

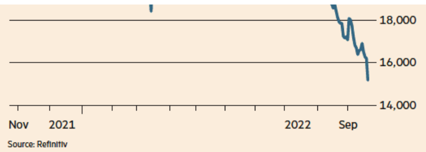
At the same time, the technology-heavy Nasdaq Composite added 0.1 per cent, reversing earlier losses.

Those gains came even as US-listed shares in a number of Chinese companies fell sharply.

The declines came after Chinese-listed tech stocks tumbled earlier in the day in the wake of Xi Jinping's securing a third term as party leader and as new data showed the country's economy fell well short of Beijing's growth target.

Monday also marked the start of a week dominated by technology earnings in the US with Apple, Microsoft, Alphabet and Amazon all due to report quarterly figures in the next few days.

UBS analysts said corporate financial statements had so far been "mixed" with results broadly in line with the market's "relatively cautious expectations".



Source: Refinitiv

Across the Atlantic, the pan-regional Stoxx Europe 600 gauge closed 1.4 per cent higher while Frankfurt's Xetra Dax rose 1.7 per cent even as S&P Global's flash eurozone composite purchasing managers' index, a measure of business activity in the region, fell to its lowest level since November 2020.

Peter Vanden Houte, chief economist at ING, said the figure "clearly confirms that the eurozone economy is already in recession".

In bond markets, the yield on the benchmark 10-year US Treasury note was steady at 4.22 per cent.

In the UK, prices for 10-year gilts climbed, pushing yields down 32 basis points to 3.73 per cent as Rishi Sunak was confirmed as the country's next prime minister.

London's FTSE 100 index rose 0.6 per cent while sterling slipped 0.1 per cent against the dollar to $1.1290. It also slipped 0.3 per cent against the euro on the day to €1.1430.

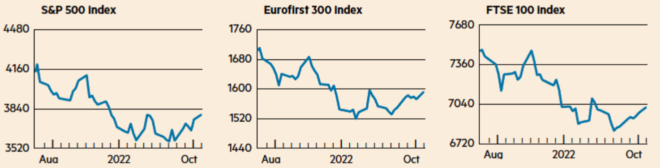
Hong Kong's Hang Seng index closed 6.4 per cent lower, registering its biggest drop since 2008, while the CSI 300 index of Shanghai- and Shenzhen-listed equities fell 2.9 per cent. **George Steer**

Markets update

	US	Eurozone	Japan	UK	China	Brazil
Stocks	**S&P 500**	**Eurofirst 300**	**Nikkei 225**	**FTSE100**	**Shanghai Comp**	**Bovespa**
Level	3791.32	1591.70	26974.90	7013.99	2977.56	116858.54
% change on day	1.03	1.23	0.31	0.64	-2.02	-2.56
Currency	**$ index (DXY)**	**$ per €**	**Yen per $**	**$ per £**	**Rmb per $**	**Real per $**
Level	112.285	0.989	148.765	1.131	7.262	5.285
% change on day	0.244	0.918	-0.817	1.253	0.163	1.854
Govt. bonds	**10-year Treasury**	**10-year Bund**	**10-year JGB**	**10-year Gilt**	**10-year bond**	**10-year bond**
Yield	4.209	2.327	0.252	3.733	2.714	12.849
Basis point change on day	-1.550	-8.600	0.050	-31.600	-1.500	11.700
World index, Commods	**FTSE All-World**	**Oil - Brent**	**Oil - WTI**	**Gold**	**Silver**	**Metals (LMEX)**
Level	378.43	93.34	84.82	1643.25	18.39	3555.40
% change on day	0.73	-0.17	-0.27	0.49	-2.13	-0.13

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

Main equity markets



Biggest movers

%	US		Eurozone		UK	
Ups	Tractor Supply	6.06	Michelin	5.27	Pearson	8.74
	Regions Fin	5.81	Aegon	4.21	Persimmon	4.47
	Key	5.74	Coloplast	4.20	Sse	4.00
	Hca Healthcare	5.43	Bbva	3.79	Barratt Developments	3.73
	Autozone	4.12	Asml Holding	3.45	Berkeley Holdings (the)	3.72
Downs	Las Vegas Sands	-11.67	Vopak	-3.11	Prudential	-9.27
	Starbucks	-5.79	Galp Energia	-3.00	Fresnillo	-2.73
	Wynn Resorts	-5.46	Swatch	-2.62	Antofagasta	-2.22
	Tesla	-4.17	Renault	-1.85	Scottish Mortgage Investment Trust	-1.84
	Cf Industries Holding	-3.19	Philips	-1.75	Anglo American	-1.74

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

A sell-off in China-exposed stocks spread to Wall Street where casino operators **Las Vegas Sands** and **Wynn Resorts** sank to the bottom of the S&P 500 index.

Both groups have properties located in Macau, a narrow peninsula off the south coast of China.

The sell-off was spurred by the release of growth numbers that fell short of Beijing's annual target and a change in leadership in the ruling party that unsettled investors who worried that economic reforms would take a back seat in the country.

In other China-related news, **Tesla** retreated following reports that it had cut the starter prices for some of its vehicles in the country to combat softening demand.

Myovant rose sharply on news that Japan's Sumitomo Pharma had agreed to buy the biopharma group for $27 per share — a 10 per cent premium on Friday's closing price.

The bid improved on a $22.75 offer made earlier this month by Sumitomo, with already owned 52 per cent of the group that specialises in treatments for prostate cancer and uterine fibroids.

Dorman Products, which supplies after-market auto parts, sank after cutting its full-year profit forecast, which it blamed partly on "rapidly increasing interest rates". *Ray Douglas*

Europe

Germany's **Atoss**, which provides workforce management software, rose sharply after lifting its outlook and reporting "new records . . . for sales and earnings" in the third quarter.

Management now assumed the company would "slightly exceed" its 2022 forecast for total revenue of €110mn and an operating profit margin of more than 25 per cent.

Broker Jefferies highlighted a "key factor" of recurring revenues, which continued to "grow significantly" and accounted for 58 per cent of sales during the quarter, up from 51 per cent from the previous year.

Speciality minerals group **Imerys** rallied following its declaration "to become a major player in the European lithium market".

The French group said surveys carried out at its Beauvoir site confirmed "very attractive concentrations and quantities of lithium", a key ingredient for batteries in electric cars and smartphones.

A soft set of quarterly numbers weighed on Portugal's **Galp Energia** with the oil and gas group posting operating profit that missed analysts' estimates.

Full-year guidance for core profits was also trimmed to €3.8bn from €4bn "to reflect lower expectations for the industrial and energy management segment", said Citi. *Ray Douglas*

London

Education publisher **Pearson** topped the FTSE 100 index after reaffirming its full-year guidance as part of an update that gave investors "comfort", said Citi.

Helped by what Pearson described as an "outstanding result" in its English-language learning business, organic growth ran at 7 per cent for the first nine months of 2022, significantly ahead of Citi's 2 per cent forecast.

Online car dealer **Auto Trader** rallied on news that it was selling its subsidiary, Webzone, which trades in the Republic of Ireland under the Carzone brand.

The business was sold to Mediahuis, the publisher of titles such as the Belfast Telegraph and Sunday World, for €30mn.

Liberum said the price was an "attractive" multiple and will allow Auto Trader to focus on its core UK market.

Life insurer **Prudential**, which has significant business in Asia, sank to the bottom of London's blue-chip benchmark following a sell-off in Chinese shares.

The rout was trigged by below-par growth figures out of Beijing and fears of an ideological shift among the top echelons of the ruling Communist party.

Fulcrum Utility Services, which provides energy connections and utility infrastructure, tumbled after forecasting a core loss of about £6mn for its financial year against a £500,000 profit for same period a year earlier. *Ray Douglas*

tion, they can vary greatly. Consider the latest one.

This year, global stock prices have already collapsed by about 25 per cent, typical when foreshadowing a recession. Yet, so far, market earnings estimates reveal no expected profit decline ahead.

That is not so unusual as a trend. Corporate bosses usually exude optimism. If products or services continue to sell and customers pay on time, of course they will emphasise a rosy view.

As a result, even time-hardened analysts may not wish to second-guess their covered companies on the facts.

Eventually though, companies start warning of problems with, say, excess inventory or clients that have stopped spending. This can have a disproportionate effect on a company's shares.

One example — big box US retailer Target noted that it had too much stock in its warehouses in its first-quarter results in May. Investors panicked and the shares immediately hit an air pocket, falling 25 per cent on the day.

Today, executives regularly offer some caution when discussing outlooks. Yet global earnings estimates still point to growth to come this year and next.

If we exclude the energy sector given its Ukraine-induced rise in profit, global earnings per share growth is set to rise about 3 per cent this year and almost 9 per cent in 2023, using MSCI data.

In a recession, these rates would typically register a fall of a fifth or more.

The US, which weighs heavily on these aggregate figures, is expected to deliver 0.5 per cent earnings growth this year and 9.7 per cent next year.

Other areas — Europe, Japan and effects from the strong dollar) but still strong profit growth is expected in 2023.

We have been here before. This year's bear market resembles the tech wipeout starting in 2000, said Andrew Lapthorne at Société Générale.

High valuation stocks took the hit first, usually those groups with plenty of promise but little or no earnings.

Back then, a ratio of tech stocks against the S&P 500, a measure of relative performance, hit a peak not seen since the late 1960s, Bank of America pointed out recently. The tech-heavy Nasdaq 100 plummeted by three-quarters in the two years to September 2002 while the broad-based US benchmark S&P 500 index fell by less than half. Market-wide profit trends did not begin to deteriorate for about a year after the bubble burst early in 2000.

> Until central banks stop lifting interest rates, this is likely to leave markets on edge

This year, the tech sector has led the way again in the sell-off but the scale of sell-off is far from the spectacular bursting of the late 1990s dotcom bubble.

Notably the ratio of tech stocks against the S&P was at its highest level since the earlier dotcom peak. And like the earlier bear market, profit forecasts are holding up.

An expanding US economy has supported earnings for US companies. Inflation also helps. Rising prices have

Note that last week P&G reported a healthy single-digit increase in quarterly sales, down to its own product price increases. But profits growth did not keep up, crunching margins.

The broader trend is likely to continue until the US Federal Reserve quells inflation by raising rates. Eventually this will hit broader profit growth, perhaps in the early part of next year.

This brings us to the key difference with the bear market of two decades ago. Asset allocators and macro investors cannot easily shift into bonds.

Normally, they would seek out these and high-income stocks as harbours from an approaching storm. Not this time. A vicious bear market in the bond market has also taken hold.

Volatility in the fixed income market is extremely and persistently high as shown by the ICE BoA Move index. This index is at its highest in three years. UK gilt volatility has leapt even higher.

Until central banks stop lifting interest rates, this is likely to leave markets on edge. That might not happen until there is stark evidence of inflation falling, probably accompanied by economic weakness and rising unemployment.

Even if inflation is brought under control, that will mean less of a boost for topline revenue growth from rising prices, exposing underlying earnings weakness. Profit growth should then tumble fall quickly as in a more typical economic cycle. That is not a great outlook for equities. Cash holdings by investors are rising. The bear market should continue into next year.

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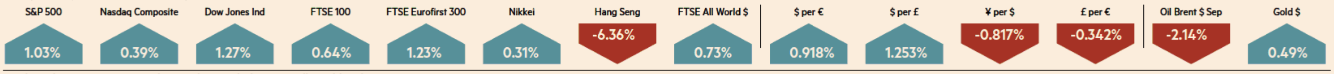
MARKET DATA

WORLD MARKETS AT A GLANCE

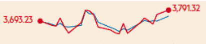
FT.COM/MARKETSDATA

Change during previous day's trading (%)



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

AMERICAS



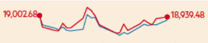
Day ↗ 1.03% Month ↘ -10.70% Year ↘ -14.82%

Nasdaq Composite New York

Day ↗ 0.39% Month ↘ -14.61% Year ↘ -27.88%

Dow Jones Industrial New York

Day ↗ 1.27% Month ↘ -6.62% Year ↘ -8.99%

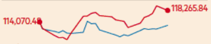


Day ↗ 0.33% Month ↘ -5.90% Year ↘ -7.64%

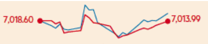
IPC Mexico City

Day ↗ 0.86% Month ↘ -1.98% Year ↘ -7.41%

Bovespa São Paulo



Day ↘ -2.56% Month ↗ 4.88% Year ↗ 7.44%



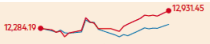
Day ↗ 0.64% Month ↘ -7.00% Year ↗ 1.71%

FTSE Eurofirst 300 Europe

Day ↗ 1.23% Month ↘ -7.51% Year ↘ -8.95%

CAC 40 Paris

Day ↗ 1.59% Month ↘ -5.61% Year ↘ -6.68%



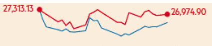
Day ↗ 1.58% Month ↘ -1.20% Year NaN%

Ibex 35 Madrid

Day ↗ 1.79% Month ↘ -7.79% Year ↘ -12.24%

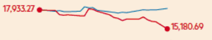
FTSE MIB Milan

Day ↗ 1.93% Month ↘ -2.33% Year ↘ -14.39%



Day ↗ 0.31% Month ↘ -6.71% Year ↘ -11.51%

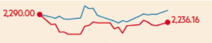
Hang Seng Hong Kong



Day ↘ -6.36% Month ↘ -23.15% Year ↘ -39.02%

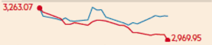
Shanghai Composite Shanghai

Day ↘ -2.02% Month ↘ -8.61% Year ↘ -17.61%



Day ↗ 1.04% Month ↘ -10.29% Year ↘ -28.80%

FTSE Straits Times Singapore



Day ↘ -1.75% Month ↘ -8.48% Year ↘ -3.26%

BSE Sensex Mumbai

Day ↗ 0.97% Month ↗ 0.52% Year ↗ 1.59%

Country	Index	Latest	Previous
Argentina	Merval	137371.95	138944.79
Australia	All Ordinaries	6978.40	6869.90
	S&P/ASX 200	6779.40	6676.80
	S&P/ASX 200 Res	5432.30	5323.10
Austria	ATX	2820.48	2775.09
Belgium	BEL 20	3495.19	3448.63
	BEL Mid	9030.71	8898.26
Brazil	IBovespa	116858.54	119928.79
Canada	S&P/TSX 60	1147.01	1143.32
	S&P/TSX Comp	18922.80	18860.95
	S&P/TSX Div Met & Min	1456.86	1378.03
Chile	S&P/CLX IGPA Gen	27831.74	27977.11
China	FTSE A200	9700.64	10013.74
	FTSE B35	9000.71	8988.96
	Shanghai A	3120.10	3184.52
	Shanghai B	283.22	293.24
	Shanghai Comp	2977.56	3038.93
	Shenzhen A	2021.50	2057.64
	Shenzhen B	1102.16	1135.64
Colombia	COLCAP	1261.61	1260.21
Croatia	CROBEX	2013.05	2011.29
Cyprus	CSE M&P Gen	68.46	68.68
Czech Republic	PX	1171.40	1164.33
Denmark	OMXC Copenahgen 20	1609.59	1576.59
Egypt	EGX 30	10258.24	10273.53
Estonia	OMX Tallinn	1667.53	1653.75
Finland	OMX Helsinki General	10357.55	10252.39
France	CAC 40	6131.36	6035.39
	SBF 120	4713.68	4640.02
Germany	M-DAX	23241.83	22918.01
	TecDAX	2771.68	2736.10
	XETRA Dax	12931.45	12730.90
Greece	Athens Gen	866.00	854.99
	FTSE/ASE 20	2097.61	2068.16
Hong Kong	Hang Seng	15180.69	16211.12
	HS China Enterprise	5114.48	5517.44
	HSCC Red Chip	3128.69	3307.12
Hungary	Bux	40091.49	40431.97
India	BSE Sensex	59880.85	59307.15
	Nifty 500	15216.75	15112.10
Indonesia	Jakarta Comp	7053.04	7017.77
Ireland	ISEQ Overall	6731.16	6626.73
Israel	Tel Aviv 125	1917.57	1925.32
Italy	FTSE Italia All-Share	23905.57	23442.77
	FTSE Italia Mid Cap	36713.27	36182.61
	FTSE MIB	21982.95	21567.55
Japan	2nd Section	7228.27	7239.06
	Nikkei 225	26974.90	26890.58
	S&P Topix 150	1617.93	1611.98
	Topix	1930.17	1935.49
Jordan	Amman SE	2502.22	2503.75
Kenya	NSE 20	1704.60	1705.02
Kuwait	KSX Market Index	6633.44	6603.51
Latvia	OMX Riga	1064.32	1063.41
Lithuania	OMX Vilnius	897.88	899.00
Luxembourg	LuxX	1329.65	1330.06
Malaysia	FTSE Bursa KLCI	1446.42	1437.72
Mexico	IPC	47526.26	47120.08
Morocco	MASI	10954.52	11066.31
Netherlands	AEX	653.54	652.46
	AEX All Share	884.10	885.69
New Zealand	NZX 50	10782.36	10832.03
Nigeria	SE All Share	44396.73	44332.21
Norway	Oslo All Share	1017.37	1006.88
Pakistan	KSE 100	42347.23	42213.48
Philippines	Manila Comp	6028.79	6055.99
Poland	Wig	47390.06	46768.23
Portugal	PSI 20	5563.32	5491.94
	PSI General	4247.34	4169.85
Romania	BET Index	10827.84	10875.61
Russia	Micex Index	2436.57	2445.30
	RTX	1245.71	1212.57
Saudi-Arabia	TADAWUL All Share Index	11963.68	11795.10
Singapore	FTSE Straits Times	2969.95	3022.70
Slovakia	SAX	336.11	338.34
Slovenia	SBI TOP	-	-
South Africa	FTSE/JSE All Share	64975.95	65539.24
	FTSE/JSE Res 20	61812.05	61165.30
	FTSE/JSE Top 40	58461.97	59091.06
South Korea	Kospi	2236.16	2213.12
	Kospi 200	291.47	288.57
Spain	IBEX 35	7680.50	7545.60
Sri Lanka	CSE All Share	8685.52	8737.38
Sweden	OMX Stockholm 30	1938.73	1901.51
	OMX Stockholm AS	733.83	719.06
Switzerland	SMI Index	10595.53	10418.60
Taiwan	Weighted Pr	12856.98	12819.20
Thailand	Bangkok SET	1591.32	1592.73
Turkey	BIST 100	4000.60	3934.63
UAE	Abu Dhabi General Index	9222.93	9251.11
UK	FT 30	2300.60	2268.60
	FTSE 100	7013.99	6969.73
	FTSE 4Good UK	6257.73	6220.21
	FTSE All Share	3820.96	3796.89
	FTSE techMARK 100	5878.11	5843.02
USA	DJ Composite	10407.94	10237.81
	DJ Industrial	31478.22	31082.56
	DJ Transport	13077.24	12692.75
	DJ Utilities	871.00	864.47
	Nasdaq 100	11372.54	11310.33
	Nasdaq Cmp	10902.44	10859.72
	NYSE Comp	14236.09	14144.05
	S&P 500	3791.32	3752.75
	Wilshire 5000	37744.69	37419.43
Venezuela	IBC	8843.17	8866.75
Vietnam	VNI	986.15	1019.82
Cross-Border	DJ Global Titans ($)	407.68	404.53
	Euro Stoxx 50 (Eur)	3530.50	3476.63
	Euronext 100 ID	1163.80	1154.11
	FTSE 4Good Global ($)	9121.73	9008.36
	FTSE All World ($)	378.43	375.67
	FTSE E300	1591.70	1572.29
	FTSE Eurotop 100	3129.69	3096.57
	FTSE Global 100 ($)	2391.37	2366.59
	FTSE Gold Min ($)	1427.15	1394.57
	FTSE Latibex Top (Eur)	4440.00	4432.20
	FTSE Multinationals ($)	2459.31	2424.18
	FTSE World ($)	688.75	681.65
	FTSEurofirst 100 (Eur)	4190.93	4146.43
	FTSEurofirst 80 (Eur)	4810.32	4737.94
	MSCI ACWI Fr ($)	569.93	563.06
	MSCI All World ($)	2462.42	2429.26
	MSCI Europe (Eur)	1605.45	1610.93
	MSCI Pacific ($)	2285.50	2313.31
	S&P Euro (Eur)	1595.43	1573.67
	S&P Europe 350 (Eur)	1629.04	1610.03
	S&P Global 1200 ($)	2735.65	2717.90
	Stoxx 50 (Eur)	3454.35	3414.27

(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	115.8	205.49	-8.95
Apple	51.1	148.48	1.21
Nvidia	31.0	125.07	0.41
Microsoft	27.9	245.77	3.65
Amazon.com	27.7	119.25	-0.07
Advanced Micro Devices	23.2	58.74	-0.08
Netflix	21.4	284.41	-5.16
Alphabet	12.4	101.75	0.62
Alphabet	12.1	102.05	0.57
Exxon Mobil	8.4	106.37	0.51

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Tractor Supply	209.34	11.97	6.06
Regions Fin	20.66	1.14	5.81
Key	17.87	0.97	5.74
Hca Healthcare	207.34	10.68	5.43
Autozone	2395.75	94.72	4.12
Downs			
Las Vegas Sands	34.51	-4.56	-11.67
Starbucks	83.48	-5.13	-5.79
Wynn Resorts	55.59	-3.21	-5.46
Tesla	205.49	-8.95	-4.17
Cf Industries Holding	103.95	-3.42	-3.19

Based on the constituents of the S&P500

LONDON

ACTIVE STOCKS	stock traded m's	close price	Day's change
Shell	172.8	2345.00	1.00
Glencore	160.2	501.90	-0.20
Bp	152.5	470.00	5.55
Hsbc Holdings	109.1	475.10	-2.75
Astrazeneca	86.1	9782.00	62.00
Unilever	82.5	3921.50	-22.00
Rio Tinto	79.3	4750.00	-55.00
Rentokil Initial	75.4	512.80	10.40
Prudential	67.6	804.20	-82.20
Anglo American	65.8	2686.50	-47.50

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Pearson	965.00	77.60	8.74
Indivior	1547.00	92.00	6.32
Persimmon	1273.00	54.50	4.47
Morgan Sindall	1452.00	60.00	4.31
Cmc Markets	231.50	9.50	4.28
Downs			
Fidelity China Special Situations	186.20	-20.30	-9.83
Prudential	804.20	-82.20	-9.27
Ferrexpo	109.40	-8.80	-7.45
Vietnam Enterprise Investments	512.00	-35.00	-6.40
Jupiter Fund Management	94.10	-5.80	-5.81

Based on the constituents of the FTSE 350 index

EURO MARKETS

ACTIVE STOCKS	stock traded m's	close price	Day's change
Asml Holding	417.5	475.40	15.85
Roche Gs	308.8	330.72	2.78
Novartis N	296.8	78.83	1.44
Nestle N	296.7	108.29	1.80
Prosus	242.1	40.85	-8.26
Unicredit	238.6	11.51	0.06
Stellantis	185.9	13.47	0.40
Eni	185.2	12.35	0.30
Totalenergies	179.9	53.71	0.74
Inditex	176.2	22.90	0.61

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Sika N	222.71	9.40	4.41
Engie	12.73	0.51	4.17
Essilorluxottica	159.80	6.35	4.14
Atlas Copco Ab Ser. B	9.21	0.36	4.13
Atlas Copco Ab Ser. A	10.27	0.39	3.95
Downs			
Prosus	40.85	-8.26	-16.82
Philips Kon	13.03	-0.23	-1.75
Adidas Ag Na O.n.	102.54	-1.32	-1.27
Hermes Intl	1289.50	-14.50	-1.11
Ericsson, Telefonab. L M Ser. A	5.96	-0.06	-1.05

Based on the constituents of the FTSEurofirst 300 Eurozone index

TOKYO

ACTIVE STOCKS	stock traded m's	close price	Day's change
Softbank .	1440.3	5733.00	-25.00
Tokyo Electron	770.9	39160.00	770.00
Nippon Yusen Kabushiki Kaisha	447.0	2778.00	99.00
Fast Retailing Co.,	421.8	82780.00	-940.00
Toyota Motor	402.8	1996.50	9.00
Mitsubishi Ufj Fin,.	370.0	705.30	10.00
Mitsui O.s.k.lines,	357.1	3030.00	118.00
Sony	344.8	9614.00	34.00
Recruit Hldgs Co Ltd	265.0	4487.00	107.00
Kawasaki Kisen Kaisha,	249.5	2373.00	86.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Mitsui O.s.k.lines,	3030.00	118.00	4.05
Sumitomo Metal Mining Co.,	4203.00	162.00	4.01
Kawasaki Kisen Kaisha,	2373.00	86.00	3.76
Nippon Yusen Kabushiki Kaisha	2778.00	99.00	3.70
M3,.	4345.00	143.00	3.40
Downs			
J.front Retailing Co.,	1166.00	-45.00	-3.72
Isetan Mitsukoshi Holdings	1302.00	-48.00	-3.56
Takashimaya ,	1827.00	-62.00	-3.28
Central Japan Railway	16905.00	-400.00	-2.31
West Japan Railway	5729.00	-126.00	-2.15

Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Oct 24 price(p)	%Chg week	%Chg ytd
Winners			
Pearson	965.00	8.5	59.3
Smurfit Kappa	2860.00	6.9	-
Pershing Square Holdings Ltd	2770.00	6.1	-9.3
Crh	3031.50	4.6	-
Bp	470.00	4.6	41.1
Mondi	1487.00	4.4	-
Halma	2115.00	4.3	-
Smith (ds)	286.10	4.2	-
St. James's Place	1027.00	3.8	-
Imperial Brands	2079.00	3.6	28.1
Shell	2345.00	3.5	44.8
British American Tobacco	3379.50	3.1	23.8
Losers			
Prudential	804.20	-9.0	-
Hargreaves Lansdown	740.80	-7.0	-
Harbour Energy	375.00	-6.5	7.1
Auto Trader	502.00	-5.4	-
Centrica	68.86	-4.8	-3.6
Frasers	628.50	-4.5	-
Dechra Pharmaceuticals	2594.00	-3.8	-
B&m Eur Value Retail S.a.	305.80	-3.2	-
Jd Sports Fashion	95.54	-3.1	-
Burberry	1828.00	-3.0	0.9
Kingfisher	206.80	-2.9	-
Segro	745.20	-2.8	-

FTSE 250	Oct 24 price(p)	%Chg week	%Chg ytd
Winners			
Wood (john)	129.65	10.8	-31.4
Bridgepoint	200.60	10.6	-
Carnival	621.60	10.0	-
Synthomer	100.50	9.7	-
Abrdn	152.60	8.2	-
Centamin	93.00	8.2	5.3
Balanced Commercial Property Trust	84.80	7.8	-
Rathbones	1844.00	7.3	-7.0
Discoverie	725.00	4.6	-
Jlen Environmental Assets	118.20	4.4	12.1
Network Int Holdings	327.00	4.1	11.5
Rhi Magnesita N.v.	1684.00	4.1	-
Losers			
Vietnam Enterprise Investments	512.00	-14.5	-
Moneysupermarket.com	172.40	-13.2	-
Fidelity China Special Situations	186.20	-10.9	-
Trainline	307.00	-10.4	10.0
Molten Ventures	250.40	-9.5	-75.1
Home Reit	81.80	-9.3	-
Mitchells & Butlers	104.90	-9.2	-58.3
Hilton Food	598.00	-9.0	-
Helios Towers	102.30	-8.3	-
Wetherspoon (J.d.)	426.60	-8.2	-
Just	57.85	-8.1	-
Moonpig	120.50	-8.0	-

FTSE SmallCap	Oct 24 price(p)	%Chg week	%Chg ytd
Winners			
Trustpilot	96.70	21.7	-
Funding Circle Holdings	52.80	17.3	-
Record	77.60	14.1	-7.2
Lookers	78.90	11.1	22.3
Harworth	112.00	7.7	-
Macfarlane	95.00	7.0	-
Esken	5.35	6.6	-
Cqs Natural Resources Growth And ome	199.00	6.6	29.0
Treatt	637.00	6.2	-50.6
Octopus Renewables Infrastructure Trust	99.00	6.0	-10.3
Card Factory	45.05	5.9	-
Palace Capital	227.00	5.6	-
Losers			
Provident Fin	136.30	-18.4	-62.0
On The Beach	92.50	-17.9	-
Luceco	67.80	-14.1	-
Jpmorgan China Growth & ome	256.00	-13.1	-
Restaurant	28.76	-12.7	-
Trifast	64.70	-11.4	-
Baillie Gifford China Growth Trust	212.75	-11.3	-44.0
Secure Trust Bank	634.00	-10.5	-
Abrdn China Investment	462.00	-9.8	-
Greencore	64.05	-9.5	-50.8
Metro Bank	69.00	-9.3	-
Zotefoams	270.50	-9.1	-

Industry Sectors	Oct 24 price(p)	%Chg week	%Chg ytd
Winners			
Oil & Gas Producers	8158.21	1.3	42.8
Aerospace & Defense	4717.09	0.7	12.9
Tobacco	36515.48	-1.2	24.8
Media	8769.96	-1.7	-10.1
Industrial Transportation	3150.60	-2.0	-
Personal Goods	28536.78	-2.1	-
Electronic & Electrical Equip.	8376.26	-2.3	-
Industrial Metals	6687.89	-3.0	5.0
Health Care Equip.& Services	10652.48	-3.2	29.2
General Industrials	5743.59	-3.6	-
Support Services	9700.24	-3.6	-
Travel & Leisure	5886.70	-3.8	-
Losers			
Automobiles & Parts	1110.73	-32.9	-
Real Estate & Investment Servic	1954.54	-21.3	-40.1
Real Estate Investment Trusts	2113.17	-19.4	-
Electricity	9170.65	-17.8	-9.2
Gas Water & Multiutilities index	5104.60	-14.9	-
Household Goods	9264.39	-13.3	-
Life Insurance	5783.99	-12.5	-
Banks	3020.11	-10.1	-0.9
General Financial	11610.02	-9.2	0.7
Mobile Telecommunications	2450.20	-9.1	-
Food Producers	5071.93	-9.0	-
Software & Computer Services	1722.65	-8.8	-22.8

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

CURRENCIES

Oct 24	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	154.7375	0.9233	152.9510	2.2665	175.0701	3.3220
Australia	Australian Dollar	1.5879	0.0043	1.5696	0.0182	1.7966	0.0283
Bahrain	Bahrainin Dinar	0.3770	-	0.3726	0.0033	0.4265	0.0056
Bolivia	Bolivian Boliviano	6.9100	-	6.8302	0.0608	7.8180	0.1023
Brazil	Brazilian Real	5.2852	0.0962	5.2242	0.1408	5.9797	0.1857
Canada	Canadian Dollar	1.3727	-0.0022	1.3568	0.0099	1.5530	0.0179
Chile	Chilean Peso	983.4000	14.3500	972.0466	22.7141	1112.6197	30.5834
China	Chinese Yuan	7.2616	0.0119	7.1777	0.0755	8.2157	0.1207
Colombia	Colombian Peso	4988.6250	89.0700	4931.0321	131.1696	5644.1372	173.3185
Costa Rica	Costa Rican Colon	625.3600	-0.1450	618.1402	5.3625	707.5329	9.0972
Czech Republic	Czech Koruna	24.7570	-0.2448	24.4711	-0.0220	28.0100	0.0932
Denmark	Danish Krone	7.5253	-0.0680	7.4384	-0.0004	8.5141	0.0354
Egypt	Egyptian Pound	19.6921	0.1122	19.4648	0.2833	22.2797	0.4168
Hong Kong	Hong Kong Dollar	7.8499	0.0001	7.7593	0.0692	8.8814	0.1163
Hungary	Hungarian Forint	417.7501	-2.3491	412.9271	1.3759	472.6428	3.5623
India	Indian Rupee	82.6813	-	81.7267	0.7278	93.5457	1.2242
Indonesia	Indonesian Rupiah	15587.0000	-45.5000	15407.0623	92.6341	17635.1603	179.9852
Israel	Israeli Shekel	3.5559	-0.0042	3.5148	0.0272	4.0231	0.0480
Japan	Japanese Yen	148.7650	-1.2250	147.0475	0.1094	168.3129	0.8348
..One Month		148.7645	-1.2260	147.0473	0.1091	168.3124	0.8339
..Three Month		148.7632	-1.2286	147.0468	0.1081	168.3113	0.8316
..One Year		148.7574	-1.2402	147.0437	0.1018	168.3124	0.8262
Kenya	Kenyan Shilling	121.2000	-	119.8007	1.0668	137.1258	1.7945
Kuwait	Kuwaiti Dinar	0.3104	-0.0004	0.3068	0.0023	0.3511	0.0041
Malaysia	Malaysian Ringgit	4.7380	-	4.6833	0.0417	5.3606	0.0702
Mexico	Mexican Peso	19.9505	-0.0285	19.7202	0.1477	22.5720	0.2636
New Zealand	New Zealand Dollar	1.7601	0.0073	1.7398	0.0226	1.9914	0.0342
Nigeria	Nigerian Naira	440.7500	-	435.6615	3.8796	498.6649	6.5258
Norway	Norwegian Krone	10.5246	-0.0757	10.4030	0.0185	11.9075	0.0714
Pakistan	Pakistani Rupee	221.0000	-	218.4485	1.9453	250.0396	3.2721
Peru	Peruvian Nuevo Sol	4.0053	0.0194	3.9590	0.0543	4.5315	0.0810
Philippines	Philippine Peso	58.8700	0.1225	58.1903	0.6382	66.6056	1.0084
Poland	Polish Zloty	4.8402	-0.0369	4.7843	0.0064	5.4762	0.0304
Romania	Romanian Leu	4.9686	-0.0470	4.9112	-0.0023	5.6215	0.0211
Russia	Russian Ruble	62.0750	0.4250	61.3583	0.9628	70.2317	1.3936
Saudi Arabia	Saudi Riyal	3.7579	-0.0009	3.7145	0.0322	4.2517	0.0547
Singapore	Singapore Dollar	1.4219	-0.0023	1.4054	0.0102	1.6087	0.0184
South Africa	South African Rand	18.4313	0.1900	18.2185	0.3484	20.8531	0.4850
South Korea	South Korean Won	1439.7000	-0.0500	1423.0785	12.6236	1628.8781	21.2605
Sweden	Swedish Krona	11.1979	-0.0850	11.0686	0.0153	12.6693	0.0709
Switzerland	Swiss Franc	1.0008	-0.0045	0.9892	0.0044	1.1322	0.0098
Taiwan	New Taiwan Dollar	32.2625	0.0665	31.8900	0.3491	36.5018	0.5519
Thailand	Thai Baht	38.3700	-	37.9270	0.3377	43.4119	0.5681
Tunisia	Tunisian Dinar	3.2933	-0.0391	3.2553	-0.0093	3.7260	0.0051
Turkey	Turkish Lira	18.5988	0.0117	18.3840	0.1752	21.0426	0.2885
United Arab Emirates	UAE Dirham	3.6731	-	3.6306	0.0323	4.1557	0.0544
United Kingdom	Pound Sterling	0.8839	-0.0117	0.8737	-0.0037	-	-
..One Month		0.8840	-0.0117	0.8735	-0.0037	-	-
..Three Month		0.8842	-0.0117	0.8732	-0.0037	-	-
..One Year		0.8843	-0.0115	0.8717	-0.0036	-	-
United States	United States Dollar	-	-	0.9885	0.0088	1.1314	0.0148
..One Month		-	-	0.9882	-0.1282	1.1315	0.0148
..Three Month		-	-	0.9877	-0.1281	1.1317	0.0148
..One Year		-	-	0.9858	-0.1282	1.1319	0.0150
Vietnam	Vietnamese Dong	24855.0000	10.0000	24568.0929	228.6058	28121.0103	379.1429
European Union	Euro	1.0117	-0.0091	-	-	1.1446	0.0048
..One Month		1.0114	-0.0091	-	-	1.1445	0.0048
..Three Month		1.0109	-0.0091	-	-	1.1442	0.0049
..One Year		1.0091	-0.0091	-	-	1.1427	0.0050

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

FTSE ACTUARIES SHARE INDICES

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

	£ Strlg Oct 24	Day's chge%	Euro Index	£ Strlg Oct 21	£ Strlg Oct 20	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	7013.99	0.64	6251.09	6969.73	6943.91	7204.55	3.85	1.94	13.41	238.25	7173.80
FTSE 250 (250)	17337.55	0.76	15451.78	17206.55	17388.93	22931.66	3.42	1.07	27.39	471.90	14373.91
FTSE 250 ex Inv Co (174)	17476.39	1.04	15575.52	17296.31	17508.46	23913.49	3.60	1.47	18.84	512.93	14792.23
FTSE 350 (350)	3859.16	0.65	3439.40	3834.12	3827.73	4126.41	3.79	1.83	14.47	127.31	7832.93
FTSE 350 ex Investment Trusts (271)	3798.81	0.69	3385.62	3772.61	3764.80	4022.47	3.85	1.91	13.57	127.89	3985.00
FTSE 350 Higher Yield (131)	3363.07	0.57	2997.28	3344.15	3324.63	3250.54	5.25	1.86	10.22	141.01	7680.15
FTSE 350 Lower Yield (219)	3951.40	0.75	3521.62	3922.14	3933.07	4762.68	2.22	1.74	25.96	88.38	4861.26
FTSE SmallCap (240)	5738.56	-0.08	5114.39	5743.38	5756.44	7421.63	3.65	0.53	51.22	174.44	9605.07
FTSE SmallCap ex Inv Co (127)	4557.10	0.18	4061.43	4548.99	4575.59	6279.48	3.89	2.41	10.68	135.38	7932.40
FTSE All-Share (590)	3820.96	0.63	3405.36	3796.89	3790.95	4108.91	3.78	1.79	14.74	125.76	7831.26
FTSE All-Share ex Inv Co (398)	3728.80	0.69	3323.22	3703.34	3696.07	3964.90	3.85	1.92	13.52	125.33	3971.40
FTSE All-Share ex Multinationals (527)	989.46	1.18	732.36	977.96	986.01	1320.14	4.22	1.78	13.29	35.34	2098.37
FTSE Fledgling (83)	11116.05	0.04	9906.98	11111.91	11161.64	13479.04	3.79	4.90	5.38	286.16	23936.78
FTSE Fledgling ex Inv Co (33)	14370.20	0.24	12807.18	14336.37	14392.48	18648.76	3.41	8.24	3.56	365.43	30043.03
FTSE All-Small (323)	4010.52	-0.08	3574.30	4013.61	4023.24	5168.71	3.66	0.79	34.69	120.91	8609.14
FTSE All-Small ex Inv Co (160)	3434.03	0.18	3060.52	3427.85	3447.64	4721.70	3.87	2.60	9.94	101.49	7569.81
FTSE AIM All-Share (766)	787.54	0.27	701.88	785.40	786.44	1234.19	1.67	1.56	38.21	10.60	922.83
FTSE All-Share Technology (21)	1840.47	0.84	1431.97	1825.23	1856.58	2297.55	2.05	0.80	60.89	36.68	2661.89
FTSE All-Share Telecommunications (6)	1586.73	1.16	1234.55	1568.50	1579.73	1736.15	6.60	1.06	14.31	57.66	2361.43
FTSE All-Share Health Care (14)	13086.17	0.41	10181.61	13032.47	12925.92	13006.28	3.04	1.14	28.83	341.37	12091.59
FTSE All-Share Financials (256)	4181.43	0.03	3253.34	4180.31	4186.91	4928.03	4.02	2.20	11.33	155.98	4643.15
FTSE All-Share Real Estate (55)	772.29	1.48	628.58	761.01	766.94	1161.62	4.50	4.55	4.88	28.35	809.43
FTSE All-Share Consumer Discretionary (85)	4197.87	1.56	3266.13	4133.47	4168.41	5390.07	2.52	1.02	39.00	100.04	4445.45
FTSE All-Share Consumer Staples (24)	18964.50	0.58	14755.21	18855.87	18815.47	18635.30	4.02	1.16	21.54	613.22	17318.34
FTSE All-Share Industrials (84)	5858.02	1.57	4557.80	5767.48	5812.44	7073.32	2.43	1.34	30.61	129.34	6774.91
FTSE All-Share Basic Materials (22)	8037.62	-0.60	6253.62	8086.32	7896.09	7868.06	6.76	2.01	7.35	536.92	10954.95
FTSE All-Share Energy (13)	8435.50	0.40	6563.19	8402.16	8328.41	6411.20	3.29	2.96	10.26	220.07	10165.47
FTSE All-Share Utilities (10)	7593.77	2.76	5908.29	7389.47	7413.93	7876.64	5.02	0.66	30.01	292.26	11471.09
FTSE All-Share Software and Computer Services (18)	1987.81	0.91	1546.60	1969.94	2004.69	2463.24	2.06	0.80	61.07	39.73	3041.75
FTSE All-Share Technology Hardware and Equipment (3)	4553.76	-0.99	3543.02	4599.16	4624.04	6975.50	1.95	0.91	56.52	78.21	5685.36
FTSE All-Share Telecommunications Equipment (1)	570.02	1.67	443.50	560.63	583.88	677.04	2.16	2.31	20.09	11.51	814.80
FTSE All-Share Telecommunications Service Providers (5)	2446.50	1.14	1903.48	2418.88	2432.79	2664.64	6.79	1.04	14.14	90.35	3314.20
FTSE All-Share Health Care Providers (3)	10689.91	0.48	8317.22	10638.66	10697.42	8505.75	0.55	4.48	40.95	58.27	9921.97
FTSE All-Share Medical Equipment and Services (2)	5120.33	0.57	3983.84	5091.45	5125.34	6053.21	2.79	0.97	37.16	142.76	4946.05
FTSE All-Share Pharmaceuticals and Biotechnology (9)	18673.19	0.40	14528.56	18598.30	18427.97	18410.91	3.08	1.14	28.37	489.47	15533.90
FTSE All-Share Banks (12)	2979.39	0.61	2318.09	2961.24	2949.63	3023.71	4.37	4.27	5.37	128.47	2636.63
FTSE All-Share Finance and Credit Services (8)	9937.67	0.18	7731.94	9919.74	10018.09	10710.64	2.10	2.05	23.22	208.41	13352.14
FTSE All-Share Investment Banking and Brokerage Services (31)	7497.89	1.55	5833.68	7383.71	7403.74	10600.20	5.89	1.86	9.15	379.93	10519.75
FTSE All-Share Closed End Investments (192)	11060.25	-0.14	8605.36	11076.18	11122.96	13956.70	2.80	-0.77	-46.26	247.25	6898.75
FTSE All-Share Life Insurance (6)	5888.94	-3.26	4581.86	6087.14	6119.72	8162.91	5.20	1.08	17.78	294.59	7206.58
FTSE All-Share Nonlife Insurance (7)	3319.04	0.76	2582.36	3294.13	3319.25	3521.34	4.35	1.24	18.57	130.27	7068.37
FTSE All-Share Real Estate Investment and Services (10)	1892.64	1.32	1472.55	1867.96	1898.06	2957.44	2.66	3.76	9.99	41.03	5643.50
FTSE All-Share Real Estate Investment Trusts (45)	1929.95	1.51	1501.59	1901.24	1913.29	2874.29	4.82	4.63	4.48	76.70	2913.74
FTSE All-Share Automobiles and Parts (2)	1116.42	-2.70	868.62	1147.39	1195.31	4221.88	0.87	-19.25	-5.96	14.02	1161.46
FTSE All-Share Consumer Services (2)	3036.94	1.08	2362.87	3004.60	2974.92	2405.10	1.26	1.71	46.23	38.43	3852.35
FTSE All-Share Household Goods and Home Construction (13)	7735.68	3.36	6018.70	7484.41	7594.52	13615.82	9.17	1.61	6.78	661.61	6920.69
FTSE All-Share Leisure Goods (2)	17021.20	2.25	13243.23	16646.03	16850.18	26883.84	3.97	1.59	15.81	831.45	19022.54
FTSE All-Share Personal Goods (4)	24578.93	-0.71	19123.48	24754.06	25330.77	29299.99	2.11	2.86	16.63	402.68	19224.54
FTSE All-Share Media (11)	8991.53	2.19	6995.81	8799.12	8793.96	9416.27	2.47	1.45	27.97	221.28	6326.37
FTSE All-Share Retailers (22)	1569.99	1.52	1221.52	1546.47	1590.45	2689.47	3.22	3.62	8.58	43.59	2037.21
FTSE All-Share Travel and Leisure (29)	5740.70	0.92	4466.51	5688.18	5771.02	8352.30	0.68	-10.97	-13.48	35.41	5932.38
FTSE All-Share Beverages (5)	27543.21	0.80	21429.82	27325.12	27552.81	28341.44	2.17	1.99	23.08	584.47	22073.60
FTSE All-Share Food Producers (10)	5186.07	0.70	4034.99	5150.16	5201.54	6391.90	2.86	2.14	16.33	83.25	4992.61
FTSE All-Share Tobacco (2)	36515.54	1.71	28410.69	35901.51	35682.89	28016.78	6.49	0.92	16.70	1728.22	34129.07
FTSE All-Share Construction and Materials (15)	6671.61	1.56	5190.81	6569.01	6673.28	8181.70	3.43	0.65	44.92	220.73	8129.19
FTSE All-Share Aerospace and Defense (7)	4961.01	0.04	3859.88	4959.03	4948.14	4729.85	2.37	0.05	856.05	104.10	6050.90
FTSE All-Share Electronic and Electrical Equipment (10)	9816.42	2.08	7637.61	9616.67	9644.40	13769.74	1.75	2.01	28.42	142.02	9690.38
FTSE All-Share General Industrials (8)	4620.95	1.94	3595.30	4532.81	4550.29	5366.33	3.08	1.17	27.82	134.98	6094.98
FTSE All-Share Industrial Engineering (5)	14663.32	2.68	11408.70	14280.91	14586.17	19575.12	1.78	2.01	27.92	261.52	19696.81
FTSE All-Share Industrial Support Services (31)	9343.76	1.75	7269.85	9182.94	9256.23	11528.48	2.03	1.67	29.56	181.51	10745.46
FTSE All-Share Industrial Transportation (8)	4759.31	1.78	3702.95	4675.93	4750.57	6640.37	2.45	3.42	11.94	98.14	4986.51
FTSE All-Share Industrial Materials (1)	13527.52	-1.64	399.85	13752.57	14352.68	17928.35	2.43	1.81	22.74	329.06	17087.28
FTSE All-Share Industrial Metals and Mining (9)	7203.08	-0.82	5604.31	7262.85	7070.65	6453.52	7.25	2.01	6.86	517.27	11056.53
FTSE All-Share Precious Metals and Mining (5)	8902.50	-0.62	6926.53	8958.27	8839.49	20630.45	4.02	1.86	13.39	358.99	6276.57
FTSE All-Share Chemicals (7)	12424.03	1.68	9666.43	12218.87	12248.13	18553.99	2.86	2.11	16.58	324.25	12451.92
FTSE All-Share Oil, Gas and Coal (12)	8189.15	0.40	6371.52	8156.74	8085.13	6222.00	3.29	2.96	10.26	213.64	10234.58
FTSE Sector Indices											
Non Financials (334)	**4694.17**	**0.80**	**4183.60**	**4656.70**	**4645.30**	**4914.89**	**3.72**	**1.67**	**16.09**	**148.83**	**8461.18**

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	6978.43	6949.56	6937.84	6966.83	6985.76	7009.05	7019.83	7043.85	7024.94	7046.53	6914.82
FTSE 250	17293.75	17277.51	17228.85	17302.15	17293.59	17417.71	17432.06	17404.07	17356.87	17439.13	17214.25
FTSE SmallCap	5741.35	5732.40	5727.79	5727.77	5729.58	5738.97	5738.93	5738.22	5727.11	5746.66	5723.38
FTSE All-Share	3803.48	3789.70	3782.79	3798.23	3806.61	3821.18	3826.52	3836.58	3826.34	3837.33	3772.51

Time of FTSE 100 Day's high:13:57:45 Day's Low08:26:45 FTSE 100 2010/11 High: 7672.40(10/02/2022) Low: 6826.15(12/10/2022)
Time of FTSE All-Share Day's high:13:57:00 Day's Low08:26:00 FTSE 100 2010/11 High: 4296.96(10/02/2022) Low: 3712.50(12/10/2022)

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FT 30 INDEX

	Oct 24	Oct 21	Oct 20	Oct 19	Oct 18	Yr Ago	High	Low
FT 30	2300.60	2268.60	2282.20	2276.40	2287.90	0.00	2880.10	2152.10
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
2268.6	2278	2270.9	2286.3	2290.1	2304.7	2312.3	2315.1	2306.4	2317.4	2267.3

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

FT WILSHIRE 5000 INDEX SERIES

	Oct 21		Oct 21
FT Wilshire 5000	38128.26	FT Wilshire Mid Cap	5042.21
FT Wilshire 2500	4881.52	FT Wilshire Small Cap	4619.72
FT Wilshire Mega Cap	4890.45	FT Wilshire Micro Cap	4577.83
FT Wilshire Large Cap	4915.87		

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FTSE GLOBAL EQUITY INDEX SERIES

Oct 24 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	9528	639.07	1.1	-2.9	-24.6	1022.22	-23.1	2.4
FTSE Global All Cap	9528	639.07	1.1	-2.9	-24.6	1022.22	-23.1	2.4
FTSE Global Large Cap	1907	573.62	1.2	-2.6	-24.5	945.79	-23.0	2.5
FTSE Global Mid Cap	2264	814.08	1.0	-3.5	-24.1	1224.80	-22.7	2.4
FTSE Global Small Cap	5357	848.20	1.0	-3.8	-25.9	1220.50	-24.6	2.2
FTSE All-World	4171	375.67	1.2	-2.8	-24.4	636.35	-23.0	2.4
FTSE World	2665	681.65	1.2	-2.4	-24.1	1549.42	-22.7	2.4
FTSE Global All Cap ex UNITED KINGDOM In	9236	676.56	1.2	-2.8	-24.6	1061.46	-23.2	2.4
FTSE Global All Cap ex USA	7718	431.83	-0.7	-5.4	-28.0	766.45	-26.0	3.5
FTSE Global All Cap ex JAPAN	8123	668.95	1.3	-2.7	-24.3	1079.38	-23.0	2.4
FTSE Global All Cap ex Eurozone	8861	681.19	1.3	-2.9	-23.9	1065.82	-22.5	2.3
FTSE Developed	2181	626.28	1.3	-2.3	-24.1	1008.48	-22.8	2.3
FTSE Developed All Cap	5836	652.42	1.3	-2.4	-24.3	1035.07	-22.9	2.2
FTSE Developed Large Cap	834	589.27	1.3	-2.0	-24.0	965.84	-22.6	2.3
FTSE Developed Europe Large Cap	220	325.32	-1.0	-3.1	-27.6	643.65	-25.5	3.4
FTSE Developed Europe Mid Cap	356	477.02	-1.7	-5.2	-38.1	819.00	-36.5	3.3
FTSE Dev Europe Small Cap	752	674.30	-1.5	-5.8	-38.9	1112.44	-37.3	3.5
FTSE North America Large Cap	234	809.83	2.3	-0.9	-22.3	1214.39	-21.4	1.8
FTSE North America Mid Cap	423	1035.92	2.1	-2.5	-20.8	1436.06	-19.7	1.9
FTSE North America Small Cap	1333	1032.41	2.0	-2.3	-21.7	1372.47	-20.8	1.7
FTSE North America	657	528.07	2.3	-1.2	-22.1	809.54	-21.0	1.8
FTSE Developed ex North America	1524	224.80	-1.1	-4.8	-28.7	429.79	-26.7	3.4
FTSE Japan Large Cap	169	325.22	-1.0	-6.0	-28.7	477.93	-26.9	2.6
FTSE Japan Mid Cap	340	465.10	-1.1	-6.2	-24.2	649.04	-22.3	2.7
FTSE Global wi JAPAN Small Cap	896	514.08	-0.8	-5.9	-26.1	744.64	-24.1	2.8
FTSE Japan	509	134.31	-1.0	-6.1	-27.8	220.99	-26.0	2.6
FTSE Asia Pacific Large Cap ex Japan	1088	585.98	-0.6	-9.1	-29.7	1066.37	-27.8	3.5
FTSE Asia Pacific Mid Cap ex Japan	867	838.92	-0.7	-8.8	-26.0	1472.13	-23.8	3.8
FTSE Asia Pacific Small Cap ex Japan	2117	477.71	-0.9	-9.6	-34.4	814.70	-32.6	3.4
FTSE Asia Pacific Ex Japan	1955	467.01	-0.6	-9.1	-29.4	903.23	-27.4	3.5
FTSE Emerging All Cap	3692	643.15	0.0	-6.9	-27.0	1119.54	-24.7	4.0
FTSE Emerging Large Cap	1073	591.83	0.1	-7.3	-28.1	1036.03	-25.8	4.0
FTSE Emerging Mid Cap	917	940.66	0.0	-4.0	-18.2	1647.15	-15.5	4.2
FTSE Emerging Small Cap	1702	699.39	-0.5	-7.2	-27.8	1165.61	-25.5	3.6
FTSE Emerging Europe	111	100.71	0.2	8.7	-75.7	210.53	-74.7	3.2
FTSE Latin America All Cap	262	749.74	2.3	4.0	5.8	1465.16	13.4	10.8
FTSE Middle East and Africa All Cap	331	741.79	-0.3	-0.6	-6.9	1357.26	-4.2	3.2
FTSE Global wi UNITED KINGDOM All Cap In	292	271.29	-1.2	-5.6	-24.6	553.15	-22.2	3.9
FTSE Global wi USA All Cap	1810	906.79	2.3	-1.2	-22.2	1310.79	-21.2	1.7
FTSE Europe All Cap	1468	366.43	-1.1	-3.5	-31.6	695.98	-29.6	3.4
FTSE Eurozone All Cap	667	350.59	-1.0	-2.4	-32.4	660.99	-30.4	3.4
FTSE EDHEC-Risk Efficient All-World	4171	425.51	1.0	-3.4	-22.1	668.74	-20.4	2.8
FTSE EDHEC-Risk Efficient Developed Europe	576	265.31	-1.4	-5.2	-35.8	466.01	-34.0	3.5
Oil & Gas	132	397.77	1.7	7.0	21.3	810.64	26.3	4.7
Oil & Gas Producers	88	400.06	1.5	8.9	25.9	837.28	31.5	4.9

Oct 24 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil Equipment & Services	24	265.70	2.9	3.5	13.5	489.42	17.3	4.3
Basic Materials	393	532.52	1.0	-1.1	-20.8	979.51	-17.6	5.3
Chemicals	196	726.91	0.7	-1.7	-25.0	1284.40	-23.0	3.2
Forestry & Paper	20	238.42	-0.3	-1.2	-21.9	479.88	-19.6	4.0
Industrial Metals & Mining	98	431.15	2.3	1.8	-22.1	823.82	-18.1	8.6
Mining	79	816.45	0.7	-1.7	-12.3	1591.16	-6.9	6.8
Industrials	802	439.11	0.9	-2.2	-26.9	699.65	-25.5	2.2
Construction & Materials	154	491.96	-0.3	-5.9	-33.4	827.16	-32.1	2.4
Aerospace & Defense	35	810.09	1.4	4.1	0.9	1262.51	2.2	1.6
General Industrials	76	208.53	1.2	0.8	-24.8	367.76	-23.2	2.8
Electronic & Electrical Equipment	157	541.47	1.3	-3.3	-32.7	777.71	-31.7	1.7
Industrial Engineering	158	848.86	1.6	0.1	-26.6	1348.52	-25.2	2.2
Industrial Transportation	132	817.06	1.0	-5.3	-26.4	1326.17	-24.3	3.7
Support Services	90	484.30	0.3	-4.0	-31.8	719.95	-31.0	1.5
Consumer Goods	569	506.01	0.3	-8.4	-26.6	849.85	-25.2	2.5
Automobiles & Parts	132	497.36	1.5	-16.6	-35.7	804.02	-34.7	1.9
Beverages	72	699.49	0.2	-4.2	-13.2	1185.84	-11.7	2.4
Food Producers	134	661.74	-0.2	-3.3	-15.7	1139.34	-14.0	2.6
Household Goods & Home Construction	65	462.11	0.7	-5.7	-29.4	778.70	-27.6	3.0
Leisure Goods	53	213.38	-0.8	-6.5	-33.0	301.62	-32.2	1.5
Personal Goods	98	776.47	-0.9	-7.2	-32.7	1193.47	-31.7	2.0
Tobacco	15	899.48	0.7	-4.4	-6.4	2542.71	-2.2	6.4
Health Care	343	664.31	1.3	1.6	-15.9	1057.70	-14.6	1.8
Health Care Equipment & Services	133	1283.00	1.0	-0.7	-22.9	1573.18	-22.2	1.1
Pharmaceuticals & Biotechnology	210	445.45	1.5	3.2	-10.4	762.30	-8.5	2.4
Consumer Services	427	508.84	1.7	-2.0	-27.8	725.91	-27.1	1.2
Food & Drug Retailers	69	293.21	1.2	-2.8	-14.8	465.87	-13.0	2.5
General Retailers	141	915.08	2.0	-2.5	-28.4	1249.20	-27.9	1.0
Media	75	285.31	2.0	-0.6	-39.2	410.04	-38.5	1.4
Travel & Leisure	142	412.29	0.9	-1.3	-19.6	601.28	-18.9	1.2
Telecommunication	89	119.94	-1.1	-4.7	-19.1	282.25	-16.1	4.5
Fixed Line Telecommuniations	31	94.64	0.0	-2.3	-16.0	255.90	-12.2	5.4
Mobile Telecommunications	58	140.99	-1.7	-6.0	-20.7	285.80	-18.1	4.0
Utilities	200	284.95	0.7	-11.8	-17.0	664.24	-14.8	3.6
Electricity	142	327.20	1.0	-11.8	-15.1	751.03	-13.0	3.5
Gas Water & Multiutilities	58	271.22	0.2	-11.7	-21.4	654.59	-19.1	4.0
Financials	853	236.17	1.0	-3.6	-21.3	452.91	-19.2	3.4
Banks	270	185.14	1.1	-1.9	-18.2	395.58	-15.3	4.3
Nonlife Insurance	71	320.71	0.8	-0.2	-8.5	535.03	-5.9	3.1
Life Insurance	51	192.44	0.1	-5.0	-20.4	370.08	-17.5	4.3
Financial Services	211	384.55	1.7	-3.2	-22.9	582.78	-21.9	1.9
Technology	363	439.29	1.7	-3.3	-35.3	572.62	-34.7	1.1
Software & Computer Services	187	679.78	1.3	-1.1	-36.5	821.48	-36.2	0.7
Technology Hardware & Equipment	176	379.12	2.2	-5.7	-33.8	531.70	-33.1	1.7
Alternative Energy	20	154.75	1.5	-17.1	-25.8	222.05	-25.5	0.5
Real Estate Investment & Services	142	225.76	-0.6	-9.4	-31.4	438.67	-29.6	3.5
Real Estate Investment Trusts	108	397.50	0.0	-10.7	-33.4	927.13	-31.6	4.2
FTSE Global Large Cap	1907	573.62	1.2	-2.6	-24.5	945.79	-23.0	2.5

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

FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Oil & Gas Producers	42.96	Beverages	-11.76	FTSE SmallCap Index	-23.07
Oil & Gas	42.22	Mobile Telecomms	-12.27	Support Services	-24.00
Tobacco	24.67	Utilities	-12.97	Life Insurance	-24.30
Aerospace & Defense	12.31	Media	-13.11	Food Producers	-24.99
Mining	4.67	Travel & Leisure	-14.27	Construct & Material	-26.05
Beverages	31.66	Gas Water & Multi	-14.27	FTSE 250 Index	-26.16
Pharmace & Biotech	-0.18	Telecommunications	-14.87	Household Goods & Ho	-27.14
Health Care	-0.81	Software & Comp Serv	-15.52	Industrial Eng	-28.91
Banks	-1.01	Technology	-15.80	Electronic & Elec Eq	-32.55
Basic Materials	-2.08	Nonlife Insurance	-17.06	Chemicals	-32.60
Personal Goods	-2.93	Tech Hardware & Eq	-18.29	Leisure Goods	-32.96
FTSE 100 Index	-5.02	Financials	-18.30	Real Est Invest & Tr	-37.48
Consumer Goods	-6.22	Industrials	-20.85	Food & Drug Retailer	-39.05
NON FINANCIALS Index	-7.44	Fixed Line Telecomms	-21.55	Real Est Invest & Se	-39.97
Electricity	-9.09	Financial Services	-21.80	General Retailers	-41.84
FTSE All{HY-}Share Index	-9.20	Oil Equipment & Serv	-21.85	Industrial Transport	-48.55
Health Care Eq & Srv	-9.43	Equity Invest Instr	-22.44	Automobiles & Parts	-69.38
		Consumer Services	-22.73	Industrial Metals &	-82.88

FTSE 100 SUMMARY

FTSE 100	Closing Price	Day's Change	FTSE 100	Closing Price	Day's Change
3I Group PLC	1115.5	25.50	International Consolidated Airlines Group S.A.	112.78	-1.04
Admiral Group PLC	1957	9.00	Intertek Group PLC	3763	62.00
Airtel Africa PLC	125.00	1.20	Jd Sports Fashion PLC	95.54	1.36
Anglo American PLC	2686.5	-47.50	Kingfisher PLC	206.80	3.00
Antofagasta PLC	1122.5	-25.50	Land Securities Group PLC	537.00	11.60
Ashtead Group PLC	4332	88.00	Legal & General Group PLC	232.30	3.60
Associated British Foods PLC	1331.5	11.50	Lloyds Banking Group PLC	42.54	1.16
Astrazeneca PLC	9782	62.00	London Stock Exchange Group PLC	7366	16.00
Auto Trader Group PLC	502.00	15.80	M&G PLC	178.35	0.45
Aveva Group PLC	3145	-5.00	Melrose Industries PLC	106.45	2.45
Aviva PLC	415.10	8.60	Mondi PLC	1487	24.00
B&M European Value Retail S.A.	305.80	4.70	National Grid PLC	921.00	20.40
Bae Systems PLC	813.00	-	Natwest Group PLC	240.50	5.40
Barclays PLC	148.94	3.90	Next PLC	4882	144.00
Barratt Developments PLC	361.20	13.00	Ocado Group PLC	479.40	-5.20
Berkeley Group Holdings (The) PLC	3429	123.00	Pearson PLC	965.00	77.60
BP PLC	470.00	5.55	Pershing Square Holdings LTD	2770	-20.00
British American Tobacco PLC	3379.5	58.50	Persimmon PLC	1273	54.50
British Land Company PLC	350.00	5.70	Phoenix Group Holdings PLC	542.80	7.40
Bt Group PLC	125.90	2.35	Prudential PLC	804.20	-82.20
Bunzl PLC	2755	61.00	Reckitt Benckiser Group PLC	5950	16.00
Burberry Group PLC	1828	-12.00	Relx PLC	2262	37.00
Centrica PLC	68.86	1.50	Rentokil Initial PLC	512.80	10.40
Coca-Cola Hbc AG	1931	11.00	Rightmove PLC	471.80	12.70
Compass Group PLC	1841.5	20.00	Rio Tinto PLC	4750	-55.00
Convatec Group PLC	217.40	1.60	Rolls-Royce Holdings PLC	73.50	-0.08
Crh PLC	3031.5	51.00	Rs Group PLC	964.00	23.00
Croda International PLC	6650	108.00	Sage Group PLC	716.80	9.20
Dcc PLC	4839	62.00	Sainsbury (J) PLC	187.25	1.35
Dechra Pharmaceuticals PLC	2594	54.00	Schroders PLC	386.40	6.50
Diageo PLC	3608.5	28.50	Scottish Mortgage Investment Trust PLC	734.40	-13.80
Endeavour Mining PLC	1530	-9.00	Segro PLC	745.20	4.80
Entain PLC	1198	24.50	Severn Trent PLC	2421	58.00
Experian PLC	2753	62.00	Shell PLC	2345	1.00
F&C Investment Trust PLC	893.00	4.00	Smith & Nephew PLC	1010	5.00
Flutter Entertainment PLC	10775	190.00	Smith (Ds) PLC	286.10	5.10
Frasers Group PLC	628.50	7.50	Smiths Group PLC	1537	35.50
Fresnillo PLC	698.40	-19.60	Smurfit Kappa Group PLC	2860	46.00
Glaxosmithkline PLC	1387.4	-5.00	Spirax-Sarco Engineering PLC	10595	295.00
Glencore PLC	501.90	-0.20	Sse PLC	1508	58.00
Haleon PLC	273.70	1.20	St. James's Place PLC	1027	21.00
Halma PLC	2115	41.00	Standard Chartered PLC	561.60	-5.40
Harbour Energy PLC	375.00	0.80	Taylor Wimpey PLC	91.20	2.60
Hargreaves Lansdown PLC	740.80	-1.00	Tesco PLC	210.80	1.60
Homeserve PLC	1185	-	Unilever PLC	3921.5	-22.00
HSBC Holdings PLC	475.10	-2.75	Unite Group PLC	865.50	23.00
Imperial Brands PLC	2079	31.00	United Utilities Group PLC	912.20	25.60
Informa PLC	556.00	6.20	Vodafone Group PLC	99.58	0.99
Intercontinental Hotels Group PLC	4528	61.00	Whitbread PLC	2611	42.00
Intermediate Capital Group PLC	1018	22.80	Wpp PLC	759.40	13.80

UK STOCK MARKET TRADING DATA

	Oct 24	Oct 21	Oct 20	Oct 19	Oct 18	Yr Ago
Order Book Turnover (m)	198.04	116.20	116.20	91.58	59.98	271.66
Order Book Bargains	741307.00	696550.00	696550.00	742113.00	697888.00	737511.00
Order Book Shares Traded (m)	1285.00	1306.00	1306.00	1666.00	1401.00	1589.00
Total Equity Turnover (£m)	5211.08	6056.02	6056.02	4667.00	4962.17	7380.97
Total Mkt Bargains	949695.00	892146.00	892146.00	932788.00	888294.00	930830.00
Total Shares Traded (m)	11718.00	7945.00	7945.00	10175.00	5743.00	5644.00

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

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

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

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

UK COMPANY RESULTS

Company		Turnover		Pre-tax		EPS(p)		Div(p)		Pay day	Total
Sondrel (Holdings)	A	**7.952**	3.669	**1.715L**	2.871L	**0.000**	0.000	**0.00000**	0.00000	-	

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

UK RECENT EQUITY ISSUES

Issue date	Issue price(p)	Sector	Stock code	Stock	Close price(p)	+/-	High	Low	Mkt Cap (£m)
10/21	55.00	AIM	SND	Sondrel (Holdings) PLC	58.00	-	59.50	55.00	0.0
10/07	10.00		ACG	ACG Acquisition Company Ltd	9.90	-0.08	10.10	9.95	154.7
10/04	1.00		MII	Milton Capital PLC	1.03	0.00	1.20	1.00	102.5

§Placing price. *Introduction. ‡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.

FT500: THE WORLD'S LARGEST COMPANIES

Stock	Price	Day Chg	52 Week High	52 Week Low	Yld	P/E	MCap m
Australia (A$)							
ANZ Bank	25.59	0.04	28.75	20.78	5.69	11.12	48183.58
BHP Group	39.06	0.99	53.72	35.56	10.15	9.51	124523.33
CmwBkAu	100.48	1.20	110.19	86.98	3.36	19.58	107336.47
CSL	273.05	5.55	319.78	240.10	1.07	40.52	82918.72
NatAusBk	31.63	0.23	33.75	25.43	2.74	17.46	62820.84
Telstra	3.81	0.02	4.20	3.62	2.53	32.12	27723.12
Wesfarmers	44.18	0.89	61.34	40.03	3.89	23.54	31546.15
Westpac Bank	23.87	0.14	26.44	18.80	3.59	18.00	52629.48
Woolworths	33.32	0.39	41.13	32.62	3.13	39.39	25525.67
Belgium (€)							
AnBshInBv	47.16	0.61	58.72	45.56	1.09	24.47	80971.49
KBC Grp	50.10	0.81	86.50	45.53	6.60	8.48	20644.74
Brazil (R$)							
Ambev	15.17	-0.14	18.12	12.81	3.55	23.95	45207.53
Bradesco	16.63	-0.74	17.72	13.53	4.77	8.05	15325.38
Cielo	5.78	-0.02	6.22	2.01	2.41	20.45	2971.16
ItauHldFin	24.76	-1.08	26.04	18.86	2.99	10.24	23228.5
Petrobras	38.63	-2.93	42.08	26.54	11.87	5.76	54397.57
Vale	72.64	-1.49	107.11	61.85	17.09	3.39	65681.25
Canada (C$)							
Bausch Hlth	9.26	0.09	36.26	5.10	-	-3.06	2435.27
BCE	59.08	0.15	74.09	55.66	5.38	21.77	39250.77
BkMontrl	123.38	0.82	154.47	113.73	3.33	10.44	60875.38
BkNvaS	64.71	-0.14	95.00	63.19	5.20	8.91	56162.02
Brookfield	52.44	0.27	79.04	51.07	1.14	19.14	62717.76
CanadPcR	97.26	0.60	106.93	86.12	0.71	25.63	65901.95
CanImp	59.66	0.20	167.50	55.35	9.14	4.55	39329.34
CanNatRs	80.79	0.75	88.18	48.42	2.24	13.78	65325.16
CanNatRy	155.19	1.23	171.48	137.26	1.44	24.81	76841.12
Enbridge	51.94	0.27	59.69	46.88	5.84	19.94	76617.09
GtWesLif	30.37	0.59	41.50	27.99	5.77	9.39	20616.57
ImpOil	67.42	-0.42	72.96	40.96	1.39	21.34	30035.61
Manulife	22.17	0.11	28.09	20.81	4.79	6.90	30661.49
Nutrien	108.83	-4.24	147.93	82.48	1.94	17.19	42263.83
RylBkC	124.61	0.88	149.60	116.75	3.24	12.18	126408.22
SHOP	39.68	-0.86	222.87	33.00	-	1.51	28832.15
Suncor En	45.63	0.13	53.62	27.87	2.09	18.15	45167.49
ThmReut	140.89	1.08	156.62	119.23	1.32	10.68	49482.06
TntoDom	86.37	0.11	109.08	77.27	3.44	11.91	114167.09
TrnCan	58.50	-0.23	74.44	54.60	5.40	34.65	43127.33
China (HK$)							
AgricBkCh	2.35	-0.06	3.15	2.30	8.46	3.30	9202.28
Bk China	2.61	-0.04	3.20	2.52	7.95	3.46	27803.57
BkofComm	4.03	-0.12	5.74	4.02	8.09	3.56	17974.39
BOE Tech	0.72	0.07	0.90	0.57	-	12.42	18.25
Ch Coms Cons	3.17	-0.15	5.17	3.15	5.98	2.81	1784.31
Ch Evrbrght	2.11	-0.08	3.11	2.10	10.58	3.05	3407.92
Ch Rail Cons	3.93	-0.19	5.95	3.85	6.22	2.23	1039.48
Ch Rail Gp	3.76	-0.14	5.88	3.61	5.10	3.23	2015.3
ChConstBk	4.41	-0.11	6.23	4.35	7.85	3.43	135064.05
China Vanke	12.10	-1.10	22.15	12.10	10.97	5.83	2938.74
ChinaCitic	3.07	-0.12	4.08	3.06	8.52	3.04	5820.27
ChinaLife	8.93	-0.76	15.04	8.91	7.13	4.17	8465.01
ChinaMBank	27.75	-2.40	70.80	27.60	4.80	5.47	16229.2
ChinaMob	48.70	-0.95	58.65	45.90	6.16	8.03	126932.16
ChinaPcIns	12.38	-1.16	25.90	12.28	9.89	4.31	4376.9
ChMinsheng	2.27	-0.06	3.29	2.19	10.10	3.14	2406.06
ChMrchSecs	12.41	-0.24	18.56	12.06	3.46	11.26	12684.21
Chna Utd Coms	3.36	-0.08	4.18	3.30	3.28	17.14	14326.62
ChShenEgy	22.35	-1.45	27.65	15.74	8.55	7.25	9616.27
ChShpbldng	3.56	-0.03	4.49	3.36	-	-269.14	10826.58
ChStConEng	4.99	-0.17	6.40	4.52	4.23	3.93	28061.25
ChUncHK	3.39	-0.09	4.43	3.32	4.32	7.99	13213.8
CNNC Intl	6.22	-0.04	8.92	5.78	1.97	16.53	16146.69
CSR	2.52	-0.12	3.80	2.42	7.65	7.40	1403.2
Daqin	6.65	-0.21	7.25	5.95	7.10	10.24	13614.83
GuosenSec	8.67	-0.15	11.72	8.43	2.61	10.13	10539.23
HaitongSecs	3.94	-0.23	7.34	3.87	6.81	4.57	1711.33
Hngzh HikVDT	29.60	-0.58	55.70	28.10	2.66	16.54	37402.42
Hunng Pwr	3.63	-0.11	5.74	3.08	5.08	-4.36	2173.6
IM Baotou Stl	1.81	-0.04	3.21	1.75	-	31.34	7895.86
In&CmBkCh	3.62	-0.10	4.94	3.59	7.83	3.55	40025.07
IndstrlBk	15.30	-0.69	23.22	15.26	4.99	4.26	43771.12
Kweichow	1501.28	-122.72	2216.96	1488.01	1.26	34.39	259711.07
Midea	0.38	-0.01	0.61	0.36	-	-4.41	14.57
New Ch Life Ins	13.54	-1.18	24.90	13.50	10.55	2.75	1783.69
PetroChina	3.32	-0.08	4.49	3.18	6.71	7.16	8923.57
PingAnIns	32.75	-4.05	69.40	32.55	7.14	5.57	31071.51
PngAnBnk	10.62	-0.47	20.59	10.61	1.61	6.45	28380.61
Pwr Cons Corp	7.61	-0.01	9.81	5.99	1.15	16.09	11518.88
SaicMtr	13.91	-0.30	23.45	13.90	4.20	7.08	22380.49
ShenwanHong	0.09	-0.01	0.18	0.05	-	2.97	105.44
ShgPdgBk	6.81	-0.11	9.09	6.80	6.65	4.43	27527.05
Sinopec Corp	3.38	-0.08	4.28	3.25	3.85	4.36	10962.15
Sinopec Oil	1.87	0.02	2.56	1.70	-	632.25	3494.39
Denmark (kr)							
DanskeBk	102.05	1.55	133.25	91.28	1.88	7.27	11692.02
MollerMrsk	15880	135.00	24070	13185	2.06	2.69	17668.25
NovoB	795.30	14.90	863.60	604.40	1.13	39.90	184160.25
Finland (€)							
Nokia	4.36	0.05	5.71	4.12	-	15.63	24529.24
SampoA	46.43	0.66	48.74	35.85	3.54	10.28	24464.3
France (€)							
Airbus Grpe	102.54	1.62	120.36	86.52	-	19.55	79889.43
AirLiquide	124.22	2.22	153.40	114.48	2.13	23.85	64264.62
AXA	24.84	0.61	29.09	20.34	5.53	8.70	57358.28
BNP Parib	46.97	0.59	68.07	40.67	5.48	7.04	57301.11
ChristianDior	619.00	2.00	733.50	513.00	1.09	23.51	110444.16
Cred Agr	9.02	0.09	14.27	8.09	8.52	5.13	27130.06
Danone	48.40	0.77	58.41	46.48	3.85	17.13	32332.9
EDF	11.94	0.01	12.67	6.64	3.92	9.55	45870.01
Engie SA	12.68	0.46	14.61	9.79	4.02	9.29	30527.71
EssilorLuxottica	160.05	6.60	195.00	132.70	0.65	50.77	70783.3
Hermes Intl	1292	-12.00	1678	957.60	0.34	57.70	134820.97
LOreal	316.10	6.00	433.65	300.45	1.22	40.06	167701.25
LVMH	635.90	4.40	741.60	535.00	1.06	27.70	316326.65
Orange	9.49	0.04	11.94	8.93	6.07	3277.76	24957.74
PernodRic	175.50	3.15	214.50	166.60	1.71	27.57	44747.12
Renault	32.03	-0.74	38.07	20.47	-	-24.88	9361.17
Safran	109.48	1.34	123.12	87.85	0.38	1139.21	46234.48
Sanofi	82.19	0.62	106.08	76.45	3.74	17.29	102971.45
Sant Gbn	40.61	1.40	64.82	35.20	3.22	10.10	20700.52
Schneider	127.60	2.18	173.78	110.02	1.96	23.42	72030.15
SocGen	23.01	0.39	37.68	18.34	2.31	4.05	19330.05
Total	53.50	0.53	57.41	40.09	4.85	10.69	138505.76
UnibailR	44.95	1.15	73.09	39.68	-	-6.66	6165.24
Vinci	88.63	2.49	103.74	80.74	2.92	20.45	52387.73
Vivendi	7.95	0.07	12.16	7.59	7.25	-14.78	8715.7
Germany (€)							
Allianz	176.68	3.22	232.50	156.22	5.22	11.61	71333.16
BASF	46.60	0.52	69.15	37.90	6.81	8.03	42302.42
Bayer	51.00	1.00	67.99	43.91	3.77	52.03	49525.18
BMW	77.91	0.48	97.60	67.58	2.34	4.32	46359.96
Continental	51.88	1.18	111.96	44.44	-	8.32	10256.51
Deut Bank	9.12	0.22	14.64	7.46	-	9.33	18625.22
Deut Tlkm	18.31	0.25	19.61	14.47	3.15	21.89	90228.22
DeutsPost	34.68	0.53	58.31	29.68	3.83	9.13	42468.35
E.ON	8.17	0.26	12.54	7.28	5.53	4.72	21330.45
Fresenius Med	27.45	-0.07	63.66	26.19	4.69	8.63	7950.11
Fresenius SE	21.78	0.07	42.50	19.76	3.98	7.16	12023.74
HenkelKgaA	58.45	-0.20	75.05	56.55	3.01	16.18	15009.76
Linde	296.90	5.80	315.35	244.00	1.21	48.00	146256.47
Mercedes-Benz	58.44	1.51	77.90	50.19	2.22	6.08	61799.48
MuenchRkv	262.90	4.10	282.25	205.15	3.58	13.07	36406.78
SAP	91.34	-0.06	129.74	81.35	1.95	21.31	110916.08
Siemens	109.84	3.00	156.98	93.67	3.06	17.19	92286.1
Volkswgn	169.35	-0.45	301.40	158.80	2.72	5.96	49396.51
Hong Kong (HK$)							
AIA	59.70	-6.25	92.50	59.45	1.88	16.29	90295.51
BOC Hold	25.60	-0.70	32.75	23.20	4.08	14.01	34479.84
Ch OSLnd&Inv	18.32	-2.13	27.35	16.10	5.51	4.85	25543.06
ChngKng	45.00	-0.75	57.00	43.85	3.31	10.98	20666.97
Citic Ltd	7.31	-0.09	9.26	6.96	6.19	3.61	27089.43
Citic Secs	12.36	-0.86	21.32	12.22	3.25	6.79	4125.42
CK Hutchison	40.60	-0.70	60.45	40.20	4.72	5.49	19832.11
CNOOC	9.76	-0.19	12.54	7.55	3.90	9.08	55455.78
HangSeng	116.30	-2.50	169.50	114.70	4.41	19.95	28324.87
HK Exc&Clr	228.20	-23.80	490.60	225.60	3.37	27.43	36856.57
MTR	33.60	-0.50	43.70	33.45	3.08	25.94	26546.74
SandsCh	14.00	-0.86	24.90	13.52	-	-16.49	14433.88
SHK Props	88.70	-1.80	104.60	85.70	4.69	10.81	32743.49
Tencent	206.20	-26.60	512.50	205.20	0.66	8.65	252402.41
India (Rs)							
Bhartiartl	806.80	9.35	816.75	628.75	-	185.64	58113.66
HDFC Bk	1461.25	22.65	1722.1	1271.6	-	26.70	98439.45
Hind Unilevr	2591	-62.90	2734	1927	1.15	74.80	73629.59
HsngDevFin	2397.45	47.55	3021.1	2026	0.89	21.99	52695.85
ICICI Bk	923.35	16.20	936.65	642.15	0.20	31.57	77832.28
Infosys	1519	18.50	1923.3	1360	1.85	32.34	77305.16
ITC	349.20	3.60	353.20	207.00	2.86	31.27	52367.31
L&T	1913.25	36.50	2035	1456.35	0.87	34.20	32513.91
OilNatGas	133.50	1.95	189.80	119.85	6.33	4.07	20312.5
RelianceIn	2486.75	15.15	2856.15	2222	0.26	30.67	203496.27
SBI NewA	568.15	7.30	578.50	430.70	0.65	17.08	61326.09
SunPhrmInds	985.80	8.10	991.90	733.70	0.71	39.59	28607.01
Tata Cons	3167.55	30.15	3920	2950.1	1.07	32.60	140179.58
Israel (ILS)							
TevaPha	29.18	-0.15	37.23	23.83	-	26.02	9180.15
Italy (€)							
Enel	4.29	0.10	7.37	3.96	8.20	20.78	43146.68
ENI	12.35	0.30	14.85	10.43	5.25	5.41	44029.25
Generali	14.84	0.40	21.55	13.67	9.52	8.68	23192.18
IntSPaolo	1.86	0.03	2.92	1.58	1.89	59.85	35642.66
Unicred	11.51	0.06	15.93	7.75	1.00	17.78	25449.17
Japan (¥)							
AstellasPh	1979.5	-11.00	2205	1739	2.51	28.29	24428.24
Bridgestne	5164	88.00	5509	4042	3.47	11.15	24774.23
Canon	3326	9.00	3516	2467	3.17	15.27	29819.5
CntJpRwy	16905	-400.00	17920	14660	0.83	-30.09	23408.93
Denso	7135	66.00	9575	6549	2.12	18.56	37791.06
EastJpRwy	7900	-84.00	8280	6373	1.37	-7.52	20069.68
Fanuc	20310	-	25300	18740	2.40	22.93	27565.49
FastRetail	82780	-940.00	88230	54310	0.68	36.88	59024.48
Fuji Hvy Ind	2305.5	17.50	2684	1664.5	2.62	25.14	11920.38
Hitachi	6416	56.00	7460	4750	1.93	8.93	41772.97
HondaMtr	3258	1.00	3755	3043	4.27	6.54	39670.84
JapanTob	2404	-20.00	2448	2000	6.13	11.62	32319.42
KDDI	4269	-23.00	4636	3237	3.03	13.58	66079.25
Keyence	48870	950.00	75090	44880	0.44	38.76	79894.86
MitsbCp	4073	21.00	4845	3355	3.66	8.63	40360.26
MitsubEst	946.03	-4.01	972.04	876.51	-	-	-
MitsubishiEle	1397	-5.50	1611	1225.5	3.09	11.85	20163.62
MitsuiFud	850.58	11.08	949.18	684.38	-	-	-
MitUFJFin	705.30	10.00	828.30	601.40	3.98	6.79	62970.34
Mizuho Fin	1619.5	-	1683.5	1397	5.20	7.35	27643.04
Murata Mfg	7031	70.00	9410	6604	1.84	13.40	31939.53
Nippon T&T	3992	-42.00	4128	3054	2.84	11.93	97194.07
NipponTT	3992	-42.00	4128	3054	2.84	11.93	97194.07
Nissan Mt	458.20	1.90	654.30	436.50	-	13.81	12999.93
Nomura	475.10	-1.90	562.20	460.30	5.22	-30.32	10326.8
Nppn Stl	2094.5	5.00	2318.5	1690.5	4.12	3.07	13379.81
Panasonic	1050.5	9.50	1541	1006.5	2.57	9.86	17329.25
Seven & I	5591	-17.00	6083	4552	1.98	19.75	33314.94
ShnEtsuCh	15195	340.00	20870	14185	2.06	13.51	42558.34
Softbank	5733	-25.00	7217	4210	0.83	4.57	66397.97
Sony	9614	34.00	14745	9213	0.67	11.39	81497.94
SumitomoF	4167	41.00	4461	3672	5.18	7.52	38505.95
Takeda Ph	3710	-9.00	4063	2993	5.24	12.35	39460.16
TokioMarine	2637.5	31.00	2787.33	1886	9.00	3.98	36167.77
Toyota	1996.5	9.00	2375.5	1805	2.76	8.36	218955.29
Mexico (Mex$)							
AmerMvl	17.46	0.40	21.44	15.66	1.82	14.48	37218.99
FEMSA UBD	135.18	3.13	173.50	120.63	1.46	113.32	14643.64
WalMrtMex	74.88	0.13	82.93	64.81	0.66	38.26	65537.71
Netherlands (€)							
ASML Hld	477.95	18.40	777.50	376.10	0.68	38.39	192031.54
Heineken	87.12	1.52	100.95	77.50	1.08	15.71	49602
ING	9.85	0.17	14.00	7.90	5.86	8.33	36660.74
Unilever	44.86	-0.27	48.81	39.36	3.20	23.03	128808
Norway (Kr)							
DNB	182.05	5.15	220.50	168.05	9.53	11.67	26973.11
Equinor	359.80	-4.60	410.95	213.25	1.37	15.56	108558.94
Telenor	90.68	-1.98	148.80	90.52	9.89	15.36	12057.8
Qatar (QR)							
QatarNtBk	19.35	-0.06	27.00	18.40	2.41	16.90	49076.65
Saudi Arabia (SR)							
AlRajhiBnk	87.70	2.00	117.40	78.60	2.29	17.76	93310.28
Natnlcombnk	65.70	1.40	82.00	59.60	1.85	26.34	78256.32
SaudiBasic	92.50	0.30	141.40	86.10	2.94	14.37	73813.02
SaudiTelec	39.00	0.45	48.88	37.10	8.59	8.23	51868.6
Singapore (S$)							
DBS	32.39	-0.30	37.49	29.45	3.31	14.40	58528.11
JardnMt US$	47.86	-1.83	62.10	47.73	2.96	9.66	13852.36
OCBC	11.53	-0.11	13.54	10.98	3.17	12.47	36417.3
SingTel	2.38	-0.08	2.88	2.31	2.74	43.56	27585.36
UOB	25.99	-0.17	33.33	25.47	3.32	12.54	30559.68
South Africa (R)							
Firstrand	62.24	0.39	79.34	53.25	4.08	11.51	18942.51
MTN Grp	114.32	-7.34	211.49	112.62	-	15.93	11687.2
Naspers N	1711.35	-360.43	2853.25	1392.5	0.34	9.40	40437.4
South Korea (KRW)							
HyundMobis	198000	-6000.00	272500	189500	2.04	7.63	12966.9
KoreaElePwr	16700	-50.00	25100	16500	7.43	-9.64	7446.55
SK Hynix	91800	1300	134000	80400	1.70	6.49	46419.82
SmsungEl	57500	1600	80800	51800	2.54	9.84	238426.43
Spain (€)							
BBVA	5.19	0.19	6.29	3.97	6.88	7.35	30929.01
BcoSantdr	2.72	0.07	3.48	2.32	2.70	5.68	45219.77
CaixaBnk	3.51	0.01	3.64	2.22	0.74	24.04	27998.09
Iberdrola	9.68	0.15	11.49	8.47	4.19	17.28	60886.64
Inditex	22.90	0.61	32.41	18.55	0.93	25.13	70547.35
Repsol	13.30	0.08	16.23	9.60	4.34	8.44	19093.85
Telefonica	3.28	0.03	5.06	3.24	10.15	2.49	18706.98
Sweden (SKr)							
AtlasCpcoB	101.94	4.04	133.60	22.08	7.40	6.64	14209.48
Ericsson	61.16	-0.01	117.32	58.81	3.80	8.80	16780.69
H & M	113.34	2.44	191.86	98.25	5.74	15.25	14784.32
Investor	176.00	4.94	228.75	158.22	2.05	7.39	28635.93
Nordea Bk	106.54	1.52	113.78	85.25	14.17	12.14	35541.19
SEB	118.35	2.35	141.85	91.64	8.81	9.66	22771.62
SvnskaHn	104.90	1.50	105.15	80.88	4.92	10.05	18218.42
Swedbank	160.65	1.60	196.70	124.50	9.36	8.38	16240.32
Telia Co	28.08	-0.17	41.70	28.08	7.36	9.67	10255.24
Volvo	173.70	2.44	218.65	148.24	3.86	11.05	24640.11
Switzerland (SFr)							
ABB	27.39	0.34	33.86	23.84	2.79	13.61	53774.03
CredSuisse	4.69	0.12	10.18	3.52	1.95	-7.64	12433.28
Nestle	107.12	1.78	128.90	103.42	2.36	19.27	294359.23
Novartis	77.98	1.42	88.42	73.01	3.55	8.78	187301.71
Richemont	100.65	0.20	146.10	90.28	1.78	24.86	52499.93
Roche	327.15	2.75	404.20	298.60	2.47	22.70	229671.13
Swiss Re	76.10	1.02	102.20	68.18	7.13	19.04	24143.44
Swisscom	454.30	4.50	587.40	443.40	4.44	14.00	23515.99
UBS	15.14	0.43	19.90	13.10	2.10	8.07	53305.39
Zurich Fin	417.20	8.10	461.70	376.00	4.41	14.40	62724.94
Taiwan (NT$)							
Chunghwa Telecom	107.50	-0.50	132.50	105.50	3.88	24.05	25848.12
Formosa PetChem	80.60	1.60	104.00	75.20	0.71	15.96	23798.32
HonHaiPrc	103.00	-0.50	116.00	99.50	3.78	10.67	44258.43
MediaTek	588.00	21.00	1200	533.00	6.13	8.60	29148.21
TaiwanSem	387.00	-2.50	650.00	386.00	2.69	15.83	311043.98
Thailand (THB)							
PTT Explor	34.75	-	41.25	32.75	5.50	9.68	25868.36
United Arab Emirates (Dhs)							
Emirtestele	24.30	0.70	38.98	11.60	2.75	27.17	57535.64
United Kingdom (p)							
Anglo American	2686.5	-47.50	4292.5	2487.5	6.64	5.32	42693.41
AscBrFd	1331.5	11.50	2066	1223	0.47	22.01	11926.25
AstraZen	9782	62.00	11540	8090.32	2.12	1656.28	140162.5
Aviva	415.10	8.60	606.58	341.92	5.14	54.62	18847.98
Barclays	148.94	3.90	209.45	132.06	2.01	3.61	28754.32
BP	470.00	5.55	474.15	310.53	3.35	17.05	105982.86
BrAmTob	3379.5	58.50	3645	2508	6.38	11.43	71288.55
BT	125.90	2.35	201.40	117.05	-	12.22	14133.05
Compass	1841.5	20.00	1970.5	1435	0.76	44.81	34264.62
Diageo	3608.5	28.50	4364.1	3282.5	2.01	27.76	102778.74
GlaxoSmh	1387.4	-5.00	2753.96	1280.92	5.77	16.02	77195.88
Glencore	501.90	-0.20	548.30	346.40	1.77	18.37	81910.89
HSBC	475.10	-2.75	567.20	344.46	3.40	10.38	107775.28
Imperial Brands	2079	31.00	2094	1434.23	6.64	6.95	22433.63
Jardine Mathes.	62.50	-	60.50	50.06	2.27	12.61	18089.69
LlydsBkg	42.54	1.16	4824.5	38.10	6.04	5.91	34687.39
LSE Group	7366	16.00	8612	6230	1.04	75.32	28835.29
Natl Grid	921.00	20.40	1271.45	844.29	5.34	21.47	34976.11
Natwest Group	240.50	5.40	284.42	196.92	4.37	9.47	32559.7
Prudential	804.20	-82.20	1516.5	792.60	1.46	13.06	23541
ReckittB	5950	16.00	6824	4905.16	2.93	-25.75	47405.91
RELX	2262	37.00	2634.82	2056	2.11	29.84	49057.49
RioTinto	4750	-55.00	6343	4354	10.58	4.97	72079.08
RollsRoyce	73.50	-0.08	161.91	64.44	-	50.00	1546.61
Shell PLC	2345	1.00	2459.23	1534.2	2.58	12.36	121968.23
StandCh	561.60	-5.40	641.00	406.20	1.58	12.59	20947.59
Tesco	210.80	1.60	304.10	194.35	4.34	10.73	19527.62
Unilever	3921.5	-22.00	4178	3267.5	3.69	20.13	54650.91
Vodafone	99.58	0.99	141.60	97.40	7.77	-222.77	30052.04
WPP	759.40	13.80	1231.5	713.00	3.49	14.46	10878.25
United States of America ($)							
21stC Fox A	29.37	-0.06	44.95	28.27	1.34	14.23	8968.62
3M	118.56	1.75	186.30	107.07	4.17	14.02	67532.24
AbbottLb	97.57	2.51	142.60	93.25	1.54	29.65	170866.51
Abbvie	151.04	3.98	175.91	107.75	2.88	28.03	267048.34
Accenture	274.46	4.89	417.37	242.95	1.12	33.36	182456.39
Activision Bli.	72.51	-0.21	82.34	56.40	0.54	25.23	56721.14
Adobe	312.73	6.36	699.54	274.73	-	36.83	145388.18
Advanced Micro	58.74	-0.08	164.46	54.57	-	27.36	94825.21
AEP	85.84	0.21	105.60	80.22	2.92	20.72	44098.93
Aflac	61.82	0.85	67.20	52.07	1.78	11.58	39065.08
AirProd	243.77	2.48	316.39	216.24	2.06	30.65	54067.94
Allstate	124.10	4.02	144.46	106.11	2.18	8.75	33543.68
Alphabet	101.75	0.62	151.55	94.38	-	1.09	610093
Altria	45.29	0.81	57.05	40.35	6.49	40.46	81552.09
Amazon	119.25	-0.07	188.11	101.26	-	2.20	1214840.44
AmerAir	13.93	0.22	22.35	11.65	-	-4.45	9049.87
AmerExpr	141.54	1.50	199.55	130.65	1.10	16.45	106115.55
AmerIntGrp	54.27	1.02	65.73	47.05	1.97	6.00	41267.78
AmerTower	187.14	-0.42	291.99	178.17	2.33	39.58	87129.93
Amgen	259.47	7.53	260.00	198.64	2.27	30.22	138798.51
Amphenol Corp	71.91	0.36	88.45	61.67	0.91	34.30	42774.09
Analog Devices	144.85	-1.75	191.95	133.48	1.61	58.22	74499.8
Anthem	482.58	12.71	-	-	-	-	-
Aon Cp	283.62	3.50	341.98	246.21	0.59	61.18	59822.71
Apple	148.48	1.21	182.13	129.04	0.49	29.48	2386104.9
Applied Materi.	83.89	1.47	167.06	71.12	0.94	13.85	72167.05
Aptiv	89.00	1.96	180.81	77.96	-	54.92	24112.85
ArcherDan	89.86	0.17	98.88	61.80	1.38	22.46	50372.06
AT&T	17.47	0.37	21.53	14.46	9.95	7.58	124491.22
Autodesk	204.46	3.07	335.48	163.20	-	108.24	44134.54
AutomData	237.15	4.41	261.59	192.26	1.35	43.95	98486.42
AutoZone	2395.75	94.72	2404.35	1703.32	-	25.92	46687.42
Avago Tech	457.61	7.88	677.76	415.07	2.75	30.94	185332.72
BakerHu	26.18	-0.50	39.78	20.42	2.36	72.53	26213.41
Bank of NY	40.82	0.59	64.63	36.22	2.66	11.80	32982.73
BankAm	34.97	0.02	50.11	29.31	1.86	11.73	280992.31
Baxter	56.87	0.44	89.70	53.78	1.59	26.91	28640.34
BectonDick	225.45	1.85	277.29	215.90	1.24	46.69	64297.24
BerkshHat	434318.18	7148.19	544389.26	393012.25	-	8.74	260557.9
Biogen	274.38	6.76	284.59	187.16	-	31.58	39815.76
BlackRock	610.89	13.63	973.16	503.12	2.26	19.13	92103.11
Boeing	142.09	0.77	233.94	113.02	-	-23.79	84371.66
Booking Holdings	1801.2	-21.60	2715.66	1616.85	-	76.55	71518.7
Bristol-Myers	73.40	1.19	80.59	53.22	2.29	28.16	156717.05
Broadcom	457.61	7.88	677.76	415.07	2.75	30.94	185332.72
Cadence Design	160.50	2.16	194.97	132.32	-	76.86	43956.14
CapOne	97.92	1.67	170.00	90.27	1.71	4.35	37581.51
CardinalHlth	73.65	0.62	74.52	45.85	2.22	45.68	19297.29
Carnival	8.12	-0.08	25.29	6.11	-	-1.16	9031.51
Caterpillar	191.14	0.92	237.90	160.60	1.87	19.34	100904.55
Centene Corp	76.05	2.20	98.53	67.79	-	39.93	43468.72
CharlesSch	70.75	0.43	96.24	59.35	0.85	29.93	128608.93
Charter Comms	337.49	7.09	739.86	297.66	-	16.51	54218.57
Chevron Corp	173.36	0.17	182.40	110.73	2.56	25.50	340620.06
Chipotle Mexic.	1551.64	1.82	1895.99	1196.28	-	81.11	43080.74
Chubb	203.41	5.62	218.99	173.78	1.31	12.64	84952.44
Cigna	306.05	4.71	308.28	191.74	1.09	23.29	93379.29
Cintas Corp	405.42	5.48	461.44	343.86	0.75	42.55	41168.5
Cisco	43.41	0.61	64.29	38.61	2.88	18.45	178344.38
Citigroup	44.25	-0.01	71.89	40.01	3.85	5.22	85700.18
CME Grp	173.06	3.07	256.94	166.58	1.74	28.42	62203.53
Coca-Cola	57.46	1.50	67.20	52.28	2.44	30.57	248471.57
Cognizant	60.81	0.53	93.47	55.40	1.32	17.97	31483.91
ColgtPlm	71.57	0.10	85.18	67.84	2.09	33.60	59697.98
Comcast	31.28	0.80	54.59	28.39	2.67	12.32	137750.68
ConocPhil	125.56	1.07	126.40	66.06	1.30	24.76	162405.53
Constellation	228.81	3.66	261.53	207.59	1.12	-1233.37	36889.78
Corning	32.41	0.22	43.47	28.98	2.47	30.31	27392.53
Corteva	63.37	0.49	64.30	42.07	0.70	32.00	45860.87
Corteva	63.37	0.49	64.30	42.07	0.70	32.00	45860.87
Costco	493.37	15.19	612.27	406.51	0.54	47.15	218365.39
CrownCstl	123.07	-0.52	208.69	121.71	3.71	55.18	53294.14
CSX	28.52	0.98	38.63	25.80	1.14	18.85	61057.49
CVS	94.64	1.92	111.25	86.24	1.77	19.04	124246.12
Danaher	250.37	5.78	331.69	233.71	0.30	34.20	182260.02
Deere	385.85	2.79	446.76	283.81	0.85	25.36	116455.6
Delta	33.18	0.60	46.27	27.20	-	47.67	21276.43
Devon Energy	75.01	0.72	79.40	35.55	2.19	21.43	49116.55
Digital Realty	97.08	0.22	176.53	85.76	3.99	19.57	27901.93
DiscFinServ	95.97	1.29	129.12	87.64	1.64	6.44	26216.25
Disney	101.83	-0.21	179.25	90.23	-	70.88	185641.97
Dollar General	245.55	6.18	262.21	183.25	0.58	28.63	55389.14
DominRes	65.94	0.41	88.78	61.70	3.19	24.74	54891.07
DukeEner	88.83	0.37	116.33	83.76	3.67	21.57	68390.26
DuPont	55.89	0.31	84.08	49.52	1.79	20.71	27995.41
Eaton	141.95	2.62	175.72	122.50	1.79	31.82	56536.69
eBay	38.60	0.19	81.19	35.92	1.56	121.60	21205.6
Ecolab	150.10	4.19	238.93	136.94	1.09	45.96	42775.46
Edwards Lifesc.	85.54	0.73	131.73	80.69	-	43.02	53026.83
Eli Lilly	351.41	10.64	351.77	231.87	0.81	68.74	333900.93
Emerson	83.94	0.78	100.47	72.41	2.02	21.94	49633.72
EOG Res	135.18	0.18	147.99	80.67	1.00	20.25	79221.5
Equinix	534.39	-0.22	849.51	494.89	1.79	115.68	48669.21
EquityResTP	64.24	0.03	94.32	60.75	3.13	22.44	24161.84
Exelon	37.04	0.32	50.71	29.10	3.45	25.48	36316.7
ExxonMb	106.37	0.51	107.67	57.96	2.74	23.63	443311.47
Fedex	156.13	2.90	260.50	141.92	1.53	10.05	40628.77
Fidelity NIS	77.92	0.09	126.04	72.37	1.67	139.22	47373.69
Fiserv	97.39	0.65	111.84	87.03	-	58.59	62289.12
FordMtr	12.36	0.17	25.87	10.61	0.68	3.33	48814.4
Franklin	22.84	0.31	38.27	20.24	4.13	7.23	11382.48
GenDyn	244.95	2.35	254.99	188.64	1.59	25.39	67176.61
GenElectric	73.62	0.80	116.17	59.93	0.36	-27.12	80728.24
GenMills	77.56	0.52	81.24	61.20	2.22	24.53	46031.66
GenMotors	35.46	0.46	67.21	30.33	-	6.34	51702.42
GileadSci	68.84	1.05	74.12	57.17	3.45	16.72	86275.54
GoldmSchs	329.28	4.18	426.16	277.84	1.65	6.63	112401.68
Halliburton	34.36	0.48	43.99	20.77	0.64	23.11	31158.07
HCA Hold	207.34	10.68	279.02	164.47	0.77	11.73	59510.29
Hew-Pack	27.21	0.42	41.47	24.08	2.58	5.88	27371.6
Hilton Worldwi.	129.99	-1.24	167.99	108.41	-	106.59	35654.62
HiltonWwde	129.99	-1.24	167.99	108.41	-	106.59	35654.62
HomeDep	281.58	6.05	420.61	264.51	1.98	21.50	288255.77
Honywell	186.88	4.07	228.26	166.63	1.69	28.28	125899.62
HumanaInc	523.17	12.63	524.61	363.73	0.45	27.63	66209.1
IBM	131.78	1.88	144.73	114.56	4.15	30.28	119020.66
IDEXX Laborato.	344.22	6.57	672.93	317.06	-	47.92	28657.58
IllinoisTool	199.92	4.30	248.11	173.52	1.97	28.12	61899.57
Illumina	218.88	-1.13	425.00	173.45	-	51.99	34386.05
Intcntl Exch	94.32	1.27	139.79	88.60	1.17	15.73	52670.99
Intel	27.31	0.34	55.00	24.59	4.25	6.73	112134.86
Intuit	413.34	-3.84	716.86	339.36	0.52	61.97	116508.1
John&John	171.64	2.93	186.69	155.72	2.04	26.31	451272.44
JohnsonCn	54.39	1.35	81.69	45.52	1.77	29.73	37460.95
JPMrgnCh	122.01	-0.22	172.96	101.28	2.60	9.51	357802.57
Kimb-Clark	115.45	1.49	144.53	108.74	3.41	25.94	38978.49
KinderM	17.42	-0.10	20.20	15.01	5.33	45.04	39236.69
KLA Corp	295.41	4.78	442.44	250.20	1.10	18.20	41891.45
Kraft Heinz	36.28	1.07	44.87	32.73	3.68	52.97	44458.95
Kroger	43.47	-0.17	62.78	39.18	1.51	23.75	31112.52
LasVegasSd	34.51	-4.56	48.27	28.88	-	-27.36	26370.95
LibertyGbl	16.77	0.26	30.10	15.22	-	0.86	2906.42
Lilly (E)	351.41	10.64	351.77	231.87	0.81	68.74	333900.93
Linde	294.60	6.28	346.50	262.47	1.20	48.18	146818.5
Lockheed	463.57	8.96	479.99	324.23	2.00	23.83	121489.63
Lowes	186.57	4.20	263.31	170.12	1.36	18.38	115804.1
Lyondell	81.47	-0.69	117.22	71.46	4.55	5.82	26576
Marathon Ptl	110.92	-0.46	114.35	59.55	1.75	65.74	55307.38
Marsh&M	156.50	1.57	183.14	142.80	1.43	28.82	77625.49
MasterCard	305.73	3.36	399.92	276.87	0.61	41.78	293091.19
McDonald's	255.12	0.57	269.72	217.68	1.72	30.42	187696.19
McKesson	379.20	8.56	379.91	202.61	0.39	51.41	54501.87
Medtronic	83.76	0.50	124.80	79.44	2.49	27.36	111329.88
Merck	98.05	2.38	98.42	71.50	2.25	24.15	248388.09
Meta	196.64	0.99	384.33	169.00	-	15.41	450997.53
Metlife	69.30	1.24	73.18	57.05	2.29	11.35	56355.17
Microsoft	245.77	3.65	349.67	219.13	0.78	31.33	1832926.09
Mnstr Bvrg	89.04	1.45	99.81	71.78	-	41.47	46911.25
MondelezInt	58.41	1.06	69.47	54.72	1.90	23.00	80047.91
Monsanto	9.95	-	9.95	9.66	-	54.60	248.75
MorganStly	79.21	-0.01	109.73	72.05	2.21	11.81	135989.81
Netflix	284.41	-5.16	700.99	162.71	-	30.29	126568.28
NextEraE	73.09	1.44	92.91	67.22	1.86	114.94	143605.71
Nike	88.23	-0.28	179.10	82.22	1.11	27.61	111485.76
NorfolkS	213.56	5.52	296.87	203.65	1.63	21.11	50159.62
Northrop	529.78	7.12	534.64	345.90	0.97	14.57	81962.95
NXP	144.26	-1.00	239.91	132.08	1.30	25.43	37881.14
Occid Pet	71.13	-0.13	77.13	26.05	0.05	41.34	66662.39
Oracle	72.26	-0.44	106.34	60.78	1.49	32.71	194824.98
Pepsico	176.77	3.71	181.07	153.37	2.01	38.55	243532.83
Perrigo	41.07	0.78	47.95	31.32	1.95	-50.17	5528.76
Pfizer	45.84	0.89	61.71	41.45	2.84	13.96	257242.15
Phillips66	100.67	0.23	111.28	67.08	3.00	40.58	48425.63
PhilMorris	86.94	0.43	112.48	82.85	4.71	17.85	134771.35
PNCFin	160.89	4.52	217.60	143.52	2.49	15.17	65984.85
PPG Inds	113.65	1.06	172.78	107.06	1.75	29.86	26710.86
ProctGmbl	129.44	0.86	165.35	122.18	2.31	26.33	308779.05
Prudntl	99.63	1.34	124.22	85.46	3.86	6.11	37062.36
PublStor	293.16	0.48	421.76	280.83	2.28	35.56	51458.06
Qualcomm	116.29	0.55	192.68	104.66	1.93	15.95	130593.67
Raytheon	90.16	1.62	106.02	79.00	1.86	41.83	132686.52
Regen Pharm	732.76	18.85	761.05	538.01	-	12.19	78544.67
S&P Global	301.84	5.90	484.21	279.32	0.85	28.88	100661.97
Salesforce	161.19	1.02	311.75	137.59	-	129.15	161189.3
Schlmbrg	51.81	1.40	51.91	27.65	0.81	46.99	73279.46
Sempra Energy	143.51	1.23	176.47	119.56	2.56	42.84	45106.68
Shrwin-Will	213.38	5.56	354.15	195.24	0.86	36.60	55303.18
SimonProp	101.74	0.70	171.12	86.02	5.87	17.81	33303.13
SouthCpr	46.38	-2.40	79.32	42.42	5.76	12.65	35856.03
Starbucks	83.48	-5.13	117.47	68.39	1.84	27.01	95784.95
StateSt	70.25	1.13	103.76	58.62	2.59	11.70	25825.26
Stryker	221.12	2.81	279.28	188.84	0.98	50.81	83617.43
Sychrony Fin	33.13	0.72	51.09	27.22	2.28	5.22	15960.68
T-MobileUS	139.04	2.58	148.04	101.51	-	69.07	174361.89
Target	161.81	2.62	268.98	137.16	1.65	13.61	74476.2
TE Connect	115.53	0.64	166.44	104.76	1.43	18.79	36951
Tesla Mtrs	205.49	-8.95	414.50	198.59	-	50.20	638669.04
TexasInstr	161.03	1.31	202.26	144.46	2.18	23.34	147134.3
TheTrvelers	179.10	2.87	187.98	145.40	1.69	13.22	41971.64
ThrmoFshr	508.05	11.31	668.94	478.31	0.17	31.25	199048.38
TJX Cos	68.26	0.65	76.94	53.69	1.28	29.98	79253.48
Truist Financial Corp	42.68	1.17	66.10	40.01	3.64	11.43	56610.47
Twitter	51.00	1.11	64.47	31.30	-	-218.05	39027.94
UnionPac	194.65	4.12	278.94	183.70	1.99	21.53	119670.98
UPS	168.23	2.68	233.72	154.87	2.03	13.72	122726.44
USBancorp	41.27	0.76	63.01	38.39	3.56	9.69	61318.31
UtdHlthcre	543.77	10.04	553.29	436.00	0.86	36.00	508628.38
ValeroEngy	128.39	0.65	146.81	65.13	2.55	67.71	50581.85
Verizon	36.26	0.91	55.51	34.55	5.84	8.16	152260.66
VertexPharm	308.05	8.05	311.02	179.96	-	40.93	79003.55
VF Cp	27.74	0.05	78.91	27.03	5.93	10.89	10774.9
Visa Inc	190.76	0.39	236.96	174.60	0.58	37.81	311895.39
Walgreen	34.35	0.05	53.46	30.39	4.66	5.96	29706.33
WalMartSto	139.29	2.49	160.77	117.27	1.33	33.92	378052.63
Walt Disney	101.83	-0.21	179.25	90.23	-	70.88	185641.97
Waste Manage.	162.57	2.74	175.98	138.58	1.18	45.37	67195.99
WellsFargo	45.26	0.43	60.30	36.54	1.42	10.95	171673.42
Williams Cos	31.22	-0.30	37.97	24.86	4.39	30.14	38042.51
Workday	146.95	-2.53	307.81	134.10	-	1452.18	29536.95
Yum!Brnds	108.64	-2.39	139.85	103.97	1.54	24.96	30912.69
Zoetis	150.29	3.08	249.27	141.87	0.56	42.14	70356.55
Zoom	80.04	-0.95	291.31	70.44	-	21.09	20086.8
Venezuela (VEF)							
Bco de Vnzla	1.19	0.04	2.14	0.32	128.81	-	516.87
Bco Provncl	2.63	0.01	798000	1.70	-	0.00	117.45

Closing prices and highs & lows are in traded currency (with variations for that country indicated by stock), market capitalisation is in USD. Highs & lows are based on intraday trading over a rolling 52 week period.
- ♦ ex-dividend
- ■ ex-capital redistribution
- # price at time of suspension

FT 500: TOP 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
Schlmbrg	51.81	50.41	1.40	2.78	8.95	20.9	39.56
ASML Hld	475.40	459.55	15.85	3.45	74.85	18.7	-13.23
Lockheed	463.57	454.61	8.96	1.97	66.26	16.7	5.71
Netflix	284.41	289.57	-5.16	-1.78	39.31	16.0	17.68
Halliburton	34.36	33.88	0.48	1.40	4.37	14.6	16.84
AT&T	17.47	17.10	0.37	2.16	2.16	14.1	-5.05
Applied Materi.	83.89	82.42	1.47	1.78	9.48	12.7	-19.98
KLA Corp	295.41	290.63	4.78	1.64	32.19	12.2	-20.62
EOG Res	135.18	135.00	0.18	0.13	14.28	11.8	13.92
Carnival	8.12	8.20	-0.08	-1.02	0.85	11.6	-17.93
Northrop	529.78	522.66	7.12	1.36	54.69	11.5	8.07
ValeroEngy	128.39	127.74	0.65	0.51	12.89	11.2	8.36
SvnskaHn	104.90	103.40	1.50	1.45	9.98	10.5	14.85
StateSt	70.25	69.12	1.13	1.63	6.44	10.1	-2.74
CanNatRs	80.71	80.04	0.67	0.84	7.14	9.7	10.57
Salesforce	161.19	160.17	1.02	0.64	14.01	9.5	-12.21
BakerHu	26.18	26.67	-0.50	-1.86	2.25	9.4	4.03
SHOP	39.52	40.54	-1.02	-2.52	3.30	9.1	-8.76
Fresenius SE	21.82	21.71	0.11	0.51	1.78	8.9	-13.95
TheTrvelers	179.10	176.23	2.87	1.63	14.30	8.7	3.70

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 %
Naspers N	1711.35	2071.78	-360.43	-17.40	-488.65	-22.2	-30.81
Tencent	206.20	232.80	-26.60	-11.43	-43.00	-17.3	-34.54
Ericsson	61.16	61.17	-0.01	-0.02	-10.48	-14.6	-24.34
PingAnIns	32.75	36.80	-4.05	-11.01	-5.40	-14.2	-24.80
SandsCh	14.00	14.86	-0.86	-5.79	-2.24	-13.8	-16.55
Kweichow	1501.28	1624.00	-122.72	-7.56	-236.33	-13.6	-20.78
ChinaPcIns	12.38	13.54	-1.16	-8.57	-1.94	-13.5	-23.65
Telia Co	28.08	28.25	-0.17	-0.60	-4.32	-13.3	-27.52
China Vanke	12.10	13.20	-1.10	-8.33	-1.72	-12.4	-17.39
AIA	59.70	65.95	-6.25	-9.48	-8.15	-12.0	-20.69
MTN Grp	114.32	121.66	-7.34	-6.03	-13.55	-10.6	-17.44
Ch OSLnd&Inv	18.32	20.45	-2.13	-10.42	-2.08	-10.2	-7.47
ChinaMBank	27.75	30.15	-2.40	-7.96	-2.90	-9.5	-31.15
ChinaLife	8.93	9.69	-0.76	-7.84	-0.89	-9.1	-20.97
Prudential	804.20	886.40	-82.20	-9.27	-79.80	-9.0	-15.87
PngAnBnk	10.62	11.09	-0.47	-4.24	-0.91	-7.9	-15.51
Nokia	4.36	4.31	0.05	1.16	-0.36	-7.7	-12.67
HK Exc&Clr	228.20	252.00	-23.80	-9.44	-18.40	-7.5	-31.78
CrownCstl	123.07	123.59	-0.52	-0.42	-9.90	-7.4	-31.69
IndstrlBk	15.30	15.99	-0.69	-4.32	-1.21	-7.3	-14.04

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

Oct 24	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
High Yield US$										
HCA Inc.	04/24	8.36	BB-	Ba2	BB	113.75	4.24	0.00	0.12	-
High Yield Euro										
Aldesa Financial Services S.A.	04/21	7.25	-	-	B	71.10	28.23	0.00	0.64	25.98
Emerging US$										
Peru	03/19	7.13	BBB+	A3	BBB+	104.40	2.60	-	-	0.34
Colombia	01/26	4.50	-	Baa2	BBB-	109.50	2.33	0.16	0.52	1.28
Brazil	04/26	6.00	-	Ba2	BB-	115.15	2.78	-0.01	0.65	1.73
Poland	04/26	3.25	-	A2	A-	111.22	0.98	0.03	0.16	-0.07
Mexico	05/26	11.50	-	Baa1	BBB-	149.00	1.61	0.00	-0.12	0.56
Turkey	03/27	6.00	-	Ba2	BB+	101.26	5.82	0.00	0.17	3.07
Turkey	03/27	6.00	-	B2	BB-	102.88	5.43	0.14	0.83	4.38
Peru	08/27	4.13	BBB+	A3	BBB+	103.50	3.66	0.01	-0.02	0.80
Russia	06/28	12.75	-	Baa3	BBB	168.12	2.48	0.07	0.05	-
Brazil	02/47	5.63	-	Ba2	BB-	101.48	5.52	0.08	0.80	-
Emerging Euro										
Brazil	04/21	2.88	BB-	Ba2	BB-	103.09	0.05	0.01	-0.09	-1.19
Mexico	04/23	2.75	BBB+	A3	BBB+	107.76	0.76	0.00	-0.07	-1.56
Mexico	04/23	2.75	-	Baa1	BBB-	106.48	-0.26	-	-	-0.36
Bulgaria	03/28	3.00	BBB-	Baa2	BBB	117.04	1.00	0.02	-0.15	-1.42

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

BONDS: GLOBAL INVESTMENT GRADE

Oct 24	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
US$										
FleetBoston Financial Corp.	01/28	6.88	BBB+	Baa1	A-	129.00	2.54	-0.01	-0.05	-
The Goldman Sachs Group, Inc.	02/28	5.00	BBB+	A3	A	117.21	2.47	0.00	0.32	-
NationsBank Corp.	03/28	6.80	BBB+	Baa1	A-	127.69	2.72	-0.01	0.06	-
GTE LLC	04/28	6.94	BBB+	Baa2	A-	128.27	2.80	0.00	-0.11	-
United Utilities PLC	08/28	6.88	BBB	Baa1	A-	130.43	2.62	-0.07	-0.22	-
Barclays Bank plc	01/29	4.50	A	A1	A+	96.46	5.02	0.00	0.02	-
Euro										
Electricite de France (EDF)	04/30	4.63	A-	A3	A-	137.45	0.82	-0.01	0.10	-
The Goldman Sachs Group, Inc.	02/31	3.00	BBB+	A3	A	124.42	0.68	0.00	-0.11	-
The Goldman Sachs Group, Inc.	02/31	3.00	BBB+	A3	A	121.70	0.93	0.00	0.02	-
Finland	04/31	0.75	AA+	Aa1	AA+	111.08	-0.27	0.00	-0.05	-0.87
Yen										
Mexico	06/26	1.09	-	Baa1	BBB-	98.73	1.34	-0.02	-0.14	0.27
£ Sterling										
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	137.45	2.19	-0.03	0.02	-
innogy Fin B.V.	06/30	6.25	BBB	Baa2	A-	128.68	3.20	0.00	-0.01	0.40

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

INTEREST RATES: OFFICIAL

Oct 24	Rate	Current	Since	Last
US	Fed Funds	3.00-3.25	21-09-2022	2.25-2.5
US	Prime	6.25	22-09-2022	5.50
US	Discount	2.50	27-07-2022	1.50
Euro	Repo	0.374	20-09-2022	0.141
UK	Repo	2.25	22-09-2022	1.75
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

Oct 24 (Libor: Oct 21)	Over night	Change Day	Change Week	Change Month	One month	Three month	Six month	One year
US$ Libor	3.06686	0.006	2.141	0.013	3.58557	4.35843	4.87500	5.47557
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	0.008	2.72140	3.38000	4.18150	0.81363
Swiss Fr Libor				-0.002	-0.77540	-0.75300	-0.70280	-0.55320
Yen Libor				0.000	-0.06005	-0.02853	0.04206	0.04867
Euro Euribor				0.040	0.98300	1.54300	2.10700	2.77800
Sterling CDs				0.000	0.50000	0.63000	0.78500	
US$ CDs				0.030	3.66000	4.30000	4.80000	
Euro CDs				0.020	1.17000	1.26000	1.91000	

Oct 24	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	0.45	0.75	0.45	0.75	1.02	1.32	1.11	1.41	1.76	2.06	2.23	2.53
Sterling					0.45	0.55	0.58	0.68	0.71	0.86	0.90	1.05
US Dollar	2.87	3.07	2.89	3.09	3.56	3.76	4.20	4.40	4.70	4.90	5.03	5.23
Japanese Yen	-0.15	0.05	-0.20	0.00	-0.20	0.00	-0.15	0.05	-0.10	0.20	-0.05	0.25

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	185.85	-0.31	-1.44	-15.44	-4.24	-14.80
Corporates(£)	307.10	0.34	1.86	-22.41	-4.67	-21.54
Corporates(€)	202.32	-0.21	-1.26	-16.23	-3.00	-16.39
Eurozone Sov(€)	208.26	-0.16	-1.70	-18.14	-3.17	-18.35
Gilts(£)	266.03	0.41	0.86	-25.99	-3.67	-23.79
Overall(£)	272.85	0.38	1.09	-24.62	-3.80	-22.77
Overall(€)	203.39	-0.17	-1.54	-17.55	-3.14	-17.74
FTSE						
Sterling Corporate (£)	-	-	-	-	-	-
Euro Corporate (€)	104.47	-0.05	-	-	0.54	-1.73
Euro Emerging Mkts (€)	585.91	5.74	-	-	-17.56	-22.88
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	585.23	-17.71	-35.47	-51.56	688.92	584.73
Europe 5Y	121.59	-3.47	-8.43	-8.45	142.08	121.11
Japan 5Y	106.36	-0.44	-0.14	1.86	119.29	98.33
Senior Financials 5Y	131.29	-4.45	-12.72	-10.57	155.06	131.29
Markit CDX						
Emerging Markets 5Y	314.26	-10.15	-21.03	-3.48	335.29	288.27
Nth Amer High Yld 5Y	542.75	-25.10	-52.65	-	625.47	542.75
Nth Amer Inv Grade 5Y	94.30	-4.74	-9.76	-11.55	110.98	94.30

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

VOLATILITY INDICES

	Oct 24	Day Chng	Prev	52 wk high	52 wk low
VIX	30.53	0.84	29.69	38.93	14.73
VXD	27.67	1.41	26.26	45.37	3.27
VXN	36.13	0.88	35.25	44.05	15.70
VDAX	28.21	0.64	27.57	93.30	-

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

BONDS: BENCHMARK GOVERNMENT

	Red Date	Coupon	Bid Price	Bid Yield	Day chg yield	Wk chg yield	Month chg yld	Year chg yld
Australia	11/22	2.25	99.96	2.78	-0.02	0.07	-0.09	2.65
	05/32	1.25	76.98	4.19	0.14	0.19	0.30	-
	02/50	1.00	84.92	2.12	0.07	0.05	0.15	1.87
Austria	02/29	0.50	86.27	2.91	0.04	0.16	0.28	2.97
	02/47	1.50	70.47	3.28	0.06	0.04	0.35	2.72
Belgium	06/27	0.80	92.51	2.53	-0.01	0.08	0.28	2.80
	06/47	1.60	69.68	3.44	0.07	0.02	0.36	2.61
Canada	03/25	1.25	93.60	4.14	-0.10	0.06	0.41	3.05
	06/30	1.25	84.34	3.63	-0.06	0.12	0.42	2.04
	12/48	2.75	83.56	3.74	0.04	0.28	0.61	1.68
Denmark	11/29	0.50	85.83	2.73	0.02	0.13	0.25	2.74
	11/39	4.50	119.47	3.02	0.08	0.15	0.41	2.74
Finland	09/24	0.00	96.03	2.16	-0.07	0.05	0.23	2.71
	09/29	0.50	84.95	2.95	0.03	0.14	0.39	3.00
France	05/28	0.75	90.42	2.62	0.01	0.08	0.26	2.74
	05/48	2.00	76.74	3.37	0.08	0.05	0.37	2.57
Germany	08/29	0.00	85.76	2.28	0.03	0.10	0.29	2.52
	08/50	0.00	50.65	2.48	0.10	0.06	0.38	2.22
Greece	01/23	3.50	100.56	1.35	-0.01	0.05	0.06	1.66
	01/28	3.75	96.30	4.55	0.06	0.22	0.29	4.08
Ireland	-	-	-	-	-	-	-	-
	05/26	1.00	95.61	2.30	-0.05	0.07	0.20	2.62
	02/45	2.00	78.65	3.38	0.07	0.05	0.36	2.65
Italy	02/25	0.35	93.74	3.23	-0.01	0.06	0.16	3.30
	05/30	0.40	87.03	2.28	0.00	-0.03	0.01	3.18
	03/48	3.45	81.64	4.70	0.05	-0.04	0.31	2.93
Japan	04/25	0.05	99.89	0.09	0.01	0.04	0.04	0.01
	12/29	0.10	98.92	0.25	0.00	0.02	0.03	0.25
	12/49	0.40	76.01	1.48	0.04	0.11	0.15	0.81
Netherlands	07/27	0.75	92.74	2.39	-0.01	0.09	0.28	2.71
	01/47	2.75	97.85	2.87	0.09	0.09	0.43	2.61
New Zealand	05/31	1.50	78.09	4.63	-0.02	0.16	0.36	2.20
	09/40	2.50	112.29	2.74	-0.01	0.05	0.17	1.98
Norway	08/30	1.38	83.86	3.80	0.04	0.18	0.52	2.11
Poland	01/23	2.50	98.75	7.61	0.00	0.05	0.20	6.13
	07/27	2.50	75.90	8.95	0.05	0.98	1.55	6.65
	04/47	4.00	54.84	8.40	0.00	1.30	1.74	5.52
Portugal	04/27	4.13	105.93	2.70	0.03	0.14	0.25	2.90
Spain	10/22	0.45	99.96	2.99	0.78	1.32	1.97	3.57
	10/29	0.60	84.06	3.17	0.02	0.06	0.24	2.90
	10/46	2.90	84.51	3.91	0.08	0.02	0.33	2.71
Sweden	06/30	0.13	113.08	-0.01	0.06	0.23	0.12	1.71
	03/39	3.50	116.66	2.27	0.03	0.20	0.18	1.56
Switzerland	04/28	4.00	115.39	1.08	0.00	-0.04	0.07	1.36
	06/29	0.00	92.53	1.17	0.00	-0.01	0.12	1.36
United Kingdom	07/23	0.75	97.99	3.51	0.22	0.00	-0.32	2.88
	07/27	1.25	87.74	4.12	0.21	-0.17	-0.28	3.26
	07/47	1.50	59.24	4.15	0.14	-0.72	0.30	2.69
United States	-	-	-	-	-	-	-	-
	03/25	0.50	90.91	4.48	-0.13	-0.02	0.24	3.59
	02/30	1.50	82.94	4.24	-0.05	0.13	0.36	2.66
	02/50	0.25	64.23	1.94	0.01	0.12	0.06	-

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

GILTS: UK CASH MARKET

Oct 24	Price £	Red Yield	Change in Yield Day	Change in Yield Week	Change in Yield Month	Change in Yield Year	52 Week High	52 Week Low	Amnt £m
	-	-	-	-	-	-	-	-	-
Tr 0.75pc '23	98.28	3.11	-9.06	-2.51	-2.81	418.33	100.82	97.34	34.36
Tr 0.125pc '24	96.05	3.34	-8.49	-4.57	-6.18	391.18	99.44	94.34	35.55
Tr 2pc '25	96.08	3.45	-8.00	-4.17	0.58	379.17	105.99	93.15	39.93
Tr 0.125pc '26	89.29	3.63	-8.10	-4.47	3.13	365.38	98.77	86.33	35.32
Tr 1.25pc '27	89.04	3.80	-7.32	-3.06	6.74	352.38	104.30	85.65	40.99
Tr 0.875pc '29	82.25	3.79	-6.88	-4.29	7.67	275.25	102.36	78.21	43.62
Tr 4.25pc '32	104.09	3.74	-7.65	-6.03	6.86	214.29	135.62	98.13	40.33
Tr 4.25pc '36	103.13	3.95	-6.40	-7.71	5.90	206.20	145.94	94.91	31.68
Tr 4.5pc '42	107.22	3.98	-6.57	-11.56	3.38	188.41	169.96	93.79	28.35
Tr 3.75pc '52	99.76	3.76	-6.93	-14.16	-0.53	174.45	180.27	82.51	25.11
Tr 4pc '60	107.68	3.62	-6.70	-14.62	0.00	187.30	213.01	87.32	25.13

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

GILTS: UK FTSE ACTUARIES INDICES

Price Indices Fixed Coupon	Oct 24	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
1 Up to 5 Years	80.91	0.71	2326.80	2.27	-5.01	3.58
2 5 - 10 Years	145.51	1.99	3069.27	3.57	-15.49	3.79
3 10 - 15 Years	154.45	3.12	3548.62	4.57	-22.32	3.93
4 5 - 15 Years	146.74	2.30	3184.75	3.85	-17.56	3.84
5 Over 15 Years	219.52	5.00	3757.07	11.44	-36.02	3.76
7 All stocks	135.51	2.68	3013.67	5.80	-22.03	3.77

Index Linked	Oct 24	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	324.00	0.58	2.67	2.78	2732.46	2.67	3.94
2 Over 5 years	577.36	6.60	18.44	-34.53	4395.04	18.44	-34.26
3 5-15 years	444.32	3.08	3.76	-16.98	3587.81	3.76	-16.37
4 Over 15 years	684.18	8.70	28.76	-41.55	5057.09	28.76	-41.41
5 All stocks	541.55	5.65	15.76	-30.68	4204.72	15.76	-30.34

Yield Indices	Oct 24	Oct 21	Yr ago		Oct 24	Oct 21	Yr ago
5 Yrs	3.67	3.98	0.77	20 Yrs	3.96	4.24	1.40
10 Yrs	3.88	4.17	1.13	45 Yrs	3.47	3.75	1.17
15 Yrs	3.98	4.26	1.33				

Real yield	inflation 0% Oct 24	inflation 0% Dur yrs	inflation 0% Previous	inflation 0% Yr ago	inflation 5% Oct 24	inflation 5% Dur yrs	inflation 5% Previous	inflation 5% Yr ago
Up to 5 yrs	-0.95	1.51	-0.57	-3.70	-1.66	1.51	-1.29	-4.13
Over 5 yrs	-0.01	19.64	0.32	-2.40	-0.04	19.70	0.29	-2.43
5-15 yrs	0.12	8.56	0.48	-2.96	0.01	8.57	0.36	-3.07
Over 15 yrs	-0.03	26.02	0.29	-2.34	-0.05	26.04	0.27	-2.36
All stocks	-0.02	16.95	0.31	-2.42	-0.06	17.05	0.27	-2.45

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

Tradeweb

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

POWERED BY MORNINGSTAR

COMMODITIES

www.ft.com/commodities

Energy		Price*	Change	Agricultural & Cattle Futures		Price*	Change
Crude Oil†	Dec	83.23	-1.82	Corn♦	Dec	678.50	-5.75
Brent Crude Oil‡		93.34	-0.16	Wheat♦	Dec	843.00	-7.75
RBOB Gasoline†	Dec	2.60	-0.06	Soybeans♦	Nov	1378.75	-16.75
Natural Gas†	Nov	4.90	-0.06	Soybeans Meal♦	Dec	414.60	-3.30
Base Metals (♠ LME 3 Months)				Cocoa (ICE Liffe)⊕	Dec	1976.00	22.00
Aluminium		2180.00	-38.50	Cocoa (ICE US)♥	Dec	2342.00	36.00
Aluminium Alloy		1675.00	-905.00	Coffee(Robusta)⊕	Nov	1954.00	-47.00
Copper		7569.50	-81.00	Coffee (Arabica)♥	Dec	193.95	3.05
Lead		1892.00	-11.00	White Sugar⊕		526.00	-7.00
Nickel		22170.00	-20.00	Sugar 11♥		18.26	-0.12
Tin		18505.00	-45.00	Cotton♥	Dec	78.18	-0.95
Zinc		2973.50	23.00	Orange Juice♥	Nov	214.50	4.70
Precious Metals (PM London Fix)				Live Cattle♣	Dec	150.30	0.53
Gold		1643.25	7.95	Feeder Cattle♣	May	134.88	-
Silver (US cents)		1838.50	-40.00	Lean Hogs♣	Dec	89.15	2.13
Platinum		905.00	12.00				
Palladium		1998.00	-21.00		Oct 21	% Chg Month	% Chg Year
Bulk Commodities							
Iron Ore		91.44	-3.32	S&P GSCI Spt	627.69	-6.71	16.01
Baltic Dry Index		1797.00	-22.00	DJ UBS Spot	111.84	-8.63	14.57
Richards Bay ICE Futures		241.50	-2.50	TR/CC CRB TR	293.09	-6.22	24.15
				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 Oct 21	Yield Oct 21	Yield Prev	Month return	Value stock	Market	No of stocks
Can 4.25%' 26	109.98	1.719	1.826	-0.97	5.25	67626.76	8
Fr 0.25%' 24	102.42	-1.107	-1.048	-0.27	17.92	238995.78	17
Swe 1.00%' 25	124.87	-0.662	-0.721	1.19	35.38	213546.65	6
UK 0.125%' 24	103.77	-2.474	-2.675	1.91	15.24	558220.34	31
UK 2.50%' 24	373.48	-1.571	-1.762	2.11	6.82	558220.34	31
UK 2.00%' 35	231.23	0.482	0.418	-3.91	9.08	558220.34	31
US 0.625%' 24	98.38	1.966	2.194	0.75	40.98	1553576.38	46
US 3.625%' 28	109.09	1.871	1.977	0.54	16.78	1553576.38	46

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	4.19	1.91	-0.05	Netherlands	2.39	0.11	-1.85
Austria	2.91	0.63	-1.33	New Zealand	4.63	2.35	0.39
Canada	3.63	1.35	-0.61	Norway	3.80	1.52	-0.44
Denmark	2.73	0.45	-1.51	Portugal	2.70	0.41	-1.54
Finland	2.95	0.66	-1.29	Spain	3.17	0.89	-1.07
Germany	2.28	0.00	-1.96	Sweden	-0.01	-2.29	-4.25
Italy	2.28	0.00	-1.96	Switzerland	1.17	-1.11	-3.07
Japan	0.25	-2.03	-3.99	United States	4.24	1.96	0.00

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

Native American artist stages family reunion

Jeffrey Gibson inaugurates the Institute of Contemporary Art in San Francisco with a show about our relationship to land. By Jonathan Griffin

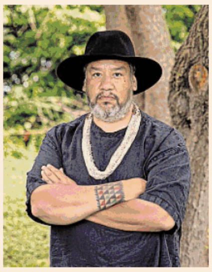
To Native American artist Jeffrey Gibson, land acknowledgments — the practice of paying tribute, in the Americas or Oceania, to the original dwellers of the place one is in — have never felt quite enough. "I believe in land acknowledgments," he says, "but I'm also interested in the history of the land itself, beyond the indigenous history of the land, from a geologic perspective."

Gibson's exhibition, *This Burning World*, at the newly minted Institute of Contemporary Art in San Francisco (ICA SF), is a metaphorical form of geologic land acknowledgment. In a long gallery, video projections display a dazzling patchwork of natural imagery — leaves, blossom, fruit, rain on water, icy streams, rocky coastlines — shot over the changing seasons, mostly near Gibson's home in New York's Hudson Valley. At the foot of these projections, two long strips have been cut out of the concrete floor, uncovering the impoverished and dry earth on which the building rests.

The exposed soil looks depleted and arid. Much of Dogpatch, the formerly industrial, rapidly gentrifying area of eastern San Francisco which is home to the ICA SF, was built on landfill, and there are rumours about the toxicity of the soil. Ali Gass, the ICA SF's founding director, says that there are strict ordinances about how much ground can be uncovered in a space such as a gallery, given the possibility of contamination. A few streets away, Gibson's intervention would not have been possible.

"When we remove the cement, it's like removing the lid of a box," says Gibson. "The earth is grey, and not fertile, because it's something living that has been suffocated." He refers to indigenous world views where the natural environment and the beings that live in it are seen as materially and spiritually one and the same. Introducing his video images of a verdant wilderness, he says, "is like a family reunion with those who have been free".

Above: 'The Future Is Present' (2011-22) by Jeffrey Gibson features an uprooted maple tree. Below: the artist — Courtesy the artist/ICA SF; Johnna Arnold/Impart Photography; Brian Barlow



The ICA SF, as it is known, aspires to be a more thoughtful and socially conscious kind of institution than traditional museums. It was conceived during the national conversation about race and equity that grew louder during the pandemic. In the summer of 2021, Gass, then director of the nearby ICA San José, saw an opportunity for a new non-collecting art institution in the city of San Francisco.

She raised an initial $1mn cash commitment from Silicon Valley venture capitalist Andy Rappaport and his wife Deborah and took a 15-year lease on a former children's gymnasium in Dogpatch. By September 2022, she had raised another $3mn, largely from local entrepreneurs including Instagram co-founder Mike Krieger and his wife Kaitlyn and venture capitalist David Hornik and his wife Pamela.

"We have the great privilege to start an institution from scratch, which is a really rare opportunity," says Gass. Chief among the ambitions set out by the institution is a greater focus on social and economic equity, from artists to board members, from staff salaries to community engagement.

When Gass was discussing with curator Christine Koppes which artist might inaugurate their exhibition space, it took them "about two minutes", Gass says, to hit on Gibson. "Jeffrey's practice really embodies many of our values."

Gibson, 50, who is of Mississippi Choctaw and Cherokee heritage, is one of today's leading Native American artists. He was not raised in tribal society, however. Due to his father's job working for the US Department of Defense he moved around frequently during his childhood, including periods in West Germany and South Korea. He is also gay; his layered identity manifests in his multivalent art. He has overlaid quotes from pop songs and poetry on to traditional glass beadwork or painted geometric abstractions. Perhaps his best-known pieces are beaded punchbags which hang from the ceiling, sometimes decorated with tassels or tin jingles produced for powwow regalia.

This Burning World, Gibson decided early on, was not going to be another display of his greatest hits. (He's had plenty, including a 2018 retrospective originating at the Denver Art Museum.) His first question to Gass, when she approached him about the project, concerned the land on which the ICA SF would be situated.

Dogpatch used to serve the nearby shipyards. (Its name may derive from the dogfennel that once proliferated there.) Only in recent years, as demand for liveable space in San Francisco has soared, has it begun to be gentrified, notably with the establishment of an arts district centred on the Minnesota Street Project gallery and studio hub, also founded by the Rappaports.

Gibson wanted to reunite land, people and traditions in more than just an earthbound way. The installation's soundtrack mixes natural recordings with vocalisation and percussion by the Tsalagi Cherokee musician Joan Henry, who Gibson recruited for his project. As a traditional song-carrier, Henry considers herself a channel for stories and music passed to her from her ancestors.

Henry's voice fills an adjacent gallery, too, her song addressing a dying red maple tree. Gibson found the tree, which had been hit by a drunk driver and torn from the ground, to recreate a piece he first made in 2011 titled "The Future is Present". Root ball intact, the tree hangs horizontally on wires, floating in front of a glowing abstract vinyl design on the gallery's tall window.

Gibson's dazzling vinyl prints also emblazon the front of the building. "The trees are witnesses," declares one panel, while another reads, "Speaking to the sky and kissing the ground."

> The new gallery aspires to be a more thoughtful and socially conscious kind of institution

At an event the evening before the ICA SF opened to the public on October 1, Henry led the well-heeled guests in an extended land acknowledgment. Entreating them to tell their names to the stars and to "mother earth", she encouraged everyone to crouch close to the ground. As the roomful of donors took to its knees, the ICA SF seemed to be making good on its promise to be a very different kind of art institution.

To March 26 2023, icasf.org

Starting from scratch: vinyl artworks by Gibson outside San Francisco's Institute of Contemporary Art — Courtesy the artist/ICA SF; Johnna Arnold/Impart Photography

Slacker rock makes energised return

POP

Pavement
Roundhouse, London
★★★★☆

Ludovic Hunter-Tilney

Speaking in 1999, as his band Pavement prepared to release what would turn out to be their final album, Stephen Malkmus complained that it felt "irrelevant" and "fake" to play old songs at gigs. He named a couple of examples, "Summer Babe" and "Grounded".

"When it's old songs, it just seems really dated to me," the band's singer-guitarist explained. "Maybe in 20 years' time, with a dwindling bank account, I might reconsider that."

Twenty-three years later, the rethink has taken place. At the Roundhouse, for the first of four shows, Malkmus was back on stage with his Pavement bandmates playing a set that included "Summer Babe" and "Grounded". A mostly middle-aged audience was present to celebrate the return of one of the leading bands of 1990s US alt-rock. Gen X-tatic cheers went up when they played fan favourites. The nostalgia was real, not fake. But what was its relevance, other than to the state of Malkmus and co's bank accounts?

Back in the day, the prospect of Pavement on the reunion circuit in their mid-fifties would have met with dismay. The US 1990s alt-rock boom was obsessed with the notion of selling out, even as its going from A to B. They were held up as epitomes of the slacker, that irony-addled, artfully inactive archetype of 1990s non-rebellion: "too lazy to rock", in the sniggering judgment of Beavis and Butt-Head.

That certainly was not the case at the Roundhouse. Pavement used to have a reputation as a shambolic live act, but here they were engaged and energetic. Malkmus threw guitar-slinger's shapes as he played solos and riffs, kicking the air during opening track "Fin" and strafing the audience like a member of The Clash during a punk-rock rendition of "Unfair".

For "Grounded", he performed the classic axe hero's trick of playing the instrument behind his head. There was more than a hint of irony to the pose — but a greater helping of skill.

He was joined by fellow guitarist Scott Kannberg on the other side of the stage, the Californian childhood friend with whom he started the band. Arranged between them were bassist Mark Ibold, drummer Steve West and percussionist Bob Nastanovich. Touring member Rebecca Cole played keyboards.

It is not their first reactivation, having got back together for an ambivalently brief tour in 2010. Whatever misgivings existed then are absent now. Playing a setlist that has been varying from concert to concert, they were a tight unit, bringing to life music that went far beyond the loud-quiet-loud template of alt-rock.

Jangling guitars evoked the memory of 1960s pop while solos made splashy raids on 1970s rock. There were "sha la la" choruses like a doo-wop group and a psychedelic breakdown like an old-school jam band. Nastanovich was an unhinged vocal foil to the urbane Malkmus, barking surreal phrases like an indie-rock Flavor Flav.

Amid the thickly distorted riffs and tricksy song structures, the message of their reunion rang out clearly: Pavement are an act for the ages, not just their era.

pavementband.com

Left: Stephen Malkmus of Pavement at the Roundhouse
Josh Turner

biggest names signed with major labels and shilled for MTV coverage.

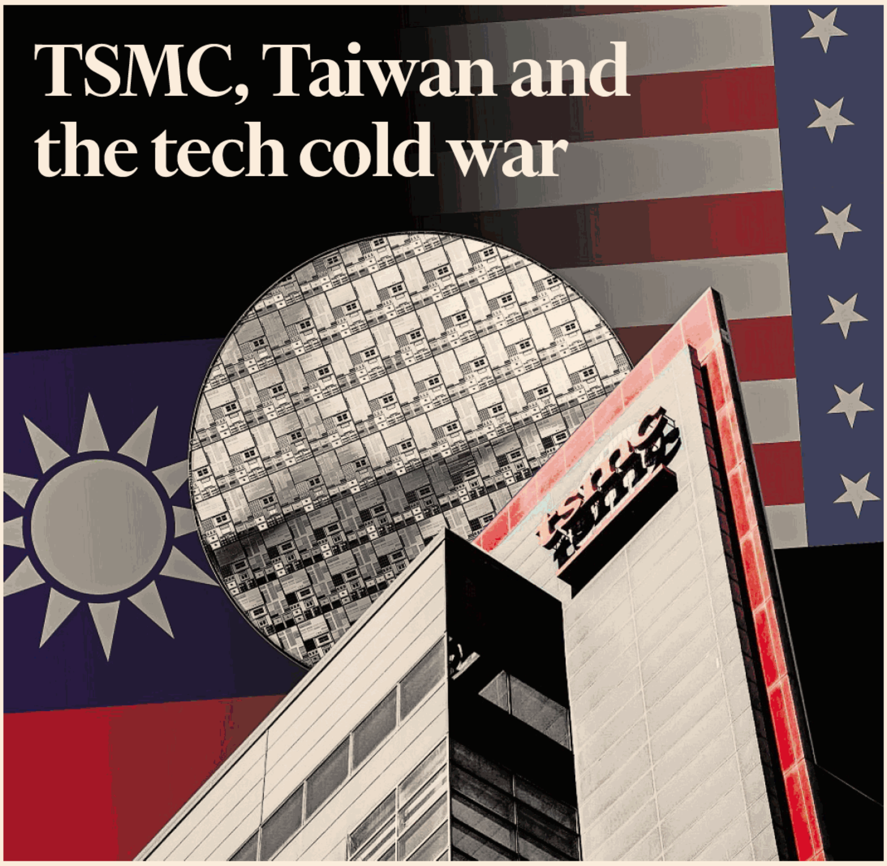
Pavement never did that. They were not earnest enough to care greatly about selling out, but they also lacked the careerism to actually accomplish it. Their twisty, fuzzy songs, topped by Malkmus's drawl, took pleasure in not

FT BIG READ. SEMICONDUCTORS

TSMC, Taiwan and the tech cold war

As the competition between the US and China heats up, Washington is pressuring the Taiwanese chipmaker to move more production outside the island. But Taipei is resisting.

By Kathrin Hille and Demetri Sevastopulo



The efficiency and cost savings of the TSMC model have convinced many chipmakers to outsource fabrication to the Taiwanese company

FT montage

Taiwan greeted Nancy Pelosi as a true friend when the US House Speaker visited the country in August in what was seen as a show of support against Chinese military threats.

But when President Tsai Ing-wen hosted Pelosi for lunch at a neo-baroque palace in Taipei, two men at the table were a reminder that the friendship is coming under strain: Morris Chang, founder of Taiwan Semiconductor Manufacturing Company, and Mark Liu, chair of the world's largest contract chipmaker.

The global semiconductor industry is now dominated by Taiwan, thanks to TSMC's meteoric rise. Chang told Pelosi in stark terms that Washington's efforts to rebuild chip manufacturing at home were doomed to fail. "He was pretty blunt, and the esteemed guests were a bit surprised," says one person who heard the conversation.

TSMC now finds itself at the centre of both a tug of war between Washington and Taipei and the fiercest front in the new cold war between China and the US.

Nicknamed the "godfather of the chip industry" in Taiwan, 91-year-old Chang is defending his life's work: founded 35 years ago with start-up capital from the Taiwanese government and technology licensed from Dutch semiconductor company Philips, TSMC has grown into a giant with an effective stranglehold on the global chip supply chain.

Taiwan sees this dominance as a crucial security guarantee — sometimes referred to as its "silicon shield". It believes that the concentration of global semiconductor production in the country ensures the US would come to the rescue if China were to attack.

> 'If you have something that both sides want, you have leverage. But if you don't play that card, you become a pawn'

"Everyone needs more advanced . . . semiconductors," economy minister Wang Mei-hua said during a visit to Washington this month. Being a key global player in this way will "make Taiwan . . . safer and [secure] peace", she added.

But Taiwan's determination to keep as much of the industry as it can on the island is clashing with US strategic goals and its fears of China.

As competition between the US and China heats up and the risk of a military conflict over Taiwan increases, Washington is seeking to both cut Beijing off from supplies of key advanced semiconductors and reduce its own dependency on Taiwan for chip supplies.

These objectives potentially undermine TSMC, whose success is built on serving customers in all markets and on doing so from a cost-efficient cluster of plants almost entirely in Taiwan. "The silicon shield is becoming a tripwire," says Jason Hsu, a former Taiwanese lawmaker and now a senior fellow at the Harvard Kennedy School.

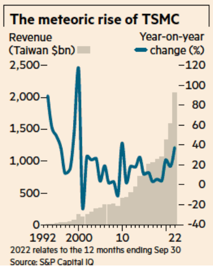
"On the one hand, the US pressures TSMC to move to the US. On the other, it is waging technology war on China, pushing tension to a higher level that puts Taiwan at risk," he adds. "If you have something that both sides want, you have leverage. But if you don't play that card, you become a pawn. We are kind of playing along with what the US wants."

The US stepped up its campaign to hamper China's economy earlier this month, introducing sweeping controls that block exports of some chip manufacturing equipment and restrict sales of certain semiconductors to the country — measures clouding the future of China's entire chip industry.

Although TSMC says the impact on its business is limited for now, chief executive CC Wei told investors it was too early to assess the true influence in the longer term. The problem for TSMC is that Washington is simultaneously pushing to diversify chip manufacturing away from Taiwan.

The Pentagon has long been con-

The meteoric rise of TSMC



2022 relates to the 12 months ending Sep 30

Source: S&P Capital IQ

In early September, President Joe Biden bragged that "America is back" as he attended the groundbreaking ceremony for a $20bn chip fabrication plant, or "fab", that Intel will build. "Folks, the future of the chip industry is going to be made in America," he said, a month after the US Congress passed legislation to provide $52bn to rebuild US semiconductor manufacturing.

The geopolitical and business implications of the new US strategy are starting to surface. "Everyone realises that there is a big watershed moment here for the whole industry," says Peter Hanbury, a partner and expert in semiconductor and technology supply chains at Bain, the consultancy. "But it kind of snuck up on people."

Global domination

The relentless rise of TSMC is one of the most important and least told chapters in the era of globalisation. Different from peers such as Intel and Samsung, which continue to both design and manufacture chips, TSMC is a contract manufacturer that produces semiconductors designed by other companies.

The efficiency and cost savings of this foundry model have convinced so many other chipmakers to outsource fabrication to TSMC that Taiwan now accounts for 20 per cent of global wafer fabrication capacity, the single largest concentration in one country, and 92 per cent of capacity for the most advanced chips. The US share in global chip manufacturing has dwindled from 37 per cent in 1990 to 12 per cent in 2020.

The risks are clear: Credit Suisse analysts estimate that if the world were to lose access to Taiwan's chip plants, the production of everything from computers to cars would be severely disrupted.

A major disruption in that capacity would be "massive" compared with recent incidents such as a 2021 outage in a Samsung fab due to power cuts

infancy. Born in China and educated as an engineer at MIT, he began working alongside the pioneers of the industry in the 1950s and showed his knack for improving manufacturing processes from the very beginning.

At US chipmakers Sylvania and Texas Instruments, Chang became an expert in increasing the yield — the proportion of non-defective transistors on a production line — according to Chris Miller, an economic historian at Tufts University and author of *Chip War*, a book about the industry. That became a core strength that boosts both TSMC's profits and reliability for its customers.

TSMC's foundry services spawned an entire new breed of "fabless" chip companies, such as Nvidia, the graphics chip design house founded in 1993. The increasing technical difficulty of chip manufacturing and the rising cost of building fabs also convinced ever larger numbers of chipmakers to go fabless.

One of them was AMD, Intel's rival in the market for central processing units, the chips that power PCs. After falling behind Intel, AMD sold its fabs in 2008.

TSMC founder Morris Chang says US efforts to rebuild chip manufacturing at home are doomed to fail

It now relies almost completely on TSMC, a strategy that helped it recover.

The next boost came when Apple started designing chips for the iPhone in-house and picked TSMC to manufacture them. Its iPhone chips are now exclusively made by TSMC in Taiwan.

"I have been surprised by Apple and AMD deciding to allow themselves to get so reliant on one supplier," says Dan Nystedt, vice-president at TriOrient, an Asia-based private investment company. "Even without geopolitics, there

cloud services providers such as Google. Then Intel struggled to master mass production in two consecutive process technology generations. This allowed TSMC to pull ahead not only in scale but also in technology.

"That, combined with the geopolitical tension, led to a crisis of confidence in the US: if something were to go wrong in the Taiwan Strait you could not credibly tell yourself that you could rely on US technology solely to build up the capacity you need if, in fact, by some key metrics TSMC had leaped ahead of Intel in terms of technology," Miller says.

By 2016, concerns over the US's heavy dependence on Taiwan-made chips had spread from the Pentagon to the commerce department. Although it took a trade war with China, a pandemic and an escalation in Beijing's threats against Taiwan, Washington is now moving quickly.

In 2019, the Trump administration leaned on TSMC to place some advanced capacity in the US, its largest market. The company complied — it is building a fab in Arizona that is scheduled to start mass production in 2024. But the plant lacks the scale and the technology of TSMC's newest fabs — in Taiwan, the company is building a fab for N2 chips, the newest generation of chips that is expected to follow the N3 one about to go into mass production.

"Progress on reducing the dependence on TSMC . . . for the most advanced processes will not be reduced significantly until TSMC, Samsung and Intel all site advanced facilities at scale in the US," says Paul Triolo, a China and technology expert at Albright Stonebridge Group.

Even then, only part of the supply chain will benefit. The fabs that Intel, TSMC and Samsung are building in the US are all for advanced chips, mostly supporting the PC, smartphone and server industry. However, automakers,

general counsel for TSMC and now a consultant in the US. "There will be a lot of disillusionment — actually, US semiconductor manufacturing will suffer because of it."

Underlining the size of the challenge, the Semiconductor Industry Association and Boston Consulting Group estimate that upfront investment of up to $1.2tn would be needed for each region to have fully localised supply chains at 2019 levels, followed by continuous spending of up to $125bn a year.

Edlyn Levine, chief science officer at America's Frontier Fund, which aims to invest in companies that will help the US stay ahead in critical technologies, says it is "a fantasy" to think that the US could completely decouple from TSMC. "The idea . . . is technically not feasible," says Levine.

Despite its Arizona investment, TSMC is trying to sit things out as the concentration of its fabs and suppliers in a tight cluster in Taiwan has enhanced its efficiency. "There are a lot of benefits to the way they are running things — especially the close connection between R&D and high-volume manufacturing where you can send an engineer to a fab just an hour away," Hanbury says. "The cost savings and benefits of expertise are part of the TSMC model."

The company refuses to discuss how the push for change affects it. "We recognise that there has been increased attention on geopolitical issues between China and Taiwan, which are not new and go back decades," says TSMC. "However, we do not see these tensions affecting TSMC operations at the current time . . . The success and functioning of the highly complex and diverse semiconductor ecosystem require global collaboration, as all nations and corners of the technology industry know."

Still, the heightened sensibility over global dependence on Taiwan is certain to force change.

> 'If something were to go wrong in the Taiwan Strait, you could not rely on US technology to build what you need'

"There have been some concerns among TSMC customers since two years ago," says Sebastian Hou, managing director at Neuberger Berman, an investment management company. "It was the time when in Taiwan we started to have more fighter jets from China hovering around the Taiwan Strait, and that has become a daily routine."

Wireless chip company Qualcomm said in August it was more than doubling manufacturing orders to GlobalFoundries under a strategic co-operation with the TSMC rival, specifically at a plant the foundry is expanding in New York.

Nvidia is splitting its product portfolio with data centre chips being produced at TSMC and some of its personal gaming chips by Samsung.

Hanbury says it will take years to see whether more TSMC customers follow that example because changing manufacturing partners is so difficult and risky. "The big question is if Apple is also going to do a split," he adds.

A decisive factor will be how smoothly TSMC's rivals can scale up capacity in the US. Both Intel and Samsung are planning much bigger US fabs than TSMC's initial Arizona commitment, theoretically allowing for a better cost structure and market share gains. However, TSMC has acquired enough land to build several more fabs.

Industry experts believe that diversifying its footprint might become necessary for TSMC for reasons beyond geopolitics. It is already getting harder for the company to find the thousands of engineers for its larger and larger fabs. Another question is whether Taiwan will be able to provide enough water and power to keep expanding chip manufacturing.

Some analysts argue that Taipei's reliance on TSMC for its security is flawed in the first place.

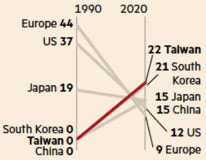
Brad Martin, director of the National

cerned that US dependency on Taiwan could put its defence industry's chip supplies at risk. Eric Schmidt, the former Google CEO who chaired a national commission on artificial intelligence, warned last year that the US was "very close to losing the cutting edge of microelectronics which power our companies and our military because of our reliance on Taiwan".

Now, the chip shortage triggered by disruptions during the pandemic, Washington's desire to slow down China in its pursuit of technology leadership and fears that Beijing could seize Taiwan by force are all catalysing US efforts to revive semiconductor manufacturing at home. Europe, Japan, Singapore and India are making similar efforts.

Taiwan develops into leader of the semiconductor industry

Semiconductor manufacturing market share (%)



Sources: Credit Suisse; VLSI Research; SEMI Q2 2020 database; BCG analysis

in Texas, Covid-related disruption in south-east Asian factories and earthquakes in Japan, according to Credit Suisse. TSMC's capacity footprint by the end of 2023 could reach $171bn, "over 3x the scale of the US Chips Act allocations through the next decade", it adds.

Breaking up this hub challenges not only TSMC but the global ecosystem that has formed around the company.

Chang started TSMC in 1987 after the Taiwanese government recruited him from the US to help create an electronics industry. Industry executives credit the company's success to its single-minded focus on technological detail, customer needs and execution.

Chang started honing those skills when semiconductors were still in their

are earthquakes, power shortages. Why does Apple accept that their whole company would have to shut down if TSMC were shut down?"

Some fabless companies' decision to put all their eggs in one basket reflects the efficiency of the symbiotic system TSMC has built. "There has been an unwillingness to even think about shifting away from TSMC for a lot of the industry [because] it was inconceivable for the business model that was functioning so well," Miller says.

TSMC was further strengthened when Intel stumbled. The company, long focused on CPUs, missed both the rise of the smartphone and of artificial intelligence applications, letting TSMC grab much of the market for chips used by

which saw production disrupted due to chip supply bottlenecks, use less advanced chips that struggle to be viable in the US, where costs are higher.

"A lot of the investment will not help with the defence supply chain either," says Hanbury. "The only government applications that run on advanced nodes are AI, cryptography and supercomputers, and those account for less than 5 per cent of bleeding-edge chips."

An uphill struggle

Despite Biden's upbeat rhetoric, the Chips and Science Act may fall far short of what is needed. "The way the fab funding section has evolved and is now playing out is a train wreck waiting to happen," says Dick Thurston, former

Security Supply Chain Institute at the Rand Corporation, warns that instead of functioning as a "silicon shield", Taiwan's dominance in the semiconductor market could make it more vulnerable.

If China were to impose a quarantine — a limited, non-violent blockade — on Taiwan, other countries could shy away from supporting the country out of concern that an escalation would lead to permanently cutting off or even destroying their chip supplies, Martin says.

"The monopoly in semiconductor production creates instability," he adds. "If the US is faced with a need to make a decision between protecting its economy and defending Taiwan, that starts to become a very stark decision."

The FT View

FINANCIAL TIMES
'Without fear and without favour'

ft.com/opinion

Sunak's uphill struggle to restore British stability

Former chancellor was least bad option to be the next Conservative premier

After the calamitous two-month detour into the unfunded tax cuts of Trussonomics — and an unsettling flirtation with a return by the discredited Boris Johnson — Conservative MPs have backed the best of the available options to be their next leader and Britain's next premier. Rishi Sunak has the right experience and outlook to take control at a time of deep economic crisis. Far less certain is whether he can restore any semblance of unity to his party, and whether today's Conservatives have any capacity to become once again a serious party of government.

Sunak is the first British Asian premier, marking a significant step forward in creating governing institutions that more closely reflect those they govern. The prospect of a fiscally literate leader has begun to calm financial markets. Though he is the youngest prime minister in modern British history, Sunak has proved himself in one of the great offices of state. As chancellor during Covid-19, he implemented innovative support measures, despite occasional missteps.

Yet the auguries are hardly positive that the Conservatives can become a disciplined political force once more. A third of the parliamentary party backed Liz Truss in their final vote in the summer leadership contest; to suggest she was foisted on largely unwilling MPs by the party members' vote is disingenuous. In the truncated contest following Truss's defenestration, a third or more were ready to back other candidates. One, Penny Mordaunt, has few of the credentials to take the reins mid-crisis despite a stint as defence secretary. The other, Johnson, was forced out only in July as unsuitable for the job.

That Johnson spent an entire weekend plotting a comeback is further proof of his narcissism. His withdrawal — despite his claim to have enough MP backers to run — should mark the end of his ambitions for a return to high office. Yet his intervention ensured Sunak could not take over without one more farcical episode playing out in the Conservative political psychodrama.

The party has also changed leader for a second time midterm through a deeply undemocratic process of its own devising. UK voters should have had the chance to choose their next leader in a general election, as this newspaper argued last week. Instead, they have a new premier who did not make a single public statement during the latest contest. If Sunak cannot quickly restore stability, an election will be unavoidable.

He inherits a deeply fractured party facing decisions on issues such as spending and immigration that will inflame the faultlines. Sunak is under pressure from the right wing to scrap post-Brexit trading rules with Northern Ireland, poisoning relations with the EU.

He has the right experience and outlook to take control at a time of deep economic crisis

The incoming premier will be well-advised to keep as his chancellor Jeremy Hunt, who has already dumped much of Trussonomics and begun charting a course to fiscal stability which he is due to detail on October 31. Coming from different wings of the party, each man could provide some political cover for the other. Sunak should assemble a cabinet based on competence, not fealty.

He and his team should focus, above all, on the overwhelming priority of restoring his party, and the country's, reputation for fiscal competence. The public finances and the broader economy need to be put back on an even keel while dealing with the cost of living squeeze, and a credible plan for tax and spending agreed. Despite its now record-low standing in opinion polls, the new cabinet should jettison the obsessive focus on whether the Conservatives can win the next election, and concentrate on providing effective government. Its only, faint, hope of achieving the former lies in first delivering the latter.

Opinion Demographics

What's driving the rich world's falling fertility?

Ewan White

Stephen Bush

Some say the world will end in fire. Others in ice. But from looking at demographic trends in the developed world, I hold with those who favour stairlifts. Or, as Tesla chief Elon Musk puts it, "civilisation will indeed die with a whimper in adult diapers".

Richer states have ageing populations and lower birth rates. That isn't all bad news: older societies tend to have lower levels of violence and political instability than younger ones. But they also have lower economic growth rates, and are not always good global citizens. The UK, for example, produces fewer doctors than it needs per head of population. Skilled professions like medicine will always be geographically mobile, but when meeting your own healthcare needs are predicated on poaching staff from poorer nations, it's hard to claim you are a responsible or compassionate nation.

With a few exceptions, maternity is a terrible deal, economically, for working women

More importantly, we should be preoccupied by the cause of the rich world's falling fertility rates because we should assume it represents the fewer people are choosing to have children if they can't afford homes and face heavy childcare costs.

That makes intuitive sense, but some data suggest the fall in fertility in the rich world has proved resistant to greater spending on family incentives and other welfarist measures. In the UK, what is driving the fall in the birth rate is actually growing childlessness among the middle and upper classes. It's true that household formation has slowed in Britain, but it is far from clear that this is primarily driven by poverty or inequality.

According to analysis by the Office for National Statistics, degree-educated women are nearly twice as likely to remain childless as women without degrees. Given that women are the biggest driver of increased higher education participation worldwide, that suggests a very sharp increase in the number of childless households in the future.

The real cause, I think, is not iniquity in the housing market or in the cost of childcare, but in the workplace. With a few happy exceptions, maternity is a terrible deal, economically speaking, for working women. Although there is a regrettable paucity of high-quality studies on this, I suspect the pattern we see in the UK data would be even starker if we separated the reproductive choices of women who are the family's second earner from those who are the first.

The rise of so-called "greedy jobs" — where your progress is closely linked to how much of your personal life you are willing to put on hold — is a further disincentive to have children. But some policymakers deny this is a problem: one minister recently told me they weren't that worried about

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Letters

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Nord Stream leaks put methane emissions on the agenda

The recent leaks from the Nord Stream pipeline supplying Russian gas to Germany grabbed the world's attention (Report, September 29).

Images of methane bubbling up from the depths of the ocean made an otherwise invisible climate menace clear and obvious, especially because methane has the potential to increase global warming by over 80 times more than CO_2 over a 20-year period.

Estimates of how much damage had been done to the climate came thick and fast as newsrooms pushed scientists to put hard numbers to this "unprecedented" leak.

In 2021 alone, the global energy sector emitted about 135mn tonnes of methane, which means emissions greater than those from the Nord Stream leak happen every day from many thousands of separate sources. Without action on methane this decade we cannot meet temperature targets, which means the long-term goals of energy system transformation and eliminating carbon dioxide emissions will not be possible to achieve.

According to the latest research, we can cut up to 85 per cent of methane emissions with currently available technology in less than a decade. In most parts of the world, methane remains remarkably under-regulated, which means these available fixes aren't being implemented or enforced.

Meanwhile, the fossil fuel industry is seeking to water down the common sense proposals included in the EU's proposed methane regulation.

As policymakers move to pass and implement a comprehensive methane policy, the Nord Stream leaks should serve as a catalyst towards stronger regulation, improved financing mechanisms and more rapid action to mitigate this harmful super pollutant.

Alessia Virone
EU Affairs Director, Clean Air Task Force, Brussels, Belgium
Enrico Donda
Gas Campaigner, Food and Water Action Europe, Brussels, Belgium
Marina Gros
Gas Campaigner, Ecologistas en Accion, Saragossa, Spain

Power chief sets example with blackouts warning

It may not be fashionable at present but I wanted to commend an example of good communicating.

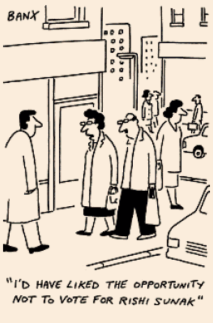
John Pettigrew, the chief executive of National Grid, did a brave thing to highlight at this month's FT Energy Transition Summit conference the "cut off" risks this winter ("Prepare for blackouts during 'deepest, darkest evenings', warns power chief", Report, October 18).

I had three such security of supply crises during my decade at the helm of Ofgem and one of the abiding lessons is the importance of multi-dimensional communications.

I well recall when an energy minister (I did have 10 in my decade in office!) was asked whether he had remembered to call Dublin to inform them of possible imminent restrictions of supply to Ireland. Silence followed — and then a lot of adult noise! The call went in — but it could have been done earlier.

This multi-jurisdictional and multi-stakeholder communication is not easy — partly due to the unintended consequences surrounding energy supply messages. Even so, Pettigrew at National Grid appears to be adopting the dictum "forewarned is forearmed".

Alistair Buchanan
Chief Executive, Office of Gas and Electricity Market, 2003-13
London TW20, UK



"I'D HAVE LIKED THE OPPORTUNITY NOT TO VOTE FOR RISHI SUNAK"

Biden must keep eye on big prize in China stand-off

In "Containing China is Biden's explicit goal" (Opinion, October 20), Edward Luce discussed the possibility of the US launching a full-scale economic war against China. If the US did so, it would represent a Pyrrhic victory as it would necessarily have eliminated any chance of co-operation between the world's two leading economic powers, which many believe is a precondition to avoid serious planetary destruction from climate change.

In our relationship with China and indeed in our policies involving almost everything else, we must keep our eye on the main objective — which is saving the planet from global warming. That does not mean that we should surrender to the diktats of President Xi Jinping. The Chinese government is rational and well aware of the perils of climate change and the damage it could do to its own existence.

It simply means that we should never lose sight of our most important duty in any endeavour that we undertake.

Harold J Smith
White Plains, NY, US

Truss at least outlasted the 1746 'shortlived ministry'

Liz Truss is described as the shortest-serving prime minister (Report, October 21). I am afraid she has failed in that competition too.

The shortest administration, according to some accounts, is that of the Earl of Bath and his cousin the Earl Granville, the secretary of state. Sometimes called the "shortlived ministry" it lasted from February 10 to February 12, 1746.

George II appointed them after Henry Pelham's cabinet resigned en masse in protest at the King's refusal to appoint William Pitt the Elder. But Bath and Granville found it impossible to win the backing of Whigs in parliament, and the King could not accept bringing in the Tories.

Pelham thus returned to office, with Pitt in government for the first time. This was an important moment in cabinet government — the first time the whole cabinet had resigned and forced the King to bend to the will of parliament on a cabinet appointment.

ER Yescombe
London N10, UK

OUTLOOK

AMERICA

Silicon Valley rethinks the corporate

Mikumari Caiyhe, a spoken word artist, performs a poem inspired by how Slack "pivoted" from making a video game to building what would become a multibillion-dollar work communications platform. A tap dancer in gold shoes clacks across the stage.

"What do you do when it all goes wrong?" Caiyhe asks the 800-strong audience. "Pivot!" they chant back to life. Here's a personal, relatable, heart-wrenching story. *And here's what it means for your business*. But a kinder interpretation might be that it offered a compelling pitch for what a conference must look like post-pandemic, as businesses question the expense of sending people to events when a livestream is available instead.

It was organised by WaitWhat, a media company set up by June Cohen and Deron Triff which also produces the *Masters of Scale* podcast that wool. Shou Chew, chief executive of TikTok, made a rare public appearance. A coup, but Hoffman failed to pose a single question on Chinese surveillance or political censorship. As a representative of the American internet user, he surely had an obligation to press harder. I asked Cohen if an agreement had been made with Chew, but she said no. And in the "The Human at the Center" session, Uber's Dara Khosrowshahi received no follow-up to the statement that his ent on Beijing.

In its efforts to win what President Joe Biden calls a "contest for the future of our world" with China, the US is increas-

invited to participate for the first time. The statement issued after the June meeting was the first Nato strategic document to cite China as a threat. Euro-

nations are attempting to build supply chains and trading ties with each other

infrastructure projects.

There are also presentational problems. The countries of the global west argue that they are banding together to

weekend's scenes from Beijing certainly help to make that case.

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the poster. "The man abused my country, my leader . . . I think it's my duty," said the Chinese consul-general when asked by Sky News about a video of him appearing to grab a protester by the hair.

During this latest party congress, such absolute loyalty to Xi became a condition of party membership. With stakes this high, one can understand how a caricature mounted on cardboard could worry Chinese diplomats. Letting it stand might be seen as a failure of fealty.

However, the consul-general's internal narrative is baffling to an external audience. When trying to rebut the accusation that they are bullies, Chinese diplomats find it disconcertingly easy to revert to behaviour that could be seen as bullying. This confirms the suspicion that European governments have of the Communist party: that it is becoming more brazen.

A certain school of Chinese nationalism says that the west is set on containing China's rise at all costs — and that, as a result, Beijing may as well conduct external relations for internal consumption.

Yet European alliances are still in China's grasp, and many of its own objectives, from technological upgrading to climate action, can only be achieved with a wide range of allies. But under a limitless presidency, China's ability to engage in such co-operation will be seriously constrained.

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Europe has reached a critical moment in tackling energy shortages

Peter Mandelson

In retrospect, this energy crisis looked inevitable. To attribute this solely to Vladimir Putin's invasion of Ukraine is simplistic. Rather, this is a longer-term tale of energy insecurity and under-investment. Western gas supplies have been left fragile by Europe not diversifying its energy sources, by Putin and Gazprom's increasing manipulation of the European market over the past decade and by under-investment in oil and gas as the US shale boom has waxed and waned. This combination has caused gas prices to soar to 10 times the normal average, leading to record price rises for consumers and businesses.

This is not just an EU crisis — the UK has also been left exposed. The European Commission is focusing on reducing demand and, to an extent, continuing to let the market do so through high prices; the UK has intervened on prices with no clear plan on demand. Across European capitals, we have seen significant interventions in the market, from France capping prices to Spain and Portugal capping the price of gas for electricity generation. From Berlin to Zagreb, governments have spent eye-watering amounts — at least €700bn — on packages to cushion citizens and businesses from soaring gas and power prices.

As EU energy ministers gather this week, we are at a crucial inflection point in our efforts to tackle the energy crisis. One policymaker in the European Commission recently told me we are facing a two to four-year energy crunch, given heavily constrained global liquefied natural gas markets. The assumption is the US, Qatar and other non-Russian sources of LNG are not going to "ride to the rescue" anytime soon.

Governments on both sides of the Channel face a delicate balancing act this winter: to protect citizens and the economy in the short-term, while building a sustainable and sensible future vision for secure, affordable and clean energy.

As the UKs business secretary during the global financial crisis, I know full well the political temptation to try to "go it alone". But this crisis, like Covid, and the 2008 crash before it, requires solidarity. Meeting the challenges of security, affordability and sustainability requires the whole European political community to collaborate.

This crisis, like Covid and the 2008 crash, requires solidarity between Britain and the EU

I welcome outgoing prime minister Liz Truss's recognition at the European Political Community meeting in Prague this month that on energy, now is the "time to find common cause with our European friends". But follow-up action is essential from her successor Rishi Sunak to avoid attention moving back to domestic interests. Take the de facto windfall tax set to be applied by Britain and Europe on renewable energy producers. If the level set in the UK does not mirror the EU's policy, there is a risk this could divert investment to Europe. On energy, Britain and Europe must learn to co-operate again, for three reasons.

Our interlinked energy markets will be vital for winter resilience. Interconnectors from France, Belgium, Norway and the Netherlands power 5mn British homes each year. Meanwhile, Britain is a crucial hub for LNG imports from the rest of the world, providing gas by pipeline to help the European continent refill gas storage supplies.

Second, the North Sea is Europe's main indigenous source of oil and natural gas. Measures to boost domestic oil and gas production, providing climate compatibility checks are met, will help the continent shore up non-Russian supplies of hydrocarbons.

Last, our shared offshore wind resources will power the UK and Europe's transition to net zero by 2050. The voluntary North Seas Energy Cooperation, made up of the commission, Norway and eight EU member states, has agreed to increase the capacity of offshore wind to at least 260 gigawatts by 2050. If the UK would signal its intention to rejoin this partnership, that would cement the North Sea's potential as a global offshore wind powerhouse.

Winston Churchill's exhortation to "never let a good crisis go to waste" feels in tune with the current energy turbulence. Through collaboration across the European neighbourhood, policymakers in Britain and the EU have a golden opportunity to secure a new era of European energy independence. Defeating Putin, achieving energy security, affordability and our net zero ambitions depend on it.

The writer is a former EU trade commissioner and UK business secretary

Lex.

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Hong Kong stocks: panic room

Hong Kong stocks have fallen to levels last seen in the financial crisis. Xi Jinping has appointed several hardliners to the Politburo Standing Committee. Foreign investors see the limited patience with business diminishing further.

Everyone expected Xi to secure a third leadership term at the party national congress. The Hang Seng fell more than 6 per cent yesterday in response to the tone of the event.

Hong Kong equities are at 13-year lows. The offshore renminbi has cratered. Hong Kong's drop was more than triple the fall in the two mainland benchmarks, the Shanghai and Shenzhen Composite indices. The onshore renminbi is stronger than the offshore renminbi. It points to panic among overseas investors. The fear is warranted. Xi replaced more than half the Politburo Standing Committee with purists. Li Qiang, the party's top official in Shanghai who oversaw extreme lockdowns in the city this year, is set to be China's next premier.

Xi used the word "security" 26 times in a two-hour speech at the congress. The party has amended its constitution to state explicit opposition to Taiwan independence. Defence stocks such as AVIC Electromechanical Systems, Anhui Great Wall Military Industry and Guangzhou Hangxin Aviation Tech were among the few gainers.

Downside impacts are broader. Hong Kong-listed shares of tech groups including Alibaba and Tencent fell more than 12 per cent yesterday.

Property stocks dropped to record lows. The new leadership is likely to continue crackdowns on these sectors.

Hong Kong real estate has largely escaped the zero-Covid policies applied on the mainland. Shares of developers including Sun Hung Kai, Henderson Land and Swire Properties have fared comparatively well. Those days are numbered.

China's new leadership team is unlikely to stunt growth completely. That could trigger discontent. But Hong Kong's economy will suffer all the same. Beijing has had little interest in doing the city favours since it crushed pro-democracy protests in 2019.

Some buyside analysts will say the sell-off is a knee-jerk reaction by poorly informed foreigners. But in this case, distance lends perspective.

Overseas domiciles permit selling that is politically tricky for locals. Where Hong Kong has led, mainland markets may follow.

Infosys/Sunak: Murthy's lore

You could credit Rishi Sunak with playing the long game were it not that his last attempt to become UK premier only ended seven weeks ago. This time, Tory MPs have propelled him to power over the heads of party members who last time disapproved of his elite credentials, including a £630mn stake in Infosys held by his wife Akshata Murthy. Sunak supporters resist the claim that family wealth will bias him against Britons on modest incomes.

What they cannot deny is that his political fortunes and the value of Murthy's investment are playthings of the dollar. It is up 10 per cent against the rupee in the past year. That helps Infosys, co-founded by Murthy's father, which provides tech staff to companies. Nearly two-third of its revenues come from North America.

Sunak spent the pandemic as chancellor, staving off the threat of business collapses with loan schemes. Indian outsourcers such as Infosys enjoyed heavy demand from foreign businesses forced to accelerate online transitions. Infosys shares are a quarter below their January peak. IT spend forecasts are slowing. Last September, chief information officers expected tech investment to rise more than 5 per cent in 2022. Their growth forecasts for next year fall below 2 per cent, Citi says.

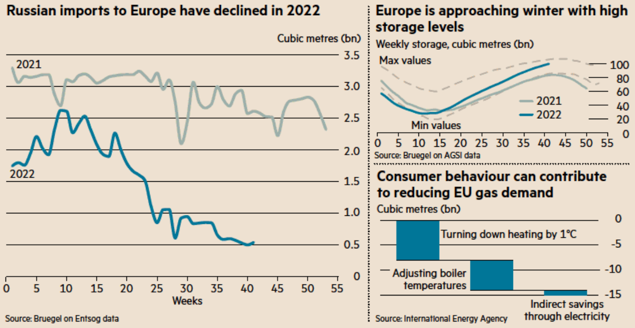
But the stock is three times higher than in early 2020. The pandemic has strengthened a thesis of Indian outsourcers as ground troops of the tech revolution. Previously, they were seen as boring contract labour suppliers. The re-rating leaves Infosys trading at about 24 times forward earnings, according to S&P data.

Infosys has far more cash than debt. Sunak's government will have far more debt than cash. The strong dollar, up a fifth against sterling this year, raises borrowing costs and pressure for cuts.

Automation may improve productivity, but that would mainly help the better-off. The software would mostly come from the US, the hardware from east Asia, the contract staff from India and eastern Europe.

European gas: the bigger chill

Russia has gradually cut gas exports to Europe during the past year. Europe has managed to more than offset the decline by containing demand and increasing imports from other sources — which helps explain why storage levels are healthy. The same feat will be hard to replicate next year



Source: Bruegel on Entsog data

Source: Bruegel on AGSI data

Source: International Energy Agency

Europe has stored enough gas to get through this winter — unless it is very, very cold. But nations such as Germany and Italy have not dodged a bullet, merely deferred it.

With 80 per cent of Russian gas supplies now offline, they may struggle to repeat their storage feat next winter.

The reason why this winter looks better than expected is that Europe is more than offsetting the decline in Russian gas from other sources.

Russian exports are set to be 80bn cubic metres below prewar forecasts for this year, if current flows continue.

Europe has riposted with 50 bcm of additional LNG imports and 60 bcm of demand reductions. That puts Europe up by 30 bcm compared with 2021, which explains why it approaches winter with healthy storage levels.

Europe must not rest on its laurels. It is not a single market in energy terms. Infrastructure bottlenecks may cause shortfalls, particularly in central and eastern Europe.

The weather makes a big difference. A chilly winter could add 30 bcm to demand, depleting storage. And even when this is well stocked, there is a limit to how much you can tap at any given time. On really cold days, Europeans may still find themselves short of fuel.

Europe will not feel the full chill of Russia's ill wind until the following winter. Even if flows through Ukraine and Turkey continue at their current pace, it will lose a further 40 bcm in 2023, which will make it harder to refill storage.

New regasification facilities are coming but not fast enough. It may become more difficult to get LNG tankers to dock if Chinese demand recovers.

This does not even take into account a worst-case scenario in which Russia halts flows completely.

Further ahead, everything Europe is doing to add regasification capacity and debottleneck transport will improve energy security. But we are still approaching a tight spot.

Europe must cut consumption. The sooner it does so, the more stored gas it can carry through to 2023's winter.

Hungary: when unorthodox action works

An unorthodox interest rate rise of 12 per cent by Hungary's central bank should be a winner for foreign investors in the €930bn local currency government bond market. The move was meant to stop further depreciation of the forint. That is one of three elements needed to lower yields and raise the prices of government debt.

The other two items to watch are fiscal policy and the release of EU funds. The first looks well anchored. The government is determined to keep spending down. The release of EU funds is less assured. The government seems confident this will happen in December. The EU has yet to say.

The central bank's move caused the forint to soar against the euro. It is up almost 4 per cent since the October 14 rise. Bond yields also rose as prices fell, with the benchmark 5-year yield up 0.6 percentage points to 12.23 per cent in the past week, says Refintiv. The government hopes the currency will hold its gains and bond yields fall back.

On Friday, the central bank widened its "interest rate corridor", between the unchanged policy rate at 13 per cent and the overnight collateralised loan rate, up 9.5 points to 25 per cent. The one-day deposit facility offers 18 per cent, which the bank can raise at will. The aim is to suck liquidity out of the foreign exchange and interbank markets. That is bad news for investors who have shorted the forint since the central bank halted its policy rate tightening cycle last month.

The bank said it would offer foreign currency direct to energy importers, taking a further chunk out of the market. Hungary's bill for imported energy is €12bn; that aside, it would run a current account surplus of €3bn. It is far more exposed to soaring energy costs and has much less room to diversify supplies than nearby countries. The bank hopes its measures will strengthen the forint and help it fight inflation by keeping import prices in check. That, plus fiscal discipline, should be good for bondholders. The rest is up to Brussels.

US regional banks: all grown up

US regional banks are on a roll. The three biggest by assets — US Bancorp, PNC Financial Services and Truist Financial — delivered an average 20 per cent jump in third quarter net interest income thanks to rising rates and growing loan books.

But success invites scrutiny. US regulators are mulling plans to impose tougher capital requirements on the largest regional lenders. This could end up hitting profits and shareholder returns.

These banks have benefited from minimal exposure to volatile trading and securities issuance. Returns on average common equity of 15 per cent at PNC and 16 per cent at US Bancorp handily topped figures reported by Citigroup, Wells Fargo and Goldman Sachs.

The KBW regional banking index is down only 8 per cent this year, compared with the 26 per cent decline for the broad KBW bank index.

Large regional banks have escaped some of the tougher rules imposed on big Wall Street banks after the financial crisis. Their subsequent growth via M&A is prompting a rethink.

PNC is America's sixth-biggest lender after buying BBVA's US operations. Truist — formed from the 2019 merger between BB&T and SunTrust — is the seventh-largest. Canada's Bank of Montreal and Toronto-Dominion Bank have climbed the rankings after striking big deals of their own.

Regulators fear mega regional banks pose risks to financial stability. Possible new requirements could include getting them to raise new loss-absorbing long-term debt.

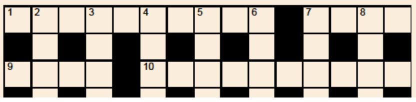
Would that be overkill? The Fed already stress tests regional banks. The assets of US Bancorp, PNC and Truist, at under $600bn each, are still less than a third of those held by Citigroup. JPMorgan has nearly $3.4tn in assets.

The three banks did not even make it on to the Office of Financial Research's Bank Systemic Risk Monitor list.

These lenders provide a much-needed counterweight to Wall Street giants. According to Fitch, the new rules could require PNC, Truist and US Bancorp to raise $20bn, $15.6bn and $12bn, respectively. This could crimp competition, not increase it.

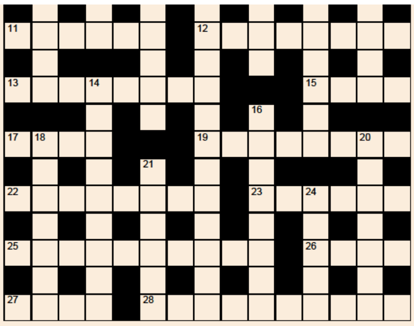
CROSSWORD

No 17,234 Set by SLEUTH



ACROSS

1 Pit to accommodate fantastic bowler in major group (5,5)
7 Choice film for an audience (4)
9 Slang, say, on a regular basis in extended story (4)
10 Pay attention to a floodgate when broken (3,1,4,2)



11 Benign family in appropriate fashion overlooking first sign of unfriendliness (6)
12 High tax dividing European city endlessly (8)
13 Horse taken by a British writer in Asian city (8)
15 Part of boom anticipated in ME country (4)
17 Husband is given trouble in wintry weather (4)
19 Poignant article probing countryside pursuit (8)
22 Catch normal basis for employment? (8)
23 Dark place to go in dilapidated gym (6)
25 Eastern Europeans given a role to be very different (5,5)
26 Set of players expressed dejection, we're told (4)
27 Growth clearly suspect at the margins (4)
28 Observe one with a ticket in a mess (4,6)

DOWN

2 Music maker and fashion designer wasting day in boat essentially (7)
3 Dash with director to see African animal (5)
4 Moneybags with no end of dollars represented dreaded character (8)
5 How one might describe Conservative with record likely to succeed? (2,3,5,5)
6 Youngster carrying odd bits of litter in Highland dress? (6)
7 Gamble on a boxing match and behave irresponsibly (4,5)
8 Pass time around hotel making complaint (7)
14 A large French department satisfied about new place for cultivation (9)
16 Element in enthusiastic type that's upset doddery gents (8)
18 Traveller in China in a good year has to make grovelling statement? (7)
20 US actor flips in charge of a wandering lot? (7)
21 Soprano in Paris before knowledgeable figure (6)
24 Source notes criminal describing where shooting takes place? (5)

JOTTER PAD

Solution 17,233

C	O	B	B	L	E		A	B	U	N	D	A	N	T
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P		Z		D		R		S		R				D
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G	A	N	G	S	T	E	R		S	H	E	R	P	A