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A humiliated and cornered Putin is likely to become more dangerous — GIDEON RACHMAN, PAGE 17

Russian rockets pound Kharkiv

- Civilians killed as Ukraine's second city menaced by heavy bombardment
- Rouble falls 20% against dollar and Moscow exchange suspends trading
- Kyiv and Kremlin talks fail to yield ceasefire while Macron tackles Putin

A Ukrainian armoured personnel carrier destroyed in fighting in Kharkiv
Sergei Bobok/AFP

GUY CHAZAN — LVIV
JOHN REED AND ROMAN OLEARCHYK — KYIV
MAX SEDDON — MOSCOW

Vladimir Putin's forces launched an intense bombardment of Ukraine's second city Kharkiv hours after Russian markets were rocked by an unprecedented wave of western sanctions.

The rouble fell 20 per cent against the US dollar in offshore trading while citizens formed long queues to withdraw money from cash machines in Russia.

Authorities in the eastern city said heavy shelling in residential areas had killed and wounded civilians. Footage shared on social media showed a barrage of strikes around apartment blocks, with multiple explosions and plumes of smoke rising from buildings.

"We still believe that they are trying to encircle Kharkiv and to employ long-range fire into there," said a senior US defence official.

Moscow was employing similar tactics in Kyiv, the official said, adding that Russian forces had advanced roughly 5km over the past 24 hours and were now within 25km of the capital's centre.

Another western official warned that the rising artillery fire on Kharkiv and Kyiv "risks being far more indiscriminate . . . As a consequence, we are going to see an increase in civilian casualties."

As Russia faced increasing international isolation over its invasion of Ukraine, President Emmanuel Macron of France phoned Putin to demand he end the offensive and negotiations between officials from Moscow and Kyiv failed to yield a settlement.

> 'As a consequence of [indiscriminate fire], we are going to see an increase in civilian casualties'

Macron urged the Russian leader to stop all strikes against civilians, preserve civil infrastructure and provide safe access to main roads, Macron's office said. The Elysée said Putin "confirmed his willingness to pursue these three points".

But according to the Kremlin, Putin told Macron that a settlement was possible "only if Russia's legitimate security interests are unconditionally taken into account". Putin has demanded the surrender of Ukraine's army and the removal of the government.

In southern Ukraine, Russian attempts to cut Ukraine off from the Black Sea appeared to be succeeding, with Moscow's forces capturing the towns of Berdyansk, on the Sea of Azov, and Enerhodar, according to a Russian defence ministry statement.

Reports suggested the port of Mariupol, the last stronghold of Ukrainian resistance that has stopped Russia from connecting the eastern border region of Donbas to Crimea, was surrounded.

Ukraine's military said Russian troops continued to attack airports, air defence systems, critical infrastructure and residential areas and had launched missile strikes on buildings in the cities of Zhytomyr and Chernihiv. Russian and Ukrainian military claims could not be independently verified.

While Russian forces pounded Kharkiv, Russia's central bank more than doubled its main interest rate to 20 per cent, saying that "external conditions" for its economy had "drastically changed". The emergency move came after the US, EU and UK unleashed measures aimed at cutting the country off from the global financial system.

The rouble dropped to almost 118 against the US dollar in offshore trading and dealing in shares and derivatives on the Moscow Exchange was suspended, with the central bank lacking an obvious mechanism to stabilise its economy.

Putin introduced capital controls yesterday, banning Russians from transferring foreign currency abroad or from servicing loans in foreign currency outside the country from today.

He also ordered Russian exporters to sell 80 per cent of their foreign currency revenue dating back to January 1 in an effort to offset the rouble's sharp fall.

Additional reporting by Henry Foy in Brussels and John-Paul Rathbone, Katie Martin and Tommy Stubbington in London

Main developments

- Ukraine revealed a 'war bond' plan to fund its forces, to reassure global investors it would not default on debt
- Talks between Ukrainian and Russian officials near the Belarus border showed little sign of a breakthrough
- The US banned dealings with Moscow's central bank, its toughest step towards crippling Russia's economy
- The UN said half a million Ukrainians had fled and more than 100 civilians and children had been killed
- Russian bonds tumbled as the possibility increased that Moscow could default for the first time since 1998
- Western governments pushed Big Tech groups to ditch Russian state-backed media from their platforms

Inside

Hong Kong loses control of China's worst Covid wave

The 34,466 new Covid cases reported in Hong Kong yesterday worsened an outbreak that has led to bodies piling up at hospitals and mortuaries. The 7.4mn population has reported more than 205,000 cases — compared with 109,000 for the rest of China. The city went for long periods with no cases but failed to jab many of the elderly, who are now dying in record numbers. Mistrust after 2019's pro-democracy protests hindered the vaccine rollout.
Mortuaries fill up ▸ PAGE 5

Shell joins corporate rivals by quitting energy ventures with Russian groups

NEIL HUME AND TOM WILSON — LONDON

Shell is walking away from its biggest Russian ventures and ending involvement with the Nord Stream 2 gas pipeline, as the global corporate backlash builds against Moscow's invasion of Ukraine.

The UK-listed oil major has taken rival BP's lead — which has said it will divest its near 20 per cent stake in Russian oil company Rosneft — by ending its joint ventures with Kremlin-backed Gazprom, including its 27.5 per cent stake in the huge Sakhalin-2 liquefied natural gas project. Other shareholders in Sakhalin include Japan's Mitsui and Mitsubishi. The UK-listed oil major did not say whether it would sell its share, either to Gazprom or to a third party, or write off the value of the stakes.

Norway's Equinor also yesterday pledged to exit all of its joint ventures in Russia. The three announcements have raised pressure on other groups such as TotalEnergies, ExxonMobil, Trafigura, Vitol and Glencore to do the same.

"We are shocked by the loss of life in Ukraine, which we deplore, resulting from a senseless act of military aggression which threatens European security," said Ben van Beurden, Shell's chief executive.

Kwasi Kwarteng, the UK business secretary, who met van Beurden yesterday to discuss the company's involvement in Russia, welcomed the decision. "Shell has made the right call to divest from Russia — including Sakhalin-2," Kwarteng wrote on Twitter. "There is now a strong moral imperative on British companies to isolate Russia. This invasion must be a strategic failure for Putin."

Gazprom declined to comment.

The decision to quit the joint ventures in Russia would trigger impairment charges, Shell said, adding that it had around $3bn in non-current assets in the ventures at the end of 2021.

"Our decision to exit is one we take with conviction. We cannot — and we will not — stand by," said van Beurden.

Sakhalin-2 produced 11.6mn tonnes of LNG in 2020, of which 3.2mn tonnes flowed to Shell, representing about 10 per cent of its global production.

Shell was also one of five international energy groups that each pledged to fund 10 per cent of the Nord Stream 2 pipeline between Russia and Germany.

Last week Germany said it was halting certification of the pipeline indefinitely and the US placed sanctions on the Gazprom subsidiary building it.

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World Markets

STOCK MARKETS

	Feb 28	prev	%chg
S&P 500	4380.48	4384.65	-0.10
Nasdaq Composite	13782.62	13694.62	0.64
Dow Jones Ind	33926.38	34058.75	-0.39
FTSEurofirst 300	1771.61	1775.26	-0.21
Euro Stoxx 50	3926.28	3970.69	-1.12
FTSE 100	7458.25	7489.46	-0.42
FTSE All-Share	4157.77	4167.09	-0.22
CAC 40	6658.83	6752.43	-1.39
Xetra Dax	14461.02	14567.23	-0.73
Nikkei	26526.82	26476.50	0.19
Hang Seng	22713.02	22767.18	-0.24
MSCI World $	2980.20	2905.94	2.56
MSCI EM $	1171.99	1154.86	1.48
MSCI ACWI $	698.53	681.96	2.43

CURRENCIES

	Feb 28	prev		Feb 28	prev
$ per €	1.123	1.125	£ per $	0.745	0.745
$ per £	1.342	1.342	€ per £	1.195	1.193
£ per €	0.837	0.838	¥ per €	129.365	129.976
¥ per $	115.175	115.580	£ index	82.447	82.274
¥ per £	154.535	155.079	SFr per £	1.231	1.245
SFr per €	1.030	1.044			
€ per $	0.890	0.889			

COMMODITIES

	Feb 28	prev	%chg
Oil WTI $	95.93	91.59	4.74
Oil Brent $	98.28	94.12	4.42
Gold $	1884.80	1936.30	-2.66

INTEREST RATES

	price	yield	chg
US Gov 10 yr	142.38	1.87	-0.11
UK Gov 10 yr		1.28	-0.08
Ger Gov 10 yr		0.13	-0.09
Jpn Gov 10 yr	110.47	0.18	-0.02
US Gov 30 yr	103.43	2.20	-0.08
Ger Gov 2 yr	103.82	-0.55	-0.16

	price	prev	chg
Fed Funds Eff	0.08	0.08	0.00
US 3m Bills	0.33	0.32	0.01
Euro Libor 3m	-0.58	-0.58	0.00
UK 3m	0.85	0.86	-0.01

Prices are latest for edition — Data provided by Morningstar

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Kremlin battles to keep control of invasion narrative

Russian version viewed domestically by some as too at odds with events

MAX SEDDON — MOSCOW
JOHN REED — KYIV

As Vladimir Putin launched his military assault on Ukraine, Russia's media censor issued a series of stark warnings. Any outlet that cited sources other than the Kremlin or its armed forces could be banned, even for using the words "attack, invasion or declaration of war" to describe it.

Such fierce enforcement of the official narrative for the "special military operation" that Russia's military began in Ukraine is part of a massive propaganda barrage accompanying the invasion.

"It's like a movie. The super commandos are conducting a special military operation and everything is super," said Tikhon Dzyadko of TV Rain, one of 10 media outlets threatened with a ban.

The campaign builds on a well-oiled machine that has shaped Russians' perceptions to deliver sound support for previous conflicts in eastern Ukraine and Syria, as well as a brutal crackdown on dissent at home and in Belarus.

> 'It's in the worst Soviet tradition of denying reality: they denied Chernobyl'

This time, however, the picture being painted by the Kremlin is so at odds with the reports from Ukraine itself that even top officials and spin-doctors have struggled to handle the cognitive dissonance required.

Putin has framed the war as an operation to liberate Russian speakers in the separatist-controlled Donbas border region, leading news anchors to largely avoid so much as mentioning the fierce battles across the rest of Ukraine.

As Ukrainians across the country shelter underground from Russian air strikes, news channels have run footage of peaceful days in Kyiv and repeated the military's denials it is launching strikes on populated areas.

"The Ukrainian authorities . . . are in fact waging war with their own population in cities where there are no Russian troops, first and foremost in Kyiv," said Artyom Sheinin, host of a political talk show on state television.

The efforts not to mention the war, or even describe it as such, have left Russian media outgunned by a huge wave of posts by Ukrainians on social networks that they have struggled to counter.

When Russia captured the city of Melitopol on Saturday, it claimed locals had put up no resistance and the elderly had welcomed them by waving red flags. That account was immediately tested by a video on social media showing a man angrily berating troops to their face.

The reality of the conflict even appears to have surprised some of the invading force themselves. In videos posted by Ukrainians, men said to be Russian soldiers are seen admitting they did not know where they had been sent.

"They live in Putin's cartoons. They really believe the population will greet them here and that the military will surrender," said Kostyantyn Batozsky, a Ukrainian political analyst. "It's in the worst Soviet tradition of denying reality: they denied Chernobyl, and exactly the same thing is happening."

Even some of Putin's most ardent supporters appear concerned that Russia is struggling to wrest control of the narrative. "There's not nearly enough official information," Alexander Gamov, a veteran reporter for a pro-Putin tabloid, complained to Kremlin spokesman Dmitry Peskov on a call with reporters.

"It's just lots of half-baked rumours in the information space, and the official narrative is just drowning. Media are forced to fill that vacuum with Telegram channels and so on," he said.

Russia began to change tactics on Saturday, after Ukraine claimed it had withstood a fierce night-time assault on Kyiv and its president, Volodymyr Zelensky, posted social media videos showing himself and top aides still in the capital — in contrast to Putin's self-imposed seclusion. State TV abandoned some of its usual weekend programming for special episodes of political talk shows repeating the government line.

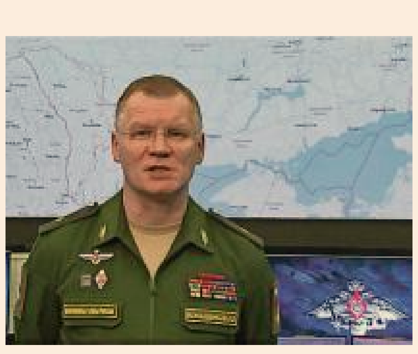
On Sheinin's talk show, analyst Kira Sazonova said Russia's military had "found themselves in a difficult situation precisely because they have the best intentions . . . to place humanitarianism above military objectives".

But Russia's struggle to control the war's story may not necessarily hurt Putin's approval ratings. State television is the main source of news for four out of five Russians, while the country has begun limiting access to Facebook and Twitter since the invasion began.

In the run-up to the conflict, when Russia repeatedly denied it would invade and mocked western warnings that later turned out to be accurate, that messaging seemed to have worked.

Yet the longer the war goes on, the more Russians' perception of it might change, said Nikolai Petrov, a senior research fellow at Chatham House.

"Information about what happens in Ukraine gets passed along from person to person — you can't shut it off. That's why they're counting on it being relatively quick and bloodless in Russians' eyes," he added. "But it might turn out totally differently."



Briefing: a Russian defence ministry spokesman updates TV viewers

Heavy bombardment

Road to ruin: Russian infantry vehicles destroyed yesterday in the fighting around the city of Kharkiv, close to the border — Sergey Bobok/AFP via Getty

Moscow intensifies shelling in Kharkiv attack

JOHN PAUL RATHBONE — LONDON
DEMETRI SEVASTOPULO — WASHINGTON

The artillery barrage that Russia launched yesterday against the city of Kharkiv is a gruesome escalation of the tactics that Moscow has so far deployed in its five-day attack on Ukraine, and analysts warned it may be a foretaste of worse to come.

Authorities in the eastern city said heavy shelling in residential areas had killed and wounded civilians. Televised footage shared widely on social media showed a barrage of strikes around apartment blocks, with multiple flashes of explosions and plumes of smoke rising from buildings.

"It's a war, a real war," Ihor Terekhov, Kharkiv's mayor, told the Ukrainska Pravda website.

Anton Gerashchenko, an adviser to Ukraine's interior minister, wrote in a Facebook post that "Kharkiv has just been massively fired upon by grads [rockets]. Dozens of dead and hundreds of wounded."

The onslaught came after Ukrainian troops repelled a Russian incursion into the city on Sunday and followed intensive exchanges on the city's outskirts a day earlier, according to the UK defence ministry. Kharkiv, Ukraine's second-largest city, is a key Russian military objective, along with the capital Kyiv.

A senior US defence official said Russia was trying to encircle Kharkiv, a city of 1.4mn inhabitants, and was using long-range fire in its efforts to take control there.

"We do believe their plans are to encircle the city and to try to take it that way because that has really been where the heaviest fighting's been," said the official.

Pentagon officials said there were growing signs that Russian President Vladimir Putin's forces were taking the same tack with Kyiv. Volodymyr Zelensky, Ukraine's president, said yesterday that the country was braced for a crucial 24 hours, as Russian troops stepped up their efforts to encircle the capital.

"We're starting to see the same sort of approach being applied to Kyiv," said the official, adding that Russian forces had advanced about 5km over the past 24 hours and were now within 25km of the city centre.

The US official also said there were growing concerns that Russia's frustration at the slow pace of its military assault on Ukraine could prompt it to use heavier bombing and missile attacks.

Analysts said they feared the escalation of force recalled the early stages of Russia's levelling of Grozny in 1999. One of Putin's first acts as president was a bombardment of the Chechen capital as part of a war on Islamist separatists that left much of the city in ruins and killed up to 8,000 civilians.

"Today's pictures from Kharkiv certainly look like the beginnings of 'Groznification'," said Eliot Cohen, a professor at the Johns Hopkins University School of Advanced International Studies.

Despite Putin's claims that he wanted to "liberate" Ukraine, Kharkiv lies in a Russian-speaking area of the country, just 40km from the border. "Of course, Grozny was a Russian city too, but that didn't stop Putin," Cohen said.

> 'The instructions from the Kremlin were . . . reduce Ukrainian cities to rubble while liberating them'

In a sign of what may still be to come, other videos shared on social media showed Russian SU-34 fighter-bombers flying over the city.

Olga, a Kharkiv resident who spoke to the Financial Times by phone, said she saw the rocket strikes while out buying groceries in the north-west of the city. The shelling intensified "and then the shrapnel started flying. We thought they shot a plane down," she said. "It was deafening."

Analysts said the use of artillery barrages represents a Russian return to tried and tested military tactics after its advance in northern and eastern Ukraine bogged down after the failure of what Russian analysts described as an initial softly-softly approach.

"The instructions from the Kremlin were . . . reduce Ukrainian cities to rubble while liberating them," said Pavel Felgenhauer, a Russian military expert.

But stronger than expected resistance incurred Russian casualties, as many as 4,500 according to Ukrainian authorities, and caused heavier than expected losses of tanks and other equipment. Russia has not provided a figure for the number of its personnel killed and injured.

"Their attacking approach didn't play to Russian tactics in the beginning [of the war] so the obvious recourse is fall back to a strategy that does work," said Henry Boyd, a military expert at the International institute for Strategic Studies. "Kharkiv is already taking military barrages."

Analysts and officials have been warning that Russia's setbacks, while spurring Ukrainian resistance, increased the chance of heavy bombardment and possibly assaults using thermobaric weapons, which use oxygen from the surrounding air to generate an intense, high-temperature explosion.

Social media posts yesterday also appeared to show TOS-1 heavy flame throwers positioned outside the besieged southern city of Mariupol.

Additional reporting by Max Seddon in Moscow and Guy Chazan in Lviv

Border crossing

More than 500,000 refugees have fled fighting, says UN

SARAH PROVAN — LONDON
NEIL MUNSHI — LAGOS

Half a million Ukrainians have fled the country since the Russian invasion and more than 100 civilians, including children, have been killed, the UN has said.

"More than 500,000 refugees have now fled from Ukraine into neighbouring countries," Filippo Grandi, commissioner of the UN High Commissioner for Refugees, said yesterday.

Many more have been internally displaced, the UNHCR added. The Office for the High Commissioner for Human Rights said 102 civilians had been killed in the conflict from Thursday morning to Sunday night, including seven children, though it warned the real figure was likely to be considerably higher.

"The military attack on Ukraine is putting at risk countless lives," said Michelle Bachelet, high commissioner for human rights, at the 49th session of the council in Geneva.

"Most of these civilians were killed by explosive weapons with a wide impact area, including shelling from heavy artillery and multi-launch rocket systems, and air strikes," Bachelet said yesterday. "The real figures are, I fear, considerably higher."

"Meanwhile millions of civilians, including vulnerable and older people, are forced to huddle in different forms of bomb shelters, such as underground stations, to escape explosions."

The UN has ratcheted up its pressure on Moscow, raising its voice on human rights violations in Ukraine in the wake of Russia's invasion, and said its humanitarian agencies were stepping up their operations in the war-torn country.

"Conflict is the utter negation of human rights across the board," the head of the UN said in a speech yesterday, adding that Russia's military might in Ukraine was leading to "the escalation of human rights violations".

The "inevitable result of war" has cost civilian lives and driven many from their homes to face hunger, poverty and economic disruption, said António Guterres, the UN secretary-general.

Sports crackdown

Fifa and Uefa kick national team and clubs into touch

SAMUEL AGINI AND ARASH MASSOUDI
LONDON

Football authorities have suspended Russia's national team and clubs from big tournaments including this year's World Cup, under intense pressure to punish Vladimir Putin for invading Ukraine.

World governing body Fifa and European counterpart Uefa said in a joint statement yesterday that Russian teams would be barred from competition "until further notice".

"Football is fully united here and in full solidarity with all the people affected in Ukraine," the two organisations said.

The move means the Russian men's team will not be allowed to face Poland in next month's round of qualifiers for the World Cup in Qatar later this year. The women's team's participation in Uefa's Euro 2022 tournament is also in doubt. Spartak Moscow was also set to play against Germany's RB Leipzig next month in the Uefa Europa League.

Fifa's change of stance comes after the Switzerland-based organisation faced criticism for an earlier decision that would have allowed the Russian national team to play in next month's World Cup qualifiers.

The head of Poland's football association called Fifa's original stance "disgraceful".

The moves come after the International Olympic Committee yesterday recommended that sports organisers bar Russian athletes from competing in events.

The IOC yesterday also stripped Putin of an honorary "gold" Olympic Order.

The war in Ukraine has intensified scrutiny of the links between global sport and Russia, which hosted the 2018 Fifa World Cup, forcing teams and competition organisers to reconsider partnerships and sponsorships linked to the Russian state.

Formula One, the global racing series, has abandoned the 2022 Russian grand prix, while Uefa has moved the Champions League final from St Petersburg.

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WAR IN UKRAINE

US bans transactions with Russia central bank

Treasury's robust move aims to cripple economy and is unveiled before US markets open to prevent 'asset flight'

JAMES POLITI — WASHINGTON
COLBY SMITH — NEW YORK

The US has taken its most aggressive step yet to cripple Russia's economy and financial system, announcing a ban on transactions with Russia's central bank and new sanctions on the Russian Direct Investment Fund and its chief executive, Kirill Dmitriev, a key ally of President Vladimir Putin.

The move by the US Treasury yesterday follows a joint pledge by western nations on Saturday to block Russia's ability to access roughly $630bn in foreign reserves and impose huge costs on its economy in the wake of its invasion of Ukraine.

A senior Biden administration official said the measures were immediate and were unveiled before US markets opened yesterday to prevent "asset flight", after learning the Russian central bank was trying to "move" some foreign reserves around.

"The unprecedented action we are taking today will significantly limit Russia's ability to use assets to finance its destabilising activities, and target the funds Putin and his inner circle depend on to enable his invasion of Ukraine," said Janet Yellen, US Treasury secretary.

The Treasury said its Office of Foreign Assets Control would prohibit US individuals from engaging in any transactions with Russia's central bank, its national wealth fund and its finance ministry. In addition, the US said it would place sanctions on the RDIF, Russia's most prominent sovereign wealth fund, as well as Dmitriev to stop Putin and his inner circle from raising funds abroad, including in the US.

"This fund and its leadership are symbols of deep-seated Russian corruption and influence peddling globally," a senior Biden administration official said.

US officials described the actions taken yesterday as an attempt to neutralise Russia's efforts to create an economic buffer in recent years with the accumulation of foreign reserves.

"If their currency was plummeting, they could use those reserves to support the rouble and to defend it," said one senior Biden administration official, adding that the US steps would "nullify" that "insurance policy".

However, the US Treasury said it would issue a licence to allow "certain energy-related transactions" with the Russian central bank, as the Biden administration sought to mitigate some of the fallout on global energy prices and the US economy.

Despite Russia's efforts in recent years to reduce its exposure to the dollar and its large domestic stockpile of gold, a large portion of its reserves reside overseas. The largest share is held in China, at more than 14 per cent, but the bulk of the rest is in the US, Germany, France, the UK, Austria and Japan.

Russia will continue to earn large amounts of foreign exchange, however, through its oil and gas sales, which have helped to bolster its current account surplus to a record $19bn. The proceeds could then be used to shore up the economy and pay for imports.

Still, the move by the US and its allies to impose sanctions on Russia's central bank led to a sharp drop in the value of the rouble, an emergency interest rate increase by Russia's central bank and a meeting between Putin and his economic advisers at the Kremlin.

In a speech delivered yesterday, Russia central bank governor Elvira Nabiullina said the condition of the Russian economy had "altered dramatically" but pledged to "use the necessary tools very flexibly" to deal with the "totally abnormal situation".

A senior Biden administration official said inflation was likely to spike, while purchasing power and investment were likely to drop in the country.

"This is a negative and vicious feedback loop that Putin has triggered," the official said.

Putin yesterday introduced capital controls to offset the impact of sanctions, triggering a further rouble drop.

In a decree published by the Kremlin, Putin banned Russians from transferring foreign currency abroad or servicing loans in foreign currency outside the country from March 1.

Putin also ordered Russian exporters to sell 80 per cent of their foreign currency revenue dating back to January 1.

The measure is intended to allow foreign currency revenue from Russia's exports of oil and gas — which account for half of its budget revenue — and other commodities to compensate for the bans on selling much of the central bank's reserves.

Chelsea owner

Abramovich offers to help find peaceful solution

Chelsea football club owner Roman Abramovich was in Belarus "trying to help" end the war in Ukraine after Kyiv asked him to assist in peace talks, a spokesperson for the Russian-Israeli billionaire said.

The spokesperson said Abramovich, pictured, "was contacted by the Ukrainian side for support in achieving a peaceful resolution, and that he has been trying to help ever since".

Abramovich's involvement comes after he said he would relinquish "stewardship" of his English Premier League club, a move that a friend of the billionaire said was an effort to get ahead of any potential sanctions he could face over his Kremlin links.

Talks between Russia and Ukraine began yesterday on the Belarusian border. David Arakhamia, head of Ukrainian president Volodymyr Zelensky's party in parliament, confirmed Abramovich was playing an "advocacy" role in the negotiations.

Alexander Rodnyansky, a Kyiv-born film producer, said Ukrainian officials asked him to broker the talks. He said Abramovich's influence over the Kremlin "was limited" but added that the billionaire was the only Russian figure who had agreed to help.

"The Ukrainians had been trying to find someone in Russia who could help in finding a peaceful resolution," Rodnyansky said. "They reached out for help and Roman is the person who decided to help and to mobilise support for a peaceful resolution."

He added: "I don't know if there will be impact but we know Zelensky's staff and I am from the Ukraine and they are grateful for the efforts."

The Kremlin declined to comment.

FT reporters

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ft.com/war-in-ukraine

Talks and tumult: left, Russian and Ukrainian negotiators sit down for negotiations in Belarus, while right, Ukrainians scramble to board an evacuation train at Kyiv central train station
Sergei Kholodilin/AP; Dimitar Dilkoff/AFP/Getty

European powerhouse. Military spending

German U-turn reshapes engagement with world

Chancellor tells nation 'new reality' created by Putin has led to policy reassessment

ERIKA SOLOMON — BERLIN

In just 30 minutes, Olaf Scholz overturned decades of German foreign and defence policy.

Speaking to the Bundestag in a special session on Sunday, the chancellor announced a €100bn fund to modernise the military. He also vowed that Germany would finally meet its Nato commitment to spend 2 per cent of gross domestic product yearly on defence, up from the 1.5 per cent that has long frustrated allies.

The plans could mark a watershed in the way Europe's largest economy engages with the world.

Coming into office barely three months ago, Scholz's cabinet had taken the reins from Angela Merkel with an ambitious plan of domestic modernisation, and seemed reluctant to be sidetracked by a foreign entanglement or anything that could hit the economy.

"President Putin created a new reality with his invasion of Ukraine. This new reality requires a clear response," Scholz said. "We have given it."

His words left observers reeling. Ukraine's ambassador to Germany, who earlier on Sunday criticised the government for doing too little for Ukraine, called the Bundestag session a "truly historic moment".

Images of the destruction visited on Ukraine — and growing public outrage over German hesitancy to act — have pushed Scholz's cabinet to outline a plan of action that critics and allies alike had unsuccessfully demanded for years.

The new plan overturns many traditional German policy dogmas — from pointing to its second world war legacy to justify avoiding military expenditures, to its focus on trade and dialogue instead of tougher stances towards authoritarian states.

"There has been a lot of shock, but also a sense of shame and guilt, that we underestimated what Putin would do, that we believed our weapons wouldn't make a difference," said Thorsten Benner, head of the Global Public Policy Institute in Berlin.

For weeks, the government stood by a longstanding German policy of not delivering weapons to active conflict zones. Foreign minister Annalena Baerbock said sending weapons would only increase the likelihood of violence.

Scholz, meanwhile, sparked pundits' derision and social media memes over his seeming refusal to utter the words "Nord Stream 2", let alone threaten to halt it. He finally agreed to suspend the Kremlin-backed pipeline in recent days, after months of dodging US pressure and sticking to the line of his predecessor, Merkel, that it was purely a commercial project.

On Sunday, Baerbock acknowledged the country was making a "180-degree turn". "Perhaps it is the case that Germany is today leaving behind a form of special restraint in foreign and security policy," said Baerbock, from a Green party long known for its pacifism.

"If our world is different, then our politics must also be different," she added.

The first signs of the shift came on Saturday night when Germany, the last big country to resist plans to suspend Russian banks from the international payment system, Swift, accepted the move.

> 'Germany is today leaving behind a form of special restraint in foreign and security policy'

That same evening, after weeks of dragging its feet over allowing Estonia to send some East German howitzers, it agreed both to allow the transfer, and for the Netherlands to send 400 German-made rocket-propelled grenades.

Soon after that, Berlin announced its own plans to send missiles, armoured vehicles and 10,000 tonnes of fuel.

Now, Benner said, Germany might become increasingly willing to provide arms to like-minded allies.

The new proposals required the three parties that make up the German government to end some of their most treasured policies.

Scholz's centre-left Social Democrats are relinquishing their more open stance toward Russia, a principle many of its stalwarts held dear. They will also bolster support for a nuclear-sharing agreement with Washington that had long made many wary.

The chancellor now plans on replacing Germany's ageing Tornado jets, which can be loaded with nuclear missiles, with US F-35 fighter jets. But he vowed that the next generation of planes and tanks would need to be built in Europe and, in particular, France.

The Greens accepted a pledge to increase capacity for coal and gas reserves, as well as Scholz's plan to build two liquid natural gas terminals to bring in LNG from Qatar and the US as a way to reduce its energy dependence on Russia, which provides Germany with 55 per cent of its imported gas.

From Germany's pro-business and fiscally orthodox Free Democrats, finance minister Christian Lindner made an impassioned argument for taking on debt to fund the new plans. "It is not a debt, it is an investment in our future," Lindner said.

The speeches on Sunday were met with bursts of applause and standing ovations in parliament.

But the real test is yet to come, when the aftershocks affect Germans themselves, whether they are cuts in Russian energy supplies, higher energy costs or financial chaos for businesses resulting from the Swift sanctions.

'Unique' decision

Swiss drop neutrality stance to duplicate EU sanctions

SAM JONES — ZURICH

Switzerland broke with its longstanding tradition of political neutrality yesterday, announcing that it intended to match EU sanctions on Russia — including those directed personally against President Vladimir Putin — in response to the invasion of Ukraine.

The step was a "unique and difficult" decision but "morally" imperative because of Russia's brutal military campaign against its neighbour, federal president Ignazio Cassis said at a press conference in Bern, flanked by three other members of the country's seven-person ruling executive.

"In view of the violation of international rights in recent days, the Federal Council has chosen to respect those values that form the basis of our civilisation," Cassis said.

Switzerland will mirror the full range of EU sanctions applied on February 23 and 25, the government said.

As well as targeted asset freezes against Russians and Russian organisations, Bern said it would implement a travel ban on five oligarchs close to Putin. Visa-facilitation services — which have made it easier for all Russians to enter Switzerland since 2009 — will also now be ended, including for holders of diplomatic passports. Swiss airspace has closed to all Russian airlines.

Long seen as one of the world's most accommodating countries for Russians to party and do business in, Switzerland will become one of the least accessible.

Finance minister Ueli Maurer said he did not expect the measures to impact the Swiss financial system.

Russian wealth accounts for about 1 per cent of annual foreign direct investment into Switzerland, he told reporters, equivalent to roughly Sfr7.5bn ($8.2bn), based on the latest government data.

He added that matters could change as a result of the consequences of the war. As well as being a location for Russian personal wealth, Switzerland is also a foreign hub for some of the country's biggest businesses, including the state-owned gas heavyweight Gazprom and Nord Stream 2.

A significant portion of Putin's alleged wealth has, in recent years, been traced to the country: the 2016 "Panama papers" leak of documents from offshore law firm Mossack Fonseca allegedly identified millions held in Zurich by the Russian cellist Sergei Roldugin, apparently on behalf of the Russian president.

EU high representative Josep Borrell said he was "very happy" with the Swiss decision to move in lockstep with the bloc in its efforts to punish Russian belligerence. Russian oligarchs have now lost a significant haven for wealth in Europe, he added.

Putin adds to western anxiety with nuclear weapons move

Russia's faltering campaign compounds worries about president's behaviour

HENRY FOY — BRUSSELS
MAX SEDDON — MOSCOW
DEMETRI SEVASTOPULO — WASHINGTON

Western capitals have long been anxious about the Russian military doctrine that allows the use of nuclear weapons to end a conflict as part of an "escalate to de-escalate" strategy. So when Vladimir Putin put strategic nuclear forces on high alert, they took it seriously.

The Russian president's decision to prepare nuclear weapons for increased launch readiness prompted the US and Nato to warn that it had made the world "much more dangerous".

"This is not only an unnecessary step for him [Putin] to take but an escalatory one," said a senior US defence official. "Unnecessary because Russia has never been under threat by the west or by Nato and certainly . . . by Ukraine. And escalatory because it is clearly potentially putting at play forces that, if there's a miscalculation, could make things much, much more dangerous."

Announced on Sunday during an invasion that has fallen short of Moscow's primary objectives and a day after the announcement of potentially crippling economic sanctions, it signalled the Kremlin felt it had no option but to intensify its threats, analysts said.

"There's a real possibility Putin could turn to nuclear weapons if he continues to experience military setbacks and sees the diplomatic and political situation crumbling," said Caitlin Talmadge, a nuclear policy expert at Georgetown University.

"It's not just a response to how his conventional campaign [in Ukraine] is going but to these other developments, with sanctions and Germany sending weapons to Ukraine," she said. "The entire picture to him looks pretty bleak. If he wanted to use tactical nuclear weapons to achieve [his aims] in Ukraine, he could do that."

Putin's order, which applies to Russia's traditional nuclear deterrent and its new hypersonic missiles, does not mean he is ordering preparations for a nuclear strike.

But according to Russia's nuclear doctrine, published in 2020, the Kremlin "reserves the right to use nuclear weapons", including "for the prevention of an escalation of military actions and their termination on conditions that are acceptable for the Russian Federation and/or its allies".

Western countries interpreted that as a lowering of the bar for the use of nuclear weapons: until 2020, Moscow's stated policy was to use nuclear weapons when "the very existence of the state is threatened".

Matthew Kroenig, a nuclear expert at the Atlantic Council, said Sunday's warning was to be expected but he thought Putin was bluffing. "This really is Russia's military strategy to backstop conventional aggression with nuclear threats, or what is known as the 'escalate to de-escalate strategy'," he said. "The message to the west, Nato and US is, 'Don't get involved or we can escalate things to the highest level'."

At the start of his invasion last Thursday, Putin warned that any attempt by other countries to "meddle" would be met with consequences, a phrase interpreted to mean possible nuclear attacks.

High alert: Russian Tu-22M3 bombers fly over the Kremlin in a file photo
Ivan Sekretarev/AP

So far, Russia has failed to capture Kyiv or Kharkiv, Ukraine's biggest cities, and suffered heavy losses against a stronger Ukrainian defence than even its allies expected.

In addition, western countries have agreed on a sanctions package that cuts off some Russian banks from the global Swift financial messaging network and attempts to prevent Russia's central bank using its $630bn of international reserves, the toughest economic restrictions imposed on Moscow.

The nuclear warning also came shortly after Russian and Ukrainian delegates agreed to meet for the first talks in the crisis. Lawrence Freedman, emeritus professor of war studies at King's College London, said Putin might see the threat of a nuclear strike combined with the offer of a potential peace deal as a "way out of this mess he is in".

Andrius Tursa, eastern Europe expert at Teneo, the political risk consultancy, said Putin might have been trying to deter tougher sanctions and the supply of weapons to Ukraine but had taken tensions to an unprecedented level. "The fact that Putin is turning into a pariah on the international stage makes him even more dangerous and unpredictable," he said.

> 'The entire picture to him looks pretty bleak. If he wanted to use tactical nuclear weapons to achieve [his aims] in Ukraine, he could do that'

James Acton, senior fellow at the Carnegie Endowment, said the order meant Russia could disperse intercontinental ballistic missiles from their bases and fit them to long-range bombers, threatening the US, or move tactical warheads to deployment locations, threatening Ukraine. "Equipping bombers with warheads and having those bombers in the air is clearly a more aggressive signal than keeping those bombers on the ground," he said.

Putin's order was a "preliminary command" rather than active preparations for a strike, said Pavel Podvig, a senior research scientist at the UN Institute for Disarmament Research in Geneva.

Podvig warned, however, that "there is a deficit of rational thinking in certain quarters" that added to the tensions. "People said invading Ukraine was crazy and irresponsible — this is an order of magnitude higher."

Moscow ally. Strategic change

Belarus tilt to Russia brings security risks for Europe

Lukashenko acceptance of Putin's troops leads to shift in balance of power near Baltic

JAMES SHOTTER — WARSAW

Vladimir Putin has mounted the biggest military offensive in Europe for more than half a century in an effort to bend Ukraine to his will. But the Russian president's quieter tightening of his grip over neighbouring Belarus will also have far-reaching consequences for the continent's security.

Although formally Russia's ally, Belarus leader Alexander Lukashenko has long tried to maintain a measure of independence. But in recent months, his resistance has waned.

Despite Belarus's constitutional status as a neutral nation, the president has allowed Russian troops to use it as a launch pad to lead the assault on Kyiv, while on Sunday he held a referendum which approved changes that would allow Russia to station nuclear weapons in Belarus. "This is a huge shift," said a senior security official from central Europe. "It's a new reality, militarily and strategically."

Following the collapse of the Soviet Union in the early 1990s, Russia and Belarus signed a treaty in 1999 pledging deeper political, defence and economic integration. But for most of his almost three decades in power, Lukashenko has sought to avoid slipping completely into Russia's orbit.

Many of the treaty's aims, such as the creation of a political confederation, have not been implemented. Lukashenko has also sought to counter Moscow's economic sway as Belarus's biggest trading partner by periodically warming relations with the EU, and the country did not recognise Russia's 2014 annexation of Crimea.

But since August 2020, when Lukashenko claimed victory in a deeply flawed presidential election, he has had less room for manoeuvre. His savage crackdown on the huge protests that followed shocked Belarusians, turned him into an international pariah and made him even more dependent on Putin.

"Belarus has always tried to chart this middle course, going to the EU, going to Russia. But Lukashenko lost," said William Alberque, a former Nato official who is now director of strategy, technology and arms control at the International Institute for Strategic Studies. "Putin said 'pay up'. And he did."

For central and eastern Europe, Lukashenko's change in stance brings risks. One of the most immediate is a shift in the balance of power around the Suwalki gap, the 65km stretch of land that makes up the Polish-Lithuanian border and links the Baltic states to the rest of the EU.

Bordered to the west by the Russian exclave of Kaliningrad, and to the east by Belarus, the strip of land has long been seen as one of Nato's weak points. If the 30,000 Russian troops that have poured into Belarus since earlier this year remain, Moscow's ability to cut off the Baltic states from the rest of the EU will be greatly enhanced.

Alexander Lukashenko: became a pariah after cracking down on post-election protests

"This is a material change," said François Heisbourg, a French defence analyst. "It essentially means it would be rather difficult to support the Baltic states militarily if the balloon went up."

In response to the additional Russian forces in Belarus, Nato members have boosted their presence in neighbouring countries. The UK, Germany, Denmark and Norway have sent troops to the Baltics, while the US sent soldiers to Poland.

Many in central Europe want the alliance to go further. "This is a fundamental shift not only in regional but also in European security," said Marcin Przydacz, Poland's deputy foreign minister. "The response must be the deployment of heavy armoured military units. This is a task for Nato."

To present a credible deterrent, the alliance's eastern flank needed significantly more troops, said Heisbourg. "You have 190,000 Russians around Ukraine," he said. "We should be ramping up not from 5,000 to 10,000, but to 50,000: more Nato forces, in a permanent posture, in the vicinity of Belarus, and further behind."

A shift in Belarus's nuclear stance will also change security calculations. Russia can already launch missiles from Kaliningrad. But, said Alberque, sending them from Belarus will boost the Kremlin's ability to target some parts of Europe with short-range weapons.

For now, officials in central Europe do not think the Russian troops in Belarus pose as big a threat to their nations as to Ukraine. But they worry if the west's response to Putin's moves in Ukraine and Belarus is not robust enough, he could try to "test" Nato elsewhere.

Delegations meeting

Breakthrough hopes slim as talks open at Belarus border

FT REPORTERS

Negotiations between Ukrainian and Russian officials took place near the Belarus border yesterday, with little prospect of a breakthrough.

Mykhailo Podolyak, an aide to Ukrainian president Volodymyr Zelensky, said the delegations would return to their respective capitals for consultations.

Zelensky's office had said the talks were aimed at securing a ceasefire and the withdrawal of Russian troops from Ukrainian territory.

Vladimir Medinsky, an aide to Russian president Vladimir Putin and leader of the Russian delegation, would report on the talks to Putin, according to the Kremlin. Medinsky said the talks would continue and that the sides found "some points on which it is possible to find common ground", according to Interfax.

But hopes of a breakthrough in the talks remain slim. Putin has demanded the surrender of Ukraine's army and the removal of the country's government.

Ukraine's delegation included Oleksiy Reznikov, defence minister, and David Arakhamia, leader of Zelensky's party in parliament. Russia's delegation included representatives of the defence and foreign ministries.

Emmanuel Macron, French president, meanwhile, urged Putin to agree to an immediate ceasefire in Ukraine and yield to international demands that he end the Russian offensive.

In a 90-minute telephone call, made at the request of Zelensky, Macron called for an end to all strikes and attacks on civilians. He also called for safe passage along main roads, particularly the route south out of the capital Kyiv, the Elysée Palace said.

Putin agreed to deal with the three demands, according to the French statement.

Macron also told Putin he should respect international humanitarian law, while Putin agreed with Macron's suggestion that they remain in contact in the coming days "to avoid the deterioration of the situation", the Elysée added.

Macron, who had previously tried and failed to persuade Putin to negotiate rather than invade Ukraine, later called Zelensky to keep him informed.

According to the Kremlin, Putin told Macron a settlement was "possible only if Russia's legitimate security interests are unconditionally taken into account, including the recognition of Russian sovereignty over Crimea" as well as the "demilitarisation and denazification of the Ukrainian state and ensuring its neutral status".

Reporting by Guy Chazan, John Reed, Max Seddon, Henry Foy, John Paul Rathbone and Victor Mallet

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Military alliance

Majority of Finns back joining Nato for first time, poll reveals

RICHARD MILNE
NORDIC AND BALTIC CORRESPONDENT

A majority of Finns are in favour of joining Nato for the first time in the Nordic country's history as Russia's invasion of Ukraine pushes the once neutral state and its neighbour, Sweden, towards the military alliance.

A poll for Finland state broadcaster Yle showed 53 per cent of Finns supported joining Nato, 28 per cent were against and 19 per cent did not know. The last time Yle conducted such a poll in 2017, only 19 per cent were in favour of joining while 53 per cent were against.

Former Finnish prime minister Alex Stubb called it a "historic shift", and it follows a similar rise in support for Nato membership in Sweden.

Both Finland and Sweden are militarily non-aligned but have not been neutral since joining the EU and have the closest partnerships with Nato of any non-member countries. Nato recently said it would share its intelligence on Ukraine with them, in addition to conducting exercises and exchanging information before Russia's invasion.

The Yle opinion poll published yesterday shows the majority in favour of Nato membership increases if either the country's political leadership advocates it or if Sweden joined the alliance. There is currently no political majority in either country in favour of membership.

But even prominent Finnish opponents of joining Nato concede they could be won over if geopolitical tensions continued to build in the region.

Analysts said the increase in support for Nato in Finland and Sweden represented one of the major negative consequences for Russian president Vladimir Putin from his war against Ukraine. "The unthinkable might start to become thinkable," ex-Swedish prime minister Carl Bildt said about the Finnish poll.

> Former Finnish prime minister Alex Stubb called it a 'historic shift', after a similar trend in Sweden

Russia's foreign ministry repeated last week that "Finland's accession to Nato would have serious military and political repercussions". Finnish and Swedish politicians have repeated they have the option to join Nato as sovereign states.

Finland and Sweden have both broken with tradition to send military equipment to Ukraine. Sweden is sending 5,000 anti-tank missiles, the first defence equipment it has sent abroad since it helped Finland in the 1939-40 war against Russia. Finland's centre-left government said last night it would send 2,500 assault rifles, 150,000 rounds and 1,500 anti-tank weapons to Ukraine.

Asia-Pacific

US sends former officials to Taiwan in show of support

DEMETRI SEVASTOPULO — WASHINGTON
KATHRIN HILLE — TAIPEI

The White House has dispatched a high-level delegation of former officials to Taiwan to send a message of reassurance and to remind China not to step up pressure on Taipei while the US is focused on the war in Ukraine.

Michael Mullen, former chair of the US joint chiefs of staff, is leading the delegation, which includes Michèle Flournoy, a former top Pentagon official, according to two people familiar with the situation. In addition to the show of support for Taipei, the delegation will urge Taiwan to intensify long-needed efforts to bolster its own defences.

The other members of the delegation are Evan Medeiros, former top White House Asia adviser to Barack Obama, and Mike Green, who held the same position for George W Bush, plus Meghan O'Sullivan, a former Bush official. The group will arrive in Taiwan today.

The decision to send a delegation comes amid concerns that Beijing might attempt to take advantage of the American focus on Ukraine to boost pressure on Taiwan, over which China claims sovereignty.

Taipei and Washington do not have formal diplomatic relations but maintain close economic and security links.

"There's a sense that it is a good idea to give Taiwan reassurance at this time," said Bonnie Glaser, a China expert at the German Marshall Fund. "Sending a group of former senior officials now outside government is a good way to do that. It sends the right message in an unprovocative way."

The Chinese military has stepped up military activity around Taiwan over the past year, including sending increasingly large sorties of fighter jets, bombers and other warplanes into the country's air defence identification zone. Last month, Qin Gang, China's ambassador to the US, warned that the US and China could end up in "military conflict" if Taiwan moved closer to declaring independence and was "emboldened" by Washington.

Glaser said the delegation would give the US another opportunity to encourage Taiwan to implement defence reforms and strengthen its own deterrence, particularly as China studies the conflict in Ukraine to draw lessons for any possible future attack on Taiwan.

US officials have been telling Taiwan for more than a decade that it must boost its defence capabilities. President Tsai Ing-wen has given higher priority to defence than her predecessors by boosting spending and regularly visiting troops but US experts and many Taiwanese defence insiders say the efforts are insufficient.

Pandemic

Hong Kong mortuaries fill up after Covid surge

Territory loses control of fifth wave, prompting fears of tougher measures

PRIMROSE RIORDAN AND CHAN HO-HIM
HONG KONG

Bodies are piling up at Hong Kong's hospitals and public mortuaries as the number of Covid cases soars.

The territory has lost control of China's worst outbreak since the pandemic began more than two years ago.

Hong Kong, with a population of 7.4mn, has reported more than 205,000 cases — compared with 109,000 for the rest of China — after a surge that local authorities said could force the government to adopt a strict lockdown that it had insisted would not be necessary.

Health officials yesterday reported 34,466 new cases, all but four of them locally transmitted.

The city has been forced to adhere to Beijing's zero-Covid policy and had long stretches without any cases, but it failed to vaccinate many elderly residents, who are now dying in record numbers.

More than 80 per cent of all adults have received at least one dose of the BioNTech or China's Sinovac vaccine but the rate falls to just 47 per cent among those aged 80 or more.

Hong Kong's vaccine rollout has been handicapped by mistrust of the government following the 2019 pro-democracy protests. Overcautious messaging by officials about potential side-effects has also had an impact, with some medical professionals saying vaccines put the elderly at greater risk due to their weakened immune systems or pre-existing health conditions.

About 630 of the territory's more than 840 Covid-related deaths have been recorded since its "fifth wave" began in the new year, including 124 fatalities reported on Monday.

"There has been a surge of Covid-related deaths," said Lau Ka-hin, a senior administrator at Hong Kong's hospital authority. "We can't [fully] process the transferral of bodies, therefore you will see some bodies [piled up] in accident and emergency rooms. The bodies of deceased patients need to be moved from [public hospitals] to public mortuaries for autopsy and investigation."

Albert Au, a senior health department official, said most of the 1,350 spaces at the city's three public mortuaries were full. Emergency rooms are also under immense pressure, with patients often examined in open-air triage areas before being taken inside for treatment.

David Chan, chair of the Hospital Authority Employees Alliance, a union, said: "Some corpses have been placed outdoors." He added about eight bodies were placed outdoors on Sunday at Caritas Medical Centre, a public hospital.

Yesterday, the territory's health secretary echoed mainland experts who said compulsory mass testing next month might have to be accompanied by a form of lockdown.

Sophia Chan said "reducing human flows" would "optimise the effect of the mass-testing drive", adding that people should "avoid going out of their homes" during the testing period.

Three members of Hong Kong's executive council, the cabinet body that advises chief executive Carrie Lam, told the Financial Times that a plan to force people to stay at home over the testing period was being considered.

Additional reporting by Tom Mitchell in Singapore

Global warming. Scientific analysis

UN lashes out at 'failed climate leadership'

Update to IPCC landmark report says delayed action will miss 'window of opportunity'

CAMILLA HODGSON AND LESLIE HOOK

The world has a "brief and rapidly closing" window to adapt to climate change, with the risks associated with levels of warming greater than previously thought, the latest instalment of a UN report signed off by 270 scientists from 67 countries has concluded.

Some losses were already irreversible and ecosystems were reaching the limits of their ability to adapt to the changing climate, the scientists warned in the blunt assessment.

The findings were an "atlas of human suffering and a damning indictment of failed climate leadership", said UN secretary-general António Guterres. "I have seen many scientific reports in my time, but nothing like this."

Hazards such as the rise in sea levels were unavoidable, and "any further delay" to mitigate and adapt to warming would miss the "window of opportunity to secure a liveable and sustainable future for all", the analysis said.

US climate envoy John Kerry said the report "paints a dire picture of the impacts already occurring because of a warmer world and the terrible risks to our planet if we continue to ignore science".

Inger Andersen, executive director of the United Nations Environment Assembly, said the world was on track for warming of 3C since the pre-industrial period. "We are in an emergency heading for a disaster," she said.

The analysis of the world's ability to adapt to global warming from the UN's Intergovernmental Panel on Climate Change (IPCC) is the sixth such report and follows last year's landmark paper on the science of warming.

That report found that the world was likely temporarily to reach 1.5C of warming within 20 years, even in the best-case scenario of deep cuts in greenhouse gas emissions. The world has already warmed about 1.1C since the pre-industrial period. "So much depends on what we do as a society. The future depends on us, not the climate," said Helen Adams, a lecturer at King's College London and lead author.

Deluge: residents are evacuated during flooding in Lismore, New South Wales, Australia, yesterday
Jason O'Brien/EPA-EFE

The report lands as Europe struggles with its dependence on oil and gas for energy, with supplies from Russia threatened by Vladimir Putin's war on Ukraine. During the closing IPCC session, Russian delegate Oleg Anasimov apologised "on behalf of all Russians who were not able to prevent this conflict". Guterres said "current events" made clear the reliance on fossil fuels "makes the global economy and energy security vulnerable".

The evidence for human-induced climate change and its effects was "unequivocal", and limiting warming to 1.5C would reduce but not eliminate the negative impact, said the latest analysis.

The authors also concluded that the effects of warming, such as extreme weather events, would become more severe at lower temperatures than the previous 2014 IPCC adaptation assessment had concluded. That change was the result of more and better evidence.

"The impacts that we are observing on ecosystems, on natural systems and on human systems are much more widespread and are really accelerating," said report author Marie-Fanny Racault from Plymouth Marine Laboratory.

Human societies and the natural world could adapt to climate change "within limits", but the effectiveness of adaptation would "decrease with increasing warming", said the IPCC.

Rises in sea level, for example, posed an "existential threat" for some small islands, while vital infrastructure, such as ports and energy systems, would be "increasingly vulnerable" if not designed to withstand climate change.

By 2100, between \$7.9tn and \$12.7tn in global assets would be in one-in-100-year coastal floodplains, based on a "medium" scenario, with about 1bn people at risk from coastal hazards such as flooding by 2060, authors estimated.

"Multiple ports and coastal infrastructure are at risk . . . [which are] an important backbone of our global activity," said Richard Dawson, a professor at Newcastle University and lead author.

"If we put up buildings that are not ready for the next 50-100 years of climate, or infrastructure that is not resilient and designed with future risks in mind, then effectively we're locking in problems."

The money available for adaptation was "insufficient", the authors said. The UN has called for climate finance to be split evenly between efforts to curb and adapt to climate change, but most goes towards mitigation.

Sticking points during IPCC negotiations included pushback by some countries, among them the US, against the phrase "loss and damage" in the report's summary for policymakers. The term is politically charged as it implies financial compensation.

Instead, the final summary uses the compromise term of "losses and damages".

Claims rise

Floods pile pressure on Australian government

Devastating floods that have submerged cities and towns in Queensland and New South Wales and triggered thousands of insurance claims are stoking criticism of the Australian government's stance on climate change.

The wild weather, described by meteorologists as a "rain bomb", moved south from Queensland over the weekend, claiming seven lives and flooding 18,000 homes.

The flooding is the latest in a series of natural disasters to hit Australia in recent years, including bushfires in 2019 and the bleaching of the Great Barrier Reef, and has piled pressure on Prime Minister Scott Morrison's conservative government to tackle climate change more robustly.

Josh Frydenberg, treasurer, declined to mention climate change when asked yesterday about the floods, saying "forever it's been thus".

Australia was criticised last year when it reluctantly signed up to a net zero greenhouse gas emission target by 2050 but refused to phase out fossil fuel production.

It also declined to set more stringent 2030 decarbonisation targets, saying it would not be lectured to by other countries.

Simon Bradshaw, head of research at the Climate Council, countered that for every 1C of warming, the atmosphere could hold 7 per cent more moisture, which would lead to more severe rainfall.

Bradshaw said governments at local and state levels were trying to address the risks but there was a lack of leadership at the federal level.

Insurers have classified the floods as catastrophic, which means claims will be given priority status.

Andrew Hall, chief executive of the Insurance Council of Australia, said: "It's too early to understand the extent of the damage to property in affected areas and to estimate the insurance damage bill.

"However, insurers have received more than 3,500 claims in south-east Queensland over the last three days."

Reporting by Nic Fildes in Sydney and James Fernyhough in Melbourne

Bankruptcy

US senators move to block ploy used in J&J cancer case

JAMIE SMYTH — NEW YORK

US lawmakers plan to outlaw the bankruptcy manoeuvre known as the "Texas two-step" to prevent large companies from abusing the Chapter 11 process, the chair of the Senate judiciary committee has said.

Dick Durbin, a Democratic whip, said the panel was discussing a draft bill to remove what he described as a "get out of jail free card" being deployed by some of the wealthiest companies.

His comments follow the failure on Friday by lawyers representing almost 40,000 cancer sufferers to prevent Johnson & Johnson using the scheme to help it settle billions of dollars of claims that its baby talc was tainted with asbestos and caused their illnesses.

"When you have massively profitable companies using this bankruptcy manoeuvre to avoid accountability to dying cancer victims, it is clear that corrective action is needed," said Durbin.

"It is our goal to pursue bipartisan legislation . . . that curbs corporate bankruptcy abuses like the Texas two-step."

On Friday, Michael Kaplan, a bankruptcy judge, threw out a motion by talc claimants to dismiss the bankruptcy of LTL Management, a J&J subsidiary, in a ruling that critics warned could open the floodgates for other companies to use the bankruptcy courts to manage personal injury and other tort claims.

The scheme utilises business-friendly laws in the state that allowed J&J to split into two entities and ringfence all its talc liabilities within LTL, which then filed for Chapter 11 bankruptcy protection, putting a stay on talc claims.

Kaplan said the claimants had not proved the company had acted in "bad faith". The claimants had wanted the filing dismissed on the grounds it was filed in "bad faith" because LTL had never been in financial distress.

J&J followed the examples set by Koch Industries' Georgia-Pacific, Trane Technologies and a US unit of Saint-Gobain of France which used the scheme to shield their main businesses from legal claims linked to asbestos. All four are represented by Jones Day, a Cleveland law firm that designed the strategy.

Durbin said J&J's exploitation of the bankruptcy loophole was "shameful" and "indefensible", as it denied cancer victims their right to pursue their claims against the company in court.

J&J declined to comment.

Additional reporting by Sujeet Indap in New York

Opposition pledge

Turkey parties sign pact in bid to oust Erdogan

LAURA PITEL — ANKARA

Six Turkish opposition parties pledged to overhaul the country's electoral laws and institutions as they signed a "historic" pact aimed at bringing an end to President Recep Tayyip Erdogan's almost two decades in power.

Leaders of the country's biggest political parties — with the exception of a key pro-Kurdish party — yesterday vowed to limit the role of the country's president and restore the rule of law after what they say is years of democratic backsliding as Erdogan has established a system of one-man rule.

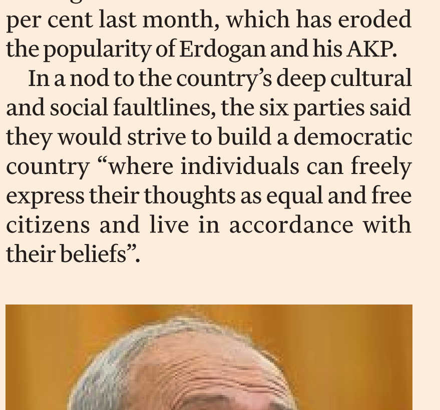
"We are determined to build a strong, liberal, democratic and fair system that establishes the separation of powers with an effective and participatory legislature, a stable, transparent and accountable executive, an independent and impartial judiciary," their joint declaration said.

Kemal Kilicdaroglu, of the secularist Republican People's party (CHP), and Meral Aksener, of the rightwing IYI party, were among the party leaders who signed a pact that marked the most significant moment so far in an effort by Erdogan's rivals to unite against him that began five years ago.

They were joined by Ali Babacan and Ahmet Davutoglu, both of whom served as senior ministers under Erdogan in the past but later quit his ruling Justice and Development party (AKP) to form two separate breakaway groups. Two other small parties, the Islamist Saadet (Felicity) party and rightwing Democrat party, also took part.

The declaration took place against the backdrop of mounting public discontent about the economy, particularly soaring inflation that reached almost 50 per cent last month, which has eroded the popularity of Erdogan and his AKP.

In a nod to the country's deep cultural and social faultlines, the six parties said they would strive to build a democratic country "where individuals can freely express their thoughts as equal and free citizens and live in accordance with their beliefs".



Kemal Kilicdaroglu: one of six party leaders to promise electoral reform

Seren Selvin Korkmaz, executive director of Istanbul-based think-tank IstanPol, described the declaration as "a historic day for Turkey", adding that the fragmentation and polarisation of Turkey's opposition had hampered their ability to present a credible challenge to Erdogan. "It is crucial because these kinds of regimes are very vulnerable when the opposition is united," she said.

At the heart of the declaration was a promise to abolish the presidential system of governance, introduced in 2018 after a referendum, that has concentrated huge powers in the hands of Erdogan. Other key pledges included placing a seven-year term limit on the president and stripping the president and council of ministers of powers to declare a state of emergency.

The six parties vowed to implement rulings by the constitutional court and European Court of Human Rights — something Erdogan has repeatedly refused to do in recent years. They said they would guarantee the independence of Turkey's central bank, which has faced heavy interference from the president in recent years.

Erdogan's rivals still face a struggle in convincing voters they can fix the country's economy and repair its institutions, analysts say. Tensions remain over who will be the opposition's joint presidential candidate.

Defensive measures Shares in cyber security groups surge as concerns rise over debilitating attacks ➔ COMPANIES, PAGE 8

Equinor and Daimler Truck sever business ties with Russia

- Link-ups with local companies end
- Corporate fallout from war spreads

RICHARD MILNE — RIGA
JOE MILLER — FRANKFURT
SARAH WHITE — PARIS
PETER CAMPBELL — LONDON

Norwegian oil group Equinor and Germany's Daimler Truck are ending their partnerships with Russian businesses while Volvo said it was halting deliveries of cars to Russia as the corporate fallout from the invasion of Ukraine spreads.

The announcements came as multinational groups with operations in Russia grappled with the reputational impact of their association with the country as well as potential exposure to western sanctions designed to inflict severe economic pain.

They follow BP's announcement on Sunday that it was divesting its near-20 per cent stake in Russian state oil group Rosneft, with chair Helge Lund describing Moscow's invasion of Ukraine as an "act of aggression which is having tragic consequences across the region".

> 'In the current situation, we regard our position as untenable'
>
> Anders Opedal, Equinor CEO

Companies with staff in Russia are also considering whether to repatriate families, people close to two French groups with operations there said. Equinor said yesterday it was "exiting" joint ventures in Russia that also include a strategic partnership with Rosneft encompassing projects in Siberia.

"In the current situation, we regard our position as untenable," said Anders Opedal, chief executive." He said that Equinor, which is two-thirds owned by the Norwegian government, was "deeply troubled" by Russia's invasion.

Daimler Truck, the world's largest truckmaker, said that it had taken the decision to "immediately suspend all our business activities in Russia" even though its contract with local vehicle-maker Kamaz limits co-operation to manufacturing civilian vehicles.

Kamaz, which was established under the Soviet Union, separately makes utility vehicles for Russia's armed forces.

Volvo Cars specifically cited the impact of the west's financial penalties as it said that it would "not deliver any cars to the Russian market until further notice" because of "potential risks associated with trading material with Russia, including the sanctions imposed by the EU and US".

Truckmaker Volvo, which is independent of the car company, said yesterday that it had halted production at its factory in Russia and stopped sales to the country until further notice, citing the risk of sanctions.

Following warnings from other carmakers that they could struggle to transport components into and out of Russia, Renault said that it had temporarily closed its Moscow plant, which produces models such as the Renault Captur and its Arkana SUVs, because of supply-chain problems. Another of the French group's factories operated by its Russian Avtovaz unit also halted production yesterday, but that was because of semiconductor shortages, it said.

Russia is the Renault group's second-biggest market by sales volumes, while Avtovaz last year made up about 7 per cent of its overall revenues.

Many of the western firms employ largely local staff through their Russian subsidiaries. Major employers also include retailers such as Germany's Metro AG or France's Auchan.

Additional reporting by Antoni Slodkowski in Tokyo, Leila Abboud in Paris, Olaf Storbeck in Frankfurt and Steff Chavez in Chicago

See Lex

Combined earnings KKR's co-founders each take home $100mn as private equity booms

Henry Kravis, left, and George Roberts in 2018: their payout comprises 'carried interest' and dividends — Kent Meister

ANTOINE GARA — NEW YORK

KKR co-founders Henry Kravis and George Roberts each earned more than $100mn in 2021 as buoyant financial markets caused the private equity group's profits to soar.

The hauls of Kravis and Roberts disclosed in KKR's annual report yesterday came from about $67mn in "carried interest" pay that each received and over $40mn in dividends due to their ownership of about 10 per cent of the group's shares.

Their payout paled in comparison to Stephen Schwarzman, the founder of KKR rival Blackstone Group, who received a record $1.1bn in 2021. But it far surpassed the pay of bosses at top Wall Street banks, underscoring a shift in money and power towards fast-growing alternative asset management firms.

Kravis and Roberts co-founded KKR in 1976 and helped pioneer the buyout industry. When they stepped down as co-chief executives in October they passed management of KKR to co-chief executives, Joe Bae and Scott Nuttall. As part of that succession, Bae and Nuttall were granted stock awards whose value was marked at about $450mn at year-end after an 85 per cent increase in KKR's share price.

The award could exceed $1bn over the next several years if the share price continues to soar.

Bae and Nuttall in 2021 each received over $55mn from carried interest, bonuses of $24.7mn and roughly $10mn in dividends on their stakes in KKR.

Top executives at private equity firms typically receive salaries that are modest compared with their right to receive carried interest, a share of profits on successful investments. Founders such as Kravis and Roberts are also large shareholders, meaning that they receive dividend income.

The dividend income and carried interest pay of KKR's top executives greatly exceeded the total pay and income earned last year by bank chief executives such as JPMorgan Chase's Jamie Dimon and Goldman Sachs's David Solomon.

However, their haul was far less than at Blackstone Group, the largest private equity firm by assets under management. Schwarzman and the firm's president, Jonathan Gray, received dividends of $941mn and $167mn, in part reflecting different policies at Blackstone and KKR.

Blackstone pays out about 85 per cent of its distributable profits in the form of dividends to shareholders. It increased its payout 80 per cent in 2021 as buoyant financial markets and inflows of assets swelled profits.

KKR's after-tax distributable profits soared 121 per cent in 2021 to nearly $4bn, but the group paid out less than 15 per cent of those profits in the form of dividends.

New York-based KKR, which has $471bn in assets under management, prefers to retain the majority of its profits to reinvest in its funds and make acquisitions. The group holds over $25bn in net assets on its balance sheet, a significant portion of its overall $50bn-plus market capitalisation. KKR announced it would increase its dividend 8 per cent in 2022.

Airbus seeks $220mn in damages from Qatar carrier

SYLVIA PFEIFER — LONDON

Airbus is seeking $220mn in damages from Qatar Airways in the latest salvo of a dispute between the European business and one of its big customers.

The Toulouse-based company launched the claim in London's High Court as it defended itself against allegations from the carrier over damage to the surface of its A350 widebody aircraft.

Qatar Airways launched legal action against Airbus in December, seeking $600mn over what it called "accelerated surface degradation" of the A350.

The airline, which runs 34 A350-900s and 19 A350-1000s, has grounded 21 of its jets on the orders of its regulator.

It announced yesterday that one more jet had been grounded, bringing the total to 22. It has another 23 on order but has halted further deliveries.

Airbus's $220mn claim is over two completed A350s that are ready to be delivered. The company would normally be able to resell the aircraft, but it has agreed not to do so pending a judgment on an injunction filed by Qatar Airways to prevent the contracts being cancelled. Airbus also wants to recover millions of dollars of credits it had awarded Qatar Airways.

Airbus yesterday reiterated that the aircraft were safe, saying no other operator had grounded the planes and the EU Aviation Safety Agency had deemed the surface degradation issues non-structural. It had carried out a "full root cause analysis", including a "fleet-wide investigation in relation to surface degradation on A350s generally" to "identify potential enhancements which might address or mitigate this issue".

It said Qatar Airways had rejected proposed repairs, and accused the airline of mislabelling the issues as safety issues in order to claim compensation.

It reserved the right to argue that Qatar Airways and its regulator had "wrongfully colluded or conspired and/or otherwise acted together in bad faith in relation" to the groundings.

Qatar Airways was not immediately available for comment yesterday. It had said earlier that "neither Qatar Airways nor its legal team are aware of any efforts by Airbus to try to resolve the situation in an amicable way; in fact, the actual situation is to the contrary."

The airline has sought to enforce a separate contract with Airbus for 50 A320neo aircraft that was cancelled by the plane maker last month.

Signs of a turning tide for the fortunes of public markets

INSIDE BUSINESS
FINANCE
John Plender

Against a background of geopolitical turmoil, investors are increasingly questioning whether central banks will once again come to the rescue of sinking public markets.

They have to worry, too, that the market fallout from Russia's invasion of Ukraine may highlight what Mohamed El-Erian has called a structural erosion of public market liquidity.

Compare and contrast with the position of private equity. Despite fears that highly leveraged private equity-backed companies would inflict losses on the banking system during financial crises, they have thrived and invested aggressively through the crisis of 2007-09 and the current pandemic. Private equity enjoys a capacious safety net of global dry powder — commitments made by ultimate investors that have yet to be disbursed — amounting to $3.4tn.

Institutional investors continue to seek to capture an illiquidity premium in private markets. Witness how Calpers, the largest US public pension plan, decided last November to raise its allocation to private equity from 8 to 13 per cent while putting 5 per cent into private debt. Its global public equity exposure is to be cut from 50 to 42 per cent.

That may sound like one more nail in the coffin of public markets. Yet they may nonetheless be about to make a modest comeback. The starting point is, admittedly, inauspicious. The OECD says 30,000 groups have delisted globally since 2005, an exodus that has not been matched by new listings. And within the OECD club of nations, there has been a net loss of listed companies every year from 2008-19.

A report by Morgan Stanley's Michael Mauboussin and Dan Callahan has shown that today's 3,600 US public companies are about half the number in 1996, reflecting takeover activity, buyouts and a low level of initial public offerings. Also that between 2009 and 2019, US companies raised more money in private markets than in public markets each year — often a great deal more.

Structural change in advanced economies is one impetus for company shrinkage, notably via the rise of the high-yield bond market, which facilitates buyouts; also through a secular decline in the intensity of capital required to produce goods and services.

> Given private equity's higher leverage more generally, rising interest rates will constitute a tilt in favour of public equity

In the late 1970s, tangible investments in the US were nearly double those of intangibles, according to the Morgan Stanley report. Today, by contrast, intangibles are one and a half times larger than tangible investments.

Unquoted tech companies, which often have the backing of savvy venture capitalists, do not need capital for investment in physical assets. If they come to market it is to provide backers with an exit or to acquire a currency — equity — to pay for acquisitions or reward employees. Those that do float may be the subject of anti-competitive acquisitions by Big Tech companies.

Meanwhile, deregulation — such as looser limits on the number and type of investors permitted in a private company — has made it easier to stay private. More buyout-backed businesses in the US are now sold to other buyout firms than find a public exit. Deterrents to the IPO route include rising flotation costs and the increased regulatory burden in the quoted sector.

What cannot be overemphasised in all this is the extent to which the extraordinary boom in private markets is the product of ultra-loose monetary policy since the financial crisis. Central banks have started to reverse this.

And tightening will expose those leveraged buyout firms that have thrived on crude financial engineering whereby they load investee companies with debt while extracting huge dividends, so potentially wrecking those companies' balance sheets. Given private equity's higher leverage more generally, rising interest rates will constitute a tilt in favour of public equity.

At the same time, competition policy is tightening towards Big Tech in both North America and Europe. Acquisitions driven by the desire to remove potential competition are in the regulators' sights.

That implies a potential reduction in delistings. Finally, valuations in private equity have been driven so high by the weight of institutional money and loose monetary policy that the illiquidity premium the institutions seek may be close to vanishing.

There can be no gainsaying that in a period of rising inflation, floating-rate private credit offers attractive protection against interest rate increases. But a little of the gloss may finally be coming off private equity relative to the public variety.

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Media

Platforms in information war crossfire

Big Tech told by leaders to remove Kremlin-backed outlets from their services

HANNAH MURPHY — SAN FRANCISCO
JAVIER ESPINOZA — BRUSSELS
MAX SEDDON — MOSCOW

Western governments are pushing for social media groups to remove Russian state-backed media from their platforms as Big Tech is dragged into the information war that has raged following Vladimir Putin's decision to invade Ukraine.

Meta-owned Facebook and Google's YouTube are among those facing calls from the EU to remove content from Russia Today, Sputnik and other Kremlin-backed outlets in an effort to throttle pro-Russia propaganda.

Attempts by the same companies to remove misinformation and employ fact checks have met accusations of censorship from Russia, which has begun restricting access to Facebook in the country and levelling threats to do the same at YouTube.

The claims and counterclaims over the war in Ukraine has placed Silicon Valley companies in the middle of a geopolitical battle for influence, given their position as gatekeepers to information seen by billions of consumers.

Ursula von der Leyen, president of the European Commission, on Sunday said she planned to "ban in the EU the Kremlin's media machine", though it is unclear how the policy will be enforced.

The prime ministers of Estonia, Latvia, Lithuania and Poland have signed a joint letter directed to the heads of Meta, Google, YouTube and Twitter demanding a clampdown on Russian state media on their platforms.

Both YouTube and Facebook have blocked access in Ukraine to RT and several other state-backed outlets, following a request from the Ukrainian government. The platforms have also paused the ability for Russian state media channels to run advertisements on their platforms.

Facebook's head of security policy Nathaniel Gleicher said the company had received similar requests for Russian state media bans from "a number of different governments", and was weighing its next steps. He declined to comment on whether the company would consider a blanket global ban.

European commissioner Thierry Breton has urged Google chief executive Sundar Pichai and YouTube's Susan Wojcicki to consider bans, and to update their terms of service to ensure "war propaganda" never appears as "recommended" content to users, according to a person briefed on the call. Pichai said the latter could be a "good option", the person added. Both companies had to report the steps they have taken to tackle misleading propaganda to the commission by yesterday evening.

Silicon Valley's social media platforms, which have cast themselves as politically neutral but committed to democratic free speech, have long struggled to prevent their platforms from being manipulated for information warfare. This includes clandestine activity by troll farms and bots directed by the Russian government, one of the most active actors in the space.

The potential removal of state media would mark a new frontier for the social media platforms, which have tended to focus more on removing covert operations rather than any domestic propaganda apparatus. It also carries the risk Russia will expel European media from Ukraine after it shut down broadcaster Deutsche Welle's Moscow bureau last month in response to Germany's refusal to let RT broadcast.

Aerospace & defence

Germany's arms makers bolstered by €100bn pledge on spending

JOE MILLER — FRANKFURT
SYLVIA PFEIFER — LONDON

Shares of Germany's listed defence contractors soared yesterday after Chancellor Olaf Scholz declared that the country would pour more than €100bn into modernising its depleted armed forces.

Stock of Rheinmetall, which makes tanks and armoured vehicles for Nato countries, finished 25 per cent higher Frankfurt, while shares in Munich-based Hensoldt, which makes electronic sensors and is part-owned by US private equity group KKR, leapt by 42.6 per cent.

BAE Systems shares also closed 10.2 per cent higher in London. The British group has a joint venture with Rheinmetall.

Defence companies have previously been shunned by some institutional investors, which are mandated not to invest in weaponry.

But Germany's new commitment to spend more than 2 per cent of annual gross domestic product on defence in the face of Russian aggression, alongside a one-off €100bn, has already led to analysts upping their share-price targets for the contractors.

Scholz's unexpected announcement on Sunday came days after German general Alfons Mais took to LinkedIn to declare that the "Bundeswehr [Germany's armed forces], the army that I have the privilege of leading, is more or less bare".

He added: "The options that we can offer the politicians to support the alliance are extremely limited."

One European industry executive also cautioned that it would take time for Germany's defence boost to translate into material orders.

"We need to understand what the government wants. As of this morning, we have not had any discussions yet. Cycles are quite long in this industry," he said.

"It takes quite a bit of time to build these types of equipment. While more immediate orders for munitions were more likely, any munitions would need to fit with what Ukraine needed in the short term."

Hensoldt, a spinout from Airbus whose products are incorporated into fighter jets and navy vessels, already relies on German contracts for more than half of its sales. The German development bank KfW is its largest shareholder, giving Berlin the ability to block a hostile takeover attempt.

About a third of sales at Rheinmetall, whose origins date back to the 19th century, are connected to German contracts. Rheinmetall had already in February posted record results for the last financial year, and has seen increased demand since the Russian invasion of Crimea in 2014.

Submarine-maker Thyssenkrupp also benefited from Scholz's announcement, with shares closing 11.4 per cent. Shares in Jenoptik, whose electro-optical thermal imagers and rangefinders are used for military reconnaissance, finished up by 6.8 per cent.

With Nato forces being deployed to Ukraine's neighbouring countries, industry experts expect spending to increase on items such as ammunition.

Analysts at Jefferies highlighted Britain's BAE Systems and Chemring among those companies likely to benefit.

Additionally, Germany's decision to reverse course is expected to boost spending on several pan-European programmes, including the Future Combat Air System to build a new fighter jet that has been mired in disagreements between its industrial partners.

Technology. Cyber security

'Critical infrastructure' groups fortify defences

Anti-malware companies' shares rise as Ukraine war sparks fears over Russian-backed hackers

MEHUL SRIVASTAVA — TEL AVIV
HANNAH MURPHY — SAN FRANCISCO
GARY SILVERMAN — NEW YORK

Russia's assault on Ukraine has led shares in major cyber security groups to rise as investors bet that demand for their products will grow amid fears that battlefield cyber attacks will spill over to computers around the world.

The discovery in Ukraine last week of a "wiper" malware, which permanently deletes data on infected computers, accelerated a rush by companies to bolster their defences.

Shares in CrowdStrike, which uncovered Russian hackers inside the servers of the US Democratic National Committee in 2016, are up more than 10 per cent since last Thursday, while those in prominent threat intelligence company Mandiant are up nearly 8 per cent and California-based Palo Alto Networks up more than 18 per cent.

Critical infrastructure groups, such as financial institutions, pipelines and aviation and electricity companies, were also urged to prepare for the possibility of debilitating attacks from Russia or Russia-affiliated actors, such as criminal ransomware groups, in the event of an escalation of cyber warfare.

"This is not business as usual. There's a war happening in Europe and war has evolved — the technologies we rely on can give opportunities for bad actors," said Chris Krebs, former director of the US Cybersecurity and Infrastructure Security Agency and head of consultancy Krebs Stamos Group.

"Given the heightened tensions, the fact that Russians have significant capabilities and given they have targeted us in the past for intelligence collection and other sorts of disruptive attacks . . . we need to take the time we have in front of us to be prepared," he said.

Intelligence agencies have warned for months that Russia's assault on Ukraine would be accompanied by cyber attacks, including repeats of assaults on infrastructure, such as the blackouts in 2015 in Kyiv that were blamed on Russian intelligence. The US Cybersecurity and Infrastructure Security Agency warned of "consequences for our own nation's critical infrastructure", urging US companies to fortify their defences with the tagline "shields up".

President Joe Biden last week hinted at a possible tit-for-tat response: "If Russia pursues cyber attacks against our companies, our critical infrastructure, we are prepared to respond."

Reuven Aronashvili, who helped create the Israeli army's "Red Team" unit and now runs cyber security company CYE, said corporations were flooding his company with requests for help. "We are seeing a very significant increase . . . we've seen almost a 10-fold increase in demand."

He added that Russian organisations were also preparing for the possibility of being caught up in retaliation attacks from the west, something that he had not witnessed before.

Theresa Payton, a former White House chief information officer who is now chief executive of cyber security consultancy Fortalice Solutions, said that the FBI "has been putting out bulletins about different concerns they have" through its InfraGard system, a partnership with the private sector designed to foster "the protection of US critical infrastructure". In particular, there are fears that the wiper malware, which has been in some Ukrainian computer systems since December, could spread.

High alert: companies fear cyber warfare will spill into the civilian sphere. Below, Theresa Payton, former White House chief information officer, now head of Fortalice Solutions — Chris Ratcliffe/Bloomberg; Matthew Eisman/Getty Images

A similar 2017 malware, nicknamed "NotPetya" and attributed by US intelligence to Russia, caused $10bn of damage to computer systems worldwide after "jumping the rails" of the Ukrainian targets it was designed to disable and hitting big companies such as Maersk.

This time around, the malware does not appear to spread as fast initially but destroys data so efficiently that it makes infected systems inoperable, experts said. It is similar to a wiper malware discovered in January by Microsoft that had already spread to computers in Latvia and Lithuania — both Nato countries. Neither pieces of malware have been attributed directly to Russia.

Some Ukrainian government websites have been brought down by "denial of service" attacks, where hackers use bots around the world to bring down websites by flooding them with requests for information. The US has blamed one of these attacks directly on Russia.

Experts warn that more sophisticated attacks could soon be in play.

"What we have seen by and large in the Russian attacks in Ukraine have been low-level harassment-type attacks," said Greg Austin, who leads the Cyber, Space and Future Conflict Programme at the International Institute for Strategic Studies. "In a sense we see that what the Russians were doing was experimental . . . they haven't unleashed the full destructive potential they are planning to."

> 'The cyber market is just beginning and a little cyber war will cause the market to be much, much bigger'

Suzanne Spaulding, security expert at the Center for Strategic and International Studies, warned that Russia might also deploy painful ransomware attacks if cyber warfare escalates.

These may not come directly from the Russian state but from state-affiliated criminal groups or other "surrogates", according to Mike Rogers, former director of the National Security Agency.

On Friday, the notorious Conti criminal ransomware group, responsible for a big attack last year on the Irish healthcare system, announced that it was lending the Russian government its "full support" and would use its resources to "strike back at the critical infrastructures of an enemy".

Shlomo Kramer, a co-founder of Checkpoint and chief executive of cloud security group Cato Networks, said that the rush by companies to prepare themselves was the result of a lack of awareness, rather than capabilities.

"The cyber market is just beginning and a little cyber war will cause the market to be much, much bigger," he said. "There needs to be enough pain before the market can jump to the next level."

Additional reporting by Joshua Franklin in New York

Banks

Canada's TD to pay $13.4bn for First Horizon

JAMES FONTANELLA-KHAN — LONDON

TD Bank Group of Canada has agreed to buy US regional rival First Horizon for $13.4bn, a move that will turn the Toronto-headquartered business into the sixth-largest lender in America.

TD Bank will pay First Horizon shareholders $25 per share in cash, a 37 per cent premium on the US bank's closing stock price on Friday. As part of the deal announced yesterday, First Horizon's chief executive Bryan Jordan will join TD as vice-chair, while TD's head of US retail banking, Leo Salom, will lead the combined group.

Toronto-Dominion Bank and its subsidiaries have been on a buying spree in the US since the mid-2000s as it amassed assets to become a leading consumer banking player in North America. It first acquired Banknorth of Maine in 2004 and then bought Hudson United for $1.9bn in 2005 and Commerce Bancorp for $8.9bn in 2007.

Canadian banks have been aggressively expanding in the US in recent years as stringent regulation for large US rivals has made it easier for financial institutions north of the border to act as consolidators of the fragmented American banking industry.

Large US regional banks, including PNC Financial and BB&T, have also sought to consolidate by buying smaller rivals. PNC acquired the US operations of Spain's BBVA for $11.6bn in 2020, creating the fifth-largest bank in America, and a year earlier BB&T combined with SunTrust to form a large financial institution across the east coast of America.

Bharat Masrani, chief executive of TD Bank Group, said the First Horizon acquisition "provides TD with immediate presence and scale in highly attractive adjacent markets in the US with significant opportunity for future growth across the south-east".

The addition of the Memphis-based regional bank will bolster the US assets of the Canadian bank to $614bn, with a network of 1,560 branches and almost 11mn consumers. First Horizon has a strong presence in the south, particularly in Tennessee and Louisiana as well as in Florida, the Carolinas and Virginia.

TD Securities and JPMorgan served as financial advisers to TD Bank, and Simpson Thacher & Bartlett and Torys acted as legal advisers to TD. Morgan Stanley was the financial adviser to First Horizon and Sullivan & Cromwell served as legal adviser.

Financials

Li insurer FWD lines up $1bn Hong Kong float

HUDSON LOCKETT — HONG KONG

FWD, the insurer founded by a son of tycoon Li Ka-shing, has filed for a Hong Kong initial public offering that aims to raise at least $1bn after its attempt to list on Wall Street came under scrutiny from US regulators last year.

The share sale by the rapidly expanding insurer started by Richard Li in 2013 underscores Hong Kong's vital role as a China-friendly offshore centre, as US regulators apply greater scrutiny to mainland Chinese and Hong Kong groups that seek to list in New York.

FWD submitted the application for its Hong Kong listing yesterday, according to an exchange filing. People familiar with the situation said it would seek to raise at least $1bn and would price the share offer in May at the earliest.

At $1bn, the IPO would mark the largest listing for the city in more than five months.

Hong Kong's pipeline of IPOs has been severely curtailed since early July, when Beijing launched a regulatory crackdown on offshore listings by China tech groups.

FWD had turned to New York last year after being told it did not qualify to list as an innovative group in Hong Kong, a requirement for issuers seeking weighted voting rights which help founders maintain control.

But FWD encountered intense scrutiny from the Securities and Exchange Commission, the US regulator, over its ties with China, one of the people said, with political tensions prompting it to withdraw its application in December.

The person said that while the insurer had sought to raise as much as $3bn when it filed for the US listing, the target range for the Hong Kong offer reflected adjustments after FWD brought in about $1.6bn from funding rounds in December and January.

Li started FWD with the acquisition of ING's pension and insurance businesses in Thailand, Hong Kong and Macau for $1.2bn.

The group, which has focused on expanding in new markets across the region by acquiring the Asian businesses of retreating rivals, has a limited presence in mainland China but substantial operations across 10 markets including Japan, Singapore, Vietnam and Malaysia.

Banks on the deal include JPMorgan, Morgan Stanley, Goldman Sachs and HSBC.

BP and Shell's Russia exits turn up sector heat

Total, Exxon, Trafigura and Glencore among oil companies and commodity traders heavily exposed to the country

TOM WILSON AND NEIL HUME — LONDON

Vladimir Putin's invasion of Ukraine has forced the biggest reappraisal of corporate relations with Russia for a generation, leaving oil executives and commodity traders with a choice between clinging on to lucrative commercial ventures and heeding calls for divestment.

Russia is the third-largest oil producer, the biggest exporter of gas, and for most of the past decade was viewed as the most promising exploration and development destination.

Western sanctions have sought to avoid restricting oil and gas exports, and some of the companies say they can continue to operate in the country.

But decisions by BP, Shell and Norway's Equinor to cut ties with their Russian partners have increased the pressure on the likes of TotalEnergies, ExxonMobil, Trafigura and Glencore to do the same.

"Other oil and gas companies must now follow suit," said Ed Miliband, the UK's shadow energy secretary. "It cannot be right that oil and gas companies continue to provide substantial investments into Russia after the unprovoked and outrageous invasion of Ukraine."

Christyan Malek, head of global energy strategy at JPMorgan, said BP's divestment pledge "should put the rest of the industry's feet on the fire".

While commodity groups had always operated in difficult parts of the world, even during periods of war, the pressure on companies today to adhere to higher environmental, social and governance standards meant this was "uncharted territory", he said.

"How do you advance a credible ESG agenda when you're in a country that's in a major conflict?"

Of the oil majors still operating in Russia, Total had the most commercial exposure now BP had decided to dump its 19.75 per cent stake in Rosneft and Shell was moving to end its partnerships with Gazprom, analysts said.

The French group has invested heavily in two projects in the Yamal peninsula in Russia's frozen north, as it seeks to build out its liquefied natural gas business alongside local "strategic partner" Novatek. Total owns 19.4 per cent of the Russian company, which has been under US sanctions limiting its access to finance since 2014 when Putin annexed Crimea. Total also has a 20 per cent and 10 per cent stake in two Novatek LNG projects.

Russia last year delivered 16 per cent of Total's oil and gas production, according to investment bank Jefferies, and cash of \$1.5bn.

Shell's Russian production represented 5 per cent of its total last year, Jefferies said. Russian expansion had previously been a priority for Shell's management, according to a person familiar with Shell's strategy.

Shell owns 27.5 per cent of Gazprom's Sakhalin-2 offshore LNG project in Russia's far east. Inaugurated in 2009, it produced roughly 11.6mn tonnes of LNG in 2020, of which 3.2mn tonnes will have flowed to Shell, representing about 10 per cent the company's production. Its withdrawal from the project could leave Shell short of LNG in east Asia at a time when prices for cargoes of the fuel are high and expected to keep rising.

The UK-listed oil major, one of five international energy groups that each committed to fund 10 per cent of the Nord Stream 2 pipeline between Russia and Germany, is also pulling out of that project. Last week Berlin said it was halting certification of the pipeline indefinitely and the US placed sanctions on the Gazprom subsidiary building it.

Shell's Russia business has long been contentious among some staff, not least because four Shell employees were among those killed when Malaysia Airlines flight MH17 was shot down over Ukraine in 2014.

Exxon has been operating in Russia for 25 years and employs more than 1,000 people in the country. In 2018 it withdrew from a series of joint ventures with Rosneft after the US expanded sanctions originally placed on the Russian company in 2014.

Exxon has continued to operate the Sakhalin-1 oil and gas project in partnership with two Rosneft units and companies from India and Japan. Exxon owns 30 per cent of the project, which has exported more than 985 mn barrels of oil and 29bn cubic metres of natural gas since production began in 2005.

Total and Exxon did not respond to requests for comment.

George Voloshin, a Russia expert with Aperio, said he expected more divestments. "There will be a domino effect spreading well beyond the energy sector and extending to a wide variety of joint ventures and affiliates." At least one oilfield services company was reviewing its Russian projects, he said.

Commodity traders are exposed. Swiss trading house Trafigura has built a strong relationship with Rosneft since helping it raise funds through short-term prepayment deals that were still permitted after the 2014 sanctions were introduced.

It strengthened that relationship in December 2020 when it agreed to buy 10 per cent of the €7.3bn Rosneft-led Vostok Oil project in the Arctic, in a deal that will also give Trafigura long-term access to cheap Russian crude. If all goes to plan, Vostok will develop a new oil-producing region on Siberia's Taymyr Peninsula to rival the US Permian Basin and Saudi Arabia's Ghawar oilfield. A consortium led by Vitol, the biggest independent oil trader, is also set to take a 5 per cent stake in the project.

Trafigura declined to comment. Vitol could not be immediately reached for comment.

People with knowledge of its thinking said Trafigura had no plans to sell its stake in Vostok. They described the investment as a "small, minority interest" in a project that will not start producing oil until 2024.

Trafigura and other traders had continued to lift Russian crude and were expected to continue to do so unless it was explicitly banned by western governments, bankers said.

While UK politicians have criticised the likes of BP and Shell for their Russian relations, sanctions have intentionally avoided blocking energy exports in a sign that western leaders remain willing to buy Russian oil and gas, even if some say they do not want western companies involved in its production.

London-listed Glencore owns a 0.5 per cent stake in Rosneft, worth \$195mn as at Friday's close, plus 25 per cent in Russneft, which it is poised to sell. It has a 10.5 per cent stake in En+, the metals group that has a controlling stake in aluminium producer Rusal.

"The combined \$920mn market value of these stakes is equivalent to 1.2 per cent of Glencore's \$77bn market capitalisation," said JPMorgan analyst Dominic O'Kane. "In addition, Glencore's marketing relationship and offtake contracts with various Russian commodity producers will be under scrutiny, including Rusal and Rosneft."

Glencore declined to comment.

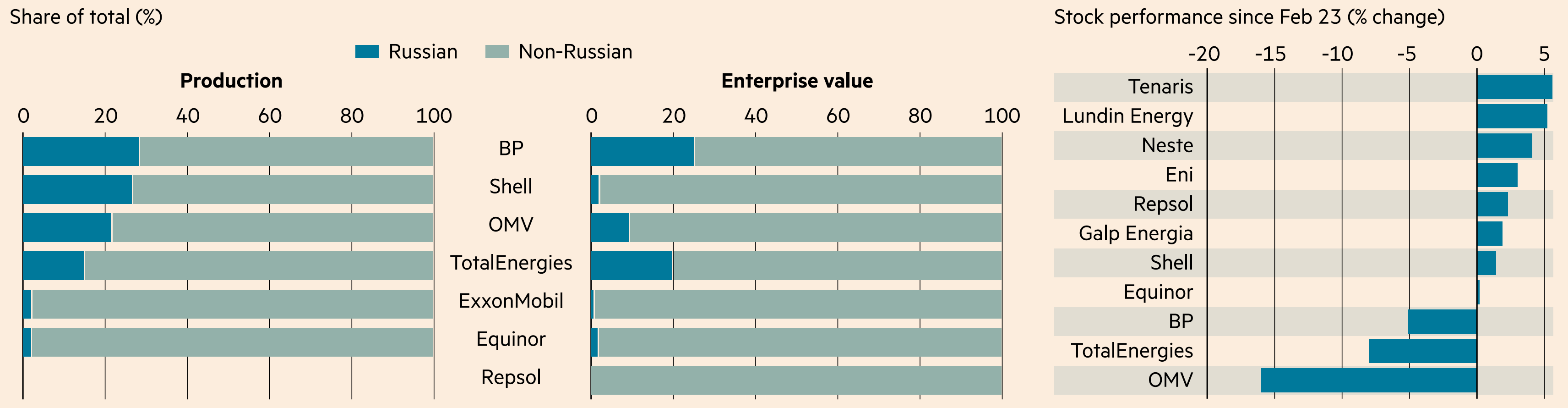
If more groups run for the exit, finding buyers for unwanted minority stakes in Russian assets will be hard. Some analysts have speculated that potential bidders could include Chinese or Middle Eastern groups such as the Qatar Investment Authority, which already owns 18 per cent of Rosneft. But any deal would be difficult to get over the line and come at a huge discount.

BP's decision to reclassify the investment and take a paper loss without triggering a fire sale or immediately writing down the stake to zero made a lot of sense, Aperio's Voloshin said. "It's absolutely the worst time to sell."

Additional reporting by Jim Pickard in London

See Lex

Big Oil's Russian exposure



Sources: Jefferies; Bloomberg

The Utrenneye field, the resource base for Novatek's Arctic LNG 2 project. French group Total owns a 19.4% stake in Russia's largest natural gas producer — Natalia Kolesnikova/AFP/Getty

> 'How do you advance a credible ESG agenda when you're in a country that's in a major conflict?'

> 'A domino effect [will] spread well beyond the energy sector and extending to a wide variety of joint ventures'

Airlines

Moscow's ban sends Finnair shares tumbling

PHILIP GEORGIADIS — LONDON
RICHARD MILNE — OSLO

Shares in Finnair fell sharply yesterday after the airline warned of a "significant" hit to its finances following the Russian invasion of Ukraine.

The company's stock dropped 21 per cent to €0.45 by the close of trading in Europe, one of the biggest fallers in the region, as Moscow banned it from Russian airspace.

The group has big exposure to Russia, building its business on growing demand for passenger and cargo flights connecting Europe with Asia, and uses its location to offer flight paths through northern Russia.

The group said Moscow's flight ban, announced yesterday in retaliation for EU's move to block Russian airlines from its skies, would make these routes uneconomical.

Moscow introduced like-for-like sanctions in response to bans on its carriers, barring 36 countries from its airspace including all of the EU.

"The negative financial impacts on Finnair will be significant especially if the situation prolongs," the company said in a statement.

Yesterday the Finnish airline announced the cancellation of all flights to Japan, Korea, China and Russia, but said it was looking at alternative routes for some flights to Asia.

Shares in other big European airlines also fell. Wizz Air, which is exposed to eastern Europe, lost 5 per cent of its value, while easyJet and British Airways owner IAG fell 4 per cent.

Russian equity markets were not open yesterday, but shares in Aeroflot have fallen 35 per cent over the past five trading days.

Finnair generated 44 per cent of its passenger revenue from its flights to 21 Asian destinations in 2019.

"Bypassing the Russian airspace lengthens flight times to Asia considerably and the operation of most our passenger and cargo flights to Asia is not economically sustainable," said Topi Manner, Finnair's chief executive.

Cross asset. Frozen out

Investors struggle with Russia trades as sanctions bite

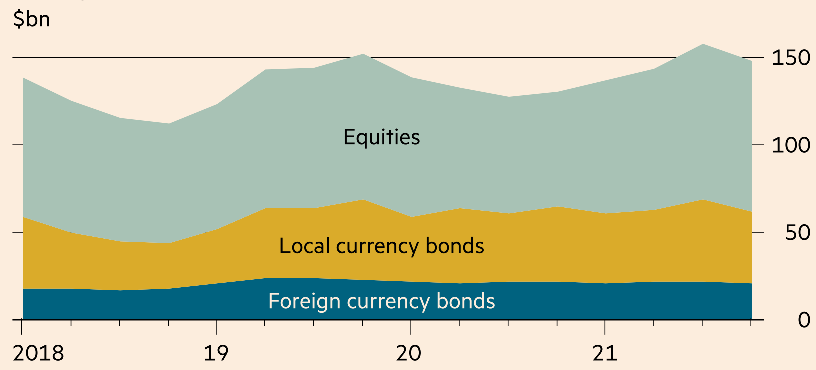
Russia has been targeted by a series of western sanctions
FT montage/Bloomberg

Foreign fund managers hold at least $150bn combined in the nation's stocks and bonds

PHILIP STAFFORD AND TOMMY STUBBINGTON

Foreign investors' exposure to Russian assets

$bn



Bond data refers to sovereign debt
Sources: Central Bank of Russia; Moscow Exchange; FactSet; FT calculations

Global investors with at least $150bn in Russian securities on their books are scrambling to find ways to execute trades after western sanctions froze the country out of the global financial system.

Foreign investors held $20bn of Russia's dollar debt and rouble-denominated sovereign bonds worth $41bn at the end of 2021, according to data from the Russian central bank. Holdings of Russian equities amounted to $86bn, Moscow Exchange data show.

But the exclusion of many Russian banks from the Swift payments network means foreign investors are now stuck, unclear how they can exit without falling foul of the new sanctions and unable to find counterparties who are willing and able to buy.

"Markets have priced an extremely conservative level across the board because frankly markets have just pulled back and said we are going to wait and see what happens," said Rick Rieder, chief investment officer of global fixed income at BlackRock, one of the biggest western holders of Russian sovereign debt, according to data from Bloomberg. "There's not a lot of actual trading going on. Nobody wants to be on the other side."

Over the weekend, western countries said they would bar some Russian banks from Swift, the messaging network that underpins global payments, while also blocking the central bank's ability to access $630bn in foreign reserves.

From today, the US will prohibit its financial institutions from buying new Russian government bonds. Most trading has stopped. The Russian central bank yesterday banned overseas institutions from selling local securities on the Moscow Exchange and suspended trading in shares and derivatives on the bourse all day.

Overseas stock exchanges, meanwhile, suspended trading in overseas listings of the country's best-known companies. Deutsche Börse, Germany's largest stock exchange operator, suspended trading in shares of 16 Russian companies, including Aeroflot, Rosneft, Sberbank, VTB and VEB Finance.

The value of London-listed securities like Sberbank, TCS and Gazprom plummeted yesterday but many traders also withdrew from making prices for fear of the repercussions — instead, choosing to wait for more guidance from their compliance departments.

One question for brokers and investors was whether their trading counterparts would be ejected from Swift. "I'm having to not trade Russia till I get a list," said one trader at an investment bank.

Illustrating those concerns, the London Stock Exchange said shares of VTB — a bank sanctioned by the US — remained available to trade.

Even so, the LSE warned its members to conduct their own due diligence and "take appropriate measures to ensure that they comply with any applicable sanctions, current or future".

The LSE will suspend trading in VTB from May 25 when an exemption from US sanctions on shareholdings of selected Russian banks expires, if sanctions are still in place.

Some brokers were concerned that, even if they managed to strike a deal, there was little guarantee it would be settled and the asset exchanged for cash.

Most cross-border trades are settled in US dollars and banks are responsible for managing the currency risk for such transactions. "It's just so messy. If you trade something you can't settle it and you're left with the exposure," said a trader at a US broker.

Those concerns were exacerbated by worries that payments for trades and coupons on bonds would be frozen in accounts at custodian banks or international securities depositories, where deals are settled and balances between central banks and commercial banks are updated.

The two largest depositories, Belgium's Euroclear and Clearstream, together hold about €50tn of assets in custody for global investors, making them a pillar of the financial system.

Deals are usually finalised by transferring balances between customer accounts held at the depository, or between the two market utilities.

Late yesterday, Clearstream said the rouble would no longer be an eligible settlement currency with immediate effect.

Euroclear said it would disable VTB, the main conduit between both customers of Euroclear and Clearstream, today and cease rouble denominated trades that take place outside Russia from March 3. It also said it could not accept incoming funds to its other correspondent bank, Dutch group ING.

Correspondent banking entails one bank providing services to another, often in a separate country.

Some brokers pinned their hopes on Euroclear finding a new regulatory-compliant bank in Russia. However, such a process can take time.

"Setting up a new correspondent bank relationship can take months," said Virginie O'Shea, founder of Firebrand Research, a capital markets consultancy. "It's a very onerous process. Generally you're encouraged to do onsite visits for due diligence or explain why you haven't."

Carsten Brzeski, global head of macro at ING, said Russia could counter the freezing of bank assets by introducing a moratorium on corporate debt repayments. President Vladimir Putin yesterday barred Russians from moving foreign currency abroad, hindering banks' foreign liability repayments.

BlackRock believes it possible that Russia could default on its bonds because of an inability to make payments to investors' accounts. "It's the difference between ability to pay and desire to pay," said Rieder.

'There's not a lot of actual trading going on. Nobody wants to be on the other side'

Fixed income

Ukraine plans military debt issuance to fund armed resistance

ROBERT SMITH AND TOMMY STUBBINGTON — LONDON

Ukraine is planning to issue a "military bond" to fund its armed forces in their battle against Russian invasion as the country sought to reassure international investors that it will not default on its debt.

The Ukraine finance ministry revealed its plans to raise money to fund its war effort with the announcement of a new bond auction scheduled for today. "In the time of military aggression of the Russian Federation, the ministry of finance offers citizens, businesses and foreign investors [the chance] to support the budget of Ukraine by investing in military government bonds."

On an investor call with bond fund managers yesterday, Ukraine's government commissioner for public debt management, Yuriy Butsa, described the exercise as a "military bond" aimed at "everyone who wants to support the budget in these troubling times".

"Unfortunately, it's not a regular exercise for us this time," he said. "I was not trained as a military expert, but now everyone has to be one."

Butsa told investors that the "initial plan of Russia actually failed dramatically", while underscoring that Ukraine's "government is fully functioning" and its "treasury operations is fully functioning" despite the military assault from the neighbouring nation.

The bonds will have a one-year maturity with the interest rate 'to be determined in the auction'

Ukraine's central bank has imposed capital controls as an emergency measure, which will make it difficult for overseas investors to participate in the auction, according to one fund manager on the call. But the bond should attract "decent local demand", the fund manager added.

The sale comes after a sharp plunge in the prices of Ukraine's existing bonds, as investors worry the Russian invasion will push Kyiv to default on its debt. Ukraine's dollar bond maturing in 2032 dropped to a price of 31 cents on the dollar yesterday.

"We are not planning any restructuring and we will honour our debt accordingly," Butsa said, adding that the "money is on the way already" for Ukraine to make a scheduled coupon payment of about $290mn to international bondholders due today.

Under sustained questioning from investors, Butsa pushed back on the notion that the country might alter its policy of servicing its debt on time if the war dragged on, noting that Ukraine's $18bn debt restructuring in 2015 had curtailed its access to debt markets for a long time.

The Ukrainian finance ministry said the new bonds would have a one-year maturity with the interest rate "to be determined in the auction".

Commodities

Polymetal surrenders half its value as 'wall of sellers' responds to hostilities

NEIL HUME
NATURAL RESOURCES EDITOR

FTSE 100 gold producer Polymetal lost half its market value yesterday as the west ramped up sanctions on Russia over its attack on Ukraine and one of its biggest shareholders prepared to sell.

Shares in the London-listed company, which operates eight mines and a state of the art processing plant in Russia and Kazakhstan, dropped 56 per cent to 351.2p, its lowest level since listing in the UK more than a decade ago.

"There is a wall of sellers and very few buyers," said Jonathan Guy, analyst at Berenberg. "It's a crazy market."

Norway's sovereign wealth fund, one of Polymetal's top 10 shareholders, has said it will dump all of its Russian investments as part of a wider package of support for Ukraine.

Analysts expect Polymetal, whose £1.6bn value is down from £7bn a year ago, to declare a final dividend of 75 cents a share when it reports results tomorrow.

Analysts reckon the money needed to cover the dividend has already been sent to Polymetal's bank account in Cyprus but the company could decide not to make the payment and preserve cash. "Obviously that's a big concern for Polymetal shareholders because a lot of them hold it for the dividend as much as the gold exposure," said Guy.

Polymetal makes most of its revenue from selling gold to Russian banks, which in turn dispose of the metal on international gold markets. But it also sells concentrated gold ore to China where it is processed by local smelters.

With domestic Russian banks effectively cut off from the international banking system, domestic producers will be looking to Russia's central bank as the buyer of last resort, according to analysts. This should provide them with the roubles needed to pay wages and supplies.

The Russian gold producer is being dumped by Norway's wealth fund

The London Bullion Market Association, which oversees London's $5tn gold market, has already revoked the membership of three Russian banks — Otkritie, VTB and Sovcombank.

Russia's central bank on Sunday said it would resume gold purchases two years after it ended a long-running buying spree.

Russia's central bank stepped up its purchases of gold following the annexation of Crimea in 2014 and at the end of November last year was sitting on a hoard of just under 2,300 tonnes, according to the World Gold Council.

At current prices, its gold stockpile — the sixth largest in the world — is worth $153bn and accounts for roughly a fifth of the bank's official reserves.

Polymetal was not the only Russian gold miner hit hard yesterday, with Petropavlovsk falling 15 per cent to a three-year low of 8p.

Fixed income

Moscow's bonds knocked after fresh western action sparks default fears

TOMMY STUBBINGTON, ROBERT SMITH AND ROBIN WIGGLESWORTH

Russian bonds tumbled yesterday as investors braced themselves for the possibility that the latest round of western sanctions on Russia could push Moscow to default on its debt for the first time since 1998.

US and European moves to cut Russia off from the global financial system have fanned concerns that foreign holders of Russian debt will not be able to receive interest or principal payments.

Sanctions against the Russian central bank are expected to seriously hamper its attempts to deploy its more than $600bn of foreign reserves to shore up its finances, leaving markets weighing the possibility that a country with debt of only 20 per cent of gross domestic product could fail to repay lenders.

President Vladimir Putin yesterday fanned fears over a government default by announcing a ban on all Russian residents from transferring foreign currency abroad, including to service overseas debts.

"A Russian default is now a real possibility," said Tim Ash, economist at BlueBay Asset Management. "It's utterly staggering how the mighty have fallen."

Russia's dollar-denominated bonds plummeted yesterday with its largest — a $7bn bond maturing in 2047 — halving in price to 33 cents on the dollar, a level associated with high levels of distress, according to Tradeweb data.

The moves came after S&P Global downgraded Russia's credit rating to "junk" status on Friday.

'A default would be of macroeconomic significance as we saw post the Greek debt crisis'

The cost of buying derivatives that insure against a Russian debt default soared. The price of Russian credit default swaps, which offer holders an insurance-like payout if the country defaults, rose sharply with five-year CDS surging 20 percentage points to 37 per cent on an "upfront" basis, according to traders in the derivatives market.

CDS flips to being quoted on an "upfront" basis when fears of financial distress become elevated. This is because the cost of buying protection against default soars well above the standard running cost defined in the derivative contracts, so traders start quoting the additional payment they require at the start of the transaction.

The trading levels yesterday mean it would cost $37mn to insure $100mn of debt against default for five years, on top of $1mn a year in premiums.

Some investors cautioned against reading too much into bond prices. "I think the current pricing might be depressed by forced liquidation and does not correctly reflect default probabilities," said one fund manager.

Ray Attrill, a strategist at National Australia Bank, warned that a Russian sovereign default would also echo through the European banking system, estimating that banks in France and Italy each own about $25bn of Russian government bonds, and Austrian banks held roughly $17.5bn of exposure. "A default would be of macroeconomic significance. It would have significant implications for bank balance sheets and lending capability — as we last saw post the 2011-12 Greek debt crisis."

The day in the markets

What you need to know

- European banks plummet as some Russian lenders are locked out of Swift
- Global oil benchmark firms above $100 a barrel
- Flight to safety sends core government bond yields down sharply

Wall Street and European stocks fell, oil prices rose and the rouble plunged after new sanctions imposed on Russia heightened tensions across markets.

The S&P 500 benchmark was down 0.8 per cent at midday in New York while the technology-focused Nasdaq Composite was flat.

Across the Atlantic, the region-wide Stoxx Europe 600 index closed only 0.1 per cent lower, having earlier been down almost 2 per cent.

But the continent's banks sank 4.5 per cent as traders responded to uncertainty about western allies locking some Russian lenders out of the Swift payments system.

The moves came after Vladimir Putin put his country's nuclear forces on high alert and western powers imposed sanctions on Russia's central bank.

Global equities had rallied on Friday as traders took note that punitive measures against Russia had steered clear of the nation's energy exports. But after these fresh financial sanctions during the weekend, fund managers de-risked their portfolios, closing out strong bets on the global economy and loading up on low-risk and easily tradeable assets.

"Investors are reducing their active bets," said Michael Metcalfe, head of macro strategy at State Street. "Right now is a time to take stock, reduce positions and try to assess all the possible outcomes that could arise" from the geopolitical situation, he said.

Brent crude, the international oil benchmark, rose 3 per cent to $101.89 a barrel. Futures linked to TTF, Europe's wholesale natural gas price, rose 15 per cent to €106 per megawatt hour.

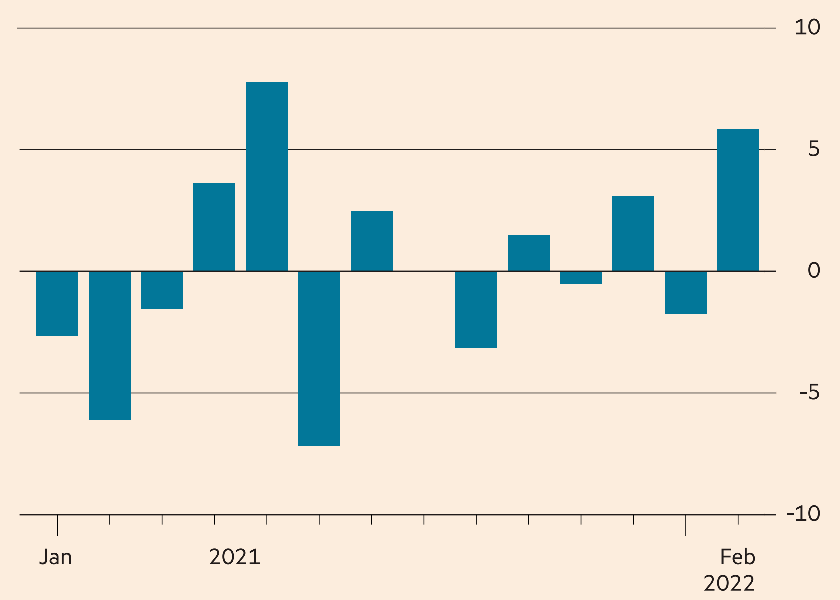
The unease made the relative safety of core government debt appealing. Germany's 10-year Bund rallied, sending its yield down 7 basis points to 0.16 per cent. The equivalent US Treasury was even more sought-after, leaving its yield sliding 11bp to 1.87 per cent.

"It's a flight to safety," said Tatjana Greil Castro, co-head of public markets at credit investor Muzinich & Co.

Gold was another in-demand asset, firming about $1,900 per troy ounce, up more than 5 per cent in February — its best month since May last year.

The rouble dropped as much as 29 per cent to almost 118 against the dollar yesterday morning, later trimming some of its falls. It came after Russia's central bank more than doubled interest rates to 20 per cent and banned the foreign selling of local securities in a bid to stem fallout from sanctions. **Naomi Rovnick**

Haven asset gold heading for best month since May last year
Gold price ($ per troy oz), monthly % change



Source: Refinitiv

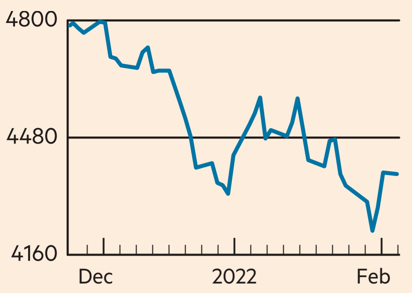
Markets update

	US	Eurozone	Japan	UK	China	Brazil
Stocks	**S&P 500**	**Eurofirst 300**	**Nikkei 225**	**FTSE100**	**Shanghai Comp**	**Bovespa**
Level	4380.48	1771.61	26526.82	7458.25	3462.31	113141.94
% change on day	-0.10	-0.21	0.19	-0.42	0.32	1.39
Currency	**$ index (DXY)**	**$ per €**	**Yen per $**	**$ per £**	**Rmb per $**	**Real per $**
Level	97.059	1.123	115.175	1.342	6.311	5.152
% change on day	0.460	-0.178	-0.350	0.000	-0.045	-0.073
Govt. bonds	**10-year Treasury**	**10-year Bund**	**10-year JGB**	**10-year Gilt**	**10-year bond**	**10-year bond**
Yield	1.872	0.133	0.180	1.281	2.788	11.212
Basis point change on day	-11.370	-9.300	-2.300	-8.300	0.200	-6.200
World index, Commods	**FTSE All-World**	**Oil - Brent**	**Oil - WTI**	**Gold**	**Silver**	**Metals (LMEX)**
Level	458.75	98.28	95.93	1884.80	24.21	4840.40
% change on day	-0.37	-0.11	4.54	-2.66	-4.37	-0.49

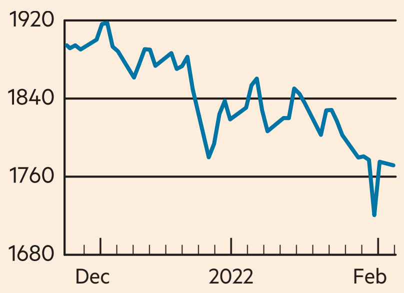
Yesterday's close apart from: Currencies = 16:00 GMT; S&P, Bovespa, All World, Oil = 17:00 GMT; Gold, Silver = London pm fix. Bond data supplied by Tullett Prebon.

Main equity markets

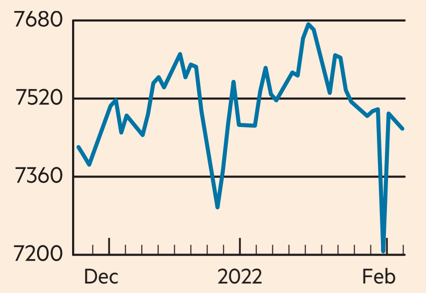
S&P 500 index



Eurofirst 300 index



FTSE 100 index



Biggest movers

%	US		Eurozone		UK	
Ups	Occidental Petroleum	10.38	Thales	11.87	Bae Systems	10.20
	Tesla	7.93	Thyssenkrupp	11.42	Bunzl	7.57
	L3harris	7.17	Grifols	7.69	Hikma Pharmaceuticals	6.99
	Northrop Grumman	7.13	Vopak	5.56	Barratt Developments	6.30
	Devon Energy	6.78	Coloplast	5.27	Antofagasta	5.08
Downs	Dentsply Sirona	-7.53	Raiffeisen Bank Internat	-14.01	Polymetal Int	-56.01
	Ipg Photonics	-4.55	Societe Generale	-9.89	Evraz	-29.29
	Ppg Industries	-3.99	Erste Bank	-9.48	Mondi	-12.03
	Int Paper Co	-3.94	Unicredit	-9.48	Coca-cola Hbc Ag	-10.86
	Philip Morris Int	-3.71	Omv	-7.99	Standard Chartered	-4.79

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

Pharma group **Viatris** tumbled after revealing that it had agreed to a $264mn settlement of a class-action lawsuit.

The company, formerly known as Mylan, was accused during a 2016 congressional grilling of raising the price of its EpiPen allergy injection by almost 5,000 per cent so its executives could get "filthy rich".

The case alleged that Mylan and Pfizer, which manufacture and sell the EpiPen, "violated certain state antitrust laws".

The settlement contained no admission of liability with Viatris maintaining it had "acted lawfully and pro-competitively".

A tie-up with Amazon sent virtual healthcare provider **Teladoc** rallying.

It is launching voice-activated medical support on the retailer's Echo smart speaker devices.

An earnings miss weighed on **Dentsply Sirona**, a dental equipment manufacturer.

Adjusted fourth-quarter earnings of $0.76 per share — down from $0.87 for the same period a year earlier — were 3¢ short of the Refinitiv-compiled estimate.

The heightened risk of cyber attacks triggered by the Ukraine conflict lifted tech security groups such as **Check Point** and **CyberArk**.

A transatlantic rally in defence stocks pushed contractors **Lockheed Martin**, **Northrop Grumman** and **L3Harris Technologies** sharply higher. *Ray Douglas*

Europe

The ramping-up of sanctions and penalties against Russia weighed on stocks, although there were some clear winners and losers.

Rheinmetall, which makes weapon and munition systems, rose 25 per cent after Chancellor Olaf Scholz said Germany would plough more than €100bn into upgrading its armed forces.

Chloe Lemarie, an analyst at Jefferies, said Scholz's decision would probably influence the military spending of Germany's neighbours, translating into "even greater top-line growth potential for the defence industry over the coming years".

Taufkirchen's **Hensoldt**, which manufacturers sensors for the defence sector, surged as did Essen's **Thyssenkrupp**, which makes non-nuclear submarines.

Military aircraft makers **Dassault Aviation** in France and Sweden's **Saab** also jumped.

Austrian bank **Raiffeisen**, which bought Moscow-headquartered Impexbank in 2006, dived alongside France's **Société Générale**, which owns Rosbank and **UniCredit** in Italy, which operates in Russia through AO UniCredit Bank.

Finland's **Nokian Tyres** also plummeted after withdrawing its financial guidance for 2022 owing to "significant uncertainty related to Russia". *Ray Douglas*

London

Energy major **BP** sank on news that it was planning to offload its 19.75 per cent stake in Russian state-oil company Rosneft as the war in Ukraine intensified.

Changes in the accounting treatment of the Rosneft stake would lead to two "material non-cash" charges in its first-quarter results that could amount to as much as $25bn, it said.

Russ Mould, investment director at AJ Bell, said BP was in "a weak negotiating position and may have to accept a cut-price deal".

BAE Systems, the UK's largest defence and security company, jumped as it benefited from a further uptick in military stocks following Germany's decision to spend 2 per cent of its gross domestic product annually on defence.

Chemring, which provides solutions for electronic warfare, and **Qinetiq**, created from the 2001 privatisation of the Defence Evaluation and Research Agency, also rallied.

McColl's, the convenience store chain, tumbled more than 60 per cent after confirming that it had "recently received an approach for the whole business, which has subsequently been withdrawn".

The retailer said it was in "ongoing discussions with its lending banks" and adjusted core profits would be "slightly behind current market expectations" for its fiscal 2022 year. *Ray Douglas*

War in Ukraine adds to EM jitters on oil and inflation

Jonathan Wheatley

Markets Insight

The collapse of the Russian rouble has given another reminder for investors in emerging markets that contagion persists as a risk.

From Asia to Latin America, stocks, bonds and currencies fell sharply as markets woke to Russia's invasion of Ukraine last Thursday. Some of those markets extended their losses yesterday after sanctions against Russia's central bank at the weekend sent the rouble plunging as much as 29 per cent.

"We're entering a new phase where we get broader EM risk-off given the Russian shock over the weekend," said Kevin Daly, a debt portfolio manager at Aberdeen Standard Investments. "The sub-Saharan Africa complex is down 1 to 3 [percentage] points," he added, referring to sovereign bond prices in the region, which dropped in a flight to quality across global markets.

It turns out so-called risk-off events, when investors rein in exposure to riskier markets are still bad for EMs overall.

Since the 1990s, when debt crises swept from Asia to Russia to Latin America in rolling waves of contagion, many governments have built buffers to external shocks, such as budget and current account surpluses and large reserves of foreign exchange. But the pandemic has drained those resources, leaving many economies exposed.

The immediate impact of the invasion on Russian assets last Thursday was "catastrophic", said Timothy Ash of BlueBay Asset Management. "I'm staggered that people didn't think [the invasion] would happen," he said. The country's currency, stocks and bonds all fell steeply, dragging other EM assets down almost in tandem.

Russia's markets staged a partial recovery before the weekend but the collapse of the rouble has renewed jitters in EM. The fallout from widespread sanctions on Russia will have unpredictable effect on banks and financial flows.

Even before the sanctions, investors were worried about the impact of higher prices for oil and other commodities on inflation and growth. This spells trouble at a time when EM output growth, and the shrinking differential between growth rates in emerging and developed economies, is causing investor concern.

"You have to model this as a classic oil shock where EMs will inevitably suffer," said Bhanu Baweja, chief strategist at UBS Investment Bank.

> 'We're entering a new phase where we get broader EM risk-off given the Russian shock'

It is not only that there are more oil consumers than producers in the benchmark MSCI emerging markets equities index, he noted. As energy and food prices rise — both likely, should the war drag on — developing countries will be hardest hit by inflation as food and fuel make up a bigger share of household consumption than in advanced economies.

Central banks in EMs have already shown they are willing to raise interest rates to avoid any repeat of the runaway inflation that has previously plagued them, even if this means slowing growth. That would add to the threat of stagflation with slow growth accompanied by rising prices, driven by bottlenecks and currency weakness.

Ukraine "will play into the global stagflation story", said Ash.

Baweja noted that Brazil, where consumer demand is falling short of expectations, provided a test for other EMs of whether stagflation will take root.

Adding to the mix is uncertainty over US monetary policy. As analysts at BCA Research said on Friday that a tightening of financial conditions triggered by the conflict might cause the US Federal Reserve to slow the pace of interest rate rises. But if rising energy prices keep inflation higher, they added, the opposite may happen.

This has profound implications for EM investors. Rising US interest rates suck money out of EM assets and tend to lead to dollar strength, which raises financing costs for developing countries and saps investment. In the short term, many analysts regard a sovereign default by Ukraine as all but inevitable.

"I don't think debt service is a priority in the middle of a war," said Ash.

S&P Global Ratings on Friday downgraded its ratings on Russian bonds from investment grade to speculative and moved Ukraine's deeper into speculative territory. Action by JPMorgan on the position of either country's bonds in its benchmark indices was likely soon, according to a person familiar with internal discussions.

MSCI, the provider of benchmark equity indices, announced a freeze on any changes to the weightings of Russian equities in its indices and said it was considering further actions, including deleting certain companies.

The longer term, broader fallout of the Ukraine invasion remains, of course, as uncertain as the war.

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MARKET DATA

WORLD MARKETS AT A GLANCE

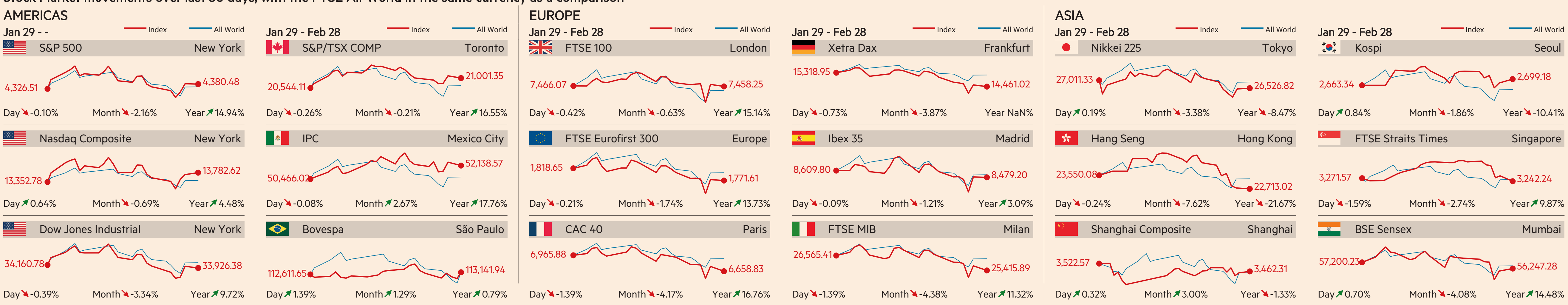
FT.COM/MARKETSDATA

Change during previous day's trading (%)

S&P 500	Nasdaq Composite	Dow Jones Ind	FTSE 100	FTSE Eurofirst 300	Nikkei	Hang Seng	FTSE All World $	$ per €	$ per £	¥ per $	£ per €	Oil Brent $ Sep	Gold $
-0.10%	0.64%	-0.39%	-0.42%	-0.21%	0.19%	-0.24%	-0.37%	-0.178%	No change	-0.350%	-0.119%	No change	-2.66%

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

AMERICAS EUROPE ASIA



Country	Index	Latest	Previous
Argentina	Merval	87969.87	88721.46
Australia	All Ordinaries	7323.20	7273.60
	S&P/ASX 200	7049.10	6997.80
	S&P/ASX 200 Res	5590.40	5427.60
Austria	ATX	3388.98	3506.14
Belgium	BEL 20	4014.02	4061.17
	BEL Mid	10328.87	10301.48
Brazil	IBovespa	113141.94	111591.87
Canada	S&P/TSX 60	1274.56	1279.66
	S&P/TSX Comp	21050.25	21106.00
	S&P/TSX Div Met & Min	1394.15	1330.68
Chile	S&P/CLX IGPA Gen	22819.93	22467.13
China	FTSE A200	12169.28	12150.91
	FTSE B35	9000.71	8988.96
	Shanghai A	3628.66	3617.17
	Shanghai B	280.94	283.70
	Shanghai Comp	3462.31	3451.41
	Shenzhen A	2425.61	2417.16
	Shenzhen B	1129.08	1142.18
Colombia	COLCAP	1261.61	1260.21
Croatia	CROBEX	2013.05	2011.29

Country	Index	Latest	Previous
Cyprus	CSE M&P Gen	68.46	68.68
Czech Republic	PX	1353.41	1382.66
Denmark	OMXC Copenahgen 20	1690.38	1647.78
Egypt	EGX 30	11138.86	11174.09
Estonia	OMX Tallinn	1857.62	1869.19
Finland	OMX Helsinki General	11254.78	11353.76
France	CAC 40	6658.83	6752.43
	SBF 120	5160.35	5224.85
Germany	M-DAX	31873.35	31800.31
	TecDAX	3236.39	3190.90
	XETRA Dax	14461.02	14567.23
Greece	Athens Gen	886.82	927.25
	FTSE/ASE 20	2155.79	2257.96
Hong Kong	Hang Seng	22713.02	22767.18
	HS China Enterprise	8023.93	7991.64
	HSCC Red Chip	4208.99	4168.02
Hungary	Bux	43731.25	45769.16
India	BSE Sensex	56247.28	55858.52
	Nifty 500	14307.95	14187.40
Indonesia	Jakarta Comp	6888.17	6817.82
Ireland	ISEQ Overall	7860.27	7803.47
Israel	Tel Aviv 125	2044.27	2009.77

Country	Index	Latest	Previous
Italy	FTSE Italia All-Share	27747.16	28080.04
	FTSE Italia Mid Cap	44461.08	44676.56
	FTSE MIB	25415.89	25773.03
Japan	2nd Section	7131.96	7048.63
	Nikkei 225	26526.82	26476.50
	S&P Topix 150	1617.79	1613.07
	Topix	1886.93	1876.24
Jordan	Amman SE	2148.34	2147.34
Kenya	NSE 20	1883.33	1892.83
Kuwait	KSX Market Index	6633.44	6603.51
Latvia	OMX Riga	1198.22	1228.03
Lithuania	OMX Vilnius	897.74	903.90
Luxembourg	LuxX	1732.78	1731.93
Malaysia	FTSE Bursa KLCI	1608.28	1591.72
Mexico	IPC	52512.63	52555.60
Morocco	MASI	13175.30	12954.68
Netherlands	AEX	729.72	727.85
	AEX All Share	997.75	994.52
New Zealand	NZX 50	11977.77	11923.38
Nigeria	SE All Share	47328.42	47272.04
Norway	Oslo All Share	1017.37	1006.88
Pakistan	KSE 100	44461.01	43984.24

Country	Index	Latest	Previous
Philippines	Manila Comp	7311.01	7212.23
Poland	Wig	60970.04	60414.19
Portugal	PSI 20	5563.14	5495.21
	PSI General	4097.72	3968.32
Romania	BET Index	12716.51	12891.69
Russia	Micex Index	2470.48	2058.12
	RTX	936.94	742.91
Saudi-Arabia	TADAWUL All Share Index	12590.26	12417.56
Singapore	FTSE Straits Times	3242.24	3294.47
Slovakia	SAX	397.56	397.56
Slovenia	SBI TOP	-	-
South Africa	FTSE/JSE All Share	76090.51	74205.69
	FTSE/JSE Res 20	84334.89	79347.72
	FTSE/JSE Top 40	69624.29	67719.42
South Korea	Kospi	2699.18	2676.76
	Kospi 200	361.54	358.44
Spain	IBEX 35	8479.20	8486.60
Sri Lanka	CSE All Share	11577.94	11107.90
Sweden	OMX Stockholm 30	2134.07	2141.52
	OMX Stockholm AS	871.86	865.53
Switzerland	SMI Index	11986.78	11987.31

Country	Index	Latest	Previous
Taiwan	Weighted Pr	17652.18	17594.55
Thailand	Bangkok SET	1685.18	1679.90
Turkey	BIST 100	1946.19	1952.40
UAE	Abu Dhabi General Index	8333.19	8358.50
UK	FT 30	2858.70	2871.90
	FTSE 100	7458.25	7489.46
	FTSE 4Good UK	6854.52	6878.84
	FTSE All Share	4157.77	4167.09
	FTSE techMARK 100	6475.24	6239.01
USA	DJ Composite	11470.74	11478.45
	DJ Industrial	33926.38	34058.75
	DJ Transport	15271.60	15207.21
	DJ Utilities	941.07	938.25
	Nasdaq 100	14263.58	14189.16
	Nasdaq Cmp	13782.62	13694.62
	NYSE Comp	16354.72	16427.96
	S&P 500	4380.48	4384.65
	Wilshire 5000	44348.35	44260.12
Venezuela	IBC	5268.47	5348.64
Vietnam	VNI	1490.13	1498.89

Country	Index	Latest	Previous
Cross-Border	DJ Global Titans ($)	496.91	495.52
	Euro Stoxx 50 (Eur)	3926.28	3970.69
	Euronext 100 ID	1268.80	1275.75
	FTSE 4Good Global ($)	10806.72	10878.99
	FTSE All World ($)	458.75	460.46
	FTSE E300	1771.61	1775.26
	FTSE Eurotop 100	3401.94	3416.86
	FTSE Global 100 ($)	2826.13	2838.52
	FTSE Gold Min ($)	2185.81	2178.01
	FTSE Latibex Top (Eur)	4440.00	4432.20
	FTSE Multinationals ($)	3021.13	2948.09
	FTSE World ($)	828.26	831.39
	FTSEurofirst 100 (Eur)	4625.54	4669.38
	FTSEurofirst 80 (Eur)	5458.63	5523.37
	MSCI ACWI Fr ($)	698.53	681.96
	MSCI All World ($)	2980.20	2905.94
	MSCI Europe (Eur)	1819.53	1759.07
	MSCI Pacific ($)	2925.67	2893.33
	S&P Euro (Eur)	1821.19	1836.99
	S&P Europe 350 (Eur)	1825.64	1826.73
	S&P Global 1200 ($)	3286.37	3289.54
	Stoxx 50 (Eur)	3641.11	3661.24

(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	LONDON ACTIVE STOCKS	stock traded m's	close price	Day's change	EURO MARKETS ACTIVE STOCKS	stock traded m's	close price	Day's change	TOKYO ACTIVE STOCKS	stock traded m's	close price	Day's change
Tesla	147.8	874.12	64.25	Bp	678.4	363.55	-14.95	Asml Holding	869.5	598.90	9.80	Nippon Yusen Kabushiki Kaisha	1416.9	10670.00	470.00
Advanced Micro Devices	71.0	124.37	3.31	Shell	510.0	1972.00	-28.50	Nestle N	831.3	116.24	1.24	Mitsui O.s.k.lines,	1144.7	9340.00	160.00
Apple	56.0	164.96	0.11	Glencore	293.1	442.15	3.00	Totalenergies	812.2	45.59	-2.68	Softbank	885.0	5125.00	56.00
Nvidia	50.1	246.02	4.45	Hsbc Holdings	284.8	514.60	-23.40	Roche Gs	665.3	339.50	0.44	Tokyo Electron	759.3	55770.00	-830.00
Amazon.com	35.1	3076.68	0.91	Anglo American	279.5	3823.00	88.00	Unicredit	639.3	11.39	-1.19	Kawasaki Kisen Kaisha,	708.3	8050.00	330.00
Ihs Markit Ltd	32.5	108.61	0.80	Astrazeneca	255.3	9059.00	64.00	Basf Se Na O.n.	619.3	59.25	-1.18	Mitsubishi Ufj Fin.	661.8	712.80	5.40
Microsoft	32.0	297.87	0.56	Bae Systems	239.9	719.60	66.60	Intesa Sanpaolo	612.3	2.29	-0.18	Toyota Motor	572.4	2138.50	34.50
Meta Platforms	30.1	211.40	0.92	Unilever	233.6	3746.50	7.50	Novartis N	545.9	77.96	-0.51	Sony	541.7	11810.00	0.00
Alphabet	21.2	2707.89	18.70	Ferguson	206.1	11415.00	0.00	Bnp Paribas Act.a	524.7	52.51	-4.24	Nippon Telegraph And Telephone	513.5	3293.00	33.00
Alphabet	15.4	2703.48	13.09	Rio Tinto	202.2	5791.00	124.00	Allianz Se Na O.n.	517.5	203.30	-4.15	Mitsui & Co.,	474.5	2865.50	-129.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%	BIGGEST MOVERS	Close price	Day's change	Day's chng%	BIGGEST MOVERS	Close price	Day's change	Day's chng%	BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups				**Ups**				**Ups**				**Ups**			
Occidental Petroleum	42.76	4.02	10.38	Oxford Instruments	2665.00	645.00	31.93	Vestas Wind Systems A/s	29.24	3.84	15.11	Jgc	1152.00	74.00	6.86
Tesla	874.12	64.25	7.93	Chemring	309.50	36.50	13.37	Siemens Energy Ag Na O.n.	21.43	2.00	10.26	Toho Z Co.,	2746.00	166.00	6.43
L3harris	250.25	16.74	7.17	Qinetiq	292.40	29.40	11.18	Orsted A/s Dk 10	15.18	1.06	7.52	Dowa Holdings Co.,	5210.00	240.00	4.83
Northrop Grumman	438.88	29.21	7.13	Ferrexpo	169.00	16.00	10.46	Umg	20.33	1.16	6.04	Nippon Yusen Kabushiki Kaisha	10670.00	470.00	4.61
Devon Energy	58.94	3.74	6.78	Bae Systems	719.60	66.60	10.20	Dassault Systemes	43.49	1.80	4.32	Kawasaki Kisen Kaisha,	8050.00	330.00	4.27
Downs				**Downs**				**Downs**				**Downs**			
Dentsply Sirona	54.27	-4.42	-7.53	Polymetal Int	351.20	-447.20	-56.01	Unicredit	11.39	-1.19	-9.48	Mitsui & Co.,	2865.50	-129.00	-4.31
Ipg Photonics	131.78	-6.28	-4.55	Evraz	144.75	-59.95	-29.29	Ing Groep N.v.	10.50	-0.91	-7.94	Japan Tobacco	2120.00	-79.50	-3.61
Ppg Industries	135.46	-5.63	-3.99	Petropavlovsk	8.00	-1.49	-15.70	Ericsson, Telefonab. L M Ser. B	8.29	-0.69	-7.70	Nissan Motor Co.,	545.30	-19.60	-3.47
Int Paper Co	43.63	-1.79	-3.94	Mondi	1571.50	-215.00	-12.03	Bnp Paribas Act.a	52.51	-4.24	-7.47	Agc	5090.00	-110.00	-2.12
Philip Morris Int	101.34	-3.91	-3.71	Coca-cola Hbc Ag	1904.00	-232.00	-10.86	Intesa Sanpaolo	2.29	-0.18	-7.43	Konami	6480.00	-140.00	-2.11

Based on the constituents of the S&P500 | Based on the constituents of the FTSE 350 index | Based on the constituents of the FTSEurofirst 300 Eurozone index | Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Feb 28 price(p)	%Chg week	%Chg ytd	FTSE 250	Feb 28 price(p)	%Chg week	%Chg ytd	FTSE SmallCap	Feb 28 price(p)	%Chg week	%Chg ytd	Industry Sectors	Feb 28 price(p)	%Chg week	%Chg ytd
Winners				**Winners**				**Winners**				**Winners**			
Bae Systems	719.60	21.6	36.1	Oxford Instruments	2665.00	37.9	-0.5	Ted Baker	103.40	21.9	-0.1	Health Care Equip.& Services	8181.83	32.2	-0.8
Smith & Nephew	1337.00	13.4	3.2	Darktrace	442.40	32.9	-	Avon Protection	1248.00	21.0	9.0	Gas Water & Multiutilities index	6179.06	31.0	2.2
Rightmove	672.60	10.2	-	Chemring	309.50	18.6	3.0	Bloomsbury Publishing	407.00	11.5	3.3	Electricity	10578.73	28.9	9.0
Dechra Pharmaceuticals	4118.00	9.3	-	Qinetiq	292.40	16.9	9.8	Tullow Oil	53.74	10.8	18.3	Industrial Metals	7506.57	26.8	9.4
Antofagasta	1521.00	9.0	12.5	Harbour Energy	398.20	15.6	11.0	Pharos Energy	26.95	10.7	7.6	Aerospace & Defense	4620.83	26.2	11.3
Bunzl	2969.00	8.8	-0.9	Howden Joinery	853.20	14.5	-9.1	Ao World	95.45	10.2	-	Pharmaceuticals & Biotech.	18774.67	25.4	2.4
Hikma Pharmaceuticals	2083.00	7.5	-7.1	Drax	706.00	12.6	15.5	Kin And Carta	259.00	8.4	-	Tobacco	33916.81	22.2	8.2
Halma	2411.00	7.3	-24.9	Hochschild Mining	116.10	12.3	-	Riverstone Energy	576.00	8.3	22.0	Oil & Gas Producers	6727.34	21.8	-4.4
Croda Int	7484.00	7.3	-	Morgan Sindall	2320.00	10.5	-9.7	Enquest	21.90	7.1	17.2	Beverages	28431.66	20.4	-2.3
Intercontinental Hotels	5236.00	7.1	9.8	Baillie Gifford Us Growth Trust	227.50	8.3	-	Seraphim Space Investment Trust	112.00	6.7	-	Real Estate Investment Trusts	3244.41	16.6	-2.4
Anglo American	3823.00	7.0	25.7	Babcock Int	331.00	8.3	3.8	Helical	421.50	6.4	-6.2	Real Estate & Investment Serv	2839.30	16.1	-0.3
Sse	1704.50	6.7	3.0	Trustpilot	140.80	8.1	-	Macfarlane	130.00	6.1	-4.4	Media	9394.26	15.1	-1.6
Losers				**Losers**				**Losers**				**Losers**			
Polymetal Int	351.20	-67.2	-	Petropavlovsk	8.00	-39.7	-	Raven Property	15.00	-43.1	-54.9	Mining	13776.25	-44.0	-
Evraz	144.75	-45.8	-37.3	Jpmorgan Russian Securities	349.00	-42.2	-	Hyve	68.00	-39.0	-	Automobiles & Parts	2921.53	-39.8	-9.5
Mondi	1571.50	-17.8	-14.3	Wood (john)	180.40	-20.0	-4.9	Hostelworld	75.00	-14.8	8.4	Travel & Leisure	7442.78	-21.2	0.1
Coca-cola Hbc Ag	1904.00	-17.8	-24.7	Wizz Air Holdings	3404.00	-15.9	-	Costain	561.00	-11.7	-	Household Goods	14786.12	-16.5	-2.3
Hargreaves Lansdown	1134.50	-12.6	-	Georgia Capital	172.20	-13.5	-	Aptitude Software	445.00	-11.0	-	Life Insurance	7145.20	-12.8	-5.6
Abrdn	206.70	-11.5	-	Tbc Bank	1202.00	-13.0	-	Jpmorgan European Growth & Income	82.00	-10.9	-	Food Producers	6726.10	-11.0	-0.3
Wpp	1057.50	-10.5	-7.0	Rhi Magnesita N.v.	2782.00	-12.7	-	Esken	12.00	-10.4	-	Chemicals	13018.83	-9.2	-5.5
Rolls-royce Holdings	103.50	-9.8	-	Spectris	2806.00	-10.6	-	Int Personal Finance	112.00	-9.7	-	General Financial	10845.49	-8.7	-8.9
Airtel Africa	142.10	-8.0	6.7	Hcape	747.00	-9.3	-18.2	Costain	43.80	-8.8	-	Industrial Engineering	14812.55	-5.0	-8.8
St. James's Place	1403.50	-7.0	-	Virgin Money Uk	186.20	-8.5	-	Robert Walters	638.00	-7.8	-	Construction & Materials	7376.32	-3.2	-8.2
Standard Chartered	532.80	-6.9	19.1	Easyjet	602.60	-8.4	8.2	Rps	97.00	-7.8	-22.4	Software & Computer Services	1888.26	-2.8	-2.6
Smurfit Kappa	3706.00	-6.7	-8.8	Provident Fin	290.00	-7.8	-					Equity Investment Instruments	12422.94	-2.0	-3.4

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

CURRENCIES

Feb 28	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	107.4010	-0.0435	120.6333	-0.1941	144.1044	-0.0584
Australia	Australian Dollar	1.3781	-0.0057	1.5479	-0.0083	1.8490	-0.0077
Bahrain	Bahrainin Dinar	0.3770	-	0.4234	-0.0005	0.5058	-
Bolivia	Bolivian Boliviano	6.9100	-	7.7613	-0.0093	9.2714	-
Brazil	Brazilian Real	5.1517	-0.0038	5.7864	-0.0112	6.9123	-0.0050
Canada	Canadian Dollar	1.2684	-0.0056	1.4246	-0.0080	1.7018	-0.0075
Chile	Chilean Peso	794.8000	-5.6000	892.7228	-7.3716	1066.4163	-7.5137
China	Chinese Yuan	6.3111	-0.0029	7.0886	-0.0117	8.4678	-0.0038
Colombia	Colombian Peso	3900.0050	-5.2000	4380.5027	-11.1193	5232.7996	-6.9781
Costa Rica	Costa Rican Colon	644.4350	2.2850	723.8322	1.6986	864.6653	3.0659
Czech Republic	Czech Koruna	22.4221	0.4817	25.1846	0.5115	30.0847	0.6464
Denmark	Danish Krone	6.6225	0.0048	7.4385	-0.0035	8.8858	0.0065
Egypt	Egyptian Pound	15.7100	0.0931	17.6455	0.0835	21.0788	0.1250
Hong Kong	Hong Kong Dollar	7.8137	0.0048	8.7764	-0.0052	10.4840	0.0064
Hungary	Hungarian Forint	329.6300	4.8199	370.4665	4.9745	442.5466	6.4671
India	Indian Rupee	75.3475	0.0600	84.6306	-0.0344	101.0969	0.0805
Indonesia	Indonesian Rupiah	14367.0000	-	16137.1008	-19.3975	19276.8112	-
Israel	Israeli Shekel	3.2055	-0.0261	3.6004	-0.0337	4.3009	-0.0351
Japan	Japanese Yen	115.1750	-0.4050	129.3650	-0.6111	154.5351	-0.5434
..One Month		115.1749	-0.4051	129.3651	-0.6110	154.5350	-0.5436
..Three Month		115.1748	-0.4055	129.3652	-0.6108	154.5347	-0.5441
..One Year		115.1734	-0.4083	129.3655	-0.6103	154.5350	-0.5459
Kenya	Kenyan Shilling	113.8500	-	127.8768	-0.1539	152.7573	-
Kuwait	Kuwaiti Dinar	0.3028	0.0002	0.3401	-0.0002	0.4063	0.0002
Malaysia	Malaysian Ringgit	4.1985	-0.0015	4.7158	-0.0074	5.6333	-0.0020
Mexico	Mexican Peso	20.4325	-0.0100	22.9499	-0.0389	27.4151	-0.0134
New Zealand	New Zealand Dollar	1.4777	-0.0064	1.6597	-0.0091	1.9826	-0.0085
Nigeria	Nigerian Naira	415.7500	-0.7500	466.9722	-1.4053	557.8291	-1.0063
Norway	Norwegian Krone	8.7937	-0.0572	9.8771	-0.0762	11.7988	-0.0767
Pakistan	Pakistani Rupee	177.3500	0.3500	199.2003	0.1539	237.9579	0.4696
Peru	Peruvian Nuevo Sol	3.7992	0.0422	4.2673	0.0423	5.0975	0.0566
Philippines	Philippine Peso	51.2700	-0.0825	57.5867	-0.1621	68.7911	-0.1107
Poland	Polish Zloty	4.1835	0.0655	4.6989	0.0605	5.6132	0.0879
Romania	Romanian Leu	4.4058	0.0057	4.9486	0.0005	5.9114	0.0077
Russia	Russian Ruble	107.1875	24.4450	120.3935	27.3449	143.8179	32.7989
Saudi Arabia	Saudi Riyal	3.7517	-	4.2139	-0.0051	5.0338	-
Singapore	Singapore Dollar	1.3575	0.0042	1.5247	0.0028	1.8213	0.0056
South Africa	South African Rand	15.4525	0.2550	17.3563	0.2659	20.7333	0.3421
South Korea	South Korean Won	1202.3500	0.6500	1350.4847	-0.8941	1613.2430	0.8722
Sweden	Swedish Krona	9.4382	0.0096	10.6010	-0.0020	12.6636	0.0129
Switzerland	Swiss Franc	0.9175	-0.0106	1.0305	-0.0132	1.2310	-0.0142
Taiwan	New Taiwan Dollar	28.0350	-	31.4890	-0.0379	37.6157	-
Thailand	Thai Baht	32.6750	0.1850	36.7007	0.1639	43.8414	0.2482
Tunisia	Tunisian Dinar	2.9087	0.0052	3.2670	0.0019	3.9027	0.0070
Turkey	Turkish Lira	13.8597	-0.0303	15.5672	-0.0529	18.5961	-0.0407
United Arab Emirates	UAE Dirham	3.6731	-	4.1256	-0.0050	4.9283	-
United Kingdom	Pound Sterling	0.7453	-	0.8371	-0.0010	-	-
..One Month		0.7453	0.0000	0.8370	-0.0010	-	-
..Three Month		0.7453	0.0000	0.8368	-0.0010	-	-
..One Year		0.7452	0.0000	0.8356	-0.0010	-	-
United States	United States Dollar	-	-	1.1232	-0.2186	1.3417	0.0000
..One Month		-	-	1.1231	-0.2186	1.3418	0.0000
..Three Month		-	-	1.1228	-0.2186	1.3417	0.0001
..One Year		-	-	1.1212	-0.2185	1.3416	0.0000
Vietnam	Vietnamese Dong	22810.0000	-20.0000	25620.3323	-53.2791	30605.1870	-26.8124
European Union	Euro	0.8903	0.0011	-	-	1.1946	0.0014
..One Month		0.8902	0.0010	-	-	1.1945	0.0014
..Three Month		0.8899	0.0010	-	-	1.1943	0.0014
..One Year		0.8883	0.0011	-	-	1.1930	0.0014

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 www.ft.com/equities

Produced in conjunction with the Institute and Faculty of Actuaries

	£ Stlg Feb 28	Day's chge%	Euro Index	£ Stlg Feb 25	£ Stlg Feb 24	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	7458.25	-0.42	6936.46	7489.46	7207.38	6483.43	3.22	2.07	15.02	32.61	7418.64
FTSE 250 (250)	21081.05	0.83	19603.34	20906.75	20251.88	20910.37	2.17	2.62	17.62	47.92	17104.82
FTSE 250 ex Inv Co (181)	21840.34	0.88	20309.41	21650.72	20958.44	21662.62	2.14	2.39	[illegible]	43.30	18059.95
FTSE 350 (350)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8274.65
FTSE 350 ex Investment Trusts (279)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4193.90
FTSE 350 Higher Yield (112)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7681.41
FTSE 350 Lower Yield (238)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5494.92
FTSE SmallCap (249)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11253.72
FTSE SmallCap ex Inv Co (130)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9889.72
FTSE All-Share (599)	4157.77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8297.04
FTSE All-Share ex Inv Co (409)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4190.23
FTSE All-Share ex Multinationals (530)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2552.93
FTSE Fledgling (82)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26420.99
FTSE Fledgling ex Inv Co (34)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	35401.65
FTSE All-Small (331)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10054.10
FTSE All-Small ex Inv Co (164)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9418.43
FTSE AIM All-Share (761)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1207.34
FTSE All-Share Technology (22)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2895.16
FTSE All-Share Telecommunications (7)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3023.79
FTSE All-Share Health Care (13)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12063.13
FTSE All-Share Financials (254)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5081.13
FTSE All-Share Real Estate (53)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1180.24
FTSE All-Share Consumer Discretionary (88)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5330.92
FTSE All-Share Consumer Staples (25)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17387.65
FTSE All-Share Industrials (88)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7509.72
FTSE All-Share Basic Materials (24)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11714.27
FTSE All-Share Energy (13)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8228.58
FTSE All-Share Utilities (10)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13269.27
FTSE All-Share Software and Computer Services (20)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3297.38
FTSE All-Share Technology Hardware and Equipment (2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6999.54
FTSE All-Share Telecommunications Equipment (2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	765.47
FTSE All-Share Telecommunications Service Providers (5)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4288.48
FTSE All-Share Health Care Providers (3)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7740.48
FTSE All-Share Medical Equipment and Services (2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5705.02
FTSE All-Share Pharmaceuticals and Biotechnology (8)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15402.93
FTSE All-Share Banks (11)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2764.33
FTSE All-Share Finance and Credit Services (7)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12372.40
FTSE All-Share Investment Banking and Brokerage Services (29)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12503.14
FTSE All-Share Closed End Investments (190)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7764.23
FTSE All-Share Life Insurance (6)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8530.19
FTSE All-Share Nonlife Insurance (7)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7410.09
FTSE All-Share Real Estate Investment and Services (13)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8123.52
FTSE All-Share Real Estate Investment Trusts (40)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4255.67
FTSE All-Share Automobiles and Parts (2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3032.75
FTSE All-Share Consumer Services (2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3533.78
FTSE All-Share Household Goods and Home Construction (13)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10374.83
FTSE All-Share Leisure Goods (2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21032.81
FTSE All-Share Personal Goods (5)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22401.31
FTSE All-Share Media (11)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6647.18
FTSE All-Share Retailers (21)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3076.57
FTSE All-Share Travel and Leisure (33)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7561.27
FTSE All-Share Beverages (5)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22582.83
FTSE All-Share Food Producers (10)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6561.92
FTSE All-Share Tobacco (2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30324.88
FTSE All-Share Construction and Materials (15)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9293.92
FTSE All-Share Aerospace and Defense (8)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5821.63
FTSE All-Share Electronic and Electrical Equipment (11)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11330.04
FTSE All-Share General Industrials (9)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6826.50
FTSE All-Share Industrial Engineering (5)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21352.70
FTSE All-Share Industrial Support Services (32)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12171.58
FTSE All-Share Industrial Transportation (7)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5868.83
FTSE All-Share Industrial Materials (1)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21844.72
FTSE All-Share Industrial Metals and Mining (10)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11601.05
FTSE All-Share Precious Metals and Mining (8)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9018.91
FTSE All-Share Chemicals (7)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14242.27
FTSE All-Share Oil, Gas and Coal (13)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8281.87
FTSE Sector Indices											
Non Financials (345)	5053.29	0.17	4699.07	5044.91	4869.46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	**8881.95**

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	7415.10	7375.25	7396.88	7414.80	7398.87	7413.74	7390.43	7435.47	7472.85	[illegible]	7361.73
FTSE 250	20741.78	20701.55	20775.47	20797.59	20827.77	20879.49	20817.23	20901.13	21027.80	21081.05	20689.94
FTSE SmallCap	6881.35	6849.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6830.26
FTSE All-Share	4127.87	4107.98	4120.13	4128.81	4122.46	4133.60	4110.85	4124.49	4145.60	4163.85	4102.75

Time of FTSE 100 Day's high:16:29:00 Day's Low13:47:00 FTSE 100 2010/11 High: 7672.40(10/02/2022) Low: 7207.38(24/02/2022)
Time of FTSE All-Share Day's high:16:29:00 Day's Low08:44:00 FTSE 100 2010/11 High: 4296.96(10/02/2022) Low: 4015.91(24/02/2022)

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FT 30 INDEX

	Jan 18	Jan 17	Jan 14	Jan 13	Jan 12	Yr Ago	High	Low
FT 30	2858.70	2871.90	2832.90	2844.10	2840.90	0.00	2880.10	2808.10
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
2871.9	2850.8	2849.7	2857	2858.6	2860.9	2862.8	2860.5	2860.4	2871.9	2843.1

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

FT WILSHIRE 5000 INDEX SERIES

	Feb 24		Feb 24
FT Wilshire 5000	43870.09	FT Wilshire Mid Cap	5838.29
FT Wilshire 2500	5741.59	FT Wilshire Small Cap	5475.18
FT Wilshire Mega Cap	5762.76	FT Wilshire Micro Cap	5529.58
FT Wilshire Large Cap	5775.79		

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FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Oil & Gas Producers	17.58	Beverages	31.66	FTSE 250 Index	-10.22
Oil & Gas	17.40	Food Producers	-0.10	Industrials	-10.81
Mining	17.01	NON FINANCIALS Index	-0.36	Equity Invest Instr	-11.17
Tobacco	15.80	Oil Equipment & Serv	-0.62	Financial Services	-11.43
Mobile Telecomms	15.37	Nonlife Insurance	-0.81	Real Est Invest & Se	-12.13
Telecommunications	13.36	Travel & Leisure	-1.15	Construct & Material	-12.67
Basic Materials	11.22	FTSE All{HY-}Share Index	-1.19	Software & Comp Serv	-14.19
Aerospace & Defense	10.30	Consumer Goods	-2.67	Support Services	-14.45
Fixed Line Telecomms	8.51	Financials	-4.31	Technology	-14.52
Banks	8.01	Media	-4.62	General Retailers	-15.13
Electricity	4.87	Personal Goods	-5.14	Industrial Transport	-15.46
Utilities	4.05	Consumer Services	-5.64	Tech Hardware & Eq	-17.69
Gas Water & Multi	3.77	Food & Drug Retailer	-5.88	Industrial Eng	-18.36
FTSE 100 Index	1.00	Real Est Invest & Tr	-6.15	Automobiles & Parts	-19.47
Health Care Eq & Srv	0.83	Life Insurance	-6.59	Electronic & Elec Eq	-20.08
Health Care	0.07	FTSE SmallCap Index	-7.83	Chemicals	-21.20
Pharmace & Biotech	0.01	Beverages	-8.56	Leisure Goods	-23.16
		Household Goods & Ho	-8.78	Industrial Metals &	-41.18

FTSE 100 SUMMARY

FTSE 100	Closing Price	Day's Change	FTSE 100	Closing Price	Day's Change
3I Group PLC	1335.5	28.50	Itv PLC	110.65	-2.45
Abrdn PLC	206.70	-2.20	Jd Sports Fashion PLC	151.00	0.75
Admiral Group PLC	2977	17.00	Kingfisher PLC	306.20	6.40
Airtel Africa PLC	142.10	-2.40	Land Securities Group PLC	794.20	4.20
Anglo American PLC	3823	88.00	Legal & General Group PLC	277.20	-3.70
Antofagasta PLC	1521	73.50	Lloyds Banking Group PLC	48.44	-1.25
Ashtead Group PLC	4876	94.00	London Stock Exchange Group PLC	6574	98.00
Associated British Foods PLC	1920	-39.50	M&G PLC	205.80	-4.80
Astrazeneca PLC	9059	64.00	Meggitt PLC	755.00	5.00
Auto Trader Group PLC	663.00	7.80	Melrose Industries PLC	148.25	-1.25
Avast PLC	628.60	3.60	Mondi PLC	1571.5	-215.00
Aveva Group PLC	2490	-20.00	National Grid PLC	1130.8	30.20
Aviva PLC	419.80	-3.60	Natwest Group PLC	229.70	-6.00
B&M European Value Retail S.A.	605.40	23.60	Next PLC	6862	66.00
Bae Systems PLC	719.60	66.60	Ocado Group PLC	1373	39.00
Barclays PLC	182.88	-6.02	Pearson PLC	648.00	-24.60
Barratt Developments PLC	611.00	36.20	Pershing Square Holdings LTD	2710	-5.00
Berkeley Group Holdings (The) PLC	3896	109.00	Persimmon PLC	2413	88.00
BP PLC	363.55	-14.95	Phoenix Group Holdings PLC	618.60	4.60
British American Tobacco PLC	3261.5	-83.50	Polymetal International PLC	351.20	-447.20
British Land Company PLC	529.60	-0.60	Prudential PLC	1136.5	-47.50
Bt Group PLC	186.25	-5.35	Reckitt Benckiser Group PLC	6321	-8.00
Bunzl PLC	2969	209.00	Relx PLC	2281	18.00
Burberry Group PLC	1940	-15.50	Rentokil Initial PLC	507.80	13.00
Coca-Cola Hbc AG	1904	-232.00	Rightmove PLC	672.60	29.20
Compass Group PLC	1694	-20.00	Rio Tinto PLC	5791	124.00
Crh PLC	3386	12.00	Rolls-Royce Holdings PLC	103.50	-2.58
Croda International PLC	7484	184.00	Royal Mail PLC	392.70	5.40
Dcc PLC	5860	32.00	Sage Group PLC	702.80	14.60
Dechra Pharmaceuticals PLC	4118	128.00	Sainsbury (J) PLC	275.70	4.60
Diageo PLC	3725	4.00	Schroders PLC	3064	1.00
Electrocomponents PLC	989.50	3.00	Scottish Mortgage Investment Trust PLC	1009.5	9.00
Entain PLC	1684	26.50	Segro PLC	1301.5	17.50
Evraz PLC	144.75	-59.95	Severn Trent PLC	2876	77.00
Experian PLC	2933	54.00	Shell PLC	1972	-28.50
Ferguson PLC	11415	-	Smith & Nephew PLC	1337	26.50
Flutter Entertainment PLC	10795	395.00	Smith (Ds) PLC	344.60	-9.10
Fresnillo PLC	718.60	5.00	Smiths Group PLC	1529	0.50
Glaxosmithkline PLC	1545.4	-18.60	Smurfit Kappa Group PLC	3706	-153.00
Glencore PLC	442.15	3.00	Spirax-Sarco Engineering PLC	11945	215.00
Halma PLC	2411	72.00	Sse PLC	1704.5	29.50
Hargreaves Lansdown PLC	1134.5	3.00	St. James's Place PLC	1403.5	-17.50
Hikma Pharmaceuticals PLC	2083	136.00	Standard Chartered PLC	532.80	-26.80
HSBC Holdings PLC	514.60	-23.40	Taylor Wimpey PLC	150.25	6.60
Imperial Brands PLC	1639	-44.50	Tesco PLC	289.75	3.20
Informa PLC	594.40	-12.00	Unilever PLC	3746.5	7.50
Intercontinental Hotels Group PLC	5236	70.00	United Utilities Group PLC	1074.5	23.00
Intermediate Capital Group PLC	1714	-21.50	Vodafone Group PLC	131.44	-2.14
International Consolidated Airlines Group S.A.	148.56	-5.96	Whitbread PLC	2924	-22.00
Intertek Group PLC	5384	164.00	Wpp PLC	1057.5	-27.00

FTSE GLOBAL EQUITY INDEX SERIES

Feb 28 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	9329	784.16	2.4	-0.1	-7.4	1233.62	-7.2	1.9
FTSE Global All Cap	9329	784.16	2.4	-0.1	-7.4	1233.62	-7.2	1.9
FTSE Global Large Cap	1799	702.28	2.3	-0.6	-7.5	1138.62	-7.3	1.9
FTSE Global Mid Cap	2281	1002.91	2.8	1.1	-6.5	1483.94	-6.4	2.0
FTSE Global Small Cap	5249	1050.90	2.6	1.0	-8.2	1489.41	-8.0	1.6
FTSE All-World	4080	460.46	2.4	-0.3	-7.3	766.99	-7.1	1.9
FTSE World	2654	831.39	2.5	0.1	-7.4	1858.88	-7.2	1.9
FTSE Global All Cap ex UNITED KINGDOM In	9034	827.91	2.3	-0.2	-7.7	1278.05	-7.5	1.8
FTSE Global All Cap ex USA	7511	564.00	2.7	-1.7	-6.0	975.08	-5.8	2.7
FTSE Global All Cap ex JAPAN	7938	818.04	2.5	0.0	-7.5	1298.77	-7.3	1.9
FTSE Global All Cap ex Eurozone	8667	829.47	2.3	0.0	-7.3	1277.54	-7.1	1.9
FTSE Developed	2204	761.00	2.5	0.0	-7.8	1206.88	-7.6	1.8
FTSE Developed All Cap	5825	794.02	2.6	0.2	-7.8	1240.87	-7.6	1.8
FTSE Developed Large Cap	885	713.50	2.5	-0.2	-8.0	1151.87	-7.7	1.8
FTSE Developed Europe Large Cap	237	419.32	4.5	-1.2	-6.7	807.54	-6.5	2.6
FTSE Developed Europe Mid Cap	350	688.87	4.7	-2.4	-10.7	1153.13	-10.6	2.4
FTSE Dev Europe Small Cap	729	971.18	4.6	-2.8	-12.1	1562.60	-12.0	2.1
FTSE North America Large Cap	255	953.36	2.2	0.4	-8.6	1414.85	-8.4	1.4
FTSE North America Mid Cap	411	1226.71	2.7	2.4	-6.2	1679.82	-6.0	1.6
FTSE North America Small Cap	1330	1221.54	2.5	2.5	-7.4	1607.38	-7.3	1.3
FTSE North America	666	622.35	2.3	0.8	-8.1	943.86	-7.9	1.5
FTSE Developed ex North America	1538	293.53	3.1	-1.6	-6.9	546.94	-6.7	2.7
FTSE Japan Large Cap	172	424.80	1.2	-3.1	-6.8	609.45	-6.8	2.2
FTSE Japan Mid Cap	337	585.18	0.4	-1.8	-4.7	797.98	-4.5	2.4
FTSE Global wi JAPAN Small Cap	882	653.52	0.5	-0.8	-6.1	923.71	-5.9	2.6
FTSE Japan	509	174.08	1.0	-2.8	-6.4	279.69	-6.3	2.3
FTSE Asia Pacific Large Cap ex Japan	960	788.43	0.8	-3.1	-5.4	1400.03	-5.2	2.6
FTSE Asia Pacific Mid Cap ex Japan	902	1074.08	1.8	0.2	-5.2	1836.33	-5.0	2.9
FTSE Asia Pacific Small Cap ex Japan	2004	658.03	2.2	-1.2	-9.6	1094.48	-9.5	2.3
FTSE Asia Pacific Ex Japan	1862	625.28	0.9	-2.8	-5.4	1179.85	-5.2	2.6
FTSE Emerging All Cap	3504	847.26	1.5	-2.7	-3.8	1431.25	-3.7	2.7
FTSE Emerging Large Cap	914	792.43	1.4	-3.4	-3.7	1346.36	-3.6	2.7
FTSE Emerging Mid Cap	962	1134.64	1.9	0.7	-1.3	1926.92	-1.1	3.3
FTSE Emerging Small Cap	1628	898.65	1.9	-1.4	-7.2	1453.23	-7.2	2.5
FTSE Emerging Europe	87	298.10	20.1	-18.4	-28.1	600.65	-27.8	7.3
FTSE Latin America All Cap	258	782.68	1.7	6.8	10.4	1429.75	10.6	5.9
FTSE Middle East and Africa All Cap	332	846.06	0.9	2.6	6.2	1507.45	6.4	2.6
FTSE Global wi UNITED KINGDOM All Cap In	295	355.83	4.9	0.4	-1.1	706.02	-0.7	3.1
FTSE Global wi USA All Cap	1818	1067.95	2.3	0.9	-8.4	1528.07	-8.2	1.4
FTSE Europe All Cap	1486	490.59	4.8	-2.0	-8.4	907.37	-8.2	2.7
FTSE Eurozone All Cap	662	472.97	4.7	-2.4	-8.8	867.97	-8.6	2.4
FTSE EDHEC-Risk Efficient All-World	4080	516.98	2.7	0.4	-5.3	797.35	-5.1	2.2
FTSE EDHEC-Risk Efficient Developed Europe	587	374.58	4.5	-2.2	-9.3	640.56	-9.2	2.5
Oil & Gas	133	369.39	3.4	3.3	12.7	728.38	13.5	4.0
Oil & Gas Producers	93	361.33	3.4	2.5	13.7	729.64	14.6	4.1

Feb 28 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil Equipment & Services	24	269.03	3.0	3.0	15.0	483.08	15.8	4.2
Basic Materials	368	668.46	2.9	2.9	-0.6	1185.66	-0.2	4.0
Chemicals	172	885.96	2.5	2.5	-8.5	1526.16	-8.4	2.4
Forestry & Paper	22	301.08	3.8	3.8	-1.4	590.93	-1.0	3.0
Industrial Metals & Mining	96	580.70	4.7	4.7	5.0	1060.02	5.3	5.9
Mining	78	1028.04	2.2	2.2	10.4	1906.54	11.5	5.4
Industrials	756	535.99	3.0	3.0	-10.8	840.06	-10.6	1.7
Construction & Materials	143	644.95	3.0	3.0	-12.7	1063.83	-12.7	2.1
Aerospace & Defense	35	860.18	4.0	4.0	7.1	1325.68	7.3	1.3
General Industrials	71	257.56	3.3	3.3	-7.2	446.80	-6.7	2.2
Electronic & Electrical Equipment	143	684.72	2.6	2.6	-14.8	969.68	-14.8	1.3
Industrial Engineering	149	1013.03	2.6	2.6	-12.4	1582.03	-12.3	1.8
Industrial Transportation	125	1039.84	2.5	2.5	-6.4	1643.89	-6.2	1.8
Support Services	90	584.90	3.3	3.3	-17.7	859.62	-17.6	1.2
Consumer Goods	544	633.89	2.7	2.7	-8.0	1045.98	-7.9	2.0
Automobiles & Parts	129	662.76	1.8	1.8	-14.3	1055.84	-14.2	1.2
Beverages	68	787.80	3.9	3.9	-2.3	1314.16	-2.2	2.1
Food Producers	133	767.14	2.6	2.6	-2.3	1295.33	-2.2	2.3
Household Goods & Home Construction	61	604.13	3.7	3.7	-7.7	996.27	-7.3	2.4
Leisure Goods	48	292.27	1.6	1.6	-8.2	408.24	-8.2	1.2
Personal Goods	90	1014.26	3.1	3.1	-12.1	1537.79	-12.0	1.6
Tobacco	15	1046.22	3.3	3.3	8.8	2835.63	9.0	5.8
Health Care	337	725.54	3.1	3.1	-8.1	1140.38	-7.9	1.7
Health Care Equipment & Services	128	1495.25	2.9	2.9	-10.1	1819.35	-10.1	0.9
Pharmaceuticals & Biotechnology	209	464.48	3.2	3.2	-6.5	781.77	-6.2	2.4
Consumer Services	446	634.06	2.0	2.0	-10.0	896.96	-9.9	1.0
Food & Drug Retailers	68	338.17	2.7	2.7	-1.8	527.52	-1.5	2.3
General Retailers	152	1124.28	2.0	2.0	-12.1	1525.17	-12.0	0.8
Media	83	411.92	1.7	1.7	-12.2	586.08	-12.2	1.0
Travel & Leisure	143	487.75	2.0	2.0	-4.9	705.37	-4.8	1.0
Telecommunication	88	149.59	2.5	2.5	0.9	341.22	1.4	4.2
Fixed Line Telecommuniations	34	113.22	2.2	2.2	0.5	295.13	1.3	5.9
Mobile Telecommunications	54	179.81	2.6	2.6	1.2	354.39	1.5	3.3
Utilities	195	327.75	3.5	3.5	-4.5	747.51	-4.1	3.3
Electricity	140	364.62	3.3	3.3	-5.4	820.19	-5.0	3.4
Gas Water & Multiutilities	55	336.88	3.8	3.8	-2.3	792.29	-2.0	3.3
Financials	865	296.05	2.4	2.4	-1.3	554.10	-1.1	2.7
Banks	268	232.31	2.6	2.6	2.6	480.75	2.9	3.2
Nonlife Insurance	72	353.04	2.8	2.8	0.7	573.74	0.9	2.9
Life Insurance	52	244.46	1.9	1.9	1.2	454.74	1.4	3.5
Financial Services	213	482.00	2.4	2.4	-3.4	721.56	-3.3	1.6
Technology	348	590.24	1.4	1.4	-13.0	764.14	-12.9	0.8
Software & Computer Services	189	906.81	1.2	1.2	-15.2	1091.86	-15.1	0.5
Technology Hardware & Equipment	159	513.48	1.7	1.7	-10.4	712.65	-10.3	1.2
Alternative Energy	16	187.23	3.7	3.7	-10.2	267.68	-10.1	0.6
Real Estate Investment & Services	159	318.82	1.3	1.3	-3.1	604.30	-3.1	3.0
Real Estate Investment Trusts	101	532.61	2.4	2.4	-10.7	1212.93	-10.5	3.0
FTSE Global Large Cap	1799	702.28	2.3	2.3	-7.5	1138.62	-7.3	1.9

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UK STOCK MARKET TRADING DATA

	Feb 28	Feb 25	Feb 24	Feb 23	Feb 22	Yr Ago
Order Book Turnover (m)	80.03	149.52	149.52	135.78	152.82	316.92
Order Book Bargains	1346002.00	1342719.00	1342719.00	1819631.00	887648.00	981733.00
Order Book Shares Traded (m)	2452.00	2172.00	2172.00	2930.00	1508.00	1676.00
Total Equity Turnover (£m)	5744.28	7683.29	7683.29	8326.92	5826.11	7247.68
Total Mkt Bargains	1760255.00	1709583.00	1709583.00	2445874.00	1194854.00	1466877.00
Total Shares Traded (m)	5990.00	5739.00	5739.00	8665.00	5663.00	6154.00

† 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 renunc. 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	
BB Healthcare Trust	Pre			**87.909**	158.492	**16.510**	34.740	**3.01500**	2.50000	Apr 28	**6.030**	5.000
CentralNic Group	Pre	**410.540**	240.012	**1.555**	11.834L	**0.016L**	0.055L	**0.00000**	0.00000	-	**0.000**	0.000
European Opportunities Trust	Int			**110.776**	42.089L	**104.420**	37.640L	**0.00000**	0.00000	-	**2.000**	3.481
Fix Price Group Ltd	Pre	**230473.000**	190059.000	**30596.000**	26310.000	**25.200**	20.700	**1179.17200**	0.00000	Oct 8	**1179.200**	0.000
GlobalData	Pre	**189.300**	178.400	**32.600**	28.600	**21.900**	19.400	**13.20000**	11.60000	Apr 29	**19.300**	17.000
Kitwave Group	Pre	**380.694**	592.016	**2.124**	1.305	**2.000**	0.000	**0.00000**	0.00000	-	**2.250**	2.250
Made Tech Group	Int	**11.720**	5.067	**0.121**	0.012	**0.000**	0.000	**0.00000**	0.00000	-	**0.000**	0.000
Metal Tiger	Pre	**0.000**	0.000	**4.215**	3.787	**2.590**	2.480	**0.00000**	0.00000	-	**0.000**	0.000
Oncimmune Holdings	Int	**1.430**	1.827	**4.875L**	2.789L	**7.040L**	4.090L	**0.00000**	0.00000	-	**0.000**	0.000
Quartix Technologies	Pre	**25.513**	25.835	**5.286**	5.659	**10.140**	9.860	**1.90000**	2.40000	Apr 29	**3.400**	4.900
Senior	Pre	**658.700**	733.600	**23.700**	191.800L	**5.820**	38.200L	**0.00000**	0.00000	-	**0.000**	0.000
Toople	Pre	**3.013**	0.690	**1.281L**	0.714L	**0.030L**	0.350L	**0.00000**	0.00000	-	**0.000**	0.000

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

UK RECENT EQUITY ISSUES

Issue date	Issue price(p)	Sector	Stock code	Stock	Close price(p)	+/-	High	Low	Mkt Cap (£m)
02/16	45.00	AIM	CPH2	Clean Power Hydrogen PLC	60.00	1.00	69.00	45.00	15925.2
02/16	185.00	AIM	STG	Strip Tinning Holdings PLC	170.00	-9.40	200.00	165.60	2573.4
02/09	76.00	AIM	IX/	i(x) Net Zero PLC	77.00	0.00	78.00	76.00	6087.4
02/07	3.75	AIM	ARV	Artemis Resources Ltd	3.70	-0.13	5.00	3.50	5136.8
02/04	50.50	AIM	HERC	Hercules Site Services PLC	48.50	-0.90	55.00	47.00	2844.5
02/02	1000.00		HMA1	HIRO Metaverse Acquisitions I SA	1000.00	4.00	1010.00	984.00	11845.0

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

MARKET DATA

FT500: THE WORLD'S LARGEST COMPANIES

Stock	Price	Day Chg	52 Week High	52 Week Low	Yld	P/E	MCap m
Australia (A$)							
ANZ	26.01	-0.09	29.64	25.64	4.00	12.78	53075.46
BHPBilltn	46.66	1.97	54.55	35.56	4.49	15.63	171404.95
CmwBkAu	93.46	-0.42	110.19	81.79	2.67	19.76	115726.61
CSL	259.98	-1.35	319.78	240.10	1.08	37.28	90876.37
NatAusBk	28.94	0.03	30.98	24.66	3.08	15.52	67927.95
Telstra	3.96	0.02	4.20	3.04	2.54	25.26	33759.82
Wesfarmers	48.19	0.29	67.20	47.45	3.44	22.82	39649.49
Westpc	22.81	-0.02	27.12	20.00	3.87	16.71	57951.12
Woolworths	35.49	-0.27	42.66	32.46	2.86	28.94	31212.51
Belgium (€)							
AnBshInBv	55.14	-3.11	65.86	46.66	0.95	22.37	107589.74
KBC Grp	64.52	-3.64	86.50	56.68	0.70	10.74	30211.2
Brazil (R$)							
Ambev	15.20	0.36	19.86	13.35	3.04	16.16	46420
Bradesco	17.06	0.05	24.57	16.06	3.01	11.26	16117.33
Cielo	2.57	-0.08	4.45	2.01	4.27	7.97	1354.33
ItauHldFin	21.83	0.32	30.15	18.91	3.92	7.81	20995.14
Petrobras	36.37	0.66	37.80	20.60	6.47	3.60	52504.06
Vale	92.28	4.74	120.45	61.85	15.15	5.14	91868.44
Canada (C$)							
Bausch Hlth	30.52	-0.41	43.97	27.50	-	-7.39	8654.09
BCE	66.84	-0.31	68.17	54.42	5.15	22.00	47905.74
BkMontrl	143.77	-1.50	152.87	103.76	2.95	12.40	73503.67
BkNvaS	91.31	-0.37	95.00	74.16	3.95	11.84	86705.75
Brookfield	68.51	-1.07	79.04	51.17	0.94	25.48	88614.08
CanadPcR	89.50	-0.51	100.00	82.12	0.85	19.34	65600.64
CanImp	160.85	-2.76	167.50	117.09	3.64	11.53	57190.69
CanNatRs	70.08	0.54	70.19	34.23	2.61	14.21	64499.15
CanNatRy	157.19	-1.05	168.66	125.00	1.53	23.80	86931.31
Enbridge♦	54.41	0.33	55.60	42.98	6.07	19.23	86919.35
GtWesLif	38.02	-0.24	41.50	31.43	4.59	10.83	27895.94
ImpOil	56.26	0.60	57.72	27.55	1.74	75.29	29681.1
Manulife	25.63	-0.28	28.09	22.76	4.35	7.56	39249.29
Nutrien	106.35	3.18	106.42	66.05	2.17	21.22	46226.04
RylBkC	139.66	-0.71	148.26	108.15	3.10	12.61	156085.71
SHOP	873.70	13.75	2228.73	752.00	-	25.79	78524.64
Suncor En	38.52	0.68	38.55	21.90	2.17	24.16	43620.65
ThmReut	127.49	-0.95	156.62	107.66	1.58	7.78	48870.26
TntoDom	102.72	-1.96	109.08	76.80	3.08	13.28	147298.65
TrnCan	67.47	0.79	68.20	53.20	5.05	35.46	52175.24
China (HK$)							
AgricBkCh	2.96	0.06	3.30	2.54	7.60	3.84	11644.48
Bk China	3.04	0.02	3.20	2.67	7.72	3.72	32534.08
BkofComm	5.36	0.08	5.56	4.33	7.11	3.91	24017.09
BOE Tech	0.71	-0.03	1.21	0.65	-	-60.46	18.08
Ch Coms Cons	4.48	-0.06	5.17	3.57	4.79	3.08	2533.33
Ch Evrbrght	2.90	-	3.54	2.63	8.71	3.71	4705.59
Ch Rail Cons	5.22	-0.08	5.99	4.57	5.30	2.65	1387.09
Ch Rail Gp	4.59	-0.05	5.20	3.53	4.73	3.80	2471.55
ChConstBk	5.86	0.11	6.74	5.03	6.68	4.16	180303.37
China Vanke	18.52	-0.24	34.75	16.84	8.11	4.64	4506.19
ChinaCitic	3.67	0.02	4.29	3.28	8.34	3.24	6990
ChinaLife	12.96	-0.02	16.92	12.22	5.80	5.13	12342.16
ChinaMBank	65.80	1.00	72.45	55.55	2.29	12.46	38660.48
ChinaMob	52.80	-0.35	59.20	45.90	6.43	8.12	138360.21
ChinaPcIns	21.75	-0.15	38.20	20.85	6.58	6.30	7725.24
ChMinsheng	3.04	-0.01	5.01	2.56	8.53	3.77	3237.09
ChMrchSecs	15.84	-0.12	22.32	15.73	4.74	14.30	18628.34
Chna Utd Coms	3.82	-0.03	4.60	3.70	1.70	18.80	18616.08
ChShenEgy	21.50	0.90	22.80	14.22	10.05	7.66	9293.41
ChShpbldng	4.11	0.03	5.08	3.78	-	-301.47	14381.86
ChStConEng	5.09	0.02	5.77	4.38	4.10	4.19	32934.54
ChUncHK	4.13	-0.06	5.39	3.82	4.19	8.24	16172.94
CNNC Intl	7.40	0.16	8.92	4.62	1.71	19.08	20021.23
CSR	3.47	-	4.04	3.19	6.29	7.59	1941.15
Daqin	6.81	-0.03	7.25	5.80	6.85	10.01	16042.29
GuosenSec	10.35	-0.10	13.29	10.29	2.16	12.53	14476.3
HaitongSecs	6.72	-0.03	7.81	6.36	9.52	5.17	2932.33
Hngzh HikVDT	48.20	-0.05	70.44	45.14	1.61	28.95	62190.73
Hunng Pwr	4.57	0.11	5.74	2.53	4.60	-55.60	2749.11
IM Baotou Stl	2.68	0.02	4.14	1.46	-	31.49	13451.73
In&CmBkCh	4.67	0.09	5.75	4.08	6.86	4.27	51874.2
IndstrlBk	22.07	-0.04	26.13	17.08	3.53	6.20	68595.32
Kweichow	1790.4	-8.66	2320	1525.5	1.05	46.16	356374.44
Midea	0.51	-	0.72	0.46	-	47.23	19.65
New Ch Life Ins	22.35	-0.25	31.20	20.55	7.48	3.83	2957.92
PetroChina	4.17	0.07	4.29	2.68	6.30	7.62	11260.06
PingAnIns	60.40	-0.20	99.80	48.80	4.52	7.34	57569.84
PngAnBnk	15.75	-0.15	25.16	15.62	1.11	9.59	48429.39
Pwr Cons Corp	7.65	-0.13	9.96	3.77	1.18	15.69	13508.8
SaicMtr	18.11	-0.26	23.45	18.01	3.33	8.94	33526.51
ShenwanHong	0.07	0.00	0.11	0.05	-	-13.13	81.81
ShgPdgBk	8.39	-0.04	11.24	8.36	5.56	5.30	39021.07
Sinopec Corp	3.86	-0.03	4.69	3.40	3.98	4.21	12603.64
Sinopec Oil	2.24	0.04	2.90	1.94	-	256.83	4816.18
Denmark (kr)							
DanskeBk	112.70	-2.10	133.25	100.70	1.82	9.22	14672.32
MollerMrsk	21020	-470.00	24070	12795	1.63	4.66	28273.4
NovoB	682.10	9.20	773.70	420.15	1.41	33.22	182568.03
MondelezInt	65.43	-1.33	69.47	52.91	1.97	20.94	91273.03
Monsanto	9.76	-0.02	10.00	9.51	-	-	244.00
MorganStly	91.67	-2.88	109.73	76.00	1.90	11.71	164493.74
Netflix	396.24	5.44	700.99	351.46	-	35.59	175915.94
NextEraE	78.13	1.40	93.47	68.33	1.92	65.98	153349.27
Nike	137.56	-1.24	179.10	125.44	0.83	35.60	217522.98
NorfolkS	257.52	-2.91	298.75	238.62	1.55	22.27	61747.49
Northrop	438.88	29.21	439.15	291.60	1.39	10.18	68510.02
NXP	191.83	-2.37	239.91	164.19	1.07	34.00	50362.69
Occid Pet	42.76	4.02	43.16	21.62	0.09	-58.07	39937.03
Oracle	76.63	0.28	106.34	64.50	1.59	21.90	204636.35
Pepsico	163.25	-5.13	177.24	128.32	2.56	27.95	225718.09
Perrigo	35.73	0.05	50.90	34.53	2.63	-11.54	4779.07
Pfizer♦	47.15	-0.57	61.71	33.36	3.27	13.77	264646.66
Phillips66	84.70	0.01	94.34	63.19	4.23	-74.01	37137.7
PhilMorris	101.34	-3.91	112.48	83.98	4.76	17.74	157051.8
PNCFin	198.87	-3.80	224.52	168.28	2.35	15.28	84050.58
PPG Inds♦	135.46	-5.63	182.97	133.13	1.62	22.88	31968.42
ProctGmbl	155.66	-2.58	165.35	121.54	2.16	27.71	376689.08
Prudntl	111.59	-1.21	124.22	85.47	4.06	6.10	41957.84
PublStor	357.43	-5.28	376.56	229.14	2.23	42.91	62714.59
Qualcomm	172.37	1.44	192.68	122.17	1.54	22.01	193930.3
Raytheon	102.19	4.07	102.32	71.99	1.84	62.26	152501.3
Regen Pharm	619.26	0.60	686.62	441.00	-	9.96	65468
S&P Global♦	381.00	0.11	484.21	325.50	0.78	33.01	91821
Salesforce	210.67	2.58	311.75	184.44	-	88.02	207505.03
Schlmbrg	39.17	-0.28	42.64	24.52	1.26	29.96	55351.78
Sempra Energy	144.86	3.42	145.70	114.66	2.98	41.36	46257.9
Shrwin-Will	265.27	-2.00	354.15	218.06	0.79	36.47	69069.35
SimonProp	139.46	-0.24	171.12	104.12	4.85	22.79	45824.9
SouthCpr	69.46	0.67	83.29	54.92	3.87	17.11	53698.22
Starbucks	92.22	-0.36	126.32	87.25	1.94	26.18	106080.67
StateSt	85.96	-2.79	103.76	72.13	2.47	12.72	31465.32
Stryker	263.89	-1.91	281.16	227.84	0.95	53.36	99628.38
Sychrony Fin	42.94	-0.25	52.49	37.76	2.04	6.10	22383.41
T-MobileUS	123.19	-2.27	150.20	101.51	-	46.54	153900.03
Target♦	200.22	1.00	268.98	166.83	1.44	15.04	95930.19
TE Connect♦	142.73	-1.98	166.44	123.31	1.37	19.58	46574.71
Tesla Mtrs	874.12	64.25	1243.49	539.49	-	285.20	877847.99
TexasInstr	170.20	-0.62	202.26	161.04	2.39	21.96	157187.71
TheTrvelers	171.97	-1.47	174.55	144.44	2.00	12.11	41530.88
ThrmoFshr	545.08	-4.75	668.94	433.52	0.18	25.43	214787.73
TJX Cos♦	66.14	-0.64	76.94	59.85	1.15	30.85	78896.98
Truist Financial Corp♦	62.42	-0.55	66.10	51.87	2.92	14.79	82901.28
UnionPac	245.35	-1.06	256.11	195.68	1.65	26.40	156263.16
UPS B♦	208.06	-1.89	232.31	156.59	1.95	28.60	152414.22
USBancorp	56.63	-0.71	63.01	49.85	3.02	11.43	84033.36
UtdHlthcre	470.00	-5.75	509.23	329.85	1.14	29.30	442222.6
ValeroEngy♦	84.22	-0.65	93.77	58.85	4.63	-78.37	34471.55
Verizon	53.59	-0.54	59.85	49.69	4.55	11.42	224940.38
VertexPharm	229.00	-1.30	254.93	176.36	-	27.59	58298.06
VF Cp	58.55	-0.09	90.79	55.71	3.33	19.38	22770.19
ViacomCBS	29.58	-6.41	101.97	27.84	3.27	6.02	17946.37
Visa Inc♦	218.05	-1.22	252.67	190.10	0.61	36.44	361619.27
Walgreen♦	46.37	0.17	57.05	43.62	4.13	6.65	40029.92
WalMartSto	135.03	-1.35	152.57	126.28	1.59	48.23	374556.81
WellsFargo♦	53.19	-0.92	60.30	35.93	0.94	12.70	202896.28
Williams Cos	31.08	0.39	31.11	22.50	5.22	38.09	37763.13
Yum!Brnds	123.22	-0.50	139.85	101.94	1.59	23.90	35608.24
Venezuela (VEF)							
Bco de Vnzla	0.40	-	594.00	0.11	240.21	-	333.06
Bco Provncl	1.75	-0.04	798000	1.75	-	0.00	149.82
Mrcntl Srvcs	4.90	-0.10	601.00	3.40	36216.94	0.00	68.10

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

Based on the FT Global 500 companies in local currency

FT 500: BOTTOM 20

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

BONDS: GLOBAL INVESTMENT GRADE

INTEREST RATES: OFFICIAL

INTEREST RATES: MARKET

BOND INDICES

VOLATILITY INDICES

BONDS: BENCHMARK GOVERNMENT

GILTS: UK CASH MARKET

GILTS: UK FTSE ACTUARIES INDICES

COMMODITIES

BONDS: INDEX-LINKED

BONDS: TEN YEAR GOVT SPREADS

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

BBC mission to make culture a TV fixture

Suzy Klein, the corporation's new head of arts, aims to create shows that will become 'appointment' viewing. She talks to Peter Aspden

Towards the end of my conversation with Suzy Klein, new head of arts and classical music at the BBC, in a Shepherd's Bush café, I recall the days when the local market used to have a record shop which opened on Christmas Day. It was there and then that I bought my first record with my own pocket money, the 1967 hit "Silence Is Golden" by maudlin group The Tremeloes, I tell her. Klein sportingly reciprocates, in a tone that hovers between sheepish and mortified: her first purchase, 20 years later, was "When Will I Be Famous?" by the anything-but-maudlin '80s boy band Bros.

While not exactly launching her into dizzying celebrity status, Klein's new appointment is an important one in Britain's cultural ecology. The BBC's symbiotic relationship with the country's artistic life — think, just for a start, of the Proms and its array of orchestras — is one of the network's touchstones. If the current existential threat to the BBC from its various detractors is to be successfully defended, here lie some of its most potent weapons. The simple part of Klein's job is to build on that inherited foundation; the harder task is to keep up with the innovations that have always made Britain a cultural leader across just about all art forms.

Asked about that balancing act, she says she wants to retain the "verve, depth and integrity" of past successes, but also points to the "more modern storytelling" techniques that have emerged in the post-Netflix landscape. "The fact that people are now used to watching programmes in Hindi, Korean and Spanish, and feature-docs . . . the grammar and sophistication of television has changed beyond recognition," she says. "Expectations are that much higher. But it is a process of evolution, and not throwing out any of the great things that we do."

Klein's own 25-year career at the BBC has included stints as a presenter, writer and producer, mostly focusing on her first love, classical music, the early infatuation with the Goss brothers merely a precursor to making documentaries on the likes of Steve Reich and John Adams. She was a sparky and erudite co-presenter of Radio 3's most listened-to show, *Essential Classics*, as well as a regular guest presenter of Radio 4's *Saturday Live*.

Above: Suzy Klein, photographed for the FT by Toby Glanville outside Broadcasting House. Above right: Hayley Squires and Zawe Ashton in the new BBC drama, 'Maryland'

She has spent the time since her appointment last August putting together her first season of new programming, details of which are announced today. The season's highlights are the establishment of a new Sunday night performance slot on BBC4, and the eight-part series for BBC2 *Art That Made Us*, a chronological survey of works and artefacts dating from the departure of the Romans from Britain to the present day.

Klein describes the performance slot as a "huge, inescapable" commitment on the part of the network. "The BBC has always been a home for performance, and now we are showing that we really mean it, putting a stake in the ground to say, 'This is what we do, and we are really good at it,'" she says combatively.

Among the works featured are productions from the Royal Shakespeare Company and Shakespeare's Globe; eight specially filmed performances from the BBC orchestras; and *Prisoner C33*, a new one-man play starring Toby Stephens and directed by Trevor Nunn, about Oscar Wilde's confinement in Reading Gaol. Klein says the series is a nod back in the direction of appointment-viewing TV. "There is something of a Sunday-night blues thing, and this is all about a chance to sit on a sofa with a glass of wine, watching something really fantastic," she says. "And you know that is something that will be there, week-in, week-out."

Art That Made Us will feature contemporary artists and performers — they include Antony Gormley, Lubaina Himid, Maxine Peake, Michael Sheen — talking about art works and the way in which they have resonated through history. "Cornelia Parker drooling over the Staffordshire Hoard!" says Klein with improbable excitement while running through the highlights. She describes the tone of the series as one that possesses "intellectual heft, borne really lightly".

I ask if the perceived division between "high" and popular art forms still bears any relevance in her considerations, and she all but dismisses the question. "When I think of what we do — from John Bridcut's [direction of] Schubert's *Winterreise* in the Alps, to Joan and Jackie Collins — I can't think of anything that has that kind of range."

She cites the iconoclastic 1990s cultural magazine Modern Review as an influence on her thinking. "They were talking about branding, games, TV, literature, addressing each of them with the seriousness they deserved and required. That was a seminal thing for me, to consider all those different things in the way we looked at the world."

For those fearful that the glass-of-wine-on-a-sofa programming model points to a certain cosiness of outlook, there is *Maryland*, a half-hour adaptation by Lucy Kirkwood of her own play on violence against women, starring Hayley Squires, Zawe Ashton and Daniel Mays, which Klein describes as a "punch in the guts".

She says greater attention will be paid to the BBC archive, particularly in the performance slot, which will form a discrete collection on the network's iPlayer platform. Some of those helped make TV history, I say: a personal favourite was Leslie Megahey's magisterial *Arena* three-hour documentary *The Orson Welles Story* from 1982. Is that kind of programme-making still possible? That kind of access to a subject? And who are the Orson Welles figures of today?

Klein responds that social media has changed things forever. "[They] have transformed the way creative artists interact with the world. Once you can curate your own story, and have a direct conversation with your followers, it becomes ever harder to find people and places that are inaccessible. But when you do get that unfettered access, it feels even more special." We both struggle briefly and unsuccessfully to think of today's Orson Welles.

> 'The BBC has always been a home for performance, and now we are showing that we really mean it'

Then there was the legendary night in December 1994 when Georg Solti invited BBC cultural grandees Michael Jackson and Alan Yentob to witness the performance at the Royal Opera House of the young and thrilling Angela Gheorghiu in *La traviata*, prompting a last-minute clearance of the BBC2 schedules to broadcast one of her performances live. Is there still that kind of derring-do and sense of occasion in the air?

Klein smiles gently. "If you are asking me whether I would like to be gifted the whole of BBC2 for a night, the answer is: 'Yes please!'"

'Art That Made Us' (BBC2) and the new Sunday night performances (BBC4) begin in April

Sculptor Antony Gormley will appear in a new BBC documentary series, 'Art That Made Us'
BBC/ClearStory/Menace

Jazz substance blends with alt-rock grit

JAZZ

Mark Lockheart's Dreamers
Vortex Jazz Club, London
★★★★☆

Mike Hobart

Saxophonist Mark Lockheart came to notice with the eclectic 1980s big band Loose Tubes. Since then, his career has criss-crossed genres through his work with artists such as Radiohead, Jah Wobble and Prefab Sprout, while his jazz output has spanned grainy white-knuckle electronica, intimate chamber jazz and orchestral work. Yet despite all the chop-and-change, Lockheart maintains his singular voice as a stylist anchored in jazz tradition with the power to adapt.

This first-house gig at the Vortex Jazz Club, at the end of a 13-date tour, presented his latest project, a synth-fuelled blend of jazz substance and alt-rock grit. Tom Herbert and Dave Smith were skin-tight on bass guitar and drums, while Elliot Galvin delivered a psychedelic sheen of ripples and beeps from his collection of keyboards and synths. Lockheart, for the most part, showcased the tonal control and dynamic range of his tenor sax, interjecting his melodic flow with fast lines and rhythmic stammers.

The evening's all-original repertoire was drawn from *Dreamers*, Lockheart's recently released CD, the latest twist in the saxophonist's multi-faceted career. The core aesthetic combines sparse harmonic movements with a kaleidoscope of electronic sounds; Lockheart's jazz-steeped phrasing is fuelled with alt-rock rhythms and bursts of free jazz. Freedom to solo is balanced by tight themes, abrupt changes in tempo and unison lines erupting mid-flow.

The set began with Galvin conjuring strange sounds from his box of tricks — "Weird Weather" was aptly named. Lockheart entered light-toned and lyrical on tenor sax, the rhythm section added sparse lines and alt-funk beats, there was a burst of abstraction with a switch to soprano sax, then a mighty groove and a sudden stop.

Mark Lockheart on stage at the Vortex Jazz Club

"Jagdish" came next, inspired by a trip to India; it is Hindi for "King of the world", we were told. It began with mournful tenor sax sounding like a ship signalling through fog. Soon, gentle rhythms swayed underneath, unison lines hinted at Eurasian scales, and Lockheart toyed with the rhythm of his echoing sax.

Elsewhere in the set, the punk-funk beats and stabs of "Gangster Rat" were inspired by Banksy and the dreamy "Marmalade Skies" by The Beatles; the first began tensely and gained traction throughout, the second was a highlight of sustained lyrical sax. "Nature V Nurture" found Lockheart ruminating on harmony's edge, first on soprano and then on tenor sax.

The gently rocking rhythms and alt-pop sensibilities of the album's title track came three numbers in, though this too had unexpected shifts. The evening's ending was fast, furious and funky with the riffy unison theme of "Fluorescences", a classic set-closer with dramatic changes of pace and sax and synth swapping phrases with glee.

vortexjazz.co.uk
'Dreamers' is released by Edition Records

FT BIG READ. SOUTH AMERICA

A prison gang with a handful of members 30 years ago, the PCC has risen to become one of the world's most powerful organised crime groups with a global operation that includes links to 'Ndrangheta in Italy.
By Bryan Harris

Brazil's drug empire

Power in the PCC is distributed across a range of senior figures including Marcos Camacho, above, known as Marcola, who is in prison. The violent conditions of penitentiaries, right, proved a fertile recruiting ground for the criminal organisation
Getty

At any given moment, Lincoln Gakiya is protected by no fewer than 10 police officers — eight special battalion troops, armed with assault rifles, and a further two or three in plain clothes. The state prosecutor from São Paulo has "no doubt" he is the most threatened man in Brazil.

"The police have risk classifications and mine is at the maximum," says the 55-year-old father of two. "It makes life very restrictive. I can't travel, I can't go to bars or restaurants. We mostly end up just staying at home."

Gakiya's cloistered personal life is a consequence of his profession. For almost 17 years, he has investigated what has now become the predominant organised crime syndicate in South America — the Primeiro Comando da Capital or First Capital Command. For many, it is known simply as the PCC.

Founded almost three decades ago as a prison brotherhood to protect inmates in São Paulo's brutal penitentiary system, the group has today evolved into a multinational mafia, with an estimated 40,000 members and a diversified revenue stream that generates upwards of half a billion dollars every year, according to São Paulo state prosecutors.

Long the criminal hegemon of São Paulo — the largest city in the Americas — the group has expanded its dominance across Brazil over the past decade, outflanking for the most part its main rival, the Rio de Janeiro-based Red Command, in a nationwide turf war.

Along the way, the PCC forged commercial ties with the region's underworld, striking deals with Bolivian farmers to supply cocaine paste and ex-Farc guerrillas in Colombia to provide training and arms. In the tri-border area between Brazil, Paraguay and Argentina, it teamed up with Lebanese syndicates — which some believe have links to Hizbollah — to launder money, according to prosecutors and federal police.

During this period, the syndicate's focus was almost exclusively on selling drugs to the Brazilian market. That has now changed, investigators say. In the past three to four years, the PCC's export business has gone global.

> 'The PCC is the largest threat to the Brazilian state. If we don't do anything, we can become a narco state'

Following a tie-up with Italy's 'Ndrangheta, the PCC has begun exporting cocaine to Europe and reaping bumper profits, says Gakiya. It has established transshipment points in west and southern Africa to diversify risk. In the US, authorities have detected the PCC in multiple states.

It has also established new revenue streams. Police say it is behind a surge in digital crimes, including WhatsApp scams that every year ensnare millions of Brazilians. It is also moving into environmental crime, with PCC members an increasingly prominent presence among illegal gold mining groups in the Amazon rainforest.

"I can't emphasise enough how much the PCC has grown. It has become much richer and a lot bigger," says Leonardo Romanelli, an intelligence officer at the state prosecutor's office in São Paulo. "They have become much more sophisticated in their overseas trafficking. Until 2017, there were the Paraguay and Bolivia routes, which were drugs for consumption in Brazil. However, since 2018-2019, the PCC have become a very large international player."

In recognition of the PCC's growing clout, the US Treasury Department in December announced sanctions against the São Paulo-based syndicate. "It has forged a bloody path to dominance through drug trafficking, as well as money laundering, extortion and murder-for-hire," the Treasury says.

With the PCC surging in strength, security experts fear Brazil is at the beginning of state capture, with the syndicate using its wealth to influence local and national politics as well as the judiciary and police. Some worry that the PCC has become too big to tackle.

"I hope Brazil doesn't become a Colombia of the 1990s or like Mexico now," says Gakiya from his office in the city of Presidente Prudente in the interior of São Paulo state. The door and windows around him are armoured.

Rafael Alcadipani, a crime expert with the Brazilian Forum on Public Security, puts the situation even more starkly: "The PCC is the largest threat to the Brazilian state. If we don't do anything, we can become a narco state."

From prisoners to professionals

The group traces its origins to 1992, when police stormed the Carandiru Penitentiary near central São Paulo to quell a riot. The botched operation left 111 inmates dead. Images from the scene showed rows of naked corpses and decrepit cell blocks awash in blood.

The massacre was a call to action for the prison population of São Paulo. After launching the following year with an initial handful of members, the PCC expanded rapidly, fashioning itself as a "brotherhood" to protect inmates from the excesses of the state. Members were required to pay dues and in exchange they would be "baptised" as an *irmão* — a brother. Home to hundreds of thousands of inmates, living in squalid, violent conditions, the prison system proved a fertile recruiting ground.

"In this world behind walls, almost a new city emerged. The prison system was a place where they became stronger. The more you arrested people, the more powerful the PCC became," says Bruno Paes Manso, a researcher at the University of São Paulo and author of *A Guerra*, a book on the PCC.

The organisation quickly segued into drug trafficking, buying raw materials from suppliers in Bolivia and Paraguay, before processing cocaine and crack cocaine for sale in São Paulo, a state with a population of 44mn.

How cocaine flows out of Brazil

Source: Insight Crime

During this period, the PCC waged open war against the state authorities, notably in May 2006, when it launched almost 300 attacks against civilian and security targets over the course of one weekend, forcing the local government to implement curfews and lockdowns. Banks were robbed and police precincts attacked by waves of PCC members. The wave of violence was co-ordinated from the prisons via mobile phones.

Since then, however, investigators and security experts say the PCC has increasingly eschewed direct confrontation with the state in favour of a quieter, more organised approach, which can generate larger profits. "They realised they needed predictability, so they started to become more professional, they started to talk about money, about profits," says Paes Manso.

"They remain innately violent but they've changed the way they exercise violence," adds Romanelli, pointing out aggression today is directed less at the state than at its domestic rivals.

Central to the professionalisation of the PCC was their system of *sintonias,* or divisions responsible for a specific area. There were three *sintonias* to begin with: drug trafficking, internal discipline and support for arrested members. Over time, the structure expanded to include *sintonias* for legal support, accountancy and female members.

In 2014 the group created the General *Sintonia* for States and Nations, a dedicated division to lead national and international expansion, and sent out coordinators to open up new markets.

On a national level, the strategy triggered a surge in gangland bloodletting as the PCC competed for territory in Brazil's north-east and Amazonian regions against local syndicates as well its chief national rival, Red Command.

But its international expansion was the real game-changer, as it entered into an alliance with the 'Ndrangheta in Italy. By selling its product in Europe and earning euros, the PCC has exponentially boosted its profits and strength, investigators say.

The PCC buys the base paste, or the extract of the coca leaf, for about $1,000 a kilo, Gakiya explains. Each kilo can be processed into two or three kilos of cocaine. Each kilo retails for about €35,000 in Europe. He estimates that the PCC ships at least a tonne per month from São Paulo or from other ports it controls in the south or north-east of Brazil.

"From the moment it arrives in Europe, the mafia is responsible for rescuing the drugs from ships," says Gakiya. "If the PCC sends a tonne, the mafia's cut is 400kg."

It's a low risk business for the PCC, he adds. "If a shipment gets caught, they only lose the drugs. No one goes to prison. And [if successful] they receive the money in euros."

Investigators in São Paulo estimate the group has an annual turnover of about $500mn, Gakiya says. "Can you imagine the profit?"

Independent security experts estimate the figure could be even higher given that the size of the Brazilian cocaine market is estimated to be worth billions of dollars and the PCC controls the lion's share of it.

> '[The group] brought respect and limits. It brought organisation. It managed to do what the government could not'

A joint study by InSight Crime and the American University's Center for Latin American & Latino Studies points out that in 2020 federal police tracked more than $5bn in ill-gotten assets as part of anti-money laundering investigations against the PCC.

The structure of the brotherhood

Unlike traditional Latin American drug cartels, which typically have one clear boss, power in the PCC is diffused through a broader top leadership.

At the apex of the pyramid is an advisory board of six or seven senior figures, who must sign off on big decisions, such as whether to launch a war or open a new frontier, says Romanelli. This board includes Marcos Willians Herbas Camacho, also known as Marcola, who for decades has been the public face of the PCC. He is serving a sentence of 332 years in prison for crimes including murder and drugs trafficking.

In 2019, authorities succeeded in incarcerating every member of this top echelon in federal penitentiaries without access to mobile phones. This has complicated the group's decision-making, investigators say, and has resulted in power filtering further down.

Below the advisory board, there are some 50 to 100 regional leaders scattered across South America. Below them are the thousands of often very young, very poor foot soldiers.

"There are two PCCs. The base that is very, very poor. They live in slums. They are more than 95 per cent of members. Then there is the second PCC, [the top] they live in the best neighbourhoods of São Paulo, Brazil, Paraguay," says Romanelli.

Members are still known as "brothers" and they implement laws and rules in the communities they control. This includes "crime tribunals", where PCC members judge cases and hand out sentences, including the death penalty.

Authorities say this type of criminal governance tears at Brazil's social fabric, although many living in these communities argue it brings order.

"Did the PCC make the community more organised, less violent? Yes, I think so," says an evangelical pastor in Paraisópolis, one of the largest favelas in São Paulo. "It brought respect and limits. It brought organisation. It managed to do what the government couldn't."

Paes Manso says this adherence to a set of rules has been the foundation for the PCC to expand rapidly. It became a type of government for the underworld and for poor communities where the Brazilian state had barely been present.

"The PCC is a kind of regulator of the criminal world. They bring a credibility. Everybody obeys the rules. And the strength comes from the network."

'A plc of crime'

As the syndicate has grown, it has diversified its business interests. While its predominant focus remains drug trafficking, it is moving into digital and, notably, environmental crimes.

Illegal mining in the Amazon rainforest offers the PCC a trifecta of opportunities: direct profit from the gold, the extortion of miners and opportunities to launder money.

"Several members of the PCC are involved in mining and it is suspected that this has to do with a new way of funding the organisation, using an activity that is not as repressed as drug and arms trafficking," says a federal police officer in the Amazonian state of Roraima. "There have also been several complaints from miners about extortion by alleged members of [the PCC] — they are charging for 'protection'."

The Amazonian gold industry is unregulated and many experts see it as a way to launder money. Like many criminal groups, the PCC struggled with how best to clean its cash. At one point in its early years, the group resorted to burying millions of dollars underground.

It then moved on to petrol stations, vehicle sales and car valets — simple front operations that could easily absorb dirty cash. "Nowadays," Romanelli says, "they are using cryptocurrency and . . . gold."

Today's PCC operates like a corporation, Gakiya says, dividing tasks into directorates with a proven record of transnational operations. "It is like a big company. A plc of crime."

This growing clout, however, has made it an unavoidable presence in Brazilian life. Investigators and other experts say the PCC has begun to infiltrate the Brazilian state, much as drug cartels did in Colombia in the 1990s. "It has been especially successful corrupting police and prison guards. But now it is infiltrating even the judiciary and the prosecutor's office," says Gakiya.

"They are operating more in the corruption style," Alcadipani adds. "They are getting involved in parliament. They corrupt police, politicians, judges . . . Everyone who seems to go up against the PCC has problems."

It is a reality known all too well by Gakiya, the prosecutor who lives behind high walls and bulletproof glass. The standing order on his head will follow him into retirement and old age, he says.

"They say they don't forget and since they're already in prison they have all the time to make it happen. It's something that really makes our lives quite complicated."

Additional reporting by Emily Costa

FINANCIAL TIMES
'Without fear and without favour'

TUESDAY 1 MARCH 2022

German defence move is a watershed moment

Boost to military spending shows how Putin's war is changing mindsets

It was a big moment for a Polish foreign minister to declare in 2011 that he was "not so much afraid of German power; it's German inactivity I'm starting to fear." Radoslaw Sikorski's words related to the eurozone crisis, but until days ago they might also have referred to Berlin's seeming reluctance to impose serious penalties over Russia's invasion of Ukraine. Germany's weekend announcements that it would supply weapons to Kyiv — reversing its refusal to export arms to conflict zones — and sharply increase defence spending have overturned decades-old security and foreign policy doctrines. They are the most dramatic sign yet of how Vladimir Putin's aggression is reshaping assumptions across Europe.

The German transformation began last week when chancellor Olaf Scholz announced that certification of the Nord Stream 2 Russian gas pipeline was suspended. In quick succession Berlin's three-way coalition later dropped resistance to suspending some Russian lenders from the Swift message system. It allowed other countries to send some German-made weapons to Ukraine, then announced its own plans to send missiles, armoured vehicles and fuel. Finally, Scholz unveiled a €100bn fund to modernise the German military and vowed it would raise spending on defence from 1.5 per cent of economic output to the Nato target of 2 per cent.

The chancellor also vowed to modernise fighter jets needed for its Nato nuclear sharing agreement — which involves German planes carrying US weapons to their targets in a conflict. And he promised to speed up efforts to reduce its reliance on Russian oil and gas.

This is a watershed moment for Berlin, as commendable as it is overdue. It spells the end of the era of cautious engagement with Moscow in which even former chancellor Angela Merkel seemed to be losing faith in her final years. It is an admission of failure for Germany's post-cold war hopes of *Wandel durch Handel* — change through trade — or that tightening economic ties would strengthen Russian democracy and embed it in the rules-based system. That belief, in turn, was influenced by Willy Brandt's *Ostpolitik*, the detente with Soviet-bloc countries that many Germans believe helped to bring down the Berlin Wall.

The weekend's reversals involved compromises for each of the coalition parties — by Scholz's SPD on raising defence spending, by the Greens on arms exports, and by the liberal Free Democrats on funding military upgrades through debt issuance. Christian Lindner, the Free Democrat finance minister, called this an "investment in our freedom". Seeming to grasp the gravity of the moment, Scholz borrowed from Merkel's willingness to occasion to make big policy leaps when she sensed German opinion was ready.

Germany's commitment helped to galvanise the whole of the EU into breaking a taboo by agreeing to provide €450mn for weapons for Ukraine via a special fund set up last year — the first time the bloc has agreed to finance weapons deliveries to a third country. European countries are now ready to contribute more to their own security, with the US increasingly preoccupied by China.

The EU collectively, and its biggest member state, are starting to move towards developing the "strategic autonomy" that its second biggest member, France, has advocated. But about two-thirds of Nato members, including Italy and Spain, do not spend the target of 2 per cent of GDP on defence. Germany is setting an example. Putin's war in Ukraine should be a powerful incentive for others to follow.

Windfall taxes on energy companies are a bad idea

One-off sugar hits cannot solve looming revenue challenges

The year 2022 was meant to be the end of the energy crisis. Governments around the world hoped that as the pandemic waned and supply problems abated, prices would fall. The war in Ukraine may have put an end to this hope: European natural gas prices have risen markedly and crude oil is now hovering around $100 a barrel.

Sky-high prices may prolong the bonanza for oil and gas companies, which has led in turn to plans for record-breaking share buyback programmes. Yet the crisis may not bring only upsides for oil majors. BP's announcement that it would divest its stake in Rosneft, the Russian state-controlled oil producer, could result in a huge writedown for the company.

This shows how hard it is to predict the corporate winners and losers of geopolitical turmoil. Many, though, will clearly profit. For such companies, fending off calls for a windfall tax on their gains — already a shrill appeal as a result of the cost of living squeeze — will become even more difficult. It was one thing for energy companies to dismiss the idea when supernormal profits could be put down to vague "supply issues". Doing so when they will be benefiting indirectly from the biggest military offensive on European soil since the second world war is quite another.

Yet, however appealing it might seem to force oil companies to fund a form of compensation, windfall taxes are a bad idea. They compound uncertainty and distract from the need to pursue well thought-out reform to deal with the challenges ahead.

A good tax system should clearly set out, in advance, how an individual or entity will be taxed. Stability is key to promoting both investment and spending — both of which drive economic growth. Predictable and constant regulations are identifiers of a society governed by the rule of law.

This does not mean that taxes should never change: epoch-shifting geopolitics may very well require more revenue to be raised for a multitude of reasons. But any changes should be made according to due process, and deliver on an explicit rationale. The targeted, retrospective confiscation of profits deemed to be "too high" is anathema to these principles and carries significant risk. High profits are not guaranteed, and if they are taxed away investors may be reluctant to take on risk — especially in an already unstable, unpredictable environment.

Debate can be had as to whether economic rents should be taxed more — especially those associated with natural resources. This is really a matter of degree. Britain already treats profits from natural resources differently.

If energy companies do escape the threat of windfall taxes, they are not absolved of the moral responsibility to reflect on how future profits are deployed. They, too, have a stake in the rules-based order that is now directly under threat and should acknowledge the important role they can play in fortifying it. BP's announcement that it would divest its holdings in Rosneft was undoubtedly the right decision. It would also be wise to accelerate plans to transition towards the renewables that will give European countries true energy independence.

The coming months and years will raise hard questions about how governments should fund responses to issues arising from the Ukraine crisis, the climate crisis, and others yet to be determined. It will always be tempting to reach for the closest pot of money. Far wiser would be to initiate meaningful discussion on how best to reform the tax system to raise the revenue needed. Natural resource taxation will be a part of this conversation. Arbitrary windfall taxes should not be.

Letters

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Obituaries for neoliberalism are premature

Rana Foroohar ("It's not just the economy, stupid", Opinion, February 21) writes about the new realities and claims that we are in a "post-neoliberal world".

Neoliberalism is a term often misinterpreted and misused, but still remains the best shorthand for the policies that have shaped the economy as we know it: privatisation, tax cuts, inflation targeting and anti trade union laws. There have been abundant obituaries written for neoliberalism over the past two decades, but the coffin has remained empty.

One of the main problems with the most common interpretations of neoliberalism is that there is no such thing as "the market", as separate from "the state". Markets can only function when states secure the infrastructure within which market interactions take place, and this system can only function when states step in to clean up after crises. The state never really shrank during the 1980s and 1990s, the heyday of the neoliberal system. Instead it was fundamentally reshaped.

There were plenty of misreadings of the 2008 financial crisis and its aftermath was presented as the "post-neoliberal era". Now, as we are slowly emerging from the Covid recession, more obituaries for neoliberalism are once again being written and are equally premature.

Bulent Gokay
Professor of International Relations
Keele University, Staffordshire, UK

Redefining role of business in society has wide support

Geoffrey Owen sets out a clear mandate for businesses to take responsibility for their social and environmental impact ("Shareholder capitalism works best for society", Opinion, February 21) but mistakenly balks at updating the law to reflect this.

Yes, businesses can pursue wider responsibilities within the existing frameworks but it is no longer enough to say that businesses may have regard to the environmental or social impacts of their actions.

Given the urgent challenges faced by people and the planet, businesses must be responsible for aligning the interests of all stakeholders in decisions. Let's not forget the urgency to act stressed by world leaders at COP26. That spirit must be matched now by changes to our corporate framework to help protect the planet and unlock the potential of a true green industrial revolution.

It is well documented that voters and consumers are supportive of this change. But so are company directors.

A poll of Institute of Directors members last year found that over three-fifths (62 per cent) believe that businesses should not exist solely to make money and generate shareholder profits. This highlights the appetite to redefine the responsibilities of business in society. Moreover, data shows that stakeholder-governed companies are outperforming businesses that follow Friedmanite ideology, proving that this model works best for profit, people and the planet.

A coalition of nearly 1,000 businesses in the UK, coming from a wide background of industries, is calling for that change to happen. The "better business act" would amend section 172 of the UK Companies Act so that the interests of all stakeholders are aligned.

This is a real opportunity for the government to ensure that every business is a partner in helping to tackle urgent issues such as climate change and inequality. We know the government is already looking at audit and governance changes; the time to do that is now, by introducing a "better business act" in the next Queen's Speech.

Chris Turner
Campaign Director, Better Business Act
London E1, UK

Government missed a trick on CPI-linked bonds

I would like to comment on the article by Torsten Bell, the chief executive of the Resolution Foundation ("Inflation will deal a harder blow to the poorest", Opinion, February 19), and in particular his remark about the retail price index "ludicrously driving the cost" of inflation-linked gilts.

This is of course quite true, with RPI currently running at 7.8 per cent compared to 5.5 per cent for the consumer price index. However, this high interest cost is not a fact of nature, but the result of government inertia over the past 20 years, since the more accurate CPI inflation index was established.

As a retired bond fund manager, I can tell you that virtually all modern bonds have fixed maturities and therefore a large issuer like the UK government will continually have a flow of maturing bonds, which need to be replaced by new issues.

Over the past decade strong demand for government bonds would have made it easy to replace maturing RPI-linked bonds with new CPI-bonds.

The government's failure to do so has resulted in yet another substantial burden on government finances, and hence the taxpayer, at a time of surging tax and price increases.

Russell Sparkes
London SW14, UK

Use Afghan frozen assets for its starving children

It is good to see that president Joe Biden is freezing $7bn of Afghan assets and that half of this is due to be used for the benefit of the Afghan people channelled via non government organisations (Report, February 12).

It is reported that the other half is scheduled to be used to compensate victims of the 9/11 atrocity. Would it not be more appropriate to use this latter half to feed the starving children in Afghanistan who were not even born at the time of 9/11?

Brian Doman
Liverpool, UK

Here are two steps to reform cryptocurrencies

Your editorial "Crypto's rise requires a global response" (FT View, February 21), which backs the US Financial Stability Board's proposal for "accelerated monitoring", is good as far as it goes.

Yet when it comes to stablecoins, there is another simple and obvious reform that needs to be made immediately. Whether you think stablecoins are more like a bank, a money-market fund or an exchange traded fund, the indubitable fact is that they are putting their liabilities as assets into the hands of the public.

Like everybody else who does this, they need to publish full audited financial statements. Of course the statements would also include their profit and loss statement. This is a minimum requirement for the public to have an idea of what they are buying.

A second simple requirement would be the publication of a clear description in plain English of the conditions and processes to redeem each stablecoin, since they all make so much of their "stable" character, and that that stability depends on what happens when you want out.

By all means, keep monitoring along with the Financial Stability Board, but get these two steps done in the meantime.

Alex J Pollock
Senior Fellow, Mises Institute
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Finessing the bitcoin prisoner's dilemma

All financial authorities must be concerned that, should bitcoin continue gaining acceptance, the levers of fiscal policy will cease to function (FT View, February 21).

Added to this is the nagging fear that others will be first to embrace the changing reality and gain advantage. This is the classic "prisoner's dilemma". The choice is to hold the line and trust others to do likewise or break ranks and look after your own interests.

One solution would be to begin to build a position as part of the nation's reserves (selling a mix of existing reserves to fund purchases), either alone or in concert. This is the cheapest way to add stability and would potentially offer great upside. Then go public with a commitment to buy more.

The alternative is to try to hold the line, all the time knowing that withdrawal tends to collapse into rout.

Full Disclosure. I hold 5 per cent of my wealth in bitcoin.

Raymond Gill
Radford Semele, Warwickshire, UK

Putin's security concerns were always a red herring

George Kennan may have opposed Nato expansion in the 1990s, as Professor John L Harper writes, but by then the ageing US diplomat had let down his guard (Letters, February 26).

The author of containment at the launch of the cold war recommended a strategy that would lead to the implosion of the Soviet enemy, which indeed occurred. At the point of greatest vulnerability, in the 1990s after the Soviet collapse, captive nations seized the opportunity to regain their liberty and confirm their security; joining Nato was the clearest expression of that intent. For Ukraine, the Budapest Memorandum of 1994, to which the US and Russia committed themselves to maintaining Ukraine's security, was meant to underwrite that achievement.

So, it is quite strange that Kennan should have come to see the matter from the viewpoint of the defeated foe and, what's more, empathised with it. Nato did not actually expand eastward; former captive nations lurched westward, a development Kennan ought to have celebrated, especially as they did so embracing democracy.

That is what is at stake now: Valdimir Putin fears the impact that Ukraine's democratic example could have for Russia, and is evoking ethno-historical nationalism to recoup his dictatorship's loss. His claim to have had "security concerns" was always a red herring, to which apparently informed observers such as Professor Harper are still succumbing, even in the face of the crudest aggression. Shame.

Emeritus Professor Albion M Urdank
University of California, Los Angeles, US

Corporate culture comes in all shapes and sizes

I was fascinated to read Patti Waldmeir's excellent comments on her "remote onboarding" experience with the FT in 1980 when working from far away Ghana ("The perils of 'onboarding' in a world of hybrid work", Work & Careers, February 8).

My 26-year-old daughter is employed in the US by a large Fortune 500 tech giant, but has never been to the office — ever — from day one, three years ago, to today. She hates it and we know that there are millions like her elsewhere.

All squares may be the same on Zoom as the article says, but the very essence of a great corporate culture is that you have all shapes, sizes and colours, which are far beyond mere squares on a small screen.

What is missing is a new age start-up which uses smart technology to integrate culture, feelings and a "sense of belonging" with a company and its people — whether or not inducted remotely.

Virtual onboarding may save time but bland, clinical, unemotional onboarding is costly. We are familiar with "speed to market", but what we need is "speed to productivity" in this hybrid world.

Sreeram Iyer
Singapore

Correction

● Russia annexed Crimea in 2014, not Ukraine as wrongly stated in an article on February 26.

Paramount seeks to recast its role as 'The Godfather' turns 50

Los Angeles Notebook

by Christopher Grimes

As a fan of 1970s cinema, I have seen *The Godfather* more times than I can count, but never on a big screen. So when an invitation arrived recently to watch a restored print of the Francis Ford Coppola classic — at Paramount Studios, no less — I accepted immediately.

The screening last Tuesday of *The Godfather*, the greatest 175 minutes in the studio's history, was to kick off celebrations for the 50th anniversary of the film's release on March 24. Paramount rolled out the red carpet for Coppola, who attended with two members of the cast — James Caan, who played hotheaded Sonny Corleone, and Talia Shire, who was Sonny's little sister, Connie.

It was a cool, windy evening by Los Angeles standards but the crowd of film executives, reporters and other industry figures seemed happy to stand outside and watch the Hollywood legends pose for photos. When the guests finally moved into the Paramount Theatre, I overheard a man confess to colleagues: "I know it's a cliché, but when people ask me for my favourite film, I always say it's *The Godfather*. It just is."

The film's anniversary is well timed for Paramount, which is still shaking off the damage from a lost decade of disastrous mismanagement. With Shari Redstone, the company's chair, trying to reinvigorate the studio — a cornerstone of her late father's media empire — having *The Godfather* back on cinema screens may help restore a little lustre to the brand.

Inside the cinema, Caan, Shire and Coppola received a standing ovation as they made their way to the front of the cinema to discuss the movie. For the next 40 minutes or so they talked about making the film with Marlon Brando, Al Pacino, Robert Duval, Sterling Hayden and other greats.

Coppola didn't discuss the clashes he had with Paramount brass over casting, shooting and editing, but Caan made clear his view that it was the director's vision and tenacity that made the film a masterpiece. "It wasn't an accident this picture became what it became," he said. "Nothing existed without Francis."

By now, the tale of the bold young auteur working with Paramount — a studio with the confidence to release the violent, dark film at nearly three hours — is tattooed on the minds of generations of film scholars, Hollywood executives and cinema nerds. *The Godfather* was one of a string of 1970s Paramount classics, including *Chinatown*, *Nashville* and *The Conversation*, that defined a golden age of adventurous filmmaking.

It is hard not to contrast that golden era with the disruption in the industry today, when filmmakers worry that their big-screen visions will be squeezed into a laptop or mobile phone to help sell subscriptions to a streaming service. While the streaming wars have unleashed seemingly bottomless budgets for television and films, there are fears over the future of cinemas — and the box office receipts that go with them.

For Paramount, the questions go beyond just the future of the box office. In Hollywood and on Wall Street, there is debate over whether the media empire built by Sumner Redstone can continue in its present form. Behind this is a family drama fit for the silver screen.

Before his death in 2020 at the age of 97, Sumner Redstone allowed his company, Viacom, to drift for years — with its Paramount division underperforming at the box office and racking up hundreds of millions of dollars in losses.

Now Shari has finally gained control of the company, she is eager to put her stamp on it by transforming it into a streaming powerhouse. Last month, she outlined an aggressive plan that included Paramount spending $6bn a year on new movies and TV shows by 2024. But Wall Street rejected it, sending the stock down 20 per cent in one day, on the grounds that the company is too small and too far behind to compete with Netflix and Disney. Apparently, investors would rather see the company sell off its assets — including the legendary 110-year-old studio.

Many observers who have worked with the company believe Shari Redstone, having fought so hard to gain control, is unlikely to want to part with the family business any time soon. Unless — to twist a phrase favoured by the Corleone family — she gets an offer that's too good to refuse.

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Opinion

Russian president's use of military force is a crime of aggression

Philippe Sands

President Vladimir Putin's decision to launch attacks on Ukraine poses the gravest challenge to the post-1945 international order, one premised on the idea of a rule of law and principles of self-determination for all peoples and the prohibition of the use of force. It is not the first time that Russia has taken a military interest in the territories it now seeks to occupy: in September 1914, Russia occupied the city of Lviv, causing tens of thousands to flee westward, including my ten-year-old grandfather. The Soviet Union returned in September 1939 for a second bite, and then again in the summer of 1944, remaining in control until Ukraine achieved independence in 1991.

The use of Russian military force in these areas is therefore not unfamiliar, although for Europeans who have lived for three generations without experiencing it on such a scale, last week's events have been a shock. History does not just go away, and memories are easily reignited. One of the differences today is that rules exist to protect us from such actions, reflected in the Charter of the United Nations, the closest thing we have to an international constitution. It is the Charter's most significant commitments that Putin has shredded. His televised speech offered a set of fanciful reasons for the invasion: a Greater Russia, a fake Ukraine, a Nazi Ukraine, a genocide being committed against ethnic Russians etc. The claims are familiar, of the kind that motivated the 1938 Nazi playbook on Munich and Slobodan Milosevic's hopes for a Greater Serbia.

Putin has gambled, hoping that the west will blink. Following its own failures, including an illegal, failed war in Iraq, and the recent collapse of political will in Afghanistan, along with the embrace of oligarchical money and dependence on Russian gas, he hopes that the west doesn't have the stomach to stand up to his actions. He may be right, but his bet poses a grave challenge, and one that sanctions and financial measures alone cannot address.

Much more is needed, and it is needed fast. In the face of so flagrant a violation of the rules, it is lawful to act jointly to protect Ukraine and the fundamental rights of its people, by offering military hardware, taking steps to prevent Russia from using air power and, ultimately, putting boots on the grounds to enforce safe areas and draw lines that Russia must not be allowed to cross.

> Why not create a dedicated international criminal tribunal to investigate him and his acolytes?

There is, too, the matter of criminality, even if I am not starry eyed about such labels. Putin's use of military force is a crime of aggression, the waging of illegal war, an idea that originated at Nuremberg as "crimes against peace". Horrific images appear to show the targeting of civilians, which is a war crime, and may well also be a crime against humanity (a legal concept with origins which, like the term genocide, may be traced to the city of Lviv). The International Criminal Court — a child of the Nuremberg Tribunal — has jurisdiction over some of these crimes (war crimes and crimes against humanity, but not the crime of aggression) committed on the territory of Ukraine. Russians are subject to its jurisdiction, and being president does not confer immunity. The ICC prosecutor, Karim Khan, has the power to open a formal investigation and, if the evidence supports and the judges authorise, to proceed to an indictment and prosecution.

The ICC has a gap, however, as its jurisdiction does not yet extend to the crime of aggression perpetrated on the territory of Ukraine. Why not create a dedicated international criminal tribunal to investigate Putin and his acolytes for this crime? After all, it was a Soviet jurist, Aron Trainin, who did much of the legwork to bring "crimes against peace" into international law. As Francine Hirsch has noted in her book *Soviet Judgment at Nuremberg*, it was largely Trainin's ideas that persuaded the Americans and the British to put "crimes against peace" into the Nuremberg Statute and the indictments against the German defendants.

Putin knows all about Nuremberg: his older brother died in the Leningrad siege at the age of two, and he seems to be something of a defender of the famous 1946 judgment. Three years ago he castigated the European Parliament for challenging the Tribunal's conclusions, to the effect that it was the 1938 "Munich Betrayal" that brought so much horror, allowing Czech territories to be annexed in the forlorn hope of appeasing Hitler.

There can be no appeasing of Putin. Chechnya, Georgia, Crimea and now all of Ukraine. On it goes. Let him reap what he has sowed, including the legacy of Nuremberg. Investigate him personally for this most terrible of crimes.

The writer is professor of law at University College London and author of 'East West Street: On the Origins of Genocide and Crimes against Humanity'

Putin's grand plan is unravelling

GLOBAL AFFAIRS
Gideon Rachman

Vladimir Putin is a "genius", chortled Donald Trump. The former US president was speaking on the very eve of Russia's invasion of Ukraine — and was lost in admiration for the "very savvy" man in the Kremlin.

So what has this genius achieved? Four days into the invasion and Russian troops have failed to win the quick victory that Putin was counting on. Ukrainian resistance is much fiercer than the Russian leader anticipated, as Ukraine's army fights back and the population mobilises. Captured Russian soldiers have been filmed complaining that they were told they were going on a training mission.

The international response has also been tougher, more co-ordinated and united than Putin bargained for. Russia is being cut out of the global financial system. Most European airspace has been closed to Russian airlines. There has been a historic reversal in German foreign and security policy — with Berlin finally sending weaponry to Ukraine and pledging to spend more than 2 per cent of gross domestic product on defence. The Nato alliance has been given a new sense of purpose. Russia is turning into a pariah, with even China failing to back it at the UN — it abstained instead.

Inside Russia itself, panicked citizens are rushing to withdraw money from banks. The rouble has plummeted in value, as has the Russian stock market. Small demonstrations against the war have broken out across the country, with the protesters swiftly arrested. Local celebrities, oligarchs and even the children of some Russian officials have condemned the conflict. Putin's own officials look visibly uncomfortable as they take his orders in front of television cameras. The Russian official media have been left in the incredible position of denying the extent of the war, as it continues to insist that this is just a special military operation to support the breakaway regions of Donetsk and Luhansk.

Meanwhile, Ukraine itself is receiving a level of international admiration and recognition that is unprecedented since the country won independence in 1991. Volodymyr Zelensky, the Ukrainian president, once derided as a comic actor out of his depth, has won international acclaim for his inspirational leadership. His physical bravery on the streets of Kyiv is a marked contrast to the cowardice of Putin, who is too scared of a virus to allow his own officials within breathing distance. Calls for Ukraine to be put on a fast-track to EU membership are growing.

Putin has achieved all of this in a mere four days. Genius, sheer genius!

However, a humiliated and cornered Putin is likely to become even more dangerous and ruthless. That was underlined on Sunday, when the Russian leader put his country's nuclear forces on alert.

Unable to achieve the easy victory that he anticipated, Putin seems unlikely to back down. Pride, paranoia and his own personal survival point to the use of ever more radical and dangerous tactics. One senior western official predicted to me that "Putin will only dig in and this will get very ugly".

Western security analysts have been warning of the possible use of thermobaric missiles in Ukraine — "flamethrower" bombs which Russia has deployed in Chechnya and Syria and can cause huge loss of life. The nuclear threats that Putin is deploying, while clearly intended to intimidate, cannot be entirely discounted, given his state of mind.

> Pride, paranoia and his own personal survival point to the use of ever more dangerous tactics

Since Putin himself seems highly unlikely to retreat, there appear to be few obvious ways out of this conflict. One small ray of hope is offered by the announcement that Russian and Ukrainian negotiators have agreed to meet at the Belarus border. But there is, as yet, no sign that Putin is prepared to back away from his maximalist demands that would involve further dismemberment of Ukrainian territory and the de facto end of the country's independence. The fact that the man originally nominated to lead Russia's delegation is a junior former official, noted for his extreme nationalism, is not a promising sign.

It may be that the only real route to peace would be for the Russian governing elite somehow to force Putin out of power. The videos that their leader has released showing him humiliating members of the security establishment, as he compels them to endorse his policies, are meant to demonstrate his total authority. But they also highlight misgivings within his own inner circle.

The current Russian system is less collective than even the post-Stalin Soviet Union, however. High-ranking Soviet officials were able to force Nikita Khrushchev from power in 1964. But Putin rules more like a pre-Soviet tsar. It is hard to see how internal opposition to him, within the government, can mobilise.

It is possible, though, that as the human and economic costs of the war mount it will become more difficult to contain the public protests against the conflict. Russian troops within Ukraine may also become demoralised as they take losses and are ordered to use brutal tactics against civilians. Eventually some combination of elite anxiety, military failure and popular discontent could force the Russian leader out of office. But — for now — the danger that Putin poses to Ukraine, Russia and the world is only growing.

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Europe must give Ukraine everything it asks for

Artis Pabriks

Russia's war against Ukraine is the most significant conflict in Europe since the second world war — but its reverberations will be felt well beyond the European continent.

Any democratic leader who looks at the Ukrainians' valiant defence of their country and does not feel ashamed at not providing more weapons to Ukraine has either their heart or their mind in the wrong place. Any leader who still believes that Ukraine should not have been given lethal support, or should not be assisted with all available military equipment, is out of step with the new international order.

In invading, Moscow has deliberately chosen to be an enemy of the democratic world. We must support Ukrainians in this fight, but we also have to start rebuilding our own defences. This will be the only way to defend our values, freedom and peace.

Changes to longstanding policies are usually the product of a strategic shock. While the best outcome that Russia can hope for in this war is a Pyrrhic victory, it is also abundantly clear that western policy up to now has failed utterly because diplomacy was not backed up militarily. In defending their homeland with such heroism, the Ukrainian people are buying the west time to make amends — we now have to act very swiftly. Our current extraordinary unity must be transformed into action in order to maintain the momentum.

Financial sanctions and the ejection of some Russian banks from the Swift cross-border banking network is just a first step. Every day that Russian forces remain on Ukrainian territory more punishment must be visited upon Vladimir Putin's regime to stop the aggression.

So far the Ukrainians have displayed a strength and resolve that has surpassed everyone's expectations — Russia's most of all. Thanks to their bravery, resilience and success, there is a real chance that the Russian offensive will be blunted and reduced to a crawl and that the Ukrainian state will endure, with no prospect of a puppet government installed in Kyiv. The Ukrainian people are not giving up. But they need arms to defend themselves.

The Baltic states have long understood the kind of existential threat that Ukraine is now facing. For this reason, we have punched above our weight and, with some danger to our own security, moved to help Ukraine shore up its defences, including with Stinger and Javelin missiles. We continue to supply their armed forces with weapons, munition, fuel and other supplies. The military support also given to Ukraine by the US, UK and Poland over the past few months has been exactly what you would expect from countries that have a realistic understanding of Russia's intentions. Now the whole democratic world is seeing Putin's true face and has shifted firmly against tyranny.

> The Baltic states have long understood the kind of existential threat that the country is now facing

But Ukraine needs more than weapons and hope. It needs membership of the EU and Nato. It would be a disgrace if we did not meet the request for EU accession made by President Volodymyr Zelensky yesterday. Ukraine is fighting for a free Europe on our behalf. Since it is fighting our war, it deserves everything it asks for.

At the same time, the EU must finally take its own security and defence capabilities seriously. It is clear that Putin lives in an alternate reality in which he nurtures ambitions on the scale of Stalin's. The nuclear threat he issued over the weekend is an obvious sign of this.

European countries need better air defences and more artillery, tanks and other weapons — not endless position papers and new strategies. Nato also has to review its posture on the eastern flank in order to adjust to the new reality, shifting from forward deterrence to defence. Air defence of the Baltic states remains a glaring gap in the alliance's defence posture, inviting escalation. This gap must be closed as a matter of urgency.

A radically new geopolitical situation calls for robust leadership, a clear-eyed assessment of the threats the west faces and resoluteness in defence. With more countries committing military aid to Ukraine and applying ever tougher sanctions on Russia and Putin's inner circle, we are finally putting adequate defence and deterrence measures in place.

There is much that we need to relearn, but one thing is certain: democracy has triumphed over tyranny in the past and it will do so again. But it is important that we have the will to fight for it and the ability to defend ourselves. Ukrainians are fighting for all of us. They deserve better and we will do better. *Slava Ukraini!*

The writer is defence minister of Latvia

Better sick pay in Britain will help us live with Covid

EMPLOYMENT
Sarah O'Connor

The UK has entered a new phase of the pandemic the government calls "living with Covid": the rules have gone and people must instead exercise "restraint and responsibility" to avoid spreading the virus, prime minister Boris Johnson has said.

"We have a habit of going back to work or going into work when we're not well," he noted. "People contrast that with Germany, for instance, where I'm told they're much more disciplined about not going to work if you're sick. I'm just suggesting that might be something we could learn."

But it's much easier to exercise "restraint and responsibility" when you can afford it. In Germany, employees are paid their full salary in the initial weeks of their illness. The UK, by contrast, is a country where the more you need decent sick pay, the less likely you are to get it. Almost 60 per cent of employees receive full pay from their employers' company schemes when off sick, according to a survey by the TUC.

But just over 30 per cent receive statutory sick pay or nothing at all. The former group are more likely to be managers and professionals who have a financial cushion for contingencies anyway; the latter are more likely to be in low paid jobs that only just cover the bills. Statutory sick pay in the UK is one of the most meagre in the OECD. The weekly payment is just £96.35. For the almost 2mn low-paid workers who earn less than the lower earnings limit of £120 a week, it is zero. Before the pandemic, workers only received SSP from the fourth day of their illness. The government scrapped the waiting period when Covid hit, but has now announced plans to reinstate it.

> In Germany, workers are paid their full salary in the initial weeks of their illness

The argument against making sick pay more generous is that it is a cost to employers that might encourage workers to bunk off. But in a pandemic the greater risk is that people go to work when they shouldn't. Official data show the percentage of working hours lost to sickness absence in the UK has declined for two decades and hit a fresh low in 2020 even as the pandemic raged (this may in part reflect the number of people who were furloughed or working from home).

A survey by academics last year of almost 13,000 UK workers found those working in closer contact to clients and customers were less likely to have access to employer-provided sick pay. Workers without access to sick pay were also more likely to say they would go into work when unwell. "From a public perspective, it exposes the risk of accelerating the spread of viruses by creating an incentive for workers to show up at work when it would be socially beneficial for them to stay at home," the authors wrote. This has real world consequences. One official study found care homes that offered their staff sick pay were less likely to have coronavirus cases than those that didn't.

Many employers seem open to this argument. A survey of more than 1,000 HR professionals and decision makers by the CIPD found that nearly two-thirds thought statutory sick pay was too low and should be raised. Even 57 per cent of small and medium sized companies supported the idea.

In a recent consultation on statutory sick pay, meanwhile, the government recorded that 75 per cent of respondents agreed it should be extended to the almost 2mn people who earn less than £120 a week. "This measure was supported by small and large employer respondents alike," the government wrote before announcing its conclusion: the consultation had "posed several important questions . . . which require further consideration" but "now is not the right time to introduce changes to the sick pay system".

If now is not the right time to improve this unequal system, as we ask people to show "restraint and responsibility" to keep each other safe, it rather begs the question: when is?

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Financial stability: rouble trouble

Tanks are harbingers of financial chaos as well as physical destruction. Russia knows this as well as any other country; the first Chechen war drained state coffers and precipitated the Russian financial crisis of 1998.

The question this time is how far the ripples will spread beyond Russia. The most alarming portent is the rouble's freefall after western leaders proposed much tougher sanctions. They plan to freeze assets of the Russian central bank, prohibit dealings with it and expel some Russian banks from the Swift international payments network.

The shock via Russia's estimated $630bn of forex reserves is cut by its shift into assets the west cannot touch and relatively low government debt levels. Even so, the sanctions package is a declaration of financial war.

The central bank doubled rates to 20 per cent to protect the rouble. But the currency was down almost a third to almost 118 against the dollar. Russians queued up at ATMs. Liquidity vanished in a blink. The stock market did not open. Rouble-denominated bonds did not trade. Dollar eurobonds halved.

The cost of swaps to insure against a Russian default spiralled to 37 per cent of bonds' face value.

The world financial system is fragile. The pandemic is not over and state balance sheets are laden with debt. There is scope for the Russian financial crisis to amplify other shocks — surging emerging market food prices, for example. Financial crises overlapped in Russia and Asia in the late 1990s. Victims included US hedge fund Long-Term Capital Management.

War and sanctions will dent domestic economic growth and inflate prices, exported to the wider world via hard currency-denominated oil and gas.

Exposures this time are mostly less pronounced. Russia has faded as an investible market, accounting for less than 4 per cent of MSCI's emerging markets equity index. But there will be plenty of pockets of financial pain, from businesses leasing planes to Aeroflot to swanky British boarding schools with Russian pupils. Bond coupon payments will be disrupted. There is heightened danger of cyber attacks of the type suffered by Toyota.

The subtlest threat is of dislocations we cannot foresee: Lehman moments when panic spreads and markets freeze. Small setbacks then become existential threats. The war means this threat is greater now than it has been since the pandemic's first days.

Abramovich/Evraz: a limited defence

Roman Abramovich's ownership of Chelsea football club secured silverware for the team and a positive public image for its owner. But the club, along with his London listed steelmaker Evraz, is Russian-owned at a time when sanctions are widening.

Abramovich has distanced himself from Chelsea, passing "stewardship and care" to its charitable foundation.

He was not on a list of Russians targeted this week by UK sanctions, though at least one opposition MP called for his assets to be seized. The EU is considering measures against other wealthy Russians who have made Europe their base.

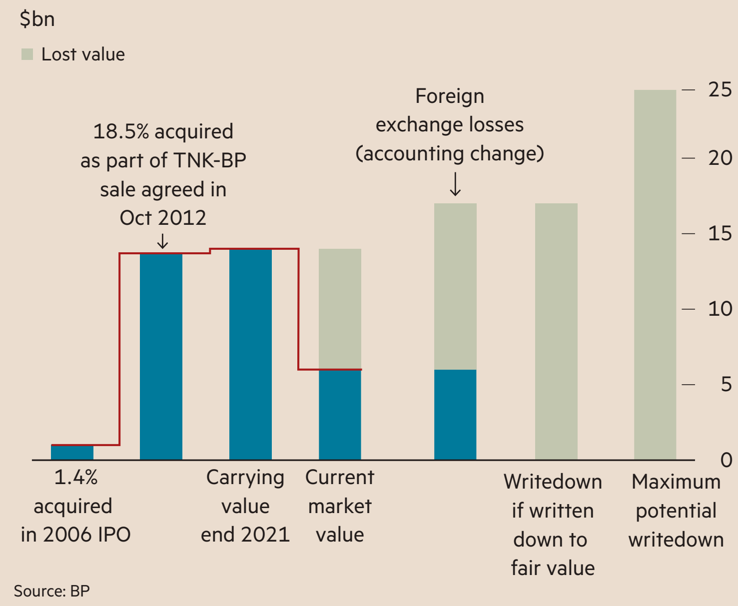
The move with the charitable foundation is unlikely to deflect too much attention away from the ultimate owner of the club, who has lent it £1.5bn. Steelmaker Evraz may be a softer target if the west has any intention of including it in widening sanctions. That would also mean a red face for Sir Michael Peat, the ex-private secretary to Prince Charles who has sat on Evraz's board since it listed in 2011, when top tier Brits were in demand and added lustre to Russian businesses. Evraz paid Peat £224,000 last year. His plans to step down at the end of March were announced in January.

The steelmaker represented a larger slice of Abramovich's wealth until recently. The shares fell a further 29 per cent yesterday bringing declines for the year to over half. Its market capitalisation is now £2.1bn. Record steel prices allowed the group to pay $1.5bn in dividends last year. Payouts since listing total $6bn. Abramovich is the largest holder with 29 per cent, followed by chair Alexander Abramov who owns almost 20 per cent.

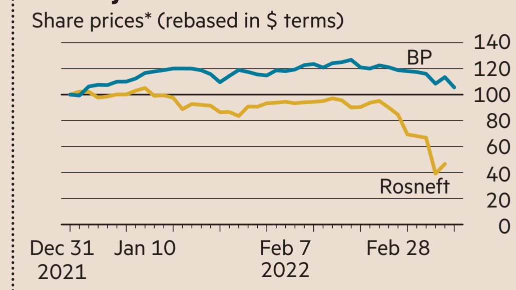
High-profile assets such as football clubs are straightforward targets for sanctions. Cracking down on deals via the front companies and middlemen other oligarchs have used to cloak their activities is far harder. Without better disclosure of ultimate ownership, London's Russian money-go-round will carry on spinning, albeit more slowly.

BP/Rosneft: red ink

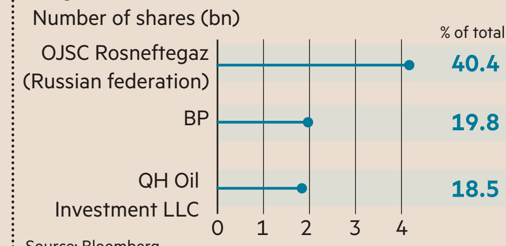
The UK-listed oil major's investment in Russia has weighed on its shares. BP is the second-largest investor in Rosneft, after the Russian state. The decision to divest the stake will change its accounting treatment. That will result in writedowns of up to $25bn, including $11bn of accumulated foreign exchange losses.



Source: BP



Source: Refinitiv * Russia market closed on Feb 28th



Source: Bloomberg

Spilling red ink over stranded assets is becoming a habit at BP. Russia's assault on Ukraine could result in even bigger writedowns than the climate change-related ones in 2020.

Jettisoning its near-20 per cent stake in Russian state oil company Rosneft could incur non-cash charges of up to $25bn. But the reputational damage to the UK-listed oil group of continuing to do business in Russia would have been much greater.

The $25bn, which includes $11bn of accumulated foreign exchange losses, is the charge for a complete write-off.

BP need not go so far. It could trim that by opting to write down just the difference between the market value and $14bn book value until it finds a buyer. That would be a struggle, though not impossible. A state-backed Chinese or Middle Eastern group might be interested.

Other energy companies with large Russian investments will also come under pressure to divest.

Norway's Equinor has already made a move. Shell and ExxonMobil own big stakes in projects in the Russian Far East. Shell is also a co-financier of the Nord Stream 2 pipeline, which now may never be commissioned.

TotalEnergies has a 19.4 per cent interest in Russian natural gas producer Novatek.

The pressure might even extend to Russian allies. Italy's Eni, for example, is heavily involved in Kazakhstan.

But the Rosneft stake was particularly high-profile. BP can afford to take the hit. Rosneft was likely to account for 6 per cent of cash flow from operations in 2022, Jefferies says. Losing that will not undermine its distribution policy even if BP cannot sell the stake.

BP is on track to increase its dividend at 4 per cent a year to the end of 2025. The shares, though down about 6 per cent yesterday, are still marginally ahead for the year.

Shedding its stake in Rosneft will help accelerate BP's realignment away from oil and gas. Its ownership of a company with very different climate ambitions had long jarred.

Given the political dangers of doing business with Russia, the divestment of the Rosneft stake should have happened years ago.

Uk bankruptcy/J&J: Texas forever

US Chapter 11 bankruptcy is typically used by groups that are overwhelmed by their debts. Corporate revamps managed by courts are also the right forum for people who believe they are victims of corporate misdeeds, in the apparent view of one judge.

Last week, a federal bankruptcy judge refused to halt the Chapter 11 filing of a subsidiary of Johnson & Johnson, a consumer-products giant. It bears billions of dollars of potential liability for talc powder alleged to cause illness. The case has caused a commotion because J&J has not filed for bankruptcy itself.

Instead, it has created a company that has filed for bankruptcy and would face off against the lawyers for thousands of alleged victims. The process is known as a "Texas two-step".

Critics allege that the move by J&J is a farce for a company with a $400bn-plus market cap. Judge Michael Kaplan remarkably stated: "There is nothing to fear in the migration of tort (civil wrong) litigation out of the tort system and into the bankruptcy system."

Plaintiffs may cry foul. But more companies, like J&J facing thousands of lawsuits over faulty products across the US, are likely to follow into bankruptcy court. The attraction of the bankruptcy system to potential "mass tort" debtors is that pending lawsuits are halted while a judge oversees a single, streamlined negotiation process to pay victims out. The typical ways that product liability victims seek redress — class actions and multi-district lawsuits — do not always work out well.

Victims, however, wonder if the bankruptcy process strong arms them into substandard deals. The J&J vehicle that has filed for bankruptcy has as much as $60bn in value that could be tapped for a deal with talc victims.

Critics of the Texas two-step should consider this: whether a tort resolution system is just or unjust does not depend solely on how much is paid out. It also hangs on the speed with which compensation is dispensed and how much is left after lawyers are paid.

Payments: Swift response

China has long hoped for independence in cross-border payments and a widely used digital currency. Those goals have remained elusive. Now the EU plans to expel some Russian banks from Swift, the world's interbank payments network. This may just be what China needs to make its version of Swift, the Cross-Border Interbank Payment System (Cips), a serious proposition.

Backed by China's central bank, Cips offers clearing and settlement services for cross-border renminbi payments. The small share of the currency in global payments, 2 per cent, means Cips is a long way from challenging Swift. The US dollar remains dominant in global payments with a share of about 40 per cent. But Russia may have little choice. There are too many curbs on its own alternative, SPFS.

The Russian central bank set this up in 2014 after threats to disconnect its banks in the wake of its invasion of Crimea. But there are only 20 foreign banks on SPFS. That compares with more than 1,200 financial institutions in 100 countries, including global banks, that are active on Cips. More than 20 Russian banks are connected.

Digital payments between the two countries have risen sharply in recent years. So has settlement in renminbi, which quadrupled to almost a fifth of all trade between the two in 2020. Russia's central bank has invested in Chinese assets even as it has cut its US and western Europe exposure.

Yesterday, shares in Client Service International and Lakala Payment rose about 5 per cent. These Chinese payments fintechs provide third-party services including central bank-led initiatives. Lakala's stock had fallen 15 per cent over the past year because of the slow rollout of the local digital renminbi.

The polarisation of world politics is nudging China and Russia closer. A common cause for both is to reduce the use of dollars. Tough sanctions on Russia give China the chance, via Cips and other projects, to promote the renminbi as an alternative.

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CROSSWORD

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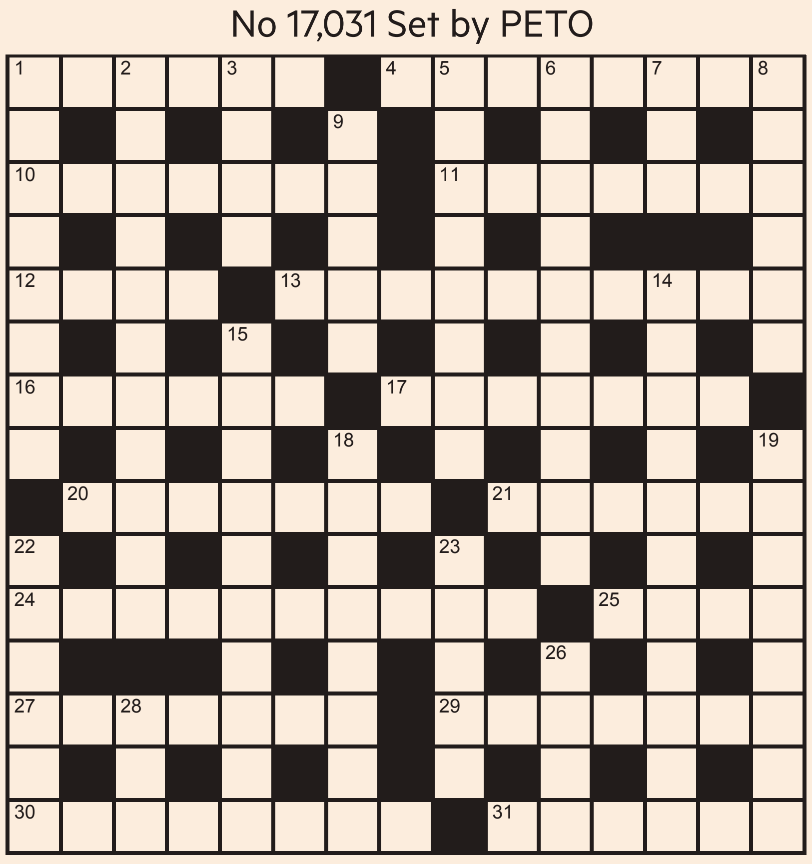

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JOTTER PAD

Solution 17,030