FINANCIAL TIMES

WEDNESDAY 2 MARCH 2022 | INTERNATIONAL NEWSPAPER OF THE YEAR | USA $2.50 Canada C$3.00

We are in a new ideological conflict, between irredentist tyranny and liberal democracy — MARTIN WOLF, PAGE 17

- Beijing 'extremely concerned about civilians' as it joins push for ceasefire
- Russian missile targets Kyiv's TV tower near Holocaust memorial
- About 660,000 people have fled Ukraine since war began 6 days ago

China offers role as peacemaker

GUY CHAZAN — LVIV
ROMAN OLEARCHYK — KYIV
ELEANOR OLCOTT AND JAMES KYNGE — LONDON

Kyiv's TV tower is hit by a Russian strike as the offensive gathered pace
Ukraine Defence Ministry/EYEPRESS

China signalled it was ready to play a role in finding a ceasefire in Ukraine as Russia unleashed devastating missile attacks on Kyiv and Kharkiv that caused multiple casualties.

Beijing said it was "extremely concerned about the harm to civilians" in comments yesterday that followed a phone call between the Chinese foreign minister, Wang Yi, and his Ukrainian counterpart, Dmytro Kuleba.

"Ukraine is willing to strengthen communications with China and looks forward to China playing a role in realising a ceasefire," the Chinese statement said.

It added that it respected "the territorial integrity of all countries", without indicating whether Beijing accepted Russia's claim to the Crimean peninsula or shared its recognition of separatists in the Donbas region of eastern Ukraine.

The statement marked a change in tone from Beijing in the days before the invasion had described the US as the "culprit" in the Ukraine crisis.

China joined the United Arab Emirates and India last week in abstaining on a UN resolution condemning Russia's invasion of Ukraine that was supported by 11 members of the Security Council. Moscow vetoed it.

The shift in Beijing's position was made as Vladimir Putin's forces intensified a missile bombardment on Ukrainian cities. Videos shared on social media showed several residential districts had been hit, while a Russian missile targeting Kyiv's television tower killed at least five civilians near the Babyn Yar Holocaust memorial, according to Volodymyr Zelensky, Ukraine's president.

He accused Russia of war crimes and described that latest attacks as "outright, undisguised terror". "After this, Russia is a terrorist state," he said. "No one will forgive. No one will forget."

Video posted by Ukrainian officials showed plumes of smoke rising from the area near the memorial but the nearby television tower still standing.

A missile also hit a municipal building in the centre of Kharkiv in one of the most destructive attacks on a densely populated urban district since Moscow launched its military offensive.

"It's a near constant cannonade," said Dima, a Kharkiv resident who declined to give his second name. "And it serves no discernible purpose: they're firing haphazardly at people queueing for water and food."

An estimated 660,000 civilians have fled Ukraine to neighbouring countries since the start of the conflict, a movement of people that could become "Europe's largest refugee crisis this century", the UN warned.

A senior US defence official said Russia appeared to be facing logistical problems that were slowing the progress of its advance on Kyiv and complicating its prosecution of the campaign. Analysts worry that Russia's generals might be resorting to rocket attacks out of frustration at their lack of progress on the ground. Such a shift in tactics would entail much more collateral damage.

As the invasion entered its sixth day, the US and other big oil-consuming nations agreed to tap 60mn barrels of oil from their emergency stockpiles to tackle a surge in prices.

The International Energy Agency said the co-ordinated release, the fourth in its history, would send a "unified and strong message to global oil markets that there will be no shortfall" because of the invasion. The body will consider "possible additional emergency oil stock draws, as needed", it added.

But rather than calm prices, the announcement triggered further gains, with Brent crude, the international oil marker, rising almost 10 per cent to a fresh eight-year high above $107 a barrel before falling back. West Texas Intermediate, the US oil benchmark, climbed more than 10 per cent to $105 a barrel.

Additional reporting by Justin Jacobs in Houston and Neil Hume in London

Main developments

- Volodymyr Zelensky accused Russia of war crimes and described attacks as 'outright, undisguised terror'
- Moscow imposed a ban on foreign investors selling Russian assets after BP and Shell issued plans to divest
- MSC and Maersk, the two biggest container shipping groups, suspended cargo bookings to and from Russia
- Valery Gergiev was sacked as chief conductor of the Munich Philharmonic after failing to condemn Russia
- Crypto exchanges were pressed to block trades with Russia, amid fears they could be a back door to move cash
- Latvia urged the EU not to be a 'political midget' and grant Ukraine candidate status to join the bloc

Inside

War in Ukraine: news & analysis
Moscow's intelligence blunders *Page 2*
Inside Kharkiv: the terror grows *Page 3*
Russians queue for dollars *Page 4*
Companies & Markets
Total reviews Russia business *Page 7*
IEA releases 60mn barrels *Page 10*
Opinion
FT View: Sanctions shock *Page 16*
Martin Wolf & Daniela Schwarzer *Page 17*
Lex
Bitcoin, toxic assets *Page 18*

Oligarchs powerless in face of Putin's power

Oligarch Mikhail Fridman has criticised the Ukraine war in general terms but said yesterday he did not want to attack Vladimir Putin directly because it 'will not have any impact for political decisions in Russia'. His comments follow a meeting last week between Russia's leader and top businessmen, who were warned that anyone who avoided doing business with companies under western sanctions would face punishment under the law.

Little power to sway Putin ▸ PAGE 5

Investors bet Ukraine crisis will slow pace of ECB and Fed interest rate rises

TOMMY STUBBINGTON — LONDON
MARTIN ARNOLD — FRANKFURT
COLBY SMITH — NEW YORK

Government bonds staged a powerful rally yesterday as investors bet the economic fallout from Russia's invasion of Ukraine would push central banks to raise interest rates more slowly than had been anticipated.

The biggest moves came in Europe, where Germany's 10-year bond yield sank below zero for the first time in a month as markets reacted to comments from European Central Bank policymakers arguing against any drastic shift in monetary policy until it became clearer how the crisis in Ukraine would affect the eurozone economy.

Derivatives linked to short-term interest rates show that investors now expect the ECB to lift interest rates by less than 0.2 percentage points from the record low of minus 0.5 per cent by the end of the year. Two weeks ago markets were pricing in a return to zero this year.

UK yields also tumbled as investors dialled down their bets on UK rate rises. The 10-year gilt yield fell 0.28 percentage points to 1.13 per cent, the biggest one-day decline since the day after the Brexit referendum in June 2016.

US Treasuries were also swept up in the rally, with the 10-year yield falling 0.12 percentage points to 1.72 per cent.

Investors still forecast the Fed to press ahead this month and deliver its first quarter-point rate rise since 2018, but expectations of how aggressively it can tighten policy have moderated. Traders are now pricing in roughly five rate increases this year, down from six on Friday.

"There's a big dovish repricing going on," said Antoine Bouvet, a rates strategist at ING. "The market has taken the view that the implications from Ukraine are that the ECB and other central banks will move more slowly."

Energy prices have surged since the Russian invasion began last week, adding to the headache for central bankers trying to keep a lid on the highest inflation in decades for leading economies.

"This also has a significant impact on growth globally and in the US," said Rick Rieder, chief investment officer of global fixed income at BlackRock. "This is clearly going to keep inflation high for a longer period of time."

Luke Ellis, chief executive of Man Group, one of the world's biggest hedge fund managers, echoed that view, telling the Financial Times yesterday that the Ukraine situation "pushes back" central bank rate rise expectations.

Markets Insight page 11

World Markets

STOCK MARKETS

	Mar 1	prev	%chg
S&P 500	4305.00	4373.94	-1.58
Nasdaq Composite	13555.59	13751.40	-1.42
Dow Jones Ind	33222.97	33892.60	-1.98
FTSEurofirst 300	1732.92	1771.61	-2.18
Euro Stoxx 50	3777.21	3924.23	-3.75
FTSE 100	7330.20	7458.25	-1.72
FTSE All-Share	4079.97	4157.77	-1.87
CAC 40	6396.49	6658.83	-3.94
Xetra Dax	13904.85	14461.02	-3.85
Nikkei	26844.72	26526.82	1.20
Hang Seng	22761.71	22713.02	0.21
MSCI World $	2977.95	2980.20	-0.08
MSCI EM $	1171.31	1171.99	-0.06
MSCI ACWI $	698.02	698.53	-0.07

CURRENCIES

	Mar 1	prev		Mar 1	prev
$ per €	1.114	1.123	£ per $	0.749	0.745
$ per £	1.335	1.342	€ per £	1.198	1.195
£ per €	0.834	0.837	¥ per €	127.909	129.365
¥ per $	114.805	115.175	£ index	82.514	82.447
¥ per £	153.288	154.535	SFr per £	1.228	1.231
SFr per €	1.024	1.030			
€ per $	0.898	0.890			

COMMODITIES

	Mar 1	prev	%chg
Oil WTI $	105.38	95.72	10.09
Oil Brent $	106.53	97.97	8.74
Gold $	1909.85	1884.80	1.33

INTEREST RATES

	price	yield	chg
US Gov 10 yr	145.22	1.70	-0.17
UK Gov 10 yr		0.99	-0.29
Ger Gov 10 yr		-0.08	-0.21
Jpn Gov 10 yr	110.83	0.18	0.00
US Gov 30 yr	108.92	2.10	-0.11
Ger Gov 2 yr	103.95	-0.75	-0.20

	price	prev	chg
Fed Funds Eff	0.08	0.08	0.00
US 3m Bills	0.35	0.33	0.02
Euro Libor 3m	-0.58	-0.58	0.00
UK 3m	0.88	0.85	0.03

Prices are latest for edition | Data provided by Morningstar

A Nikkei Company

Subscribe In print and online

www.ft.com/subsusa
Tel: 1 800 628 8088
For the latest news go to www.ft.com

No: 40,952 ★ †

Printed in London, Liverpool, Glasgow, Dublin, Frankfurt, Milan, Madrid, New York, Chicago, San Francisco, Tokyo, Hong Kong, Singapore, Seoul, Dubai

09300>
6 14919 00001 5

Russia forced to change military thinking after assault misfires

West believes Moscow underestimated opposing forces and public's resistance

HENRY FOY — BRUSSELS
JOHN PAUL RATHBONE — LONDON

On Saturday, two days after Russia's invasion of Ukraine began, a jubilant article on the website of Russian state-owned newswire RIA declared: "Ukraine has returned to Russia."

Except, of course, it had not. Russia's armed forces — which attempted a lightning-fast invasion and subjugation of Kyiv — were at the time of publication struggling to gain territory in the face of far stronger Ukrainian resistance than expected. The article was deleted within minutes but is still accessible on an internet archive.

Western defence officials say there have been apparent Kremlin intelligence failures, citing a badly informed and overconfident Russian military led by a president whose attitude towards the invasion may have been distorted by a closed circle of pliant advisers.

Half a dozen western intelligence officials told the Financial Times that the Russian armed forces' performance so far suggested Moscow had either failed to collect the correct information on Ukraine's defences, or that it had been ignored by Putin and his most senior generals — or both.

"He is biased to his own views of Ukraine and I doubt very much that anyone tells him the truth," said one official, "about Ukraine, or about the Russian military."

Russia's troubles in the opening days of the invasion lay with "a failure of honest upward reporting of intelligence, an unwillingness or inability to challenge [the leadership] and false claims of capabilities", said a second official.

Analysts point to Russia's botched attempt to seize Kyiv's Hostomel airport in the first day of the invasion as an example of the intelligence failures in practice. The airborne forces sent to take and hold the crucial runway were not large or well-equipped enough to repel a successful counter-attack by Ukrainian special forces.

There were signs yesterday that a shift in focus towards artillery and bombardment of urban residential areas represented a recalibration of Russia's strategy. A large explosion in the heart of Kharkiv destroyed its local government headquarters and filled the adjacent Independence Square with rubble. Ukrainian officials blamed a Russian missile strike. The besieged Black Sea city of Mariupol was also reportedly under Russian rocket and air attacks.

Officials point to increasing evidence of Putin's isolation from even his most senior advisers in recent months.

While long considered to maintain a small group of trusted aides, Putin has responded to the coronavirus pandemic by further restricting his contact with others outside the Kremlin.

"The number of people who will have been on the inside of a decision-making loop around this sort of event is likely to have been very small indeed," said a third official.

Russia's intelligence failings appear to be centred on two main issues, according to western officials.

First, the assessment of the strength of Ukraine's armed forces, and the scale of its improvements in terms of training, morale and equipment since Russia's swift capture of Crimea in 2014. And second, the level of resistance across Ukrainian society to the invasion, underscored by the willingness of civilians to take up arms against them.

"When Russia plans an operation, they make a lot of algorithmic calculations about the ratio of force they need to apply to defeat their enemies," a fourth defence expert said. "The ratio they apply to their own forces is classified information, but they clearly set [their forces' ability] too high. There is always an incentive in autocracies to tell commanders — and that includes Putin — what they want to hear."

Putin also appeared to expect a different response from ordinary Ukrainians to an invasion that, in his declaration of war on Thursday, he billed as a means to "protect people who have been subjected to bullying and genocide by the Kyiv regime for eight years".

In his speech, Putin addressed the Ukrainian military as "comrades" from a "common motherland", saying: "I urge you to lay down your weapons immediately and go home."

According to an analysis by UK think-tank the Royal United Services Institute — which it said was based on documents "commissioned by Russian intelligence" — the Kremlin's "pre-invasion research suggested Ukraine was fertile ground for subversion".

That appears to have been an incorrect assumption. While Russian television stations have broadcast footage of the country's tanks being welcomed by Ukrainians, authorities in Kyiv say tens of thousands of civilians have taken up state-procured arms to join the organised defence of cities.

"The FSB [Russia' spy service] is not that different to the late-Soviet KGB — they are not going to tell the leadership what the leadership doesn't want to hear," a fifth western official said, while noting that the west also had a history of intelligence failings.

"The difference is that there is genuine debate about it in the west when intelligence services get it wrong."

Destroyed: a Russian all-terrain infantry vehicle in Kharkiv

Governance

Flow of arms: Ukrainians pass assault rifles across a collapsed bridge to units manning positions on Kyiv's northern front on Monday — Aris Messinis/AFP/Getty

Kyiv strives to keep wheels of state turning

JOHN REED IN LVIV AND ROMAN OLEARCHYK — KYIV

Two days after Russia invaded Ukraine the office of Volodymyr Zelensky released a video of the president and other top officials outdoors at night in the heart of the government complex.

"We are all here defending our independence, our country," Zelensky said. "Glory to our defenders. Glory to Ukraine."

Despite some questions about the resilience of the state and the Kremlin's apparent belief that Zelensky would sue for peace within days, Ukraine's government, economy and banking systems have functioned even as Russian troops encircled Kyiv, the capital.

"Our financial system is stable, the banking sector is working . . . and we are making all the necessary social payments . . . for disabilities, pensions for elderly people and of course salaries," said Olga Stefanishyna, deputy prime minister, in a video interview.

"We are really happy and proud of the people in government who managed at a time of war the world has not seen in 75 years. We delivered on all of that."

For security reasons, officials are not disclosing information about their whereabouts. Asked about the logistics of governing under siege, she said: "I will give you all the details in 12 months."

The government has, since Russia's 2014 annexation of Crimea and the conflict in the east, been laying the groundwork for operating under conditions of a full-scale attack. The government quarter contains a labyrinth of underground passageways, and some MPs and government figures have gone elsewhere in the city or further afield.

Immediately after the invasion the parliament imposed martial law. Zelensky, as commander of the military, began ruling by decree and parliament suspended regular sessions. But MPs are still holding ad hoc meetings to help in areas such as co-ordinating aid.

"The military is running the country with the cabinet of ministers," said Mariana Bezuhla, deputy chair of the parliamentary national security committee. "We are doing everything possible to provide support."

On Sunday, members of the parliamentary finance and tax committee, working from home or in shelters, convened for a session, part of which was open to the public via Zoom link.

The agenda included briefings by the central bank and from tax and customs officials about how the economy and public finance system were prepared to weather the extreme conditions.

"It doesn't help that we are underground or in metro stations, but . . . everyone is trying to do everything we can," said Alyona Shkrum, a panel member.

At the onset of the invasion, said Shkrum: "We were told the first obligation is you have to stay alive; the second is you cannot be captured because if the Russian forces have MPs under their control, we will be forced to vote at gunpoint for some kind of capitulation. The second order is more important."

Bezuhla said many MPs were back in their constituencies to help manage the emergency and support the flow of humanitarian aid. Supply chains have broken or are frayed in Kyiv and other cities and some ATMs have run out of cash or are releasing limited amounts, but electronic payments are working.

'It's not like Russia because we are linked to the world system," said Volodymyr Landa of Forbes Ukraine. "We can pay by cards in food stores. Electronic payments are still working."

Amid a surge of patriotism since the invasion, businesses have pitched in, some paying salaries and taxes to the state in advance.

McDonald's has closed its fast-food outlets for security reasons but has been providing local authorities with "products that do not require cooking", such as doughnuts, milk, water and juices, the company said. Local outlets of the rival KFC chain said they were donating food to hospitals, territorial defence and military units.

Zelensky's popularity has soared. A weekend survey by Rating, a polling agency, found 91 per cent of 2,000 people questioned were satisfied or very satisfied with his performance, up from about 60 per cent before the invasion.

"He has resilience, passion and love for his people," said Andy Hunder, president of the American Chamber of Commerce in Ukraine, operating from Lviv. "Cometh the hour, cometh the man."

Legal push

ICC begins probe into alleged war crimes

Diplomatic efforts are under way to hold Moscow to account for its invasion of Ukraine, with Canada and Lithuania asking the International Criminal Court to investigate alleged war crimes by Russian forces.

After several days of intense bombardment, including on civilian areas, Volodymyr Zelensky, Ukraine's president, accused Russia of "war crimes" and being a "terrorist state" and called on the world to make sure "terrorists are brought to justice in international courts".

Ukraine is not a member of the ICC, so other countries had to make a formal request for an investigation on its behalf. Canada and Lithuania's requests yesterday paved the way for Karim Khan, the court's chief prosecutor, to start a formal probe.

Zelensky's comments came after rocket strikes on central Kharkiv, Ukraine's second-largest city, killed at least 10 and wounded 35, the country's emergency services said.

"We have a desire to see our children alive," Zelensky told the European parliament via video-link. "I think it is a fair one. Yesterday 16 children were killed. Again and again President Putin is going to say . . . we are hitting military infrastructure. Where? What kind of military factories do our children work at?" The Kremlin "categorically" denied targeting civilians. *Valentina Pop, Brussels*

FINANCIAL TIMES
330 Hudson Street,
New York, NY 10013

Subscriptions and Customer Service
Tel: +1 800 628 8088
uscirculation@ft.com, www.ft.com/subsusa
Advertising
Tel: +1 917 551 5040
usads@ft.com
Letters to the editor
letters.editor@ft.com
Executive appointments
www.exec-appointments.com

Published by
F.T. Publications Inc.
330 Hudson St, New York,
NY 10013, USA;
Tel: +1 917-551-5000;
Editor: Roula Khalaf

Printed by
Blue Island Newspaper Printing, Harvey, IL
Evergreen Printing Company, Bellmawr, NJ
Bay Area Production Services, Fremont, CA

Published daily except Sundays, New Year's Day, Good Friday, Independence Day, Thanksgiving, the day after Thanksgiving, Christmas Day and the day after Christmas Day.

US subscription rates, 1 year $406. Periodicals postage paid at New York, NY and at additional mailing offices; Post-Master. Send address changes to F.T. Publications Inc., PO Box 469, Newburgh, NY 12551; USPS number, 190640; ISSN# 0884-6782.

Escaping conflict

Tears of relief at Polish border as refugee flow inches to safety

JAMES SHOTTER — MEDYKA

On Ukraine's border with Poland this week, trying to find some shelter from the biting wind, Lena was coming to terms with the fact that — for the second time in her life — she has been displaced by war.

After Russian-backed separatists and Moscow stoked conflict in eastern Ukraine in 2014, Lena fled her home in Luhansk and moved to Kyiv, hoping for a safer life in the capital. But as Russian missiles began to rain down on her country last week, she found herself fleeing once more.

"We had bought an apartment in Kyiv, but now we had to leave again," she said, cradling her pet dog beneath her jacket. "I don't believe what is happening. I just don't believe it."

Since Russian tanks rolled into Ukraine last week, hundreds of thousands have made a similar journey. The country's western neighbours have all offered help. But Poland, which has close linguistic and cultural ties with Ukraine and is already home to more than 1mn of its citizens, looks likely to be one of the main destinations.

Poland's conservative-nationalist government vehemently opposed EU efforts to enforce quotas for asylum seekers during the 2015 migration crisis. But this time, officials have said they are preparing to take up to 1mn Ukrainians. Poland's border force said yesterday that 410,000 people had entered the country since the start of the war.

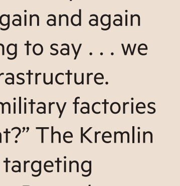
The arrivals have blocked Ukraine's roads and caused chaos at crossings such as Medyka, where the queue of cars stretches tens of kilometres from the border, stranding thousands for days in freezing conditions with dwindling supplies of food and water.

The tailbacks have also triggered emotional scenes on the Polish side of the fence. Many Ukrainians already living in the west have come to the border to wait as their loved ones inch closer to the checkpoint. On Monday, one family hugged with joy as they were reunited. A few metres away, another woman cried with desperation at the delays facing hers.

Bogdan, who had come from Berlin, said his wife Olga and their five-year-old daughter had driven from Kyiv to within 30km of the border on Friday evening. But nearly three days on, they were still 11km — or two days — away.

While she waited in the car, he said, Olga had wrapped herself and their daughter in all the clothes they had so she could turn off the engine to conserve fuel without freezing. On the other side of the border, Bogdan had been calling her every 20 minutes or so to stop her falling asleep and losing her place in the queue.

Safe at last: a woman who fled with a child from Ukraine crosses the border into Poland at Medyka



"She is worried, she is panicked, she has a little kid, and if she runs out of petrol, they will have to go more than 10km on foot, and it's impossible with a small child and after five days when she hasn't slept," he said.

Among those crossing the border, there were also groups from countries such as Nigeria, Yemen and Tunisia, many of whom moved to Ukraine to study and then found themselves caught up in the conflict. Marcel, a Nigerian who had been studying medicine in Vinnytsia, said he had made the crossing without problems. But Ahmed, who had been studying in Odesa, said he and his friends from Yemen had been insulted by Ukrainian border guards, and that one had been hit three times. "It was the worst journey of our lives," he said.

As the new arrivals waited for transport further west, or tried to obtain much-needed sim cards for phones, smaller groups of Ukrainian men in Poland were heading in the opposite direction.

Anatolii Kachorak, from Ivano-Frankivsk in Ukraine, said he was waiting for his mother, wife and two children, who had been stuck at the border for four days, to cross to safety, but that as soon as they arrived he would go to defend his country. "I will fight to the end," he said. "I will go to the front line, to wherever things are hottest."

Opinion polls suggest most are in favour of taking in Ukrainians. Polish social media is awash with offers of free transport and accommodation, as well as links to fundraising sites for refugees.

Kharkiv onslaught ‘More people are dying, every day the terror grows’

GUY CHAZAN — LVIV

Olga Markina says she can scarcely believe what is happening to her hometown Kharkiv, a city in the heart of Europe, in the 21st century, subject to a brutal artillery bombardment that has left dozens dead.

“Every day there’s more destruction, every day more people are dying, and every day the terror grows,” the child psychologist said. “We thought we lived in paradise, and they’ve turned it into hell.”

Markina was speaking hours after a devastating missile strike on the main square of Kharkiv, Ukraine’s second-largest city, turned the regional government building into a fireball, killing seven people and injuring 24.

It was one of a number of rocket attacks that have spread terror and anguish through the city of 1.4mn people, forcing thousands to seek safety in air raid shelters and triggering an exodus of refugees.

In Ukraine’s capital, Kyiv, President Volodymyr Zelensky yesterday denounced the strike as “outright undisguised terror”.

“After this, Russia is a terrorist state,” he said. “No one will forgive. No one will forget.”

Russia’s invasion began six days ago when thousands of Russian troops swarmed across the border in what President Vladimir Putin described as a “special operation” to “demilitarise” and “de-Nazify” Ukraine. Kharkiv has borne the brunt of the campaign.

Over the past two days, the eastern and mainly populated by Russian-speakers, has endured a wave of indiscriminate shelling that has caused international outrage and western calls for restraint.

“It’s a near constant cannonade,” said Dima, a Kharkiv resident who declined to give his second name. “And it serves no discernible purpose, they’re firing haphazardly at people queueing for water and food.”

So far, despite flooding the country with troops and weaponry, Russia has failed to take a major Ukrainian city. Kharkiv, too, is still under Ukrainian control: Russian troops tried to break through into the city last weekend but were repelled by its defenders.

Analysts worry that Russia’s generals might be resorting to rocket attacks out of frustration at their lack of progress on the ground. Such a shift in tactics would entail much more collateral damage.

“The use of heavy artillery in densely populated urban areas greatly increases the risk of civilian casualties,” the British Ministry of Defence said in an intelligence update yesterday.

Innocent victim: a body is removed from Kharkiv city hall — Sergey Bobok/AFP/Getty

Igor, a doctor reached by phone in Kharkiv, who declined to give his second name, said the aim seemed to be to sow panic.

“They want to create chaos, to demoralise us,” he said. “This isn’t war, this is murder of civilians.”

Kharkiv itself is a city in crisis. Hundreds of people have been camping out in metro stations that have been turned into makeshift bomb shelters.

Locals say long queues are forming outside supermarkets. Many ATMs are out of cash and much of the city’s public transport has stopped working. The worst-hit neighbourhoods lack electricity.

Markina was out buying food on Monday when she heard a deafening boom. With dozens of other shoppers, she ran for cover in a nearby underground car park.

“Later I saw what had happened. A rocket had hit a residential block a short distance away, a direct hit,” she said.

Video footage posted on social media showed roads strewn with burnt-out cars and the facades of apartment blocks reduced to smouldering ruins.

One post showed a group holding a Ukrainian yellow and blue flag standing in front of the bombed out regional government building. Addressing a Russian audience, one man shouted: “Look what you’ve fucking done! Look how many people have died! Stop, leave, before it’s too late!”

Locals in Kharkiv said the mood in the city had darkened in recent days as people hunkered down for a long struggle. “Initially there was just shock, but we were sure the sides would quickly agree on a ceasefire,” said Dima.

Yet the first talks between Russian and Ukrainian officials on Monday failed to yield a breakthrough. “Now people realise this is going to drag on, with no end in sight.”

Igor, the doctor, said the Russian offensive in Ukraine had disturbing parallels with other wars from recent history.

“I was never in Yugoslavia or Syria,” he said. “But this is exactly what Bashar al-Assad did to Syria and now Putin’s doing it to Ukraine.”

FT Inside and online
See FT View; Opinion: Martin Wolf & Janan Ganesh; Markets ft.com/war-in-ukraine

EU. Response

Putin’s invasion forges new European resolve

Continent’s strategic outlook has been transformed, led by Germany’s big policy shift

BEN HALL — EUROPE EDITOR

At the beginning of last week, EU leaders were still clinging to hopes that Russian leader Vladimir Putin might be dissuaded from launching a broad military attack on Ukraine.

French president Emmanuel Macron, reporting back from his latest talks with Putin, kept faith in the diplomatic track. The EU imposed sanctions on a few more people for the Russia-led war in Donbas. And Germany continued to resist sending weapons to Ukraine.

It was the kind of hesitant response critics of the EU have come to expect, despite its aspirations to become a geopolitical power.

Fast-forward seven days, and Europe’s strategic outlook has been transformed. It was led by a momentous policy turn in Berlin, which pledged to ramp up defence spending, dropped its resistance to arming Kyiv, endorsed damaging financial sanctions on Moscow and embarked on a costly drive to lessen its energy dependence on Russia.

> ‘Everything has changed. Nobody is questioning where we stand any more’
> Nathalie Tocci, political scientist

The EU’s illusions about the Russian threat to Europe have crumbled. Where European capitals once favoured dialogue, they have turned to deterrence.

Engagement with Russia has turned to isolation as business, cultural and sporting ties are cut. The shift happened with breathtaking speed, even if it took Russia’s decision to launch the biggest military offensive in Europe since the battle of Berlin in 1945 to bring it about.

It was not long ago that European capitals argued over the need for a European Peace Facility to provide weapons to third countries. Now Josep Borrell, the EU’s foreign policy chief, has earmarked €450mn to arm Ukraine, including with fighter jets.

“The paradigm has changed. Everything has changed. Nobody is questioning where we stand any more,” said Nathalie Tocci, director of Italy’s Institute for International Affairs. “It is not only war in Europe, it is war against Europe.”

Anger: a war protest is held outside the European Council in Brussels

Michel Duclos, a former French diplomat and adviser to the Institut Montaigne think-tank, said Germany, France, Italy and even to a degree the UK — until the 2018 poisoning of Sergei Skripal on UK soil by Russian agents — failed to recognise that Moscow was becoming more aggressive. Their assessment was shaped by a dominant narrative that Russia felt threatened by the enlargement of Nato, he said.

“Our leaders discovered with horror that the problem for Putin was not the security of Russia but his need to take back the Ukrainian lands,” Duclos said.

“When he talked about ‘denazification’ and the cleansing of Ukraine, it was not the old Putin. It was a Putin prepared to risk it all to satisfy his ethno-graphic-nationalist imperative.”

The illusions about Russia were so big in Germany, said Jana Puglierin, director of the European Council on Foreign Relations in Berlin, that Putin’s aggression brought a tectonic shift in German thinking. “The German public has finally woken up,” said Puglierin.

For decades, German policy had been driven by two nostrums: that Russia could be made a responsible security partner in Europe; and that dialogue and engagement, particularly through trade, were more effective than deterrence. They have been turned on their head practically overnight.

“With the attack on Ukraine, Putin is not just seeking to wipe an independent country off the map,” German chancellor Olaf Scholz told the Bundestag on Sunday as he tore up Germany’s post-war antimilitarist foreign policy doctrine. “He is demolishing the European security order that had prevailed for almost half a century.”

For years, the EU had tried to avoid sanctions that hurt ordinary Russians. Now the west is looking to wipe out their savings and cut them off from the rest of the world. Russians have become unwelcome. European airspace is all but closed to Russian planes. Russian football teams have been excluded.

The objective seems to be to make ordinary Russians understand the consequences of Putin’s war.

The crisis has also brought the EU closer in ways that seemed unimaginable just a few months ago. EU capitals have co-ordinated policy on Ukrainian refugees — a joint approach sorely missing the 2015-16 migrant crisis. And even Hungary’s Viktor Orban, who has nurtured close ties with the Kremlin, has backed tough sanctions.

Meanwhile, post-Brexit Britain has resumed co-operation with the European Commission.

Pierre Vimont, senior fellow at Carnegie Europe, a think-tank, and a former EU diplomat who acted as Macron’s special envoy to the Kremlin, said in the long term a new relationship with Russia “would have to be built on top of today’s crumbling security order”.

“We can’t just hope that we can push Russia behind its borders and that the Russia issue will vanish.” But now was the time for Europe “to show it stands with Ukraine”, he said. “These are giant steps [for Europe]. I don’t think there is a way back.”

Anxious Russians queue for dollars and prepare to leave

Rouble collapse recalls squeeze of 1990s while fears of armed conflict intensify

FT REPORTERS — MOSCOW

Five days into Russia's war with Ukraine, events are moving so fast that Illarion, a 37-year-old programmer from Moscow, has decided he needs to be prepared for the worst: having to flee the country.

"A few days ago we were all saying of course there won't be any war. Then the war happened. Then we were saying there won't be a nuclear war, we won't have to flee the country," said Illarion, standing in one of the long lines at cash machines throughout Moscow.

Queues have grown as people search for US dollars, which are increasingly scarce after the west imposed financial sanctions that limit Russia's access to foreign currency.

Some people waited hours for dollar deliveries at a branch or ATM, only for the machine to empty within minutes. Others said they had even tried to track cash trucks around the city. Anxiety was heightened on Sunday when Vladimir Putin, Russia's president, placed his nuclear forces on high alert.

"We are now wondering whether the state is going to forcefully convert dollar savings into roubles to take the citizens' dollars because they are being cut off from the outside. That is a reality we see on the horizon," said Illarion.

"I don't think it is a joke any more that we may have bombs flying at us and we'll need to flee the country, which requires having dollars in cash or cryptocurrency."

The rouble fell more than 30 per cent against the dollar at the start of trade on Monday after the US and the EU imposed sanctions on the central bank and cut access to the Swift payments system for some Russian banks.

Moscow yesterday announced a ban on foreign currency transfers to banks outside the country.

More Russians even appear to be considering leaving the country. Searches for the word "emigration" increased fivefold last week, according to Google trends, which analyses the frequency of online searches. Most of the searches originated in Murmansk and St Petersburg, a traditionally liberal city, followed by Moscow.

Lev Gudkov, head of Levada, the independent polling centre, told Kommersant FM radio that the number of people willing to leave the country had increased significantly in February, reaching 22 per cent of Russians and to nearly half among the young.

Reasons include limited business opportunities, the "increasingly repressive regime" and anxiety among parents of those approaching conscription age, he said. "Whoever had been in two minds will now be persuaded to leave as the iron curtain rolls down."

Some people have likened the prevailing conditions to the communist era, when the Soviet Union was in effect shut off from the rest of the world.

Others are expecting a repeat of the 1990s, when a collapse in the value of the rouble pushed up the cost of living.

"I recall in the 1990s prices were set in dollars, even if it was illegal. The rouble was worthless. And I worry this is what we will see again," said Alexei, an IT specialist, who had been waiting several hours at a mall where he exchanged roubles into dollars at the record rate of more than Rbs100 per dollar. Before the war, a dollar bought Rbs70. He, too, said he was looking for ways to emigrate.

Elena, a 29-year-old human resources specialist from Moscow, said she was thinking of following friends who had left for the United Arab Emirates before the current crisis because they could not see a positive future in Russia.

"The feelings are mixed. We are completely unprepared. This is a total mess, and it is very scary in all senses . . . That the economy collapses and we will live off [food] allowance cards as our parents and grandparents [did]," she said, referring to a system of rationing prevalent in the 1990s.

"We really hope the situation can be resolved with minimal losses, but knowing the policy of our country and where it is headed, I am not positive about the prospects . . .

"I'm starting to think I'll be of more use even to my own family, my parents, by being out of here," said Elena.

Other people have been lining up to buy goods such as iPhones and television sets, spending roubles now in the expectation that their value will continue to fall.

"For the past few days it's been like Christmas for us," said a sales assistant in an electronics shop. "People are ready to buy things even [though] we have been raising prices every few hours based on the forex situation."

In the face of profound uncertainty, Illarion is one of those ready for all eventualities.

"I have rouble savings in case everything will be OK, and dollar savings in case things are not OK," he said. "Anything that previously seemed impossible we have to have a plan for."

Ticket barrier: a passenger uses a phone to pay a fare on the Moscow Metro. Apple Pay, Google Pay and Samsung Pay, working with Visa and Mastercard, are being declined because of sanctions — Mikhail Tereshchenko/Tass/Getty

> 'I don't think it is a joke any more that we may have bombs flying at us and we'll need to flee the country, which requires having dollars'

Presidential decree

Foreign investors barred from selling Russia assets

NASTASSIA ASTRASHEUSKAYA — MOSCOW
TOM WILSON — LONDON

Moscow is imposing a temporary ban on foreign investors selling their Russian assets after key western partners, including energy groups BP and Shell, announced plans to divest their holdings following the country's invasion of Ukraine.

The move was aimed at preventing companies basing decisions on politics rather than economics, Moscow said.

"In the current sanctions situation, foreign entrepreneurs are forced to be guided not by economic factors, but to make decisions under political pressure," Russian prime minister Mikhail Mishustin told a government meeting yesterday, according to an official statement.

"To enable businesses to make informed decisions, a draft presidential decree has been prepared to introduce temporary restrictions on exiting Russian assets."

The announcement comes after energy groups BP, Shell and Equinor said they would exit their joint ventures in Russia. BP said on Sunday that it would give up the 19.75 per cent stake it has held in Rosneft for a decade — a move that could cost it up to $25bn — bringing an end to 30 years of co-operation with Russian partners. France's TotalEnergies said yesterday it was reviewing its existing business in Russia and that it would make no new investments in the country.

Germany's Wintershall Dea, which has a range of projects with Russia's state-owned Gazprom and is co-owned by German chemicals group BASF and Russian billionaire Mikhail Fridman's investor group LetterOne, said it was examining the situation and the legal implications. Wintershall is one of the main European investors in the Nord Stream 2 gas pipeline, which was halted by the German government last week, while Fridman was among the Russian oligarchs whose assets have been frozen by the EU.

"The foundation of our work in Russia has been shaken to the core," Wintershall chief executive Mario Mehren said in a note. "The Russian president is waging a war of aggression against Ukraine . . . [this war] is a hard blow."

Yet Russia "still considers foreign business as potential partners" and is "open to dialogue with constructive investors", Mishustin said.

Some analysts have speculated that buyers in China or the Middle East might be interested in BP's stake. But given the risks involved with acquiring Russian assets, companies seeking to divest are expected to struggle to sell.

Russian lenders

Brussels weighs axing seven banks from Swift network

SAM FLEMING — BRUSSELS
ELENI VARVITSIOTI — ATHENS

Russia's second-largest bank is among seven lenders that could be cut off from the Swift messaging network under proposals being discussed by EU member states.

VTB Bank would lose access to the network, which helps lenders to make cross-border payments, if the EU goes ahead with the proposals following consultations with the US and other partners, according to people briefed on the discussions.

Banks currently under consideration also include Vnesheconombank (VEB), Rossiya Bank, Sovcombank, Bank Otkritie, Novikombank and Promsvyazbank, the people said, insisting on anonymity because the list is not yet finalised. They said this proposed list did not name Sberbank, Russia's biggest lender by assets, or Gazprombank, which is heavily involved in its energy sector.

The decision to cut some Russian banks from the Belgium-based Swift system was announced at the weekend in a joint statement by the European Commission, US, Italy, France, Germany, UK and Canada. But it has required further talks over ways of intensifying pressure on the Russian financial system. The list was being discussed yesterday and its content might change prior to official publication.

The plan underlines western allies' willingness to wield a measure they previously saw as a last-resort option within their sanctions toolbox. Volodymyr Zelensky, the Ukrainian president, has been pushing leaders for days to cut Russian banks from Swift.

Swift, a co-operative, is used by more than 11,000 banks and financial institutions worldwide and handles 42mn messages a day, facilitating trillions of dollars worth of transactions.

Swift said on its website yesterday: "Diplomatic decisions have brought Swift into efforts to bring this crisis to an end, and we will always comply with applicable sanctions laws."

It added: "We are engaging with these authorities to understand which entities will be subject to these new measures and will disconnect them once we receive legal instruction to do so."

Being cut off from Swift would not prevent Russian banks from carrying out cross-border transactions, but doing so would become more costly and arduous. Foreign dealings would rely on the use of slower communication tools, such as email and telex.

But the selection of banks suggests the western allies are also seeking to mitigate the fallout from the decision for oil and gas payments in particular.

Boycotts. **Severing ties**

Faultlines run through culture and sport

Russian stars tumble from international stage in rush to isolate Moscow

ERIKA SOLOMON — BERLIN

For three decades, he was one of the world's most sought-after conductors, performing in the best concert venues, from London to Tokyo. Six days into Russia's invasion of Ukraine, Valery Gergiev has gone from international celebrity to pariah of the classical world.

Yesterday the 68-year-old maestro was sacked as chief conductor of the Munich Philharmonic. Dieter Reiter, mayor of Munich, said he had asked the Russian maestro to "clearly and unequivocally distance himself from the brutal war of aggression that Putin is waging against Ukraine".

But Gergiev, a Putin supporter who publicly backed Russia's 2014 annexation in Crimea, refused to respond to Reiter's request.

He is among a growing list of Russian stars who find themselves the new target of the campaign to isolate Moscow, which is no longer limited to economics, finance or military aid. Many are facing cancellations and suspensions in response to their failure to distance themselves from Moscow's aggression.

Gergiev, general director of the Mariinsky Theatre in St Petersburg, was also forced to resign from the Edinburgh International Festival and give up a performance at Milan's La Scala.

"Being a musician does not free you from being a citizen, from taking responsibility," Russian-German pianist Igor Levit commented on Instagram, adding #StandWithUkraine.

In the world of sport, Russia's invasion has forced the industry to abandon its self-proclaimed political neutrality.

The International Olympic Committee recommended that Russian and Belarusian athletes and officials be barred from participating in international events. Fifa, which characterises sport as a "vector of peace and hope", initially resisted pressure to bar Russia. But on Monday, world football's governing body agreed with Uefa, its European equivalent, to eject Russian teams from their competitions.

The Football Union of Russia has threatened legal action against Fifa and Uefa's decisions. Now removed from Uefa's Europa league, Spartak Moscow argued the decision undermined the loftier purpose of sport. "We believe that sport, even in the most difficult times, should aim to build bridges, and not burn them," the team said.

Some have criticised the wave of opprobrium. "Gergiev isn't responsible for Putin's appalling decisions," political analyst Hisham A Hellyer tweeted. "Moreover, he would continue to have family in Russia, who would face reprisals if he, as a public figure, were to condemn Putin. We can't (rightly) condemn Putin as a dictator, and then demand this kind of public dissent."

But efforts to shun Russia in the arts are accelerating quickly. In France, the Cannes Film Festival yesterday said it would ban official Russian delegations from its 2022 event unless the conflict in Ukraine ended "in a manner acceptable to the Ukrainian people".

New York's Metropolitan Opera, North America's largest classical music organisation, has cancelled a string of performances. "We can no longer engage with artists or institutions that support Putin or are supported by him," Met general manager Peter Gelb said in a video.

Yet several star performers are standing by Putin — or, at least, are unwilling to stand against him.

Gergiev, despite the cancellations, has made no comment on the invasion.

Star Russian opera soprano singer Anna Netrebko cancelled her upcoming appearance at La Scala shortly after Gergiev was disinvited.

Netrebko, who is also an Austrian citizen, celebrated her birthday at the Kremlin last year. She supported Putin in his 2012 re-election campaign.

On Saturday, Netrebko wrote she was "opposed to this war" but that she was "not a political person".

She criticised the idea of using culture as a political tool: "Forcing artists, or any public figure, to voice their political opinions in public and to denounce their homeland is not right."

In response, the popular German satirist Jans Böhmermann wrote on Twitter: "Nothing is apolitical, ever, and definitely not art."

In Paris, critics have called for the Louis Vuitton foundation's blockbuster exhibition of the French and Russian paintings collected by wealthy 19th century industrialists, the Morozov brothers, to be closed in solidarity with Ukraine. Some even called for the works to be seized.

Additional reporting by Eleni Varvitsioti, Dan Dombey, Joe Miller, Leila Abboud, Sam Agini and Sam Jones

Sacked: Russian conductor Valery Gergiev has failed to criticise the war

Bloc membership

Latvia urges EU to grant Ukraine candidate status

RICHARD MILNE — RIGA

Latvia's president has called on the EU to seize its chance to stop being a "political midget" and grant Ukraine candidate status to join the bloc.

Egils Levits told the Financial Times that Russia's invasion of Ukraine was a "moment in history" akin to the fall of the Berlin Wall or the end of the second world war, where "the future is being formed for the next decade".

Ukraine applied for EU membership on Monday, four days into the Russian assault, after Levits and seven other eastern European presidents signed a letter in favour of its immediate candidacy. The Latvian president said the bloc should bypass its usual "bureaucratic procedures" and give candidate status to Kyiv before detailed discussions on what reforms would be needed for its entry.

"The European Union is one of the most important economic players of the world. But in political terms the EU is a midget. There is a chance for the EU to come to the normal size that it deserves, both in political terms and in military terms," he said in an interview.

Latvia, along with the other Baltic states, has for years warned the EU and Nato about the threat posed by Russia, which has launched repeated military offensives against neighbouring countries including Georgia and Ukraine.

Nato countries such as the US, UK, Germany and Canada have sent troops and equipment to the Baltics on the alliance's eastern flank. The US is sending 300 troops to Latvia, with 40 arriving last week.

Levits said some western societies had been naive over dealing with Russia for decades. "We have not been naive," he said of Latvia. "Now the situation is that all western societies, Europe, Nato including the US and Canada, are seeing the reality and acting adequately so that we can defend our democracy in all countries."

There is a sense in Riga that the Baltics' views are finally being listened to after "game-changing" events this week, including Germany's pledge to increase its military budget and send weapons to Ukraine, as well as the EU decision to give fighter jets to Kyiv.

But despite the "unthinkable" unity in the west, Ukraine's application to join the EU has sparked early divisions.

A senior French official said on Monday that "we should be careful, let's say, to not make promises we cannot keep", and that any accession by Ukraine would be a "long-term conversation" although talks could begin within the next few months. Mark Rutte, Dutch prime minister, said it was not "a good discussion" to have at present.

Oligarchs on sanctions list have little power to sway Putin

Russian leader's record shows readiness to take on wealthy elite

MAX SEDDON — MOSCOW

As Russia's tanks rolled into Ukraine last week, Vladimir Putin gathered the country's top businessmen in the Kremlin's ornate Hall of the Order of St Catherine to discuss their response to the economic shocks that would follow.

The Russian president, sitting about 20ft away in a conspicuous social-distancing measure, told them he had "no other choice" but to invade Ukraine and, if they wanted to keep their businesses, neither did they, according to people briefed on the meeting.

"It was a pointless meeting. The main idea was to explain himself. The explanation was: 'I get it, but I didn't have any other way out.' That's really what he thinks," one of them said.

On Monday, the EU froze the assets and imposed a travel ban on more than half a dozen of Russia's most prominent businessmen in a move officials said was aimed at compelling the country's elite to demand Putin change course.

But the power dynamic of the meeting made for a much starker message to the assembled billionaires. He warned that anyone who avoided doing business with companies sanctioned by the west would face punishment under the law — implying that the oligarchs had to make a stand — while also stating that Russia would help companies hit by sanctions.

The guest list at the meeting, where attendees were seated in alphabetical order, showed that any form of dissent has become a distant prospect as Putin's power becomes near absolute, people close to some of the attendees said.

Though some, such as banker Petr Aven and Vladimir Yevtushenkov, owner of the Sistema conglomerate, were among the first to make a fortune in Russia's turbulent 1990s, they were outnumbered by the heads of the state-run banking and energy firms that now dominate Russia's economy, many of whom have ties to Putin's inner circle.

Mikhail Fridman, Aven's business partner, has criticised the war in general terms but told reporters yesterday he did not want to attack Putin directly because it "will not have any impact for political decisions in Russia" while endangering his employees.

"Nobody really wants to suffer. But the message is we will have to," said a senior state banker.

"Being on the US sanctions list used to be a status symbol of patriotism. But now it's a requirement. If you're not on it, it's suspicious."

The meeting showed how far Russia — and Putin himself — has come since his first meeting with the oligarchs a few months after he took office in 2000.

Then, the fledgling leader offered a deal to the business leaders: they could keep the gains they had made from privatising Russian state assets after the Soviet Union's collapse if they pledged fealty and stayed out of politics.

Since then, Putin has imposed his will on the oligarchs by responding to any criticism with reprisals, leaving them with vastly diminished influence and some of them in prison.

Some who built their fortunes before Putin came to power, such as Mikhail Khodorkovsky, deposed boss of oil group Yukos, and banker Sergei Pugachev, have left the country. A few other more recently minted businessmen have left the country or been arrested. "The smart oligarchs get how things work here and the dumb ones aren't oligarchs any more," a senior Kremlin official said. "Everyone who doesn't like it is out, or in prison."

Russia's wealth is even more concentrated in the hands of a few today than it was when Putin took power.

The 500 Russians with a net worth of more than $100mn control 40 per cent of the country's household wealth, according to a study by the Boston Consulting Group last year. That means Russia's super-rich are three times wealthier than their average counterparts globally.

But those vast riches do not bring political power. Fridman, saying he was "shocked" by EU allegations that he supported Putin's war effort by lobbying against western sanctions, undermining Ukraine's sovereignty, and being an enabler of Putin's inner circle, said yesterday he would contest them.

Any criticism of the invasion would risk reprisals from the Kremlin against his workforce, he said. "If I make any political statement that is unacceptable in Russia, it will have very clear implications for the company, for our customers, for our creditors, for our stakeholders. I do not have a right to push on that situation," Fridman said.

And even if Russia's oligarchs were to demand changes from Putin, they would still be unable to change his mind, one of the people briefed on the meeting said.

"Imagine they go to complain to Putin," said a diplomat from a country where Russian oligarchs own assets. "They say: 'Can you please revise your policy? I lost $4bn of my $5bn.' Putin says: 'Do you want to keep the $1bn?'"

Listening mode: business chiefs hear Vladimir Putin outline his reasons for war. Below, Mikhail Fridman
EPN/Newscom/Avalon

Targeted
Four men hit by EU measures

Alisher Usmanov, pictured Metals and technology tycoon, controls Russian phone network MegaFon and metals giant Metalloinvest along with other businesses through his USM Holdings. Was among Facebook's biggest investors

Mikhail Fridman Co-founder of Alfa Group, owner of privately owned bank Alfa-Bank, biggest supermarket chain X5 and mobile operator Veon. Runs London-based private equity firm LetterOne, set up using $14bn raised from the sale of a stake in oil group TNK-BP to Rosneft

Petr Aven Fridman's partner, chairs Alfa-Bank. Former trade minister

Alexei Mordashov Russia's richest man, owns leading steelmaker Severstal. Holds a 32 per cent share in German tour operator Tui and owns half of Tele2, one of Russian's largest telecommunications companies

INTERNATIONAL

Global warming

IPCC warns of climate risk to supply chains

Countries urged in UN report to build resilience to extreme weather events

CAMILLA HODGSON — LONDON

Risks to global supply chains are rising from the increasingly severe effects of climate change laid bare in a landmark UN report this week, and could place extra pressure on fuel stability and essential goods worldwide.

Recent crises have thrown the vulnerability of supply chains into focus, as Russia's invasion of Ukraine has highlighted Europe's dependence on oil and gas imports, while the international manufacture and distribution of goods remains chaotic because of the pandemic.

Climate-related shocks such as extreme weather events will become more common and severe as the world warms, and could further disrupt interconnected supply chains if governments do not act to build resilience, according to the latest analysis by the UN's Intergovernmental Panel on Climate Change.

That could drive up the price of critical items such as food and hamper international development, said the report, which was written by 270 scientists from 67 countries. The world had warmed by 1.1C since the pre-industrial period and was on track for 3C by 2100, the IPCC said. Beyond 1.5C, the effects are expected to be exponential for each fraction of a degree of warming.

Among the risks highlighted was the potential for climate-related hazards such as floods, droughts and energy outages to disrupt global trade, and the effects that could have on economies and food security. Damage to food storage, caused by electricity failures, and to transport routes could "significantly decrease availability and increase the cost of 22 highly perishable, nutritious foods such as fruits, vegetables, fish, meat and dairy", the report said.

The globalised nature of supply chains meant risks were "interconnected and systemic. One leads to another," said Mami Mizutori, head of the UN Office for Disaster Risk Reduction.

But risk management was often siloed and reactive, she said. "We are caught continuously in this vicious circle of disaster, response, recovery and then again disaster."

Global beverage company Coca-Cola said 21 per cent of the water used by the facilities it owned came from "areas of high or extremely high water stress", in a recent climate disclosure to non-profit monitoring group CDP.

Daniela Schmidt, a lead IPCC author, warned of the risk of "simultaneous failures" of breadbasket commodities, which could drive up global food prices.

Patrick Verkooijen, chief executive of the Rotterdam-based Global Center on Adaptation, said climate considerations needed to become part of everyday risk management for companies.

Nina Seega, from the University of Cambridge's Institute for Sustainability Leadership, said "just in time" supply chains were particularly vulnerable. "If you can work to allow some slack in the system, that will create a more resilient system overall," she said.

See FT View

Covid surge

Hong Kong panic buying clears store shelves amid lockdown fear

PRIMROSE RIORDAN, CHAN HO-HIM AND ANDY LIN — HONG KONG

Panic buying in Hong Kong has cleared supermarket shelves and long queues have formed outside banks and pharmacies as residents stock up in anticipation of a citywide lockdown in the coming weeks.

Three senior advisers to Carrie Lam, Hong Kong's chief executive, told the Financial Times a "limited lockdown" would be necessary when the city began mandatory mass testing later this month in an effort to quell China's worst Covid-19 outbreak. The city's stock market and other financial systems would continue to operate, they added, and essential workers would be exempt from the strict measures.

Lam had previously said the government would not impose a citywide lockdown but experts said it might be inevitable if Hong Kong were to adhere to China's zero-Covid policy.

'More and more people think that short pain is better than long pain'

Martin Liao, executive council

One shopper said his family bought a week's worth of groceries yesterday after reading the reports about a potential lockdown. "Many are worried about the stability of food supply," he said.

Hong Kong has been hit by a surge in infections that has overwhelmed its healthcare system. Authorities yesterday reported 32,597 Covid-19 cases, while the total number of infections during the current wave surpassed 220,000. The fatality rate has also risen, filling mortuaries.

Specific details about the lockdown have not been decided as the logistics will hinge on assistance from mainland authorities, but it could last for at least a week as all 7.4mn of Hong Kong's residents are tested three times this month.

"The main goal of the mass testing drive is to achieve zero-Covid," Lam said this week. "It needs to be quick and should not drag on too long . . . But we do need to seriously assess the scale of restricting people's movements."

"It's likely to be citywide," said Ronny Tong, who sits on Lam's executive council, the body that advises Hong Kong's leader. "Any [lockdown] will allow exceptions for essential services and allow people to obtain daily necessities."

Martin Liao, another member of the executive council, added: "More and more people . . . think that short pain is better than long pain."

Xi Jinping, China's president, last month told the city to make fighting the pandemic its "overriding mission", and top mainland epidemiologists have been dispatched to help contain the outbreak. They include Liang Wannian, leader of China's Covid-19 response team, who was in Wuhan during the first wave of infections in 2020. He arrived in Hong Kong on Monday.

Beijing is helping to build temporary isolation facilities and makeshift hospitals so anyone who tests positive, even if asymptomatic, can be quarantined.

Tens of thousands have fled the city because of the stringent Covid-19 measures, with official figures showing a net outflow of 65,295 residents in February, up from about 14,000 the previous month. Some multinational companies have also temporarily relocated senior executives out of Hong Kong.

Additional reporting by Hudson Lockett

Inside Business see Companies

Middle East. Family businesses

UAE tries to take the drama out of succession

Death of a founder often exposes web of rivalries that can destroy good companies

SIMEON KERR — DUBAI

Keeping watch: Sheikh Mohammed bin Rashid al-Maktoum is eager to protect the empire that includes the Mall of the Emirates, below
Giuseppe Cacace/AFP/Getty/Christopher Pike/Bloomberg

More than two decades ago, the cousins running the Al-Futtaim conglomerate, one of the Gulf's biggest family-run businesses, fell out. Such was the importance of Al-Futtaim to the Gulf state that Dubai's then crown prince stepped in, mediating Abdulla al-Futtaim's buyout of his cousin Majid's stake.

Majid then went on to establish his own retail empire and, after the billionaire's death in December, Dubai's leadership has stepped in once again, this time in an attempt to smooth the succession of his eponymous business to his 10 heirs.

Sheikh Mohammed bin Rashid al-Maktoum has set up a special judicial committee to deal with "potential legal disputes related to Mr Majid's estate and inheritance issues", according to Majid Al Futtaim Group.

The ruler's move recognises both the importance of the group, which runs 27 retail centres including Dubai's flagship Mall of the Emirates, and the debilitating impact of succession conflicts on the private companies that contribute an estimated $160bn, or 40 per cent, of the UAE's economic output.

The drama at MAF Group has underscored the urgency of federal government moves to draft a family business law aimed at improving governance and smoothing succession.

"It's good for the government to sit early with the family to ensure a proper structure, rather than trying to resolve it later," said one leading family business member.

With the death of a patriarch, wealthy families in the Gulf are often riven with complex rivalries, even if there is a will in place. Under sharia law, only a third of a deceased's estate can be distributed outside the family according to a will. The remainder is apportioned among survivors using a rigid formula that grants male heirs double the amount of immediate female relatives.

With control of multibillion-dollar, diversified enterprises at stake, tensions can flare quickly between squabbling siblings and spouses. Frosty familial relations take on an outsized importance when the spoils of large companies are up for grabs. "Suddenly a random relative is demanding a place on the board, with zero knowledge of the business whatsoever," said one shareholder of a conglomerate.

The business risk is substantial. "They are at risk of collapsing over minor internal issues or not being prepared for internal or external disruptive factors," said an official. When things go sour, government committees, consisting of a group of judges overseen by a technocrat or executive, have typically intervened to protect the interests of all heirs.

However, families subject to their wide-ranging powers have said they often tie up decision-making with burdensome bureaucracy.

"The government needs to give these committees clear mandates rather than allowing them to entertain every demand of family members," said the shareholder.

The draft law includes provisions for how families manage their assets before or after the death of a founder. The ministry is also considering mandating the clear provision of succession plans.

"There is much that is positive about this prospective law. However, the details need to be fleshed out further once it is officially released," said Omar Alghanim, chair of the Family Business Council Gulf. "Successful family businesses thrive across generations, so any law that can support families to manage their generational transfer is welcomed. Many disputes within families arguably could be resolved by this."

'Suddenly a random relative is demanding a place on the board, with zero knowledge of the business whatsoever'

To deal with internal divisions, the law envisions a conflict management and mediation mechanism to prevent resorting to the regular courts, which follow laws that can inadvertently push companies into liquidation.

"It gives families a platform to legally organise, professionalise and plan ahead for generations, pre-empting destructive family conflicts or disintegration of the businesses," said Alghanim.

Under the proposed law, families could agree to transfer shares to third parties. There could be different classes of shares that are "specifically tailored to address the modern challenges of family firms here", said Fadi Hammadeh, adviser to the FBCG and group general counsel at Al-Futtaim.

The ministry is involved in consultations on the precise definition of a family business, which could be offered reduced fees for property transfers or stocks as an incentive for compliance. Other countries that have introduced family business laws, such as Malta, have offered various incentives, including tax breaks on the transfer of assets between generations.

"This is a platform to take control of chaotic situations," said Hammadeh. "Many hope for the best and do nothing, but one needs to plan for the worst and provide tools to entice families into creating better frameworks for the future."

US foreign policy

Biden administration stays focused on Taiwan despite preoccupation with Ukraine crisis

DEMETRI SEVASTOPULO — WASHINGTON
KATHRIN HILLE — TAIPEI

Days after approving $350mn in military aid for Ukraine, US president Joe Biden sent a message of support to another vulnerable country by dispatching a high-level delegation of former American officials to Taiwan.

Michael Mullen, former chair of the US joint chiefs of staff, flew to Taipei yesterday to reassure Taiwan and remind China the US commitment to the island was strong despite its focus on Ukraine.

The delegation included Michèle Flournoy, a former Pentagon official, Evan Medeiros, a former White House Asia adviser to Barack Obama, and Mike Green, who held the same position for George W Bush. One US official said the high-level bipartisan delegation showed the US commitment to Taiwan was "rock solid". The visit comes as some experts worry that the US attention on Ukraine will dilute its focus on China — a bigger long-term challenge — and Beijing could ramp up the pressure on Taiwan while Washington is preoccupied.

One person familiar with the debate inside the Biden administration said the president was crafting Ukraine policy independently of the ramifications for China and Taiwan, but stressed that he was paying attention to Beijing.

"The driving force and motivation is about Russia and Ukraine. That's the lens though which the president is thinking about it," said the person. "But we're watching very closely how China is . . . reacting."

The Pentagon said the US had not changed its posture in the Pacific to send a warning to China.

Elbridge Colby, a former Pentagon official, said the move to send such a delegation underscored that the US military faced a "two-front" problem with Russia and China but stressed it should prioritise Beijing.

"The military threat to Taiwan is very real," he said. "There are things we can and should do to help Ukraine . . . but Europe must take a back seat to ensuring our military position in Asia."

Some experts worry that China might conclude from the US decision not to send troops to Ukraine — which is neither a Nato member nor an American ally — that it would not defend Taiwan.

But the person familiar with discussions inside the administration said it was an "intellectually lazy" comparison. For instance, the Taiwan Relations Act required the US to provide Taiwan with assistance to help defend itself.

Biden has continued the policy of "strategic ambiguity", under which the US does not say if it would defend Taiwan. It is partly designed to give China pause about military action.

'There are things we can and should do to help Ukraine . . . but Europe must take a back seat'

Kurt Campbell, the White House's top Asia official, suggested at an event for the German Marshall Fund think-tank that there was no change to the policy, despite calls to the contrary from some in the region, such as former Japanese prime minister Shinzo Abe, recently.

Experts say China is analysing the Ukraine conflict to see what lessons can be applied to Taiwan. Bonnie Glaser, a China expert at the German Marshall Fund, said Mullen and the delegation would probably impress on Taiwan's leaders that they needed to become more serious about boosting defences and implementing reforms.

While some may interpret the Ukraine situation as meaning that the US would not defend Taiwan, the war has also produced uncomfortable truths for Beijing. "They have been concerned by some of the solidarity that everyone has witnessed in the aftermath of the invasion," said Campbell.

Whatever lessons China takes, the attention the US is giving Ukraine has prompted concerns the situation will unwind the renewed "pivot" to Asia that Biden had been implementing.

Sheena Greitens, a China expert at the University of Texas at Austin, said a longstanding worry was that the rhetoric was not matched by resources. "The running joke is that the Indo-Pacific is named the priority theatre and then Central Command [which oversees US military operations in the Middle East] gets all the resources," she said.

But Eric Sayers, an Asia expert at the American Enterprise Institute think-tank, said the war would "sharpen" the US focus on Taiwan.

"In many ways, the multilateral sanctions and export control package coming together to respond to Moscow is also a playbook to be deployed during a future crisis over Taiwan," Sayers added. "Beijing should take note of the co-ordination and sophistication of this global response to naked aggression against a sovereign people."

Digital dilemma Crypto exchanges say Russia curbs would 'fly in the face of the reason' why asset class exists ➔ MARKETS, PAGE 10

Companies & Markets

Archegos and banks look for deal to avert clash in court

- Lenders lost $10bn over family office
- Wall St watchdogs probe block trades

TABBY KINDER — LONDON
ERIC PLATT — NEW YORK

Archegos Capital Management and global banks are in negotiations to avoid a courtroom battle that would expose details of the deals that led to the unravelling of the family office, according to three people familiar with the matter.

The potential legal battle centres on billions of dollars of swaps contracts agreed between banks such as Morgan Stanley and Credit Suisse and the family office run by Bill Hwang, the former hedge fund manager, that spectacularly imploded last March.

The talks come as financial watchdogs and the Department of Justice in the US have expanded a probe into apparent irregularities in Wall Street's lucrative practice of marketing large blocks of shares. Authorities are examining whether banks broke rules when they negotiated the "block trades" — the private sale of large quantities of shares to hedge fund clients — including during the failure of Archegos.

> 'The negotiations basically come down to "we have no money but if we find some we will pay you"'

Morgan Stanley, which was heavily exposed to Archegos, disclosed last week that the Securities and Exchange Commission had been examining the bank's block trading business since 2019 and that the DoJ recently launched its own investigation.

Six banks that provided services through their prime brokerage or trading divisions to Archegos — Credit Suisse, Nomura, Morgan Stanley, UBS, MUFG and Mizuho — lost around $10bn when they liquidated the family office's positions in US-listed companies such as ViacomCBS after Archegos failed to meet margin calls.

Morgan Stanley and Goldman Sachs, which was a prime broker to Archegos but has said it incurred no material losses from the collapse, sold roughly $19bn in big block trades in one day. The banks had purchased and held those shares themselves as part of swap trades they executed for Archegos.

A number of the banks have threatened legal action against Archegos to recoup some of their losses. However, Archegos warned the banks that it would reject their claims, which could result in a long and public legal process, according to one of the people.

Archegos has also said it could mount its own legal claim that the banks were "negligent" when they allowed the family office to build up vast amounts of leverage and that prime brokers "induced it" into borrowing as much as $50bn of shares, the person said. "By the time a judge has [ruled on the matter] it's five years later and the whole thing has been raked through publicly in the courts."

The delicate situation has prompted negotiations to resolve the proposed claims. Discussions are nearing a crucial moment as an injunction that prevents Archegos's creditors from forcing it into bankruptcy to try to collect what they are owed expires at the end of March.

"The settlement negotiations basically come down to 'we have no money but if we find some we will pay you'," said one of the people involved in the discussions. But a second person close to the matter said there was "simply not enough money to cover the banks' shortfalls".

A person close to Archegos said it had not been contacted by authorities investigating the banks' block trades.

Morgan Stanley, Nomura, UBS, Credit Suisse, MUFG, Mizuho, and Archegos declined to comment.

Carbon-free drive Stellantis outlines strategy to double sales by 2030 and shift to battery power

Stellantis, formed via the PSA-Fiat Chrysler merger, was previously critical of battery-powered cars — Eric Piermont/AFP

PETER CAMPBELL — AMSTERDAM

Stellantis aims to double car sales by 2030 and keep profit margins above 10 per cent as it shifts to electric-only transactions in Europe with the aim of becoming completely carbon free by 2038.

Half of the sales from the Jeep and Ram owner in the US will be fully electric by the end of the decade, while upmarket brands Alfa Romeo and Maserati will launch battery models only after 2025, the company said yesterday in an ambitious strategy update.

Investing in electric cars will lead to the company's margins falling from 11.6 per cent last year to "more than 10 per cent" until 2027, before climbing to "more than 12 per cent" by the end of the decade, the group claimed.

The company said the amount of cash generated by the business will fall from €6.1bn last year to €6bn in 2024, before rising to €12bn in 2027 and more than €20bn in 2030.

Despite the upbeat ambitions, Stellantis shares fell almost 7 per cent to €15.24 yesterday.

The new strategy for the business, formed a year ago by the €50bn merger of PSA and Fiat Chrysler, is a significant shift towards electric for a company that was among the most critical of battery-powered cars.

Carlos Tavares, chief executive, said the change in targets was designed to keep the company "competitive", particularly as governments crack down on carbon emissions.

"The frame for electric mobility has been set [by regulators]," he said. "The purpose today is not to express our opinion, it is about being competitive," he added.

He repeated warnings that rising prices from battery models may push the middle classes out of private-car ownership, but stressed shifting to complete carbon neutrality is "the right thing to do for my kids and grandkids".

Stellantis also aims to grow certain parts of the business, including its commercial-vehicle sales, upmarket brands, and businesses outside of its North American and European heartlands. While the US accounts for half of revenues and Europe for a third, the group wants its other regions to account for a quarter of its expanded sales by the end of the decade. It expects group revenues to rise from €152bn in 2021 to €300bn by 2030.

Stellantis hopes to make its commercial-vehicle unit "the undisputed leader in market share and profitability", with revenues doubling by 2030 and 40 per cent of sales being zero emission by the end of the decade.

The group expects revenues to rise fourfold and profits to increase fivefold by 2030.

Total reviews its Russia ties as pressure builds to exit

SARAH WHITE — PARIS
TOM WILSON — LONDON

TotalEnergies said it is reviewing how to manage its business in Russia but stopped short of announcing an exit despite pressure to follow rivals in cutting ties with the country.

BP, Shell and Norway's Equinor have said they will dump stakes in projects and sell out of Russian state-backed oil groups following Russia's invasion of Ukraine, in moves that have rippled across the industry.

Total yesterday condemned "Russia's military aggression" but unlike its peers did not pledge to divest. The French oil and gas major said it would not provide capital for new projects in Russia and was examining the impact of EU sanctions on its Russian business.

"TotalEnergies supports the scope and strength of the sanctions put in place by Europe and will implement them regardless of the consequences (currently being assessed) on its activities in Russia," the company said.

The group, which has a large exposure to Russia and operates liquefied natural gas plants largely focused on Asian markets, is under mounting pressure from within France to take action.

"I think that from now on there is a problem of principle to work with any political or economic figure close to Russian power," French finance minister Bruno Le Maire told France Info radio when asked whether Total should leave.

Total has invested heavily in two projects in the Yamal Peninsula in Russia's frozen north alongside local 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 Russian President Vladimir Putin annexed Crimea.

Novatek's other main shareholders include the Volga group, the investment vehicle of Gennady Timchenko, who featured among businessmen on a list of individuals sanctioned by the EU over the invasion of Ukraine.

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

Le Maire said he would discuss the situation with Total's chief executive, Patrick Pouyanné. "He is acutely aware of the gravity of the situation and the problem it raises," Le Maire said. "We will be able to take decisions together in the coming days."

Tough Covid curbs force airlines to question flights to Hong Kong

INSIDE BUSINESS
ASIA
Primrose Riordan

Hong Kong's airport has been a spooky place through much of the pandemic as traveller numbers dwindle, leaving cavernous arrival halls devoid of their usual bustle.

The rest of the world is opening up to international travel but in Hong Kong, which has some of the toughest Covid-19 quarantines, the airport remains largely empty of incoming passengers.

The city has for many years claimed the title of busiest airport in Asia.

It is set up as a vital air bridge to the rest of the Asia-Pacific region for those coming from Europe, and a passage for business travellers into southern China, the country's economic nucleus.

Last Tuesday, when the city's leader Carrie Lam said that the ban on flights from nine countries would stay until at least April 20, a now unremarkable trickle of 229 passengers arrived, down from the typical tens of thousands daily before the pandemic.

The government says the isolation is necessary as it races to control an Omicron outbreak and keep the city in line with Beijing's zero-Covid policy.

Airline bosses in Asia say that the measures are not only having a disastrous impact on business. "A lot of airlines are thinking very hard about the future for Hong Kong. Do we still need to fly to Hong Kong?" a North American airline executive said.

It was becoming "career suicide" to continue to argue to head office that flights be sent to the Asian hub. "I'm quite worried that Singapore will replace Hong Kong not just as a financial centre but as an aviation centre," the executive said, pointing to the move by Singapore Airlines last year to add new routes, including to Vancouver and Seattle.

Singapore's Changi and Seoul's Incheon airports have overtaken Hong Kong in traffic, and many airlines including Lufthansa, British Airways and Air France have paused direct flights to Hong Kong.

The situation could worsen because of the conflict in Ukraine. Finnair said at the weekend that it could be unviable to continue to fly to Asia.

> Cathay Pacific is seen as the city's biggest corporate casualty while relentless changes to crew conditions are dubbed 'a nightmare'

Hong Kong's travel market first hit a hurdle in 2019 when the city was engulfed by prodemocracy protests, which at one stage took place at the airport. But its pandemic policies have gone much further to transform the once-vibrant aviation hub, after compulsory incoming passenger quarantine was introduced in 2020.

More recently, the government banned flights from nine countries to stem the flow of Omicron into Hong Kong. Even before this, the airline was looking at a net loss of HK$5.6bn-HK$6.1bn for 2021.

Hong Kong has repeatedly changed restrictions on incoming crew, and is forcing some to wear tracking devices while in the city after two Cathay Pacific employees were accused of seeding part of the city's Omicron outbreak by eating out when they should have been isolating under rules for flight staff.

Cathay Pacific crew said working was like being in "permanent quarantine".

A rival airline executive said that while Cathay Pacific was the city's "biggest corporate casualty", the relentless changes to crew conditions were "a nightmare", causing global airline unions to become hostile towards the city, a situation that would be hard to reverse.

However, two people close to Cathay Pacific — which has long faced speculation that it might be taken over by a Chinese company — said that whatever the city's troubles, airlines would be mad to bet against a Hong Kong comeback.

The airport is perfectly positioned to cater to the greater bay area, a ring of cities in Guangdong province across the border, including the technology powerhouse of Shenzhen.

The area is home to the most Fortune 500 groups and makes up at least 12 per cent of China's gross domestic product.

In preparation for the potential boom, Hong Kong airport is constructing a third runway and the government has handed a licence to an airline start-up, Greater Bay Airlines, which has taken on former Cathay Pacific staff.

A person with direct knowledge of Cathay Pacific's affairs said the airline founded in 1946 had a sentimental value for its owner Swire. Like Hong Kong property developers, the carrier had the reserves to get through the pain.

"I've never got a sense they want to find a way out at all," the person said.

"Hong Kong has lived through this-sort of crises. Those who survive will come back even stronger. It's the same with Cathay."

primrose.riordan@ft.com

Legal Notices

IN THE CIRCUIT COURT OF COOK COUNTY
COUNTY DEPARTMENT, LAW DIVISION

PYRITE LLC, Plaintiff, vs. LOMENT, INC.) No. 2020 L 003623

NOTICE OF JUDICIAL SALE

Sale of Assets: On July 19, 2022 at 10:30 a.m. (Central), Tailwind Services LLC, not individually but solely as the sale agent ("Sale Agent") in the above captioned case, shall sell at a public judicial sale pursuant to an Order of the Circuit Court of Cook County in favor of the plaintiff judgment holder (the "Judgment Holder") the Defendant's right, title, and interest in and to the following U.S. Patents: nos. **10,038,735; 10,009,305; 9,760,867; 9,684,887; 9,331,972; 9,231,900; 8,924,495, 8,880,625; 8,799,386; 8,799,385; 8,150,385; D667,441; D667,440; D667,439; D667,438; D667,437; D667,436; and D667,435** (collectively, the "Patents"). The Patents are the intellectual property rights of the Defendant for "secure messaging products" for use by retailers and others to permit mobile device chat communications with customers, with security features similar to those used by users on social media platforms, for enterprise driven applications. The secure messaging products enable brands to easily and rapidly integrate privacy, security and identity management into their current infrastructure. The target audience for these products is FinTech, HealthTech, GovTech and InsureTech companies. The sale would also include a non-exclusive copy of the source code (the "Source Code") for these applications. Interested parties should contact the Sale Agent below for additional information regarding the sale and the Assets.

Terms and Conditions: At the sale, all of the Patents, a non-exclusive copy of the Source Code and any and all "white papers" or other documents in the Sales Agent's possession (collectively, the "Assets") will be sold in a single lot. The Assets are not offered separately at this time. **The Sale Agent makes no representations or warranties whatsoever, including merchantability or fitness for a particular purpose, as to the condition or value of the Assets, and the sale is "AS IS, WHERE IS."** As a condition to participate in the sale, bidders (other than the Judgment Holder) must submit an initial written bid and post a $10,000 deposit via bank or cashier's check by the close of business on July 12, 2022. Initial written bids shall clearly state they are "all cash bids", have no contingencies and be addressed to Sale Agent at the address listed below. All potential bidders are advised that the Judgment Holder intends to submit an initial credit bid in the amount of $200,000 and may increase its credit bid up to the full amount of its judgment plus accrued interest totaling approximately $1,000,000. The written bids shall include the bidder's financial statements and other information sufficient to support the financial ability of the bidder to close the sale in the full amount said bidder intends to bid. The sale will be conducted by the Sale Agent via Zoom, and Zoom instructions will be provided to all qualified bidders and any shareholder, creditor or interested party of Defendant prior to the sale. The higher of (a) the Judgment Holder's initial credit bid or (b), a competing cash bid will be the opening bid at the live auction sale. Minimum increments for further bids will be announced by the Sale Agent at the time of the sale. Following the conclusion of the bidding process, the Sale Agent will announce the winning bid and the next highest bid as a backup bid, and he shall retain the deposits of each, and release the deposits of all other bidders. Within three (3) business days of the conclusion of the sale, the Sales Agent shall present the sale to the Circuit Court of Cook County for approval. The final sale price must be paid by successful bidder in full by cashier's check, wire transfer or other means satisfactory to the Sale Agent at the closing. No closing shall take place until and unless the sale is approved by Order of the Court, and all sale proceeds shall be deposited by successful bidder with the registry of the Circuit Court of Cook County and shall be held pending further order of Court. The closing shall take place within five (5) business days of the entry of the Order approving the sale. If the successful bidder fails to pay the balance of the purchase price at closing, the initial deposit will be forfeited and, at the Sale Agent's option, the Assets may be sold to the next highest bidder without prejudice to or waiver of any rights and remedies against the defaulting bidder. Any creditor, shareholder or other interested party of Defendant may attend and observe the sale via Zoom.

Interested parties should contact the Sale Agent below for additional information regarding the sale and the Assets.

Sale Agent: Gregg Szilagyi, **Tailwind Services LLC,** 209 South LaSalle Street, Chicago, Illinois 60601, (312) 663-0801, gs@tailserv.com

Industrials

Toshiba chief steps down abruptly

Tsunakawa's exit adds twist to clash over plan for splitting Japanese group

LEO LEWIS AND ANTONI SLODKOWSKI
TOKYO

The chief executive of Toshiba resigned suddenly yesterday, reviving speculation that the Japanese group will consider a take-private deal and hardening the resolve of large investors to oppose the company's plan to split in two.

The resignation of Satoshi Tsunakawa, a former chief executive who returned to the helm of Toshiba in 2020 after the ejection of his successor during an earlier bout of turmoil, adds another twist to a saga that has become Japan's showcase clash between corporate leadership and shareholder capitalism.

The company said that its new leadership, which draws on internal candidates, would press ahead with a controversial plan to split the industrial conglomerate in two.

However, large investors said they would continue to resist that outcome, and would press Toshiba's leadership to formally resume talks with potential buyers for the company.

Last year, Tsunakawa's predecessor as chief executive said that the company was considering a $20bn buyout proposal from UK-based private equity group CVC Capital Partners.

The proposal was preliminary, but triggered a boardroom coup that led to his ejection and has led to a situation where some of Toshiba's largest shareholders have said they will oppose any strategic option that does not allow for the possibility of a buyout.

A strategic review conducted in 2021 originally recommended a three-way split. However, that idea encountered opposition from investors who believed the board did not properly explore the possibility of a buyout by private equity.

This year, Toshiba proposed a more modest two-way split, which also failed to satisfy many investors.

Because of its financial crisis five years ago, Toshiba's shareholder register is heavily weighted with foreign hedge funds and activists. They include US fund Farallon Capital, 3D Investment Partners and Effissimo, a Singapore-based fund.

Tsunakawa resigned along with Mamoru Hatazawa and Shigeru Fukuyama, both senior executives and all known, according to people in the company, as opposed to a take-private deal.

The new chief executive, Taro Shimada, is known internally as having been in favour of resuming talks with private equity towards a buyout deal.

But yesterday, Shimada appeared to be supportive of the existing plan. "We will proceed with the split plan . . . we want to build a strong relationship of trust with many stakeholders at the earliest possible stage," he said.

Large shareholders said they would maintain pressure on the new leadership to reopen talks with private equity.

For several years, the company has endured a series of shareholder revolts, and was humiliated in 2021 by an independent report into collusion between Toshiba and the government to suppress activist shareholders at the group's 2020 annual meeting. At the 2021 AGM, in a first for a company of Toshiba's size and profile, shareholders forced out the chair of the board.

Inflation bites

Biscuit group Britannia eyes acquisitions

Russia's invasion of Ukraine has driven up commodity prices, piling pressure of fast-moving consumer goods companies such as Bengaluru-based Britannia
Robert Harding/Alamy

Britannia Industries, India's biggest bread and biscuit maker by market share, has said that it is looking for acquisitions as severe commodity inflation bites into consumer goods companies.

Varun Berry, managing director, said that now was "probably the right time" for acquisitions, as smaller companies "could be in trouble".

He said that Britannia was "in the process of setting up a team which is going to look at acquisition targets".

However, Berry cautioned that, because "valuations are sky-high" in India, Britannia would take its time to find a good-value deal: "We're not adventurous with our money."

The baker, which has a market capitalisation of $11bn, has not made a significant acquisition since 2009.

The 128-year-old bourbon biscuits to sliced-bread company is a barometer for consumption in the world's second most populous country.

Yet fast-moving consumer goods (FMCG) companies such as Britannia are feeling pressure caused by Russia's invasion of Ukraine, which has dramatically driven up high commodity prices and could upset Britannia's expansion plans.

Bengaluru-based Britannia is also "looking at small expansions in Africa", one of the areas it sells in along with the Middle East, Nepal and others. But asked how Ukraine would affect Britannia's intentions, Berry said that "if the financials don't look attractive then [we] might just delay that".

Those inflation woes underscore how the fallout from Russia's invasion will be felt around the world.

Even though Britannia buys wheat in India, Berry said that rising international wheat prices would lead Indian producers to sell abroad where they can get higher prices: "I'm 100 per cent sure that that's what's going to happen now," he said.

Berry added that soaring crude oil prices, breaking $100 a barrel, would raise the cost of edible oils Britannia uses, as the foodstuff gets diverted into fuel. "Frankly, it's a very very tough situation. We had just about finished our annual plan," he added, which forecast 4 or 5 per cent commodity inflation in the coming year after 20 per cent last year. "But now, with the Ukraine situation, we have to rework the numbers because [inflation] could be a lot more."

People's purchasing power has not recovered strongly in India, where unemployment is overshadowing headline growth figures that tip India as the world's fastest-growing large economy.

For FMCG companies in India, "there's no volume growth happening", said Berry. Where companies were reporting increased revenue, he said, it's because they are putting up prices.

Britannia this month reported flat quarter-on-quarter operational revenues for the three months to December 31, at Rs34bn ($460mn).

Abheek Singhi, who leads the Boston Consulting Group's Asia consumer practice, said that while "there is going to be a slowdown in the consumption by a couple of percentage points . . . the impact is actually going to be on company profitability". *Chloe Cornish*

Financials. Crypto

Israeli judge lifts gagging order, revealing Celsius executive's arrest

Former finance chief of digital currency lending platform was one of 10 held but not charged

DAN MCCRUM AND KADHIM SHUBBER
LONDON
MEHUL SRIVASTAVA — TEL AVIV

After a three-month media blackout, an Israeli judge has allowed news organisations to report the arrest of a former senior employee of Celsius Network, a $19bn cryptocurrency lending platform.

When Yaron Shalem was detained on November 18 in connection with suspected fraud in the field of cryptocurrencies, he was chief financial officer of Celsius, which pays high rates of interest on deposits of bitcoin and other digital coins.

That day, an Israeli magistrates' court heard how Shalem was detained shortly after he landed at Ben Gurion airport, near Jerusalem, by Israel's Lahav 433 special investigations unit, the country's equivalent of the FBI.

At the time of its finance chief's arrest, Celsius had just raised $400mn of equity capital from investors, including Canada's second-largest pension fund.

> Shalem was detained shortly after he landed at Ben Gurion airport, by the equivalent of the FBI

Alex Mashinsky, Celsius chief executive, said on November 24 that the company was increasing its funding round to $750mn in light of investor demand. "We're happy to include more investors that will make Celsius stronger," he told the Blockworks website.

Celsius said in a statement on November 26 that it was "recently made aware of a police investigation in Israel involving an employee", whom it had immediately suspended. The company said the investigation was not related to Celsius itself. It has not been accused of wrongdoing related to Shalem's arrest.

"We have also verified that no assets were misplaced or mishandled," Celsius added. The statement did not name the employee.

Shalem joined Celsius in March last year, according to his LinkedIn profile, and is well known in the Israeli tech start-up scene as an executive and investor. He was one of 10 arrested, including the owner of Israel's most famous football team, Beitar Jerusalem. None of the suspects has been charged with an offence.

Israeli police said on November 18 that suspects had been arrested on "suspicion of committing fraudulent offences in the field of cryptocurrencies, amounting to hundreds of millions of shekels", or at least tens of millions of US dollars.

The statement did not specify the ventures to which the allegations related.

Initially, only the owner of Beitar Jerusalem, Moshe Hogeg, had been identified in press reporting as one of those arrested. The identities of the others were subject to a gagging order that was lifted yesterday following a joint request from the Financial Times and the Times of Israel. Before the court order was lifted, Shalem's arrest was reported by Coindesk, despite the order.

Hearings to have the gag orders lifted were delayed multiple times, as lawyers tested positive for coronavirus and judges struggled to find scheduling slots for all the defendants' legal representation as Israeli courts worked through a backlog of cases from the pandemic.

A senior police officer dragged thousands of confidential documents back and forth for hearings that were regularly cancelled or rescheduled.

Hogeg's lawyers have been quoted as saying he "vehemently denies the allegations against him and is co-operating fully with his investigators".

Lawyers for Shalem said he "acted in accordance with the law and strongly and utterly rejects any attempt to associate him with any act of fraud".

They said Shalem left Hogeg's venture capital firm at the beginning of 2018 and that the suspect ventures "were active after he no longer held a position with the group, and without him having any involvement in them. Our client is certain that at the end of the investigation, it will be found that he had committed no wrongdoing."

Celsius has grown rapidly since its launch in 2017 by offering investors investment returns as high as 17 per cent on cryptocurrency transferred to its platform, which it lends to individuals and institutions. The assets held by Celsius have dropped from $26bn to $19bn since November. In the same period the price of bitcoin fell by a third.

The $400mn equity investment round in October was led by asset manager WestCap, headed by former Airbnb and Blackstone chief financial officer Laurence Tosi, and Caisse de dépôt et placement du Québec (CDPQ), Canada's second-largest pension fund.

Tosi at the time told the FT that he had done thorough due diligence on Celsius before deciding to invest. "We've spent now almost nine months with Alex [Mashinsky] and his team, and it's quite collaborative. It's the work that you would expect us to do, with outside advisers, lawyers, etc," he said.

Alexandre Synnett, chief technology officer for CDPQ, said: "We are very careful . . . our due diligence process is very serious."

The investment followed a crackdown in September on digital asset lenders by US state regulators, who said that Celsius was engaged in unregistered securities offerings. Celsius has denied the claims.

Last week Rod Bolger, the former chief financial officer of Canadian bank RBC, was appointed by Celsius as Shalem's replacement. Celsius said it "will continue to act in the best interest of our community, our customers and our investors."

Alex Mashinsky, CEO of Celsius Network, which launched in 2017

Retail & consumer

Target upbeat that supply woes will ease

ALEXANDRA WHITE AND
MATTHEW ROCCO — NEW YORK

Target delivered an upbeat outlook in anticipation that supply chain bottlenecks will gradually ease, as the US retailer looks to build on the growth it generated during the pandemic.

The Minneapolis-based retailer forecast low to mid single-digit revenue growth in fiscal 2022, compared with analysts' expectations of about 2.2 per cent. Target yesterday also predicted adjusted earnings per share would rise by high single digits, while analysts had expected only a modest increase.

Beyond this year, the company predicted revenues will grow in the mid-single digits and adjusted earnings will grow in the high single digits.

The quarter "capped off a year of record growth", chief executive Brian Cornell said, reinforcing the "durability of our business model and our confidence in long-term profitable growth."

Target's shares had gained more than 10 per cent by midday yesterday.

Consumers are becoming more price conscious with inflation accelerating to the highest rate in four decades, driving more shoppers to seek discounts at Target and other large chains that are better able to navigate supply chain and labour disruptions.

"We have many levers to combat costs, and price is the one we pull last, not first," Target's chief financial officer Michael Fiddelke said.

> 'We have many levers to combat costs, and price is the one we pull last, not first'

Walmart, which reported an unexpected increase in sales for the holiday quarter, said last month that its stores were offering roughly the same number of price "rollbacks" as they did at the end of the first quarter last year. But some retailers, including Home Depot and Macy's, have warned that higher costs for merchandise, shipping and labour will squeeze profits this year.

Target, like its peers, has been hit by increased supply chain costs. The retailer's fourth-quarter gross margin rate shrank to 25.7 per cent, down from 26.8 per cent in the same period a year earlier, because of higher freight and merchandising costs and increased pay and headcount.

But the company allayed investors' cost concerns with forecast-beating earnings in the holiday quarter and guidance calling for an operating margin rate of 8 per cent or higher in fiscal 2022, compared with 8.4 per cent in 2021. Target warned that its operating margin in the first quarter would be "well below" its year-ago level but said profitability would improve as the year progresses.

Cornell told analysts that companies were dealing with "supply chain constraints that are steadily working themselves out but will likely take more time", adding that the Ukraine crisis had made inflation and supply challenges "more uncertain".

Target's revenues increased by almost $28bn, or 35 per cent, over the past two years during the pandemic. Its full-year sales rose to $106bn in 2021, crossing the $100bn threshold for the first time.

Travel & leisure

Crown Resorts sued by Australian watchdog

NIC FILDES — SYDNEY

Australia's largest casino operator Crown Resorts has been sued by the country's financial watchdog over alleged "widespread and serious" breaches of anti-money laundering and counter-terrorism financing laws.

Nicole Rose, chief executive of the Australian Transactions and Reports Analysis Centre, said in a statement of claim yesterday that the violations were systemic, alleging that Crown Resorts' staff overlooked suspicious transactions from high-spending consumers.

Crown's non-compliance was "long-standing, systemic and reflective of wholly inadequate oversight by the board and senior management," said Austrac in the claim. Austrac said some of Crown's customers had come to gamble with "shoeboxes" stuffed with cash.

The legal action comes two weeks after Crown recommended a A$9bn ($6.4bn) takeover by Blackstone Group.

Austrac's investigation into Crown Resorts forced billionaire James Packer to distance himself from the business he spent more than two decades building and opened the door to bidders as its value dropped sharply.

In the wake of the probe, more casino operators have been put under scrutiny. Austrac is also investigating Star Entertainment Group and SkyCity Adelaide.

Crown Resorts has come under regulatory pressure in Macau, the world's biggest gambling hub. China has cracked down on gambling in Macau with Alvin Chau, the chief executive of Suncity, the largest junket operator in the city — which conducted business in Crown's casinos — arrested in November over cross-border gambling offences.

> Austrac said some customers had come to gamble with 'shoeboxes' stuffed with cash

Crown Melbourne, which is situated on the south bank of the Yarra River, made more than A$1bn in revenue from junkets between 2015 and 2020, while Crown Perth raked in more than A$320m over a similar period.

Crown said it had co-operated with Austrac and had enacted stricter financial crime and compliance monitoring and introduced auditing of its patron bank accounts with an external consultant. "Crown recognises the importance of complying with its financial crime obligations," it said.

Allegations against Crown include the use of shell accounts to take customer deposits, running transactions through hotel reception that could be later redeemed within the casino, and the use of cash in private gaming rooms delivered and removed by unknown persons.

Some junket operators were allowed to use the casino's private jet which was used to transfer large amounts of cash into Australia. Austrac alleges that some of the junket representatives were connected to organised crime syndicates.

The value of the high-risk customers to Crown was detailed by Austrac, which said that 60 people that used the Melbourne and Perth casinos between 2016 and 2020 generated A$70bn in turnover and A$1.1bn in Crown wins.

The size of Crown's potential penalty is unclear.

German defence sector puts foot on the gas

Chancellor's boost to military spending after Ukraine invasion reshapes corporate landscape and draws investor interest

JOE MILLER — FRANKFURT
ERIKA SOLOMON — BERLIN

Six German army self-propelled howitzers are prepared for transport to Lithuania — Philipp Schulze/dpa

Armin Papperger is not used to being in demand. The head of Germany's largest listed defence contractor, Rheinmetall, has seen his industry sidelined to such an extent that as recently as last month companies could not get domestic banks to fund their activities.

But Chancellor Olaf Scholz's decision to inject €100bn into Germany's armed forces and boost defence spending in response to Russia's invasion of Ukraine has made Papperger among the world's most sought-after executives.

"Some months ago people wanted to ban us, to say that this industry is a very bad industry, is a harmful industry," Papperger told the Financial Times. "It's a totally different world now."

Berlin's defence commitment, along with its suspension last week of the Nord Stream 2 pipeline as it seeks to wean itself off Russian gas, has upturned decades-old defence, energy and finance policies, raising the prospect of a dramatically reshaped German corporate landscape.

As chief executives, including Papperger, on Monday hashed out with the German defence ministry how the new funds should be spent and what weapons were available for immediate aid to Ukraine, shares in the sector soared.

Along with Rheinmetall, investors bought into contractors such as sensor specialist Hensoldt and submarine maker Thyssenkrupp, as well as smaller companies such as Jenoptik, which makes rifle sights.

"Everyone was taken by surprise" at Scholz's decision, a person close to Hensoldt's management said, but the chancellor "kind of reiterated what we have been saying for a very long time, that German armed forces need to be properly equipped".

Three scenarios were discussed on the call between the German government and defence contractors, according to people involved.

The first was the deployment of equipment to Ukraine, including ammunition and tents, using existing stockpiles. The second was to bring European forces, especially Germany's, up to scratch in a matter of weeks by supplying munitions and repairing neglected equipment. And third, the companies were asked about lead times for new artillery and vehicles.

Rheinmetall said it had certain vehicles and ammunition in stock, which could now be handed over.

Some of the products Hensoldt can supply with short lead times include radar sensors, long-range surveillance cameras and self-protection systems for aircraft and helicopters, which can throw surface-to-air missiles off course by detecting exhaust plumes from launchers and ejecting flares to confuse heat-seeking projectiles.

In the medium term, companies are speeding up planned projects.

Rheinmetall, for instance, is considering fast-tracking a prototype tank with a 130mm gun and a fully digital turret, as installed in the British Challenger, which could be manufactured within two years to replenish the German army's arsenal.

A next-generation tank was likely to be among the German government's top priorities, according to Christian Cohrs, an analyst at Warburg Research.

"The chancellor explicitly mentioned joint development projects with France," Cohrs said. "One of these is the Main Ground Combat System [an updated battle tank], in which Rheinmetall plays a vital role."

Other manufacturers said they expected up to a 50 per cent increase in orders for products with certification already in place.

Germany's defence ministry declined to comment.

While Germany appears to have found a clear approach for handling its new defence targets, its vision for an energy transformation looks foggier.

The bosses of Germany's much-maligned nuclear power producers — Eon, RWE and EnBW — have been left wondering about the future of the country's last three reactors after Green party economy minister Robert Habeck said on Sunday an extension of their lifespan was under consideration.

On Monday, Habeck appeared to downplay comments that he would not "ideologically oppose" a return to nuclear power, which was phased out by Angela Merkel, Scholz's predecessor as chancellor, following Japan's 2011 Fukushima disaster, and increased the country's reliance on imported fuel.

Meanwhile, coal power company Uniper was asked by the government to consider building a liquefied natural gas terminal to help reduce German reliance on Russian fuel.

"It's not just a question of climate protection now," Habeck said on Monday. "It's a question of national security."

But how the country will attain energy independence stills seems unclear, both to politicians and the companies needed to make the shift happen.

Uniper officials confirmed that they were preparing for talks with the government.

The company last year shelved a plan to set up an LNG terminal in Wilhelmshaven, having found there was not enough interest to justify going forward with the project, and switched instead to a focus on a green hydrogen and low-carbon ammonia terminal.

"We are looking into resuming these [LNG] plans," one official told the FT.

"We already did the preliminary research so we would not start at zero . . . but we haven't talked any details with the government yet and it is still not clear to us how much interest in such a project has really changed with the situation."

The person also said that it would be "very ambitious" to assume such a terminal could be ready in time to be used to support Germany through a potential energy crisis caused by the current conflict with Russia.

Claudia Kemfert, an energy expert at the German Institute for Economic Research, bemoaned the fact that the €100bn made available for defence was not matched by a similar commitment to renewables.

Such a sum "would be the sort of man to the moon project funding we really needed so that we could be independent of [Russian president Vladimir] Putin for our energy by 2030," she said.

But a pledge by Habeck to cut red tape for renewables, particularly for wind energy, could have a big impact, Kemfert added.

"It currently takes about six to seven years to get all the approvals you need to build a windmill, but it only takes about six to seven months to physically put a windmill up," she explained, although new procedures could take a while to come into effect.

Germany's defence industry had been bracing itself for EU taxonomy rules that could have designated arms manufacturers unsustainable, restricting their access to capital.

But such fears have been assuaged after German finance minister Christian Lindner referred to such proposals with disdain on Sunday and said the war in Ukraine was waking Germany "from a self-righteous dream".

"Recent developments should lead to banks also understanding the importance of defence industry companies for the country's security," a large privately owned German manufacturer told the FT.

"The Russian invasion of Ukraine shows that it was wrong to classify the defence industry as socially harmful."

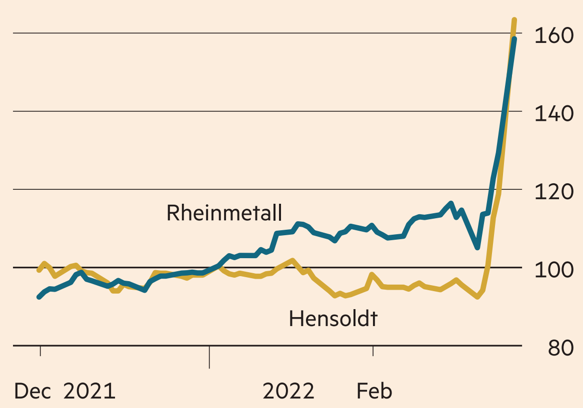
An executive at another defence company predicted that the industry — often the target of activists who point to some German arms manufacturers' Nazi past — would now attract talent as well as investment.

"It is very unfortunate that it took such tragic and brutal events to come to this," the person said.

See Lex

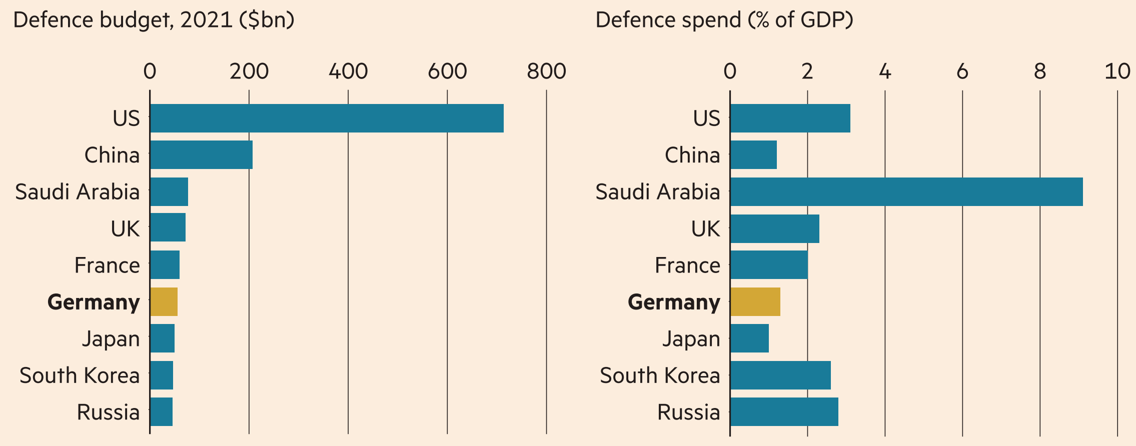
Berlin spending plans lift sector

Share prices rebased, Jan 2022



Sources: Bloomberg; JPMorgan

Germany's relatively low defence outlay



In demand: Rheinmetall chief Armin Papperger — Thilo Schmuelgen/Reuters

> 'Some months ago people wanted to ban us . . . It's a totally different world now'
>
> Armin Papperger, Rheinmetall

Shipping

MSC and Maersk halt Russian cargoes to avoid sanctions risk

HARRY DEMPSEY, PHILIP GEORGIADIS AND NEIL HUME

MSC and Maersk, the two largest container-shipping groups, suspended cargo bookings to and from Russia yesterday as sanctions led to a fresh wave of disruption for supply chains.

The suspension, which excluded food and medicines, followed similar moves by Ocean Network Express and Hapag-Lloyd as the sector sought to avoid the risk of carrying cargo placed under sanctions.

Maersk said sanctions on Russia were starting to have an impact on trade, causing delays and leading to detention of cargo by customs authorities.

It is likely to create further bottlenecks as ports remain clogged because of an unexpected rebound in demand for goods during lockdowns.

On Monday the UK banned entry of Russian vessels to its ports.

"It's making a tough time for global logistics even worse," said Peter Sand, an analyst at Xeneta, an Oslo-based shipping research group.

The disruption has spread to the air-cargo market, where industry executives expect prices to rise as aircraft are forced to reroute. A shortage of planes is likely to worsen because of the loss of Russian and Ukrainian specialist cargo aircraft for large goods.

"If they are sidelined now, you are taking some real capacity out of the market. We will in all likelihood begin to see rates rise," said Neel Jones Shah, global airfreight head at broker Flexport.

Russian and European airlines are nearly completely banned from each other's skies, complicating flight paths for aircraft delivering goods and materials from Asia to Europe.

The industry faces further problems because of difficulties switching Russian and Ukrainian crews that supply 14.5 per cent of seafarers, according to the International Chamber of Shipping.

Last week Russia halted commercial shipping in the Sea of Azov, while Ukraine ceased operations at all its ports, including those on the Black Sea.

The invasion of Ukraine has led insurers to quote additional premiums equivalent to hundreds of thousands of dollars to cover ships travelling to the Black Sea. Three non-military ships have been struck by missiles.

Suspension of shipping services is increasing metals prices. Aluminium rose 1.8 per cent to a record $3,457 a tonne yesterday. Russia accounts for 6 per cent of supply.

Freight rates for oil tankers have surged as traders bet that more crude will be exported from west Africa, the Middle East and the US. Svein Moxnes Harfjeld, co-chief executive of DHT, a tanker group, said rates for supertankers running between the Middle East and Asia had more than doubled to $25,000-$35,000 a day in the past week.

Financials

Heavily exposed Raiffeisen Bank 'not walking away'

OWEN WALKER
EUROPEAN BANKING CORRESPONDENT

The chief executive of Raiffeisen Bank, the Austrian lender whose market price has halved over its heavy exposure to Russia, has insisted that it will not pull out of the country, but has suspended a planned dividend.

Raiffeisen is one of a small number of international banks with a large direct exposure to Russia that have been hit since Moscow's invasion of Ukraine.

"It's very important that you understand: we are not walking away," Johann Strobl, the bank's chief executive, said yesterday.

Strobl said the bank's Russian business, which has €22.9bn of assets, had €354mn of exposure to sanctioned financial institutions and €119mn to other sanctioned companies.

Western allies have added a handful of Russian domestic banks to sanction lists in the past few days, including the country's second-largest lender, VTB Bank. The EU has proposed to remove the lenders from the Swift system.

Raiffeisen is one of the three foreign banks with the biggest exposure to the Russia market, including UniCredit and Société Générale. Raiffeisen shares are down more than 50 per cent over the past three weeks, falling 40 per cent since the invasion.

Raiffeisen said it was suspending its €1.15 a share dividend yesterday while it assessed the impact of the invasion on its Russian and Ukrainian operations.

Strobl said the Russian business had a return on equity of around 20 per cent over the past eight years. Even "in a worst-case scenario, I think the bank in Russia still could make a profit".

It has been increasing its hedging of the rouble and Ukrainian hryvnia, as well as boosting liquidity in its Russian and Ukrainian operations in expectation of mass client withdrawals.

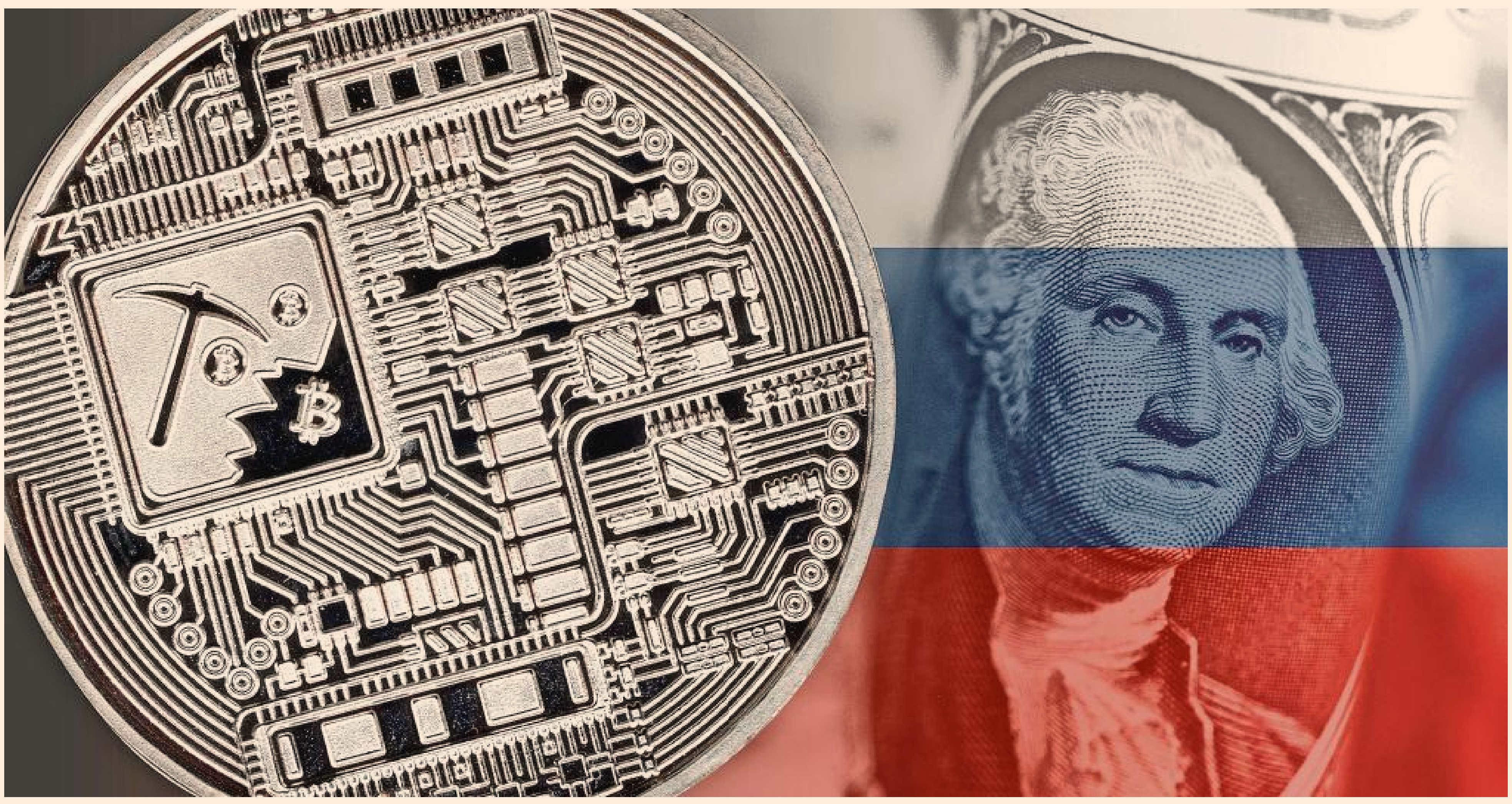
After being hit in 2014 when Russia faced penalties over annexing Crimea, the bank inserted clauses in all its lending agreements in the country so that any clients hit by sanctions would no longer be able to draw additional credit and would have to repay existing loans.

The bank has held back €60mn in provisions for potential losses from sanctions and has a €1.4bn euro-rouble hedge position.

The Austrian lender's Russian business has €22.9bn of assets

Crypto. Capital controls

Digital asset exchanges resist calls to block Russian users



Russian accounts appear to be stashing wealth in crypto or moving it overseas — FT montage/Bloomberg

Platforms shrug off concerns over sanctions evasion despite doubling of rouble trading

JOSHUA OLIVER AND PHILIP STAFFORD
LONDON

Crypto exchanges are coming under pressure to block transactions with Russia, as western politicians fear that cryptocurrencies provide a back door to move money around the world while they seek to shut the country out of the global financial system.

Trading between the Russian rouble and crypto assets such as bitcoin and tether has doubled since the assault on Ukraine began, reaching $60mn a day on Monday, according to data from Chainalysis, a crypto research group. That suggests Russian accounts, barred from the established dollar-based financial system through sanctions, are stashing funds in crypto or moving wealth overseas.

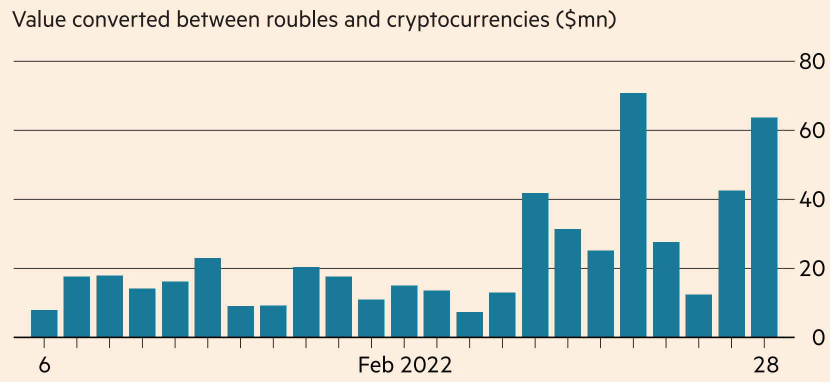
Mykhailo Fedorov, Ukraine's vice-prime minister, on Sunday called on crypto exchanges "to block addresses of Russian users", saying it is "crucial to freeze not only the addresses linked to Russian and Belarusian politicians, but also to sabotage ordinary users".

Western allies have imposed sanctions on hundreds of people, chiefly oligarchs and politicians close to President Vladimir Putin, and most big exchanges have said they will comply with those restrictions. But several have pushed back on any Russia-wide bans.

"To unilaterally decide to ban people's access to their crypto would fly in the face of the reason why crypto exists," said Cayman Islands-registered Binance, one of the biggest crypto exchanges. Rival Okx, based in the Seychelles, also said it had no plans to bar Russian accounts in bulk.

Trading between crypto and roubles surges after Ukraine attack

Value converted between roubles and cryptocurrencies ($mn)



Source: Chainalysis and Kaiko

Western powers have expressed concern about crypto and sanctions. A White House official said the administration was "continuing to aggressively combat the misuse of cryptocurrency, including to evade US sanctions".

Liz Truss, UK foreign secretary, said that Britain was looking at cryptocurrency as a route that could be used to undermine sanctions.

"There remains a considerable risk of Russian individuals and entities sanctioned last week continuing to trade in cryptocurrency assets," said MP Tom Tugendhat, who chairs the UK House of Commons foreign affairs committee, and Tory peer Lord Sarfraz in a letter urging the Financial Conduct Authority to tackle possible sanctions violations.

But for some crypto market operators, a ban would mark a profound break from pioneers who conceived the idea of the blockchain precisely to circumvent the global banking system.

Jesse Powell, founder of the exchange Kraken, said his company's mission was to "bridge individual humans out of the legacy financial system and bring them into the world of crypto, where arbitrary lines on maps no longer matter, where they don't have to worry about being caught in broad, indiscriminate wealth confiscation".

Kraken "cannot freeze the accounts of our Russian clients without a legal requirement to do so", he added. "Bitcoin is the embodiment of libertarian values, which strongly favour individualism and human rights."

Russia is among the top 20 countries with the highest level of cryptocurrency adoption, according to a Chainalysis index. Prior to the war, Russia ranked third among countries that sent the largest share of crypto transfers abroad, after Turkey and Ukraine.

"Capital flight and tax avoidance may also be part of the cryptocurrency adoption story in eastern Europe, particularly in Russia and Ukraine," Chainalysis said.

Sanctions from the US, UK and EU in recent days have severed links between Russia and the global financial system. Trading with the central bank is also heavily restricted.

Russia has, meanwhile, introduced capital controls banning Russians from transferring foreign currency abroad.

US-based exchanges Coinbase and Gemini both said that they did not operate in Russia. However, Coinbase said it would not "institute a blanket ban on all Coinbase transactions involving Russian [crypto wallet] addresses".

Many crypto exchanges operate out of offshore jurisdictions or are unregulated beyond their obligation to comply with money laundering legislation.

Investors can turn their roubles into crypto, which can then be traded on unsanctioned entities. The Financial Stability Board, a global committee of regulators and central bankers, has warned that digital assets could be used to evade sanctions.

Even so, lawyers point out that crypto exchanges face extensive legal risk since transactions recorded on blockchains are public and immutable.

"Crypto operators are at a higher risk than those in the traditional financial services spaces, however, because they will be on the hook for what they ought to have known about the ownership of the assets they handle," Jason Hungerford, a partner at law firm Mayer Brown in London.

But the role of crypto as a payment system for potentially unlawful transactions from Russia may have longer-term consequences. "Governments are likely to look at the regulation of crypto as a matter of increasing urgency," said Paul Donovan, chief economist at UBS Global Wealth Management.

Additional reporting by James Politi

'To ban people's access to their crypto would fly in the face of the reason why crypto exists'

Commodities

IEA members set to release 60mn barrels of oil reserves

JUSTIN JACOBS AND NEIL HUME

The US and other big energy consuming nations have agreed to tap 60mn barrels of oil from their emergency stockpiles to address fears over depleted supplies since Russia invaded Ukraine, a concern underlined by a mammoth rise in the price of crude yesterday.

The International Energy Agency said that the co-ordinated release, the fourth in its history, would send a "unified and strong message to global oil markets that there will be no shortfall" because of the invasion. The body will consider "possible additional emergency oil stock draws, as needed", it added.

But rather than calm prices, the announcement triggered further gains, with Brent, the international oil marker, rising almost 10 per cent to a fresh eight-year high above $107 a barrel before pulling back. West Texas Intermediate, the US oil benchmark, climbed more than 10 per cent to $105 a barrel.

Amrita Sen of Energy Aspects, a consultancy, said the market had been "underwhelmed" with the reserve release and the traders had been expecting a bigger number given the disruption to Russian energy exports caused by western sanctions on Moscow.

She said as much as 70 per cent of the country's oil exports were "not finding a home at the moment". Many western banks and shipowners were refusing to handle Russian crude to either reduce legal or reputational risk, according to traders.

West Texas Intermediate, the US oil benchmark, climbed more than 10% to $105 a barrel

Russia is the world's third-largest crude producer and the second-biggest exporter of oil, sending about 5mn barrels a day to global markets.

As US and European countries impose punishing sanctions on Russia's financial sector, oil traders have grown increasingly concerned about potential disruptions to oil supplies.

Officials in the Biden administration in the US have said they want to try to ensure that Russian energy continues to flow to international markets to minimise domestic economic damage from sanctions on Russia. Half of the IEA's co-ordinated oil release, or 30mn barrels, will come from the US's strategic petroleum reserve, said Jennifer Granholm, US energy secretary.

"We stand prepared to take additional measures if conditions warrant," Granholm added.

The US previously announced the release of 50mn barrels of oil from its strategic reserve to try to ease rallying oil prices late last year, in conjunction with a smaller group of other countries.

The 60mn barrel release accounts for about 4 per cent of IEA members' 1.5bn barrels of total emergency stockpiles, the group said. World oil demand is about 100mn barrels a day.

IEA members also discussed Europe's reliance on natural gas from Russia.

Fixed income

Euroclear shuts off exit route for rouble bondholders as sanctions bite further

PHILIP STAFFORD AND TOMMY STUBBINGTON

Foreign investors are now in effect trapped in Russian rouble-denominated bonds after Euroclear stopped accepting payments in the currency, slamming the door on one of the few exits as sanctions imposed by the west bite into the country's financial system.

"To the extent legally permissible, you should wire out any remaining long balances in rouble as soon as possible," the Belgium-based securities depository told customers.

It will reject new securities settlements in Russian domestic securities from the end of the day, it added in a notice issued hours after its main rival, Luxembourg's Clearstream, announced a similar measure overnight.

"It seems everyone is now trapped" in Russia's rouble bonds, said one emerging markets portfolio manager. Overseas investors held $41bn of Russia's local currency government debt at the end of 2021, according to data from the central bank.

"The only option foreigners have is to hunker down," said Paul McNamara, an emerging markets debt portfolio manager at GAM.

Euroclear and Clearstream are an unglamorous but vital part of the global financial markets, where about €50tn of assets are held on behalf of investors, with the companies finalising transfers between customer accounts.

Euroclear said it would also disable its account at its Russian correspondent bank, Dutch group ING, effective immediately. Correspondent banking entails one bank providing services to another, often in a separate country.

The Russian currency continued to slide in domestic trading yesterday

Closing off other routes, Deutsche Börse suspended trading in all Russian bonds, individual securities and related structured products until further notice. The move was "for the protection of the public", the German stock exchange operator said.

The latest moves to shut down trading in Russian assets come as the impact of sanctions opens up a gulf between the rouble exchange rate in domestic markets and levels traded by overseas investors.

The rouble continued to slide in domestic trading yesterday following the previous day's plunge. It was trading about 6 per cent lower at 100.2 to the US dollar, according to prices on the Moscow Exchange provided by Bloomberg. Brokers outside of Russia were quoting weaker levels of about 110 to the dollar, Bloomberg data show.

JPMorgan said yesterday that Russian debt would remain in its influential emerging markets bond benchmarks. The bank said it would exclude newly issued bonds but there was "no change to the existing Russia bond compositions" in its indices.

Asset management

Moscow-focused funds with €3.8bn in investments freeze redemptions

ADRIENNE KLASA, CHRIS FLOOD, JOSEPHINE CUMBO AND BROOKE MASTERS

Russia-exposed funds with €3.8bn in combined assets have been frozen in Europe, preventing investors from heading for the exits as they grapple with sanctions.

At least 18 asset managers including JPMorgan, BNP Paribas, UBS, Liontrust, Danske Bank, East Capital and Pictet have suspended funds since the invasion, meaning investors are stuck with no indication of when they might be able to withdraw their money from these vehicles, data from Fitch show.

More suspensions are expected, with assets held in Russia-focused mutual funds sold in Europe standing at €5.7bn at the end of January, according to Lipper, the data provider.

"We believe further Russia-focused funds may suspend redemptions, driven initially by an inability to trade portfolio securities," said Alastair Sewell, head of fund and asset manager ratings at Fitch.

The fund suspensions highlight how western allies' measures to cut Russia off from financial markets have had a knock-on effect for international fund managers, who hold at least $150bn in Russian assets collectively.

Investors' ability to trade Russian assets both on foreign and domestic markets has sharply deteriorated.

Russian stocks were already down around 40 per cent for the year to date by Friday's close in US dollar terms. The Moscow stock market was closed on Monday and yesterday, but trading in Russian equities listed abroad suggests the market is set for heavy losses when it reopens. Russian bonds denominated in foreign currencies have also come under heavy selling pressure.

The asset management arm of Danske Bank said: "Danske Invest has been forced to suspend trading in the equity funds that have a significant weight of Russian equities". Pictet said it would reopen its Russia equity fund "as soon as the market conditions allow". London-based asset manager Liontrust said it was unable to say when it might reopen its £181.7mn Russia fund.

Pension funds are looking to offload, or are reviewing, Russia investments. Retirement plans representing tens of millions of members in the public and private sectors typically have some exposure to Russia through emerging market funds, sovereign debt or through stakes in funds and listed companies.

The £90bn Universities Superannuation Scheme, the largest private-sector pension plan in the UK, plans to divest assets worth £450mn exposed to Russia, representing about 0.5 per cent of its £90bn portfolio.

"In terms of our own position, there is clearly a financial as well as a moral case for divestment with respect to our Russian holdings," USS said.

Caisse de dépôt et placement du Québec, one of Canada's largest pension managers, said "disposal plans" were under way for its Russian holdings that the C$420bn fund described as "marginal" in terms of value.

Calpers, the biggest US public pension plan with about $480bn of assets, has $900mn exposure to Russia. It said it did not hold any Russian debt, but would not comment further. The California State Teachers' Retirement system, which held Russian investments worth less than $500mn as of February 23, said it was reviewing its positions.

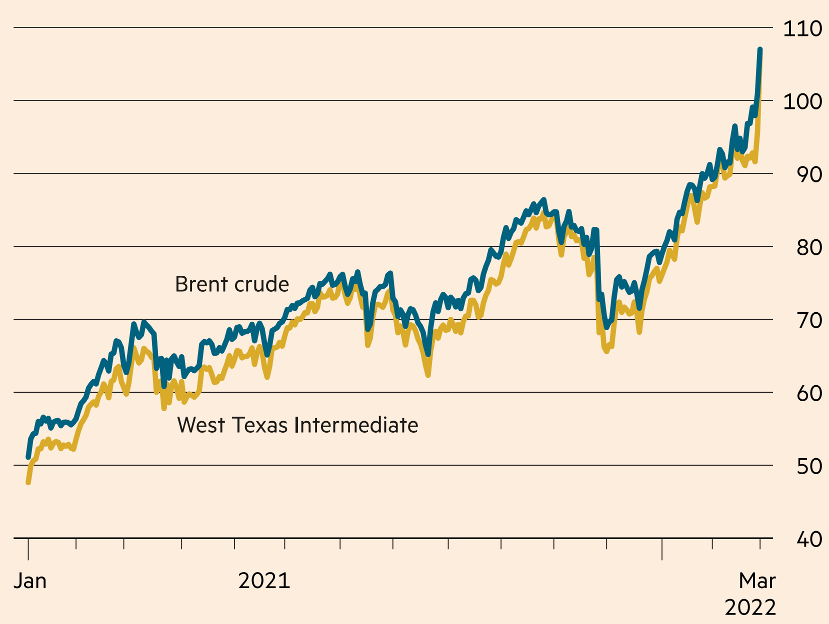
The day in the markets

What you need to know

- European shares retreat, led by falls in utilities, consumer and financials sectors
- 'Bid for safety' sends yields on core government debt down sharply
- Asia bucks downward trend, with Hong Kong and Japan equities rising

Global oil prices rally to fresh 7-year high

$ per barrel



Source: Refinitiv

US and European stocks fell, government bonds rallied and oil prices rose sharply as traders assessed the economic implications of Russia's attack on Ukraine.

On Wall Street, both the blue-chip S&P 500 and tech-heavy Nasdaq Composite indices were down 1.3 per cent at lunchtime in New York.

In Europe, the Stoxx 600 index slipped 2.4 per cent, with utilities, consumer cyclicals and financials among the biggest fallers. In the region, government bond prices rose significantly, as traders sought shelter from economic risk and bet on the European Central Bank maintaining supportive monetary policies for longer than had been anticipated.

The yield on Germany's 10-year Bund, a benchmark for borrowing costs across the eurozone, dropped 23 basis points to minus 0.07 per cent. The yield on Italy's equivalent debt fell 35bp to 1.39 per cent.

"It's a bid for safety and away from equity market risk," said Antoine Lesne, head of research and strategy at State Street's SPDR ETF business. "But it also suggests that one of the key consequences of this conflict will be a gradual shift away from monetary tightening and rate hikes in the eurozone."

The eurozone faces greater risks from the Ukraine crisis than the UK and the US because of deeper trade links with Russia and a heavy reliance on Russian oil and gas. "Europe is bearing the brunt of the invasion's initial impact, with higher energy costs hurting consumers and the level of sanctions pressuring European growth," said Jeffrey Schulze, strategist at ClearBridge Investments.

US government debt also rallied, with the yield on the 10-year Treasury note dropping 12bp to 1.73 per cent.

Kim Catechis, investment strategist at Franklin Templeton, said the conflict could lower global gross domestic product by between 0.3 and 0.5 per cent this year — less than it would have done had consumers not had their incomes topped up by government support programmes during the pandemic.

Brent crude, the international oil benchmark, rose more than 6 per cent to $107.57 a barrel, its highest level since 2014. The International Energy Agency said yesterday that member countries had agreed to release 60mn barrels of crude to tackle surging prices.

In Asia, Japan's Topix index rose 0.5 per cent and Hong Kong's Hang Seng index added 0.2 per cent. **Naomi Rovnick, George Steer and Hudson Lockett**
Additional reporting by Andy Bounds

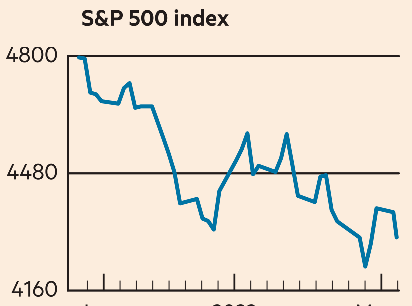
Markets update

	US	Eurozone	Japan	UK	China	Brazil
Stocks	**S&P 500**	**Eurofirst 300**	**Nikkei 225**	**FTSE100**	**Shanghai Comp**	**Bovespa**
Level	4305.00	1732.92	26844.72	7330.20	3488.83	113141.94
% change on day	-1.58	-2.18	1.20	-1.72	0.77	1.39
Currency	**$ index (DXY)**	**$ per €**	**Yen per $**	**$ per £**	**Rmb per $**	**Real per $**
Level	97.136	1.114	114.805	1.335	6.312	5.152
% change on day	0.444	-0.801	-0.321	-0.522	0.022	0.000
Govt. bonds	**10-year Treasury**	**10-year Bund**	**10-year JGB**	**10-year Gilt**	**10-year bond**	**10-year bond**
Yield	1.705	-0.075	0.176	0.993	2.817	11.212
Basis point change on day	-16.780	-20.800	-0.400	-28.800	2.900	0.000
World index, Commods	**FTSE All-World**	**Oil - Brent**	**Oil - WTI**	**Gold**	**Silver**	**Metals (LMEX)**
Level	454.07	106.53	105.38	1909.85	24.35	4855.80
% change on day	-1.33	8.55	10.05	1.33	0.58	0.32

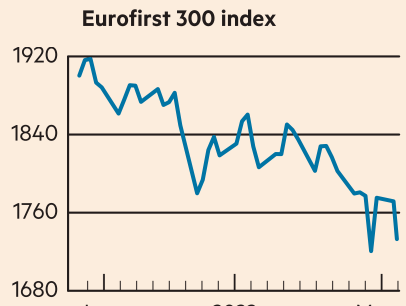
Yesterday's close apart from: Currencies = 16:00 GMT; S&P, Bovespa, All World, Oil = 17:00 GMT; Gold, Silver = London pm fix. Bond data supplied by Tullett Prebon.

Main equity markets

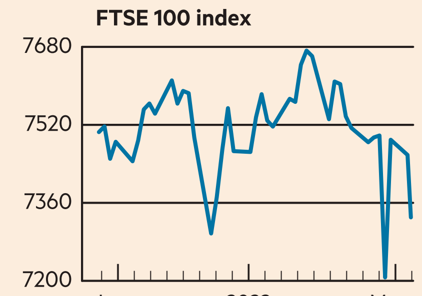
S&P 500 index



Eurofirst 300 index



FTSE 100 index



Biggest movers

%	US		Eurozone		UK	
Ups	Target	11.62	Thales	5.15	Bae Systems	3.70
	C.h. Robinson Worldwide	7.00	Galp Energia	3.72	Anglo American	3.47
	Occidental Petroleum	4.81	Beiersdorf	3.16	Antofagasta	3.32
	Hormel Foods	3.59	Eni	3.04	Rio Tinto	2.21
	Lockheed Martin	3.49	Novozymes	2.71	Sage	1.94
Downs	Royal Caribbean	-8.71	Renault	-11.23	Evraz	-28.95
	Aptiv	-8.08	Commerzbank	-11.20	Polymetal Int	-26.28
	Dxc Technology	-8.05	Ing	-10.70	Flutter Entertainment	-12.40
	Pvh	-8.00	Erste Bank	-10.41	Rolls-royce Holdings	-11.11
	Carnival	-7.92	Raiffeisen Bank Internat	-10.16	Melrose Industries	-10.02

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

Luxury electric vehicle group **Lucid** dived after cutting its production target. For 2022, it expected to make between 12,000 and 14,000 vehicles, down from the 20,000 units stated in November.

The revision reflected "the extraordinary supply chain and logistics challenges we've encountered", said Peter Rawlinson, chief executive.

Lucid's fourth-quarter loss came in at $1.05bn, more than triple the $311.3mn loss during the same period a year earlier.

Investors zeroed in on **Target** after the retailer reported record fourth-quarter earnings of $3.19 per share, which comfortably beat the Refinitiv-compiled estimate of $2.86. Moreover, Target also forecast high single-digit growth in adjusted EPS in 2022.

Better than expected results lifted **Workday**, the human resources software vendor. Its revenue, operating margin, EPS and billings were all above consensus, said Credit Suisse. The broker was particularly impressed by a 24-month subscription revenue backlog of $7.98bn, up 22.2 per cent year on year against a guidance of 19.5 per cent.

Oil group **Chevron** climbed on news it was planning to return more money to investors. At its annual investor meeting, it raised its share buyback guidance range to $5bn to $10bn per year, up from $3bn to $5bn. *Ray Douglas*

Europe

Germany's **Beiersdorf**, home to skincare brands such as Nivea and La Prairie, rallied after releasing "solid" results, said RBC Europe.

For 2021, organic sales rose 9.7 per cent year on year to €7.6bn, exceeding 2019's pre-pandemic level, while it guided for flat margins overall for 2020. This outlook was "actually quite impressive relative to other mass-market beauty players that are forecasting a margin decline", said the broker.

French IT services group **Atos** tumbled 20 per cent after its 2020 guidance fell short of analysts' estimates.

Full-year results were in line with expectations but its guidance for 2022 pointed to a 25 to 30 per cent cut to the consensus forecast for operating profit, said Citi. Atos's free cash flow outlook of minus €150mn to €200mn also missed the €252mn expected, noted the broker.

An upgrade helped lift **Thales**, the French technology company that spans aerospace, transport and defence. Jefferies raised its rating to "buy" from "hold" following an announcement by Chancellor Olaf Scholz, who committed €100bn to boosting Germany's armed forces.

Defence procurement could rise 50 per cent during the next five years, with the sector's valuations expanding 25 per cent, said the broker. *Ray Douglas*

London

Bookmaker **Flutter** dived on signs the betting boom triggered by the pandemic was waning. Group core profits excluding the US came in at £1.24bn, down 11 per cent on 2020's £1.4bn and towards the lower end of an already trimmed guidance range of £1.24bn to £1.28bn.

Shore Capital said the decline in profitability reflected "challenging Covid-related comparatives, regulatory changes and punter-friendly results".

Another gambling group, **888 Holdings**, also sank after being fined £9.4mn by the Gambling Commission. An investigation "revealed social responsibility and money laundering failings" at 888, which runs online casino, sport, poker and bingo games.

This was the second time the company had faced enforcement action, said the commission, it paid a £7.8mn penalty in 2017 for failing vulnerable customers.

Andrew Rhodes, the commission's chief executive, said if there was "a repeat of the failures at 888, then we have to seriously consider the suitability of the operator to uphold the licensing objectives".

Daily Mirror publisher **Reach** tumbled 25 per cent after forecasting a "modest year-on-year reduction in operating profit" for 2022. Inflationary pressures would intensify, primarily in the cost of newsprint, Reach warned. *Ray Douglas*

A fundamental policy decoupling is on the way

Robin Brooks

Markets Insight

Russia's invasion of Ukraine is a turning point for European politics, as has been widely recognised in the short space of a few days. What is less widely recognised is that we're also at turning point for markets.

Europe is in the early stages of a big adverse shock to its economy, which will upend the debate over monetary policy. Think back to just a week ago when there was still collective hand-wringing about elevated inflation. That is now old news. The interesting thing — and the opportunity — is that markets have not yet recognised or priced this.

Take the case of elevated inflation. In an analysis by the Institute of International Finance, we warned about the breadth of the inflation rise in Europe, which was being led by genuine overheating in Germany.

But Germany is also on the front line in confronting Russia and one of the most-exposed economies to what surely will be deep recession to the east. That changes the inflation debate.

Central banks worry about supply shocks because of "second-round effects", which is when a strong economy emboldens producers to pass on higher energy and other costs to consumers. That happens when there is strong demand, which is what gives companies pricing power.

None of this applies any more. Uncertainty has risen massively, which will pull down consumer confidence. The uncertainty does not just relate to geopolitical risks. It goes deeper. Countries such as Germany and Italy built large parts of their economies around cheap energy from Russia. That must change, which implies lower growth, wider fiscal deficits and more debt.

The debt nexus for Europe is a tricky one. There have been many voices criticising Germany for its low levels of government debt, with many treating Russia's invasion of Ukraine as a "told you so" moment. That is misguided.

If the last couple of years have taught us anything, it is that big negative shocks can come out of nowhere: recently Covid-19, then virus variants, and now Russia's invasion of Ukraine. If this is not an endorsement of keeping powder dry for emergencies, what is?

In the eurozone this argument has a special urgency, because markets were already reluctant to buy Covid-19 debt issuance in the run-up to all this. For a key periphery country like Italy, net new debt issuance was largely funded — indirectly — via the European Central Bank's quantitative easing programme of asset buying to support markets.

> The Fed is set to pursue normalisation while the ECB — given the bigger war shock to Europe — keeps easing

With this latest shock, markets' existing reluctance to fund highly indebted sovereigns will, with bigger fiscal spending needs on the horizon, only grow more acute.

If we are right, the fact that inflation is no longer a concern makes things easy. Now is the wrong time for the ECB to worry about normalising policy.

Relative price shifts in the eurozone inflation basket are unlikely to broaden out into generalised inflation, which means the coast is clear for ongoing loose monetary policy and — critically — QE that from a fiscal perspective is badly needed.

There will be a fundamental decoupling in monetary policy, with the US Federal Reserve pursuing normalisation while the ECB — given the much bigger shock that Russia's war is to Europe — keeps easing.

Markets are nowhere near recognising or pricing this. They are pricing the prospect of monetary policy normalisation and rate increases in the eurozone on a par with the US. Speculative positioning in the foreign exchange markets was starting to build a meaningful "long" position on the euro versus the dollar into last week.

In short, decoupling of the eurozone from the US, in terms of growth and policy, is not yet remotely built into markets.

We have seen this before. Think back to 2014, which was also a watershed for markets. Russia annexed Crimea early in the year. Then the bottom fell out of oil prices, as US shale took the world by storm.

Amid all this, markets were slow to price in the massive policy shift that was unfolding at the ECB, which would ultimately lead to QE in 2015.

This is because there were genuine mixed signals. Markets thought QE would never be possible given the traditional importance of inflation hawks in the eurozone. It is the same now. Elevated inflation is the mixed signal that is holding back markets.

But that is old news, which reflects the world as we knew it a week ago. Big divergence and euro weakness against the dollar is coming.

The writer is chief economist at the Institute of International Finance

MARKET DATA

WORLD MARKETS AT A GLANCE
FT.COM/MARKETSDATA

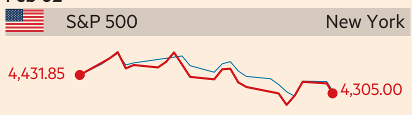
Change during previous day's trading (%)

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 $
-1.58%	-1.42%	-1.98%	-1.72%	-2.18%	1.20%	0.21%	-1.33%	-0.801%	-0.522%	-0.321%	-0.358%	7.32%	1.33%

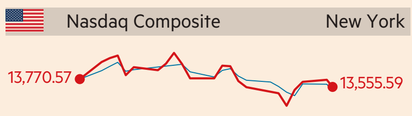
Stock Market movements over last 30 days, with the FTSE All-World in the same currency as a comparison

AMERICAS

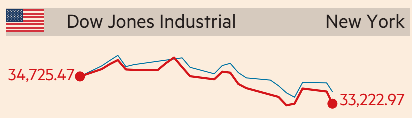
Feb 02 - - Index / All World

S&P 500 — New York


Day -1.58% Month -3.85% Year 10.34%

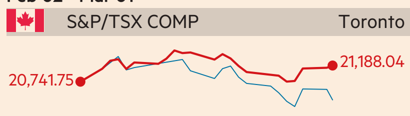
Nasdaq Composite — New York


Day -1.42% Month -2.32% Year -0.23%

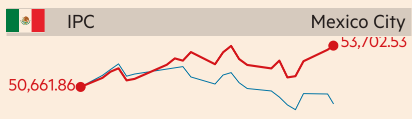
Dow Jones Industrial — New York


Day -1.98% Month -5.41% Year 5.31%

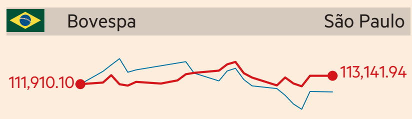
Feb 02 - Mar 01 Index / All World

S&P/TSX COMP — Toronto


Day -0.74% Month -0.59% Year 14.59%

IPC — Mexico City


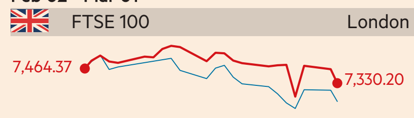
Day -0.20% Month 4.22% Year 19.02%

Bovespa — São Paulo


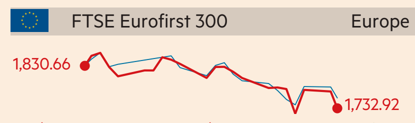
Day 1.39% Month 1.29% Year 0.79%

EUROPE

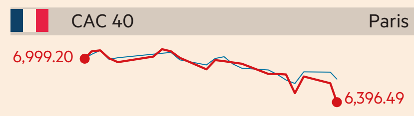
Feb 02 - Mar 01 Index / All World

FTSE 100 — London


Day -1.72% Month -2.62% Year 11.25%

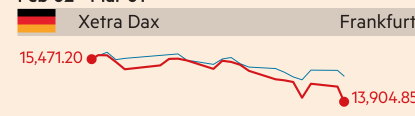
FTSE Eurofirst 300 — Europe


Day -2.18% Month -4.13% Year 9.31%

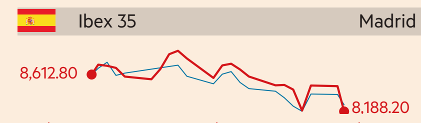
CAC 40 — Paris


Day -3.94% Month -7.68% Year 12.16%

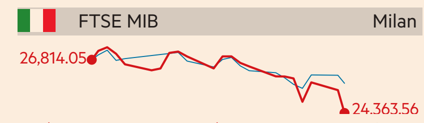
Feb 02 - Mar 01 Index / All World

Xetra Dax — Frankfurt


Day -3.85% Month -5.61% Year NaN%

Ibex 35 — Madrid


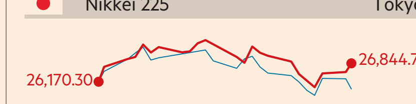
Day -3.43% Month -4.34% Year -0.45%

FTSE MIB — Milan


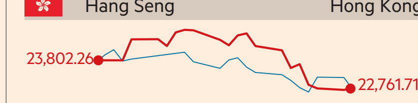
Day -4.14% Month -7.91% Year 6.94%

ASIA

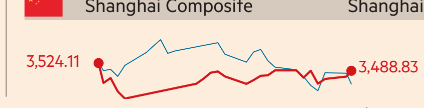
Feb 02 - Mar 01 Index / All World

Nikkei 225 — Tokyo


Day 1.20% Month -2.23% Year -7.38%

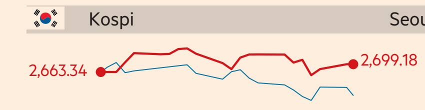
Hang Seng — Hong Kong


Day 0.21% Month -7.32% Year -21.42%

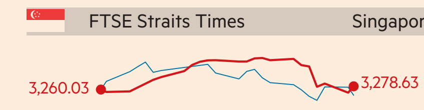
Shanghai Composite — Shanghai


Day 0.77% Month 3.79% Year -0.58%

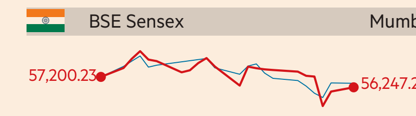
Feb 02 - Mar 01 Index / All World

Kospi — Seoul


Day 0.84% Month -1.86% Year -10.41%

FTSE Straits Times — Singapore


Day 1.12% Month -1.59% Year 11.17%

BSE Sensex — Mumbai


Day 0.70% Month -4.08% Year 14.48%

Country	Index	Latest	Previous
Argentina	Merval	87969.87	88721.46
Australia	All Ordinaries	7385.30	7323.20
	S&P/ASX 200	7096.50	7049.10
	S&P/ASX 200 Res	5581.00	5590.40
Austria	ATX	3148.92	3388.98
Belgium	BEL 20	3937.92	4014.02
	BEL Mid	10075.74	10328.87
Brazil	IBovespa	113141.94	111591.87
Canada	S&P/TSX 60	1267.23	1278.42
	S&P/TSX Comp	20970.06	21126.36
	S&P/TSX Div Met & Min	1360.18	1394.15
Chile	S&P/CLX IGPA Gen	22464.94	22851.61
China	FTSE A200	12268.88	12169.28
	FTSE B35	9000.71	8988.96
	Shanghai A	3656.55	3628.66
	Shanghai B	277.99	280.94
	Shanghai Comp	3488.83	3462.31
	Shenzhen A	2434.13	2425.61
	Shenzhen B	1139.65	1129.08
Colombia	COLCAP	1261.61	1260.21
Croatia	CROBEX	2013.05	2011.29
Cyprus	CSE M&P Gen	68.46	68.68
Czech Republic	PX	1350.01	1353.41
Denmark	OMXC Copenahgen 20	1693.90	1690.38
Egypt	EGX 30	11275.78	11138.86
Estonia	OMX Tallinn	1827.19	1857.62
Finland	OMX Helsinki General	10725.12	11254.78
France	CAC 40	6396.49	6658.83
	SBF 120	4959.54	5160.35
Germany	M-DAX	30984.63	31873.35
	TecDAX	3187.50	3236.39
	XETRA Dax	13904.85	14461.02
Greece	Athens Gen	866.00	891.58
	FTSE/ASE 20	2097.82	2160.52
Hong Kong	Hang Seng	22761.71	22713.02
	HS China Enterprise	8053.04	8023.93
	HSCC Red Chip	4215.03	4208.99
Hungary	Bux	38913.62	43731.25
India	BSE Sensex	56247.28	55858.52
	Nifty 500	14307.95	14187.40
Indonesia	Jakarta Comp	6921.44	6888.17
Ireland	ISEQ Overall	7492.11	7860.27
Israel	Tel Aviv 125	2054.92	2044.27
Italy	FTSE Italia All-Share	26679.69	27720.92
	FTSE Italia Mid Cap	43032.20	44461.08
	FTSE MIB	24363.56	25415.89
Japan	2nd Section	7212.90	7131.96
	Nikkei 225	26844.72	26526.82
	S&P Topix 150	1626.31	1617.79
	Topix	1897.17	1886.93
Jordan	Amman SE	2156.75	2148.34
Kenya	NSE 20	1883.33	1883.33
Kuwait	KSX Market Index	6633.44	6603.51
Latvia	OMX Riga	1169.85	1198.22
Lithuania	OMX Vilnius	881.77	897.74
Luxembourg	LuxX	1724.72	1732.78
Malaysia	FTSE Bursa KLCI	1596.44	1608.28
Mexico	IPC	53293.01	53400.61
Morocco	MASI	13071.04	13175.30
Netherlands	AEX	713.46	729.72
	AEX All Share	975.09	997.75
New Zealand	NZX 50	12197.92	11977.77
Nigeria	SE All Share	47394.53	47328.42
Norway	Oslo All Share	1017.37	1006.88
Pakistan	KSE 100	44803.58	44461.01
Philippines	Manila Comp	7404.61	7311.01
Poland	Wig	59983.14	61141.35
Portugal	PSI 20	5498.27	5563.14
	PSI General	4045.25	4097.72
Romania	BET Index	12482.78	12716.51
Russia	Micex Index	2470.48	2058.12
	RTX	936.94	742.91
Saudi-Arabia	TADAWUL All Share Index	12674.34	12590.26
Singapore	FTSE Straits Times	3278.63	3242.24
Slovakia	SAX	398.87	397.56
Slovenia	SBI TOP	-	-
South Africa	FTSE/JSE All Share	77110.69	76090.51
	FTSE/JSE Res 20	86939.05	84334.89
	FTSE/JSE Top 40	70584.10	69624.29
South Korea	Kospi	2699.18	2676.76
	Kospi 200	361.54	358.44
Spain	IBEX 35	8188.20	8479.20
Sri Lanka	CSE All Share	11577.94	11107.90
Sweden	OMX Stockholm 30	2084.93	2134.07
	OMX Stockholm AS	852.06	871.86
Switzerland	SMI Index	11862.28	11986.78
Taiwan	Weighted Pr	17898.25	17652.18
Thailand	Bangkok SET	1694.28	1685.18
Turkey	BIST 100	1969.91	1946.19
UAE	Abu Dhabi General Index	8333.19	8358.50
UK	FT 30	2858.70	2871.90
	FTSE 100	7330.20	7458.25
	FTSE 4Good UK	6716.08	6854.52
	FTSE All Share	4079.97	4157.77
	FTSE techMARK 100	6338.15	6475.24
USA	DJ Composite	11259.60	11465.86
	DJ Industrial	33222.97	33892.60
	DJ Transport	14994.60	15268.45
	DJ Utilities	932.58	942.54
	Nasdaq 100	14043.24	14237.81
	Nasdaq Cmp	13555.59	13751.40
	NYSE Comp	16051.69	16313.89
	S&P 500	4305.00	4373.94
	Wilshire 5000	43559.22	44259.21
Venezuela	IBC	5268.47	5348.64
Vietnam	VNI	1498.78	1490.13
Cross-Border	DJ Global Titans ($)	489.67	496.07
	Euro Stoxx 50 (Eur)	3777.21	3924.23
	Euronext 100 ID	1229.68	1268.80
	FTSE 4Good Global ($)	10678.93	10856.57
	FTSE All World ($)	454.07	460.19
	FTSE E300	1732.92	1771.61
	FTSE Eurotop 100	3331.04	3401.94
	FTSE Global 100 ($)	2799.72	2839.36
	FTSE Gold Min ($)	2171.33	2185.81
	FTSE Latibex Top (Eur)	4440.00	4432.20
	FTSE Multinationals ($)	3020.47	3021.13
	FTSE World ($)	818.97	830.96
	FTSEurofirst 100 (Eur)	4500.02	4625.54
	FTSEurofirst 80 (Eur)	5249.19	5458.63
	MSCI ACWI Fr ($)	698.02	698.53
	MSCI All World ($)	2977.95	2980.20
	MSCI Europe (Eur)	1813.08	1819.53
	MSCI Pacific ($)	2942.12	2925.67
	S&P Euro (Eur)	1752.16	1821.19
	S&P Europe 350 (Eur)	1783.85	1825.58
	S&P Global 1200 ($)	3231.88	3283.87
	Stoxx 50 (Eur)	3575.23	3642.44

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

STOCK MARKET: BIGGEST MOVERS

AMERICA

ACTIVE STOCKS	stock traded m's	close price	Day's change
Tesla	120.4	861.25	-9.18
Advanced Micro Devices	62.6	116.60	-6.74
Apple	60.8	163.58	-1.54
Nvidia	40.1	234.99	-8.86
Microsoft	32.8	295.15	-3.64
Ihs Markit Ltd	32.5	108.61	0.80
Amazon.com	25.4	3037.80	-33.46
Chevron	22.8	148.25	4.25
Jpmorgan Chase & Co	21.7	134.94	-6.86
Meta Platforms	20.3	206.42	-4.61

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Target	222.99	23.22	11.62
C.h. Robinson Worldwide	103.45	6.77	7.00
Occidental Petroleum	45.84	2.11	4.81
Hormel Foods	49.35	1.71	3.59
Lockheed Martin	448.94	15.14	3.49
Downs			
Royal Caribbean	73.69	-7.03	-8.71
Aptiv	118.98	-10.46	-8.08
Dxc Technology	31.29	-2.74	-8.05
Pvh	90.06	-7.83	-8.00
Carnival	18.72	-1.61	-7.92

Based on the constituents of the S&P500

LONDON

ACTIVE STOCKS	stock traded m's	close price	Day's change
Astrazeneca	395.0	9224.00	165.00
Shell	364.6	1951.00	-21.00
Anglo American	353.4	3955.50	132.50
Glencore	256.7	444.95	2.80
Hsbc Holdings	250.0	495.40	-19.20
Bp	233.0	357.10	-6.45
Lloyds Banking	189.1	45.78	-2.66
Rio Tinto	181.3	5919.00	128.00
Bae Systems	173.5	746.20	26.60
Diageo	167.7	3658.50	-66.50

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Centamin	103.85	4.65	4.69
Darktrace	459.00	16.60	3.75
Bae Systems	746.20	26.60	3.70
Anglo American	3955.50	132.50	3.47
Antofagasta	1571.50	50.50	3.32
Downs			
Petropavlovsk	4.97	-3.03	-37.88
Evraz	102.85	-41.90	-28.95
Polymetal Int	258.90	-92.30	-26.28
Reach	169.00	-58.50	-25.71
Flutter Entertainment	9456.00	-1339.00	-12.40

Based on the constituents of the FTSE 350 index

EURO MARKETS

ACTIVE STOCKS	stock traded m's	close price	Day's change
Basf Se Na O.n.	689.3	55.52	-3.73
Totalenergies	662.4	44.35	-1.24
Asml Holding	627.1	577.20	-21.70
Nestle N	584.4	117.57	0.64
Unicredit	573.1	10.60	-0.79
Intesa Sanpaolo	561.0	2.12	-0.18
Roche Gs	500.4	342.74	1.22
Eni	496.0	14.25	0.42
Novartis N	491.4	78.66	0.23
Ing Groep N.v.	488.5	9.37	-1.12

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Eni	14.25	0.42	3.04
Mowi	23.61	0.64	2.78
Sartorius Ag Vzo O.n.	400.70	8.90	2.27
Novo Nordisk B A/s	93.63	1.92	2.10
E.on Se Na O.n.	12.14	0.11	0.90
Downs			
Engie	12.39	-1.88	-13.19
Ing Groep N.v.	9.37	-1.12	-10.70
Neste	31.57	-3.61	-10.26
Safran	103.70	-11.00	-9.59
Airbus	104.18	-10.72	-9.33

Based on the constituents of the FTSEurofirst 300 Eurozone index

TOKYO

ACTIVE STOCKS	stock traded m's	close price	Day's change
Mitsui O.s.k.lines,	1425.0	9920.00	580.00
Nippon Yusen Kabushiki Kaisha	1254.6	10910.00	240.00
Kawasaki Kisen Kaisha,	860.3	8230.00	180.00
Softbank .	767.2	5232.00	107.00
Tokyo Electron	662.1	57650.00	1880.00
Toyota Motor	494.4	2133.00	-5.50
Mitsubishi Ufj Fin,.	475.5	700.80	-12.00
Sony	470.2	11775.00	-35.00
Mitsui & Co.,	303.0	2826.00	-39.50
Fast Retailing Co.,	298.7	63290.00	1460.00

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Tokyo Electric Power ,orporated	388.00	26.00	7.18
Mitsui O.s.k.lines,	9920.00	580.00	6.21
Nec	5240.00	285.00	5.75
M3,.	4512.00	243.00	5.69
Trend Micro orporated	6760.00	360.00	5.63
Downs			
Pacific Metals Co.,	3260.00	-120.00	-3.55
T&d Holdings, .	1632.00	-52.00	-3.09
Thb Chiba Bank,	708.00	-21.00	-2.88
Concordia Fin Ltd	460.00	-11.00	-2.34
Shizuoka Bank Ltd	836.00	-19.00	-2.22

Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Mar 01 price(p)	%Chg week	%Chg ytd
Winners			
Bae Systems	746.20	25.8	35.9
Antofagasta	1571.50	11.8	17.0
Anglo American	3955.50	10.6	27.4
Rightmove	665.00	7.1	-
Fresnillo	724.80	6.5	-
National Grid	1138.20	6.2	5.6
Dechra Pharmaceuticals	4072.00	6.2	-
Rentokil Initial	516.60	6.0	-
Glencore	444.95	5.4	17.6
Bunzl	2902.00	5.3	-0.9
Pearson	657.60	5.2	8.6
United Utilities	1084.00	5.0	-1.1
Losers			
Polymetal Int	258.90	-76.5	-
Evraz	102.85	-63.4	-
Mondi	1468.00	-22.7	-
Rolls-royce Holdings	92.00	-22.0	-
Coca-cola Hbc Ag	1772.50	-19.0	-
Int Consolidated Airlines S.a.	136.08	-15.8	4.5
Wpp	1004.50	-14.5	-9.1
Melrose Industries	133.40	-12.8	-14.6
Standard Chartered	508.20	-12.5	13.6
Whitbread	2701.00	-12.2	-
Abrdn	195.75	-12.2	-
St. James's Place	1305.50	-11.4	-

FTSE 250	Mar 01 price(p)	%Chg week	%Chg ytd
Winners			
Darktrace	459.00	33.5	-
Oxford Instruments	2600.00	32.5	-0.5
Chemring	312.50	21.1	5.8
Harbour Energy	403.60	16.1	12.7
Qinetiq	292.00	15.8	9.7
Hochschild Mining	117.30	14.7	-9.1
Morgan Sindall	2315.00	9.2	-7.4
Babcock Int	330.50	8.9	4.2
Centamin	103.85	8.6	18.5
Howden Joinery	805.40	8.4	-
Endeavour Mining	2040.00	8.2	25.9
Ultra Electronics Holdings	3260.00	7.2	1.8
Losers			
Petropavlovsk	4.97	-62.4	-
Ferrexpo	152.00	-40.6	-
Reach	169.00	-25.1	-
Wizz Air Holdings	3013.00	-24.4	-
Easyjet	546.20	-18.4	-1.4
Syncona	163.60	-16.6	-
Tbc Bank	1178.00	-15.9	-
Spectris	2700.00	-15.7	-
Rhi Magnesita N.v.	2662.00	-15.4	-
Aston Martin Lagonda Global Holdings	931.80	-15.1	-
hcape	709.00	-14.0	-
Tui Ag	219.10	-13.9	-4.7

FTSE SmallCap	Mar 01 price(p)	%Chg week	%Chg ytd
Winners			
Avon Protection	1250.00	21.5	9.2
Ted Baker	99.10	12.7	-4.3
Batm Advanced Communications Ld	56.20	12.4	-31.0
Bloomsbury Publishing	385.00	9.7	4.6
Ao World	94.55	9.4	-
Enquest	22.40	7.4	19.9
Foresight Holdings	410.00	7.0	-3.9
Tullow Oil	53.24	6.2	17.1
Pharos Energy	26.90	6.0	6.7
Seraphim Space Investment Trust	109.20	5.7	-
Macfarlane	129.50	5.5	-4.0
Jpmorgan Japan Small Cap Growth & ome	378.50	5.4	-
Losers			
Jpmorgan Russian Securities	203.00	-65.8	-67.3
Raven Property	10.00	-59.3	-69.9
Hyve	60.05	-42.8	-35.2
Bank Of Georgia	1224.00	-18.5	-
Esken	11.30	-17.3	-
Hostelworld	72.40	-16.3	4.6
Georgia Capital	544.00	-14.3	-
Aptitude Software	408.00	-12.3	-
Slf Realisation Fund	9.84	-12.1	-
Standard Life Private Equity Trust	472.00	-9.2	-
Costain	42.40	-8.6	-20.0
Restaurant	90.50	-8.2	-3.9

Industry Sectors	Mar 01 price(p)	%Chg week	%Chg ytd
Winners			
Health Care Equip.& Services	8083.32	31.4	-1.6
Gas Water & Multiutilities index	6203.59	31.3	1.7
Industrial Metals	7639.28	28.2	10.9
Pharmaceuticals & Biotech.	18959.95	26.5	2.5
Aerospace & Defense	4615.75	26.2	10.4
Electricity	10082.82	22.8	2.4
Tobacco	33723.29	21.2	-0.1
Oil & Gas Producers	6640.31	19.5	-2.5
Beverages	27848.03	18.0	-5.4
Real Estate Investment Trusts	3185.93	14.7	-5.0
Real Estate & Investment Servic	2789.92	13.9	-3.8
Media	9238.56	13.3	-3.3
Losers			
Mining	13331.57	-45.9	-22.0
Automobiles & Parts	2795.25	-41.6	-
Travel & Leisure	6827.63	-27.5	-9.2
Household Goods	13987.85	-20.9	-7.7
Life Insurance	6758.43	-17.4	-
Food Producers	6478.09	-13.8	-4.4
Chemicals	12573.34	-11.9	-9.6
General Financial	10492.44	-11.6	-
Industrial Engineering	14383.18	-7.6	-
Construction & Materials	7110.95	-6.6	-
General Industrials	6260.82	-5.9	-9.5
Personal Goods	32568.83	-4.8	-3.4

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

CURRENCIES

Mar 1	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	107.3935	-0.0075	119.6518	-0.9814	143.3921	-0.7123
Australia	Australian Dollar	1.3775	-0.0006	1.5347	-0.0131	1.8393	-0.0098
Bahrain	Bahrainin Dinar	0.3771	0.0000	0.4201	-0.0034	0.5034	-0.0024
Bolivia	Bolivian Boliviano	6.9100	-	7.6987	-0.0626	9.2263	-0.0452
Brazil	Brazilian Real	5.1517	-	5.7397	-0.0467	6.8786	-0.0337
Canada	Canadian Dollar	1.2677	-0.0007	1.4123	-0.0123	1.6926	-0.0092
Chile	Chilean Peso	801.5750	6.7750	893.0700	0.3472	1070.2650	3.8487
China	Chinese Yuan	6.3124	0.0014	7.0330	-0.0556	8.4284	-0.0394
Colombia	Colombian Peso	3893.7550	-6.2500	4338.2047	-42.2980	5198.9536	-33.8458
Costa Rica	Costa Rican Colon	643.6650	-0.7700	717.1356	-6.6966	859.4232	-5.2421
Czech Republic	Czech Koruna	22.6680	0.2458	25.2554	0.0708	30.2663	0.1816
Denmark	Danish Krone	6.6760	0.0535	7.4381	-0.0004	8.9139	0.0281
Egypt	Egyptian Pound	15.7198	0.0272	17.5141	-0.1118	20.9891	-0.0663
Hong Kong	Hong Kong Dollar	7.8165	0.0028	8.7088	-0.0676	10.4367	-0.0473
Hungary	Hungarian Forint	336.0455	6.2155	374.4031	3.9366	448.6888	6.1422
India	Indian Rupee	75.3475	-	83.9480	-0.6827	100.6042	-0.4927
Indonesia	Indonesian Rupiah	14337.0000	-30.0000	15973.4968	-163.6040	19142.8227	-133.9885
Israel	Israeli Shekel	3.2234	0.0179	3.5913	-0.0090	4.3039	0.0030
Japan	Japanese Yen	114.8050	-0.3700	127.9093	-1.4557	153.2879	-1.2471
..One Month		114.8049	-0.3702	127.9094	-1.4556	153.2879	-1.2473
..Three Month		114.8048	-0.3705	127.9095	-1.4554	153.2876	-1.2478
..One Year		114.8035	-0.3731	127.9098	-1.4548	153.2879	-1.2495
Kenya	Kenyan Shilling	113.8500	-	126.8453	-1.0315	152.0128	-0.7445
Kuwait	Kuwaiti Dinar	0.3029	0.0001	0.3375	-0.0026	0.4044	-0.0018
Malaysia	Malaysian Ringgit	4.1930	-0.0055	4.6716	-0.0442	5.5985	-0.0348
Mexico	Mexican Peso	20.5170	0.0845	22.8589	-0.0910	27.3944	-0.0208
New Zealand	New Zealand Dollar	1.4774	-0.0002	1.6461	-0.0136	1.9727	-0.0100
Nigeria	Nigerian Naira	415.7500	-	463.2054	-3.7668	555.1105	-2.7186
Norway	Norwegian Krone	8.8467	0.0530	9.8564	-0.0206	11.8121	0.0133
Pakistan	Pakistani Rupee	177.3500	-	197.5935	-1.6068	236.7982	-1.1597
Peru	Peruvian Nuevo Sol	3.7843	-0.0149	4.2162	-0.0511	5.0527	-0.0448
Philippines	Philippine Peso	51.2350	-0.0350	57.0832	-0.5035	68.4091	-0.3820
Poland	Polish Zloty	4.2263	0.0428	4.7087	0.0098	5.6430	0.0298
Romania	Romanian Leu	4.4409	0.0351	4.9477	-0.0008	5.9294	0.0181
Russia	Russian Ruble	111.7500	4.5625	124.5056	4.1121	149.2089	5.3910
Saudi Arabia	Saudi Riyal	3.7518	0.0001	4.1800	-0.0339	5.0094	-0.0244
Singapore	Singapore Dollar	1.3574	-0.0001	1.5123	-0.0124	1.8123	-0.0090
South Africa	South African Rand	15.3463	-0.1063	17.0979	-0.2584	20.4904	-0.2429
South Korea	South Korean Won	1202.3500	-	1339.5912	-10.8935	1605.3810	-7.8621
Sweden	Swedish Krona	9.5836	0.1453	10.6775	0.0764	12.7960	0.1324
Switzerland	Swiss Franc	0.9194	0.0020	1.0244	-0.0061	1.2277	-0.0033
Taiwan	New Taiwan Dollar	28.0490	0.0140	31.2506	-0.2384	37.4511	-0.1646
Thailand	Thai Baht	32.6100	-0.0650	36.3322	-0.3685	43.5410	-0.3004
Tunisia	Tunisian Dinar	2.9213	0.0126	3.2547	-0.0123	3.9005	-0.0022
Turkey	Turkish Lira	13.9625	0.1029	15.5562	-0.0110	18.6428	0.0467
United Arab Emirates	UAE Dirham	3.6731	-	4.0923	-0.0333	4.9043	-0.0240
United Kingdom	Pound Sterling	0.7490	0.0036	0.8344	-0.0027	-	-
..One Month		0.7490	0.0036	0.8344	-0.0027	-	-
..Three Month		0.7489	0.0036	0.8341	-0.0027	-	-
..One Year		0.7488	0.0036	0.8329	-0.0026	-	-
United States	United States Dollar	-	-	1.1141	-0.0091	1.3352	-0.0065
..One Month		-	-	1.1140	-0.2276	1.3352	-0.0066
..Three Month		-	-	1.1138	-0.2276	1.3352	-0.0066
..One Year		-	-	1.1123	-0.2275	1.3350	-0.0066
Vietnam	Vietnamese Dong	22817.5000	7.5000	25422.0053	-198.3270	30466.0699	-139.1170
European Union	Euro	0.8975	0.0072	-	-	1.1984	0.0038
..One Month		0.8974	0.0073	-	-	1.1983	0.0038
..Three Month		0.8972	0.0073	-	-	1.1981	0.0039
..One Year		0.8957	0.0074	-	-	1.1969	0.0039

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

	£ Strlg Mar 01	Day's chge%	Euro Index	£ Strlg Feb 28	£ Strlg Feb 25	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	7330.20	-1.72	6853.86	7458.25	7489.46	6588.53	3.27	2.05	14.88	32.61	7291.27
FTSE 250 (250)	20500.64	-2.75	19168.43	21081.05	20906.75	21221.46	2.23	2.61	17.20	47.92	16633.88
FTSE 250 ex Inv Co (181)	21119.20	-3.30	19746.79	21840.34	21650.72	21986.39	2.21	0.43	105.11	43.30	17463.63
FTSE 350 (350)	4108.78	-1.88	3841.78	4187.69	4196.79	3781.70	3.11	2.12	15.21	16.88	8118.74
FTSE 350 ex Investment Trusts (279)	4030.90	-1.91	3768.96	4109.25	4120.18	3684.80	3.17	1.80	17.50	16.86	4113.93
FTSE 350 Higher Yield (112)	3441.22	-1.11	3217.60	3479.87	3504.18	3073.41	4.34	1.66	13.85	21.50	7596.11
FTSE 350 Lower Yield (238)	4424.72	-2.77	4137.18	4550.96	4535.67	4227.80	1.67	3.49	17.18	7.12	5342.48
FTSE SmallCap (249)	6773.93	-1.47	6333.74	6874.99	6904.78	6578.11	2.84	4.16	8.47	29.55	11088.30
FTSE SmallCap ex Inv Co (130)	5708.17	-1.77	5337.23	5811.17	5837.45	5382.18	2.31	1.48	29.30	13.38	9714.44
FTSE All-Share (599)	4079.97	-1.87	3814.83	4157.77	4167.09	3761.45	3.10	2.17	14.85	16.80	8141.78
FTSE All-Share ex Inv Co (409)	3966.48	-1.90	3708.72	4043.48	4054.36	3627.55	3.15	1.80	17.62	16.47	4110.43
FTSE All-Share ex Multinationals (530)	1201.17	-3.06	930.84	1239.11	1239.32	1225.78	2.86	3.04	11.48	2.22	2474.77
FTSE Fledgling (82)	12483.05	-0.20	11671.85	12508.54	12576.98	11294.73	2.42	6.66	6.21	47.15	26367.16
FTSE Fledgling ex Inv Co (34)	17084.73	-0.93	15974.50	17244.38	17279.81	129.50	2.01	-2.89	-17.18	57.28	35073.90
FTSE All-Small (331)	4721.33	-1.40	4414.52	4788.39	4809.44	4566.83	2.81	4.28	8.30	20.44	9913.29
FTSE All-Small ex Inv Co (164)	4293.42	-1.74	4014.42	4369.43	4388.78	121.12	2.30	1.33	32.76	10.23	9254.58
FTSE AIM All-Share (761)	1027.27	-1.26	960.51	1040.36	1030.30	1192.17	1.12	1.46	61.29	1.66	1192.15
FTSE All-Share Technology (22)	2011.16	-0.83	1847.41	2027.93	2003.05	2065.13	1.76	0.65	86.65	12.32	2871.22
FTSE All-Share Telecommunications (7)	2053.21	-1.79	1886.03	2090.59	2124.95	1804.76	4.36	0.30	76.50	0.00	2969.72
FTSE All-Share Health Care (13)	13305.12	0.79	12221.80	13201.22	13151.22	10572.42	3.08	0.82	39.34	181.80	12158.07
FTSE All-Share Financials (254)	4558.37	-3.51	4187.23	4724.16	4798.56	4629.18	2.92	4.87	7.03	8.58	4902.82
FTSE All-Share Real Estate (53)	1135.81	-1.68	1091.44	1155.17	1148.20	1002.17	2.62	2.45	15.55	1.93	1160.46
FTSE All-Share Consumer Discretionary (90)	4911.78	-4.43	4511.86	5139.71	5111.19	5201.36	1.78	0.29	194.22	5.64	5094.51
FTSE All-Share Consumer Staples (25)	19255.32	-1.47	17687.54	19542.50	19656.45	17330.77	3.89	1.60	16.10	108.33	17132.14
FTSE All-Share Industrials (88)	6484.84	-2.15	5956.84	6627.14	6539.82	6029.87	1.85	1.88	28.87	4.67	7348.46
FTSE All-Share Basic Materials (24)	9240.70	1.10	8488.31	9140.31	9061.96	8334.02	5.07	2.51	7.85	3.70	11842.94
FTSE All-Share Energy (13)	6873.08	-1.29	6313.47	6963.09	7110.11	5347.20	3.35	1.45	20.52	64.63	8122.22
FTSE All-Share Utilities (10)	8961.39	-0.86	8231.75	9039.09	8827.69	6787.95	4.03	0.54	46.30	32.24	13155.20
FTSE All-Share Software and Computer Services (20)	2166.00	-0.77	1989.64	2182.75	2155.96	2228.28	1.76	0.65	88.04	13.71	3272.08
FTSE All-Share Technology Hardware and Equipment (2)	5363.72	-2.58	4927.00	5505.69	5438.72	4885.19	1.91	0.89	58.73	0.00	6819.05
FTSE All-Share Telecommunications Equipment (2)	544.99	-0.22	500.62	546.18	534.58	577.39	1.81	2.46	22.52	0.00	763.81
FTSE All-Share Telecommunications Service Providers (5)	3198.05	-1.84	2937.66	3257.88	3315.20	2791.43	4.44	0.27	82.71	0.00	4209.72
FTSE All-Share Health Care Providers (3)	8285.16	-1.18	7610.57	8384.44	8295.55	6055.83	0.13	53.19	15.03	0.00	7648.83
FTSE All-Share Medical Equipment and Services (2)	5935.74	-2.06	5452.45	6060.68	5913.21	6309.45	2.14	1.32	35.46	0.00	5587.42
FTSE All-Share Pharmaceuticals and Biotechnology (8)	18892.85	0.99	17354.58	18708.23	18663.09	14717.07	3.17	0.79	40.19	276.43	15554.93
FTSE All-Share Banks (11)	3105.21	-4.48	2852.39	3250.86	3375.33	2702.25	2.57	5.32	7.31	2.88	2640.48
FTSE All-Share Finance and Credit Services (7)	9071.16	-3.18	8332.58	9369.11	9280.78	12924.27	1.62	1.66	37.25	16.06	11978.94
FTSE All-Share Investment Banking and Brokerage Services (33)	8907.50	-4.10	8182.24	9288.68	9290.13	9755.92	4.43	2.18	10.34	17.43	11990.04
FTSE All-Share Closed End Investments (190)	12482.77	-1.39	11466.41	12658.62	12604.11	12876.16	2.34	9.48	4.51	45.19	7656.38
FTSE All-Share Life Insurance (6)	6876.07	-5.38	6316.21	7267.06	7436.85	7864.58	3.92	2.23	11.44	0.00	8071.24
FTSE All-Share Nonlife Insurance (7)	3524.13	-2.09	3237.19	3599.38	3613.62	3757.11	4.44	1.59	14.19	14.04	7255.16
FTSE All-Share Real Estate Investment and Services (13)	2718.48	-1.81	2497.14	2768.67	2736.03	2453.23	1.79	3.12	17.91	1.71	7976.27
FTSE All-Share Real Estate Investment Trusts (40)	2849.28	-1.65	2617.29	2896.98	2883.07	2502.61	2.80	2.36	15.13	5.48	4185.59
FTSE All-Share Automobiles and Parts (2)	2809.57	-4.32	2580.81	2936.50	2919.80	4726.89	1.81	-6.93	-7.96	0.00	2901.67
FTSE All-Share Consumer Services (3)	2678.83	-4.35	2460.72	2800.61	2833.90	2526.03	0.87	1.68	68.90	22.86	3380.12
FTSE All-Share Household Goods and Home Construction (13)	11738.47	-5.33	10782.71	12399.08	11904.24	13834.20	6.37	1.70	9.24	8.99	9822.06
FTSE All-Share Leisure Goods (2)	19066.96	-2.27	17514.51	19510.69	19024.59	25026.88	2.10	2.46	19.35	157.98	20554.46
FTSE All-Share Personal Goods (5)	28053.64	-3.62	25769.49	29106.84	29212.62	26789.92	1.87	1.78	30.05	16.03	21590.75
FTSE All-Share Media (11)	9507.51	-1.69	8733.40	9671.03	9718.24	8103.24	1.81	1.38	40.16	0.40	6534.78
FTSE All-Share Retailers (21)	2357.95	-2.77	2165.96	2425.23	2384.55	2384.71	1.61	4.15	14.93	0.00	2991.21
FTSE All-Share Travel and Leisure (33)	6767.22	-8.02	6216.22	7357.53	7339.64	8855.57	0.12	-88.92	-9.24	0.00	6954.60
FTSE All-Share Beverages (5)	27957.00	-2.05	25680.72	28543.02	28654.36	22743.10	2.06	1.53	31.64	207.44	22119.19
FTSE All-Share Food Producers (10)	6659.50	-3.57	6117.28	6906.41	6953.69	7507.46	2.27	2.32	18.99	0.00	6327.33
FTSE All-Share Tobacco (2)	33723.35	-0.57	30977.57	33916.87	34794.22	26791.76	6.97	1.52	9.44	172.32	30151.86
FTSE All-Share Construction and Materials (15)	7585.73	-3.51	6968.10	7861.59	7827.36	7500.37	2.47	0.60	67.94	0.00	8967.80
FTSE All-Share Aerospace and Defense (9)	4864.91	-0.15	4468.80	4872.38	4603.99	3766.41	1.95	2.72	18.88	2.10	5812.70
FTSE All-Share Electronic and Electrical Equipment (10)	11372.15	-2.25	10446.22	11634.01	11501.22	11641.99	1.52	2.15	30.62	0.00	11075.02
FTSE All-Share General Industrials (9)	5043.66	-5.28	4633.00	5324.74	5428.97	5286.58	2.57	1.18	32.98	0.00	6466.14
FTSE All-Share Industrial Engineering (5)	15761.07	-2.47	14477.79	16160.10	15983.37	16768.79	1.22	2.57	32.02	0.00	20825.45
FTSE All-Share Industrial Support Services (32)	10613.75	-1.45	9749.57	10770.18	10638.19	9549.46	1.55	2.09	30.82	15.05	11994.80
FTSE All-Share Industrial Transportation (8)	5645.55	-0.98	5185.89	5701.71	5606.95	5109.58	1.53	3.16	20.69	8.24	5811.03
FTSE All-Share Industrial Materials (1)	17378.24	-1.56	606.45	17653.29	18203.40	21504.01	1.83	2.64	20.69	0.00	21504.36
FTSE All-Share Industrial Metals and Mining (10)	8225.64	1.76	7555.90	8083.02	7956.36	7009.60	5.26	2.55	7.44	0.50	11805.75
FTSE All-Share Precious Metals and Mining (6)	12763.74	-3.23	11724.51	13189.48	15578.29	21462.06	6.90	1.58	9.16	63.66	8727.79
FTSE All-Share Chemicals (7)	14011.86	-3.45	12871.01	14512.35	14192.58	16013.58	2.35	2.73	15.57	32.45	13751.10
FTSE All-Share Oil. Gas and Coal (13)	6670.25	-1.29	6127.15	6757.60	6900.29	5189.40	3.35	1.45	20.52	62.72	8174.82
FTSE Sector Indices											
Non Financials (345)	**4982.60**	**-1.40**	**4658.81**	**5053.29**	**5044.91**	**92.43**	**3.15**	**1.47**	**21.64**	**23.66**	**8757.70**

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	7419.85	7374.40	7398.43	7435.47	7472.85	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	6853.01	6846.38	6843.07	6844.90	6832.52	6841.35	6863.96	6883.81	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)
Further information is available on http://www.ftse.com © FTSE International Limited. 2013. All Rights reserved. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under licence. † Sector P/E ratios greater than 80 are not shown. For changes to FTSE Fledgling Index constituents please refer to www.ftse.com/indexchanges. ‡ Values are negative.

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 28		Feb 28
FT Wilshire 5000	44814.51	FT Wilshire Mid Cap	5813.79
FT Wilshire 2500	5735.62	FT Wilshire Small Cap	5485.86
FT Wilshire Mega Cap	5757.80	FT Wilshire Micro Cap	5552.16
FT Wilshire Large Cap	5767.46		

FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Mining	19.13	Health Care Eq & Srv	-1.14	Equity Invest Instr	-12.40
Oil & Gas Producers	16.10	NON FINANCIALS Index	-1.76	FTSE 250 Index	-12.69
Oil & Gas	15.88	FTSE All{HY-}Share Index	-3.04	Industrials	-12.70
Tobacco	15.14	Nonlife Insurance	-3.06	Real Est Invest & Se	-13.68
Mobile Telecomms	13.12	Food Producers	-3.67	Software & Comp Serv	-14.73
Basic Materials	12.47	Consumer Goods	-4.43	Financial Services	-14.82
Telecommunications	11.28	Oil Equipment & Serv	-5.77	Technology	-15.08
Aerospace & Defense	10.13	Media	-6.15	Support Services	-15.52
Fixed Line Telecomms	6.82	Personal Goods	-6.91	Construct & Material	-15.75
Gas Water & Multi	4.18	Financials	-7.46	Industrial Transport	-16.31
Banks	3.17	Real Est Invest & Tr	-7.70	General Retailers	-17.53
Utilities	3.12	Travel & Leisure	-8.07	Tech Hardware & Eq	-18.43
Pharmace & Biotech	1.00	Food & Drug Retailer	-8.08	Industrial Eng	-20.36
Health Care	0.85	FTSE SmallCap Index	-9.19	Electronic & Elec Eq	-21.91
Beverages	31.66	Consumer Services	-9.40	Automobiles & Parts	-22.95
Electricity	-0.05	Beverages	-10.43	Chemicals	-23.90
FTSE 100 Index	-0.74	Household Goods & Ho	-11.07	Leisure Goods	-24.91
		Life Insurance	-11.61	Industrial Metals &	-49.30

FTSE GLOBAL EQUITY INDEX SERIES

Mar 1 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	9328	784.15	0.0	-0.7	-7.4	1233.70	-7.2	1.9
FTSE Global All Cap	9328	784.15	0.0	-0.7	-7.4	1233.70	-7.2	1.9
FTSE Global Large Cap	1799	701.85	-0.1	-1.4	-7.6	1138.01	-7.4	1.9
FTSE Global Mid Cap	2281	1002.54	0.0	0.9	-6.5	1483.63	-6.4	2.0
FTSE Global Small Cap	5248	1055.88	0.5	2.3	-7.7	1496.56	-7.6	1.6
FTSE All-World	4080	460.19	-0.1	-1.0	-7.4	766.62	-7.2	1.9
FTSE World	2654	830.96	-0.1	-0.9	-7.5	1858.08	-7.3	1.9
FTSE Global All Cap ex UNITED KINGDOM In	9033	827.97	0.0	-0.7	-7.7	1278.27	-7.5	1.8
FTSE Global All Cap ex USA	7510	565.05	0.2	-0.7	-5.8	976.95	-5.6	2.6
FTSE Global All Cap ex JAPAN	7938	817.53	-0.1	-0.7	-7.5	1298.07	-7.3	1.9
FTSE Global All Cap ex Eurozone	8666	830.06	0.1	-0.4	-7.2	1278.56	-7.0	1.9
FTSE Developed	2204	760.53	-0.1	-1.0	-7.8	1206.25	-7.6	1.8
FTSE Developed All Cap	5824	794.01	0.0	-0.6	-7.8	1240.96	-7.6	1.8
FTSE Developed Large Cap	885	713.00	-0.1	-1.4	-8.0	1151.15	-7.8	1.8
FTSE Developed Europe Large Cap	237	418.02	-0.3	-1.9	-7.0	805.04	-6.8	2.7
FTSE Developed Europe Mid Cap	350	689.90	0.1	-2.4	-10.5	1154.90	-10.5	2.4
FTSE Dev Europe Small Cap	729	978.47	0.8	-2.2	-11.4	1574.33	-11.3	2.1
FTSE North America Large Cap	255	952.19	-0.1	-1.6	-8.7	1413.23	-8.5	1.4
FTSE North America Mid Cap	411	1223.18	-0.3	1.5	-6.5	1675.36	-6.3	1.6
FTSE North America Small Cap	1330	1225.81	0.3	3.6	-7.1	1613.12	-6.9	1.3
FTSE North America	666	621.39	-0.2	-1.0	-8.3	942.51	-8.1	1.5
FTSE Developed ex North America	1538	293.94	0.1	-0.9	-6.8	547.76	-6.6	2.7
FTSE Japan Large Cap	172	427.64	0.7	-0.4	-6.2	613.52	-6.2	2.2
FTSE Japan Mid Cap	337	593.86	1.5	1.5	-3.3	809.82	-3.1	2.4
FTSE Global wi JAPAN Small Cap	881	666.07	1.9	3.0	-4.3	941.46	-4.1	2.5
FTSE Japan	509	175.52	0.8	0.0	-5.6	282.01	-5.6	2.3
FTSE Asia Pacific Large Cap ex Japan	960	791.32	0.4	-0.4	-5.1	1405.40	-4.8	2.6
FTSE Asia Pacific Mid Cap ex Japan	902	1077.38	0.3	2.0	-4.9	1842.17	-4.7	2.9
FTSE Asia Pacific Small Cap ex Japan	2004	660.56	0.4	0.8	-9.3	1098.76	-9.1	2.3
FTSE Asia Pacific Ex Japan	1862	627.53	0.4	-0.2	-5.1	1184.29	-4.8	2.6
FTSE Emerging All Cap	3504	847.20	0.0	-1.4	-3.8	1431.23	-3.7	2.7
FTSE Emerging Large Cap	914	792.53	0.0	-1.8	-3.7	1346.59	-3.6	2.6
FTSE Emerging Mid Cap	962	1132.44	-0.2	1.0	-1.5	1923.41	-1.3	3.3
FTSE Emerging Small Cap	1628	899.19	0.1	-0.6	-7.2	1454.13	-7.1	2.5
FTSE Emerging Europe	87	250.49	-16.0	-35.9	-39.6	504.72	-39.3	6.9
FTSE Latin America All Cap	258	787.38	0.6	6.0	11.1	1438.33	11.3	5.9
FTSE Middle East and Africa All Cap	332	861.75	1.9	4.5	8.2	1535.79	8.4	2.5
FTSE Global wi UNITED KINGDOM All Cap In	295	354.95	-0.2	-0.5	-1.4	704.29	-1.0	3.1
FTSE Global wi USA All Cap	1818	1066.56	-0.1	-0.7	-8.5	1526.23	-8.3	1.4
FTSE Europe All Cap	1486	488.35	-0.5	-2.9	-8.8	903.23	-8.6	2.6
FTSE Eurozone All Cap	662	468.95	-0.9	-3.5	-9.5	860.60	-9.4	2.4
FTSE EDHEC-Risk Efficient All-World	4080	516.54	-0.1	0.4	-5.4	796.80	-5.2	2.2
FTSE EDHEC-Risk Efficient Developed Europe	587	374.63	0.0	-2.5	-9.3	640.68	-9.2	2.5
Oil & Gas	133	372.66	0.9	2.8	13.7	734.85	14.5	3.9
Oil & Gas Producers	93	362.50	0.3	1.5	14.1	732.00	15.0	4.0

Mar 1 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil Equipment & Services	24	272.90	1.4	1.4	16.6	490.01	17.5	4.1
Basic Materials	368	673.39	0.7	0.7	0.1	1194.91	0.6	3.9
Chemicals	172	887.18	0.1	0.1	-8.4	1528.40	-8.3	2.4
Forestry & Paper	22	294.41	-2.2	-2.2	-3.5	577.84	-3.2	3.0
Industrial Metals & Mining	96	584.27	0.6	0.6	5.6	1068.55	6.2	5.6
Mining	78	1049.08	2.0	2.0	12.7	1945.65	13.8	5.3
Industrials	756	537.68	0.3	0.3	-10.5	842.82	-10.3	1.7
Construction & Materials	143	645.06	0.0	0.0	-12.7	1064.11	-12.7	2.1
Aerospace & Defense	35	894.87	4.0	4.0	11.4	1380.31	11.7	1.3
General Industrials	71	256.11	-0.6	-0.6	-7.7	444.31	-7.2	2.3
Electronic & Electrical Equipment	143	681.83	-0.4	-0.4	-15.2	965.61	-15.1	1.4
Industrial Engineering	149	1015.19	0.2	0.2	-12.2	1585.41	-12.1	1.8
Industrial Transportation	125	1041.61	0.2	0.2	-6.2	1646.87	-6.0	1.8
Support Services	90	583.88	-0.2	-0.2	-17.8	858.17	-17.7	1.2
Consumer Goods	544	635.37	0.2	0.2	-7.8	1048.48	-7.7	2.0
Automobiles & Parts	129	677.21	2.2	2.2	-12.4	1078.88	-12.3	1.2
Beverages	68	776.86	-1.4	-1.4	-3.6	1295.92	-3.5	2.2
Food Producers	133	770.98	0.5	0.5	-1.8	1302.23	-1.7	2.3
Household Goods & Home Construction	61	600.49	-0.6	-0.6	-8.2	990.27	-7.9	2.4
Leisure Goods	48	294.37	0.7	0.7	-7.6	411.18	-7.5	1.2
Personal Goods	90	1010.40	-0.4	-0.4	-12.5	1531.93	-12.3	1.6
Tobacco	15	1020.98	-2.4	-2.4	6.2	2767.23	6.4	5.9
Health Care	337	723.96	-0.2	-0.2	-8.3	1137.89	-8.1	1.7
Health Care Equipment & Services	128	1490.89	-0.3	-0.3	-10.4	1814.04	-10.3	0.9
Pharmaceuticals & Biotechnology	209	463.72	-0.2	-0.2	-6.7	780.50	-6.3	2.4
Consumer Services	446	633.31	-0.1	-0.1	-10.1	896.06	-10.0	1.0
Food & Drug Retailers	68	338.32	0.0	0.0	-1.7	527.82	-1.4	2.3
General Retailers	152	1125.65	0.1	0.1	-12.0	1527.07	-11.9	0.8
Media	83	412.19	0.1	0.1	-12.2	586.52	-12.1	1.0
Travel & Leisure	143	482.47	-1.1	-1.1	-5.9	698.28	-5.8	1.0
Telecommunication	88	149.30	-0.2	-0.2	0.7	340.60	1.2	4.2
Fixed Line Telecommuniations	34	112.92	-0.3	-0.3	0.2	294.43	1.0	5.9
Mobile Telecommunications	54	179.54	-0.2	-0.2	1.0	353.86	1.4	3.3
Utilities	195	330.94	1.0	1.0	-3.6	755.15	-3.1	3.3
Electricity	140	368.48	1.1	1.1	-4.4	829.46	-3.9	3.4
Gas Water & Multiutilities	55	339.50	0.8	0.8	-1.6	798.46	-1.3	3.2
Financials	865	292.58	-1.2	-1.2	-2.5	547.64	-2.3	2.7
Banks	268	228.57	-1.6	-1.6	1.0	473.03	1.3	3.3
Nonlife Insurance	72	349.78	-0.9	-0.9	-0.2	568.50	-0.1	2.9
Life Insurance	52	242.30	-0.9	-0.9	0.3	450.72	0.5	3.5
Financial Services	213	477.65	-0.9	-0.9	-4.3	715.05	-4.1	1.6
Technology	348	591.48	0.2	0.2	-12.8	765.75	-12.7	0.8
Software & Computer Services	189	910.33	0.4	0.4	-14.9	1096.11	-14.8	0.5
Technology Hardware & Equipment	159	513.54	0.0	0.0	-10.4	712.74	-10.3	1.2
Alternative Energy	16	205.48	9.7	9.7	-1.4	293.76	-1.4	0.6
Real Estate Investment & Services	159	319.44	0.2	0.2	-2.9	605.48	-2.9	3.0
Real Estate Investment Trusts	101	525.84	-1.3	-1.3	-11.8	1197.95	-11.6	3.1
FTSE Global Large Cap	1799	701.85	-0.1	-0.1	-7.6	1138.01	-7.4	1.9

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

FTSE 100 SUMMARY

FTSE 100	Closing Price	Day's Change
3I Group PLC	1296	-39.50
Abrdn PLC	195.75	-10.95
Admiral Group PLC	2951	-26.00
Airtel Africa PLC	142.30	0.20
Anglo American PLC	3955.5	132.50
Antofagasta PLC	1571.5	50.50
Ashtead Group PLC	4833	-43.00
Associated British Foods PLC	1798.5	-121.50
Astrazeneca PLC	9224	165.00
Auto Trader Group PLC	663.80	0.80
Avast PLC	632.00	3.40
Aveva Group PLC	2412	-78.00
Aviva PLC	406.60	-13.20
B&M European Value Retail S.A.	610.20	4.80
Bae Systems PLC	746.20	26.60
Barclays PLC	173.22	-9.66
Barratt Developments PLC	565.20	-45.80
Berkeley Group Holdings (The) PLC	3719	-177.00
BP PLC	357.10	-6.45
British American Tobacco PLC	3238	-23.50
British Land Company PLC	512.20	-17.40
Bt Group PLC	183.55	-2.70
Bunzl PLC	2902	-67.00
Burberry Group PLC	1879	-61.00
Coca-Cola Hbc AG	1772.5	-131.50
Compass Group PLC	1619.5	-74.50
Crh PLC	3260	-126.00
Croda International PLC	7246	-238.00
Dcc PLC	5720	-140.00
Dechra Pharmaceuticals PLC	4072	-46.00
Diageo PLC	3658.5	-66.50
Electrocomponents PLC	952.50	-37.00
Entain PLC	1602.5	-81.50
Evraz PLC	102.85	-41.90
Experian PLC	2908	-25.00
Ferguson PLC	11365	-50.00
Flutter Entertainment PLC	9456	-1339.0
Fresnillo PLC	724.80	6.20
Glaxosmithkline PLC	1545	-0.40
Glencore PLC	444.95	2.80
Halma PLC	2382	-29.00
Hargreaves Lansdown PLC	1087.5	-47.00
Hikma Pharmaceuticals PLC	2001	-82.00
HSBC Holdings PLC	495.40	-19.20
Imperial Brands PLC	1641.5	2.50
Informa PLC	573.00	-21.40
Intercontinental Hotels Group PLC	4859	-377.00
Intermediate Capital Group PLC	1610.5	-103.50
International Consolidated Airlines Group S.A.	136.08	-12.48
Intertek Group PLC	5318	-66.00
Itv PLC	105.60	-5.05
Jd Sports Fashion PLC	144.80	-6.20
Kingfisher PLC	302.80	-3.40
Land Securities Group PLC	767.20	-27.00
Legal & General Group PLC	259.30	-17.90
Lloyds Banking Group PLC	45.78	-2.66
London Stock Exchange Group PLC	6372	-202.00
M&G PLC	195.40	-10.40
Meggitt PLC	759.00	4.00
Melrose Industries PLC	133.40	-14.85
Mondi PLC	1468	-103.50
National Grid PLC	1138.2	7.40
Natwest Group PLC	216.50	-13.20
Next PLC	6512	-350.00
Ocado Group PLC	1331	-42.00
Pearson PLC	657.60	9.60
Pershing Square Holdings LTD	2660	-50.00
Persimmon PLC	2322	-91.00
Phoenix Group Holdings PLC	605.00	-13.60
Polymetal International PLC	258.90	-92.30
Prudential PLC	1063	-73.50
Reckitt Benckiser Group PLC	6311	-10.00
Relx PLC	2290	9.00
Rentokil Initial PLC	516.60	8.80
Rightmove PLC	665.00	-7.60
Rio Tinto PLC	5919	128.00
Rolls-Royce Holdings PLC	92.00	-11.50
Royal Mail PLC	387.80	-4.90
Sage Group PLC	716.40	13.60
Sainsbury (J) PLC	266.40	-9.30
Schroders PLC	2987	-77.00
Scottish Mortgage Investment Trust PLC	978.20	-31.30
Segro PLC	1290	-11.50
Severn Trent PLC	2905	29.00
Shell PLC	1951	-21.00
Smith & Nephew PLC	1307.5	-29.50
Smith (Ds) PLC	320.40	-24.20
Smiths Group PLC	1497	-32.00
Smurfit Kappa Group PLC	3498	-208.00
Spirax-Sarco Engineering PLC	11685	-260.00
Sse PLC	1633.5	-71.00
St. James's Place PLC	1305.5	-98.00
Standard Chartered PLC	508.20	-24.60
Taylor Wimpey PLC	141.25	-9.00
Tesco PLC	283.95	-5.80
Unilever PLC	3685	-61.50
United Utilities Group PLC	1084	9.50
Vodafone Group PLC	128.92	-2.52
Whitbread PLC	2701	-223.00
Wpp PLC	1004.5	-53.00

UK STOCK MARKET TRADING DATA

	Mar 01	Feb 28	Feb 25	Feb 24	Feb 23	Yr Ago
Order Book Turnover (m)	111.89	149.52	149.52	149.52	135.78	152.82
Order Book Bargains	1325371.00	1342719.00	1342719.00	1342719.00	1819631.00	887648.00
Order Book Shares Traded (m)	2059.00	2172.00	2172.00	2172.00	2930.00	1508.00
Total Equity Turnover (£m)	6333.15	7683.29	7683.29	7683.29	8326.92	5826.11
Total Mkt Bargains	1692290.00	1709583.00	1709583.00	1709583.00	2445874.00	1194854.00
Total Shares Traded (m)	5822.00	5739.00	5739.00	5739.00	8665.00	5663.00

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

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

UK RIGHTS OFFERS

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

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

UK COMPANY RESULTS

Company		Turnover		Pre-tax		EPS(p)		Div(p)		Pay day	Total	
abrdn	Pre			1115.000	838.000	46.800	37.800	0.00000	7.30000	-	7.300	14.600
Bunzl	Pre	10285.100	10111.100	568.700	555.700	132.700	128.800	40.80000	38.30000	Jul 4	57.000	54.100
Croda International	Pre	1889.600	1390.300	411.500	269.500	230.000	155.100	56.50000	51.50000	Jun 6	100.000	91.000
Fiske	Int	2.856	2.699	0.006L	0.103L	0.100L	0.900L	0.00000	0.00000	-	0.000	0.000
GetBusy	Pre	15.448	14.179	2.335L	1.126L	3.160L	0.810	0.00000	0.00000	-	0.000	0.000
Grand Vision Media Holdings	Pre	5.827	12.034	10.050L	15.095L	0.100L	0.160L	0.00000	0.00000	-	0.000	0.000
Intertek Group	Pre	2786.300	2741.700	413.400	343.900	178.700	153.600	71.60000	71.60000	Jun 17	105.800	105.800
PCI-PAL	Int	5.472	3.190	1.122L	2.254L	1.720L	3.540L	0.00000	0.00000	-	0.000	0.000
Reach	Pre	615.800	600.200	73.300	0.400	0.900	8.600L	4.46000	4.26000	Jun 10	7.210	4.260
Revolution Bars Group	Int	74.134	21.636	4.346	17.708L	1.900	15.700L	0.00000	0.00000	-	0.000	0.000
RIT Capital Partners	Pre			861.900	503.000	550.300	322.400	17.62500	17.50000	Oct 29	35.250	35.000
Rotork	Pre	569.160	604.544	105.931	112.566	9.200	9.800	4.05000	6.30000	-	6.400	10.200
The European Smaller Companies Trust	Int			10.870L	192.589	2.910L	48.000	1.25000	1.02500	Apr 29	3.350	2.790
Travis Perkins	Pre	4586.700	3697.500	305.600	20.300L	120.300	9.000L	26.00000	0.00000	May 13	38.000	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	69.00	8.00	69.46	45.00	18314.0
02/16	185.00	AIM	STG	Strip Tinning Holdings PLC	165.00	-5.10	200.00	160.00	2497.7
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	3.85	0.00	5.00	3.50	5345.1
02/04	50.50	AIM	HERC	Hercules Site Services PLC	48.50	0.60	55.00	47.00	2844.5
02/02	1000.00		HMA1	HIRO Metaverse Acquisitions I SA	1000.00	-1.00	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

FT 500: TOP 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
Occid Pet	45.84	43.73	2.11	4.81	7.52	19.6	14.54
Lockheed	448.94	433.80	15.14	3.49	62.74	16.2	15.22
Northrop	449.91	442.14	7.77	1.76	59.18	15.1	20.21
Hunng Pwr	4.57	4.57	0.00	0.00	0.58	14.5	10.39
Target	222.99	199.77	23.22	11.62	26.64	13.6	4.72
Chevron Corp	148.25	144.00	4.25	2.95	15.85	12.0	10.35
Nutrien	107.61	109.01	-1.40	-1.28	10.91	11.3	17.67
Devon Energy	58.45	59.55	-1.10	-1.86	5.78	11.0	9.99
ConocPhil	97.10	94.86	2.24	2.36	9.27	10.5	6.90
Equinor	299.55	278.45	21.10	7.58	27.90	10.3	18.63
SHOP	881.89	879.92	1.97	0.22	81.06	10.1	-14.19
MTN Grp	197.68	191.60	6.08	3.17	18.06	10.1	13.39
Raytheon	102.79	102.70	0.09	0.09	9.25	9.9	10.70
WalMrtMex	78.10	77.90	0.20	0.26	5.63	7.8	10.73
GenDyn	233.56	234.45	-0.89	-0.38	16.74	7.7	10.00
Vale	92.28	87.54	4.74	5.41	6.38	7.4	7.62
Salesforce	209.25	210.53	-1.29	-0.61	14.12	7.2	-1.64
SouthCpr	71.48	69.39	2.09	3.01	4.58	6.8	13.23
Williams Cos	31.53	31.28	0.25	0.80	2.02	6.8	3.93
NovoB	696.40	682.10	14.30	2.10	42.10	6.4	4.97

Based on the FT Global 500 companies in local currency

FT 500: BOTTOM 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
SocGen	23.24	25.64	-2.40	-9.36	-8.19	-26.0	-31.22
[illegible]	10.60	11.39	-0.79	-6.95	-3.47	-24.7	-28.64
Renault	25.34	28.54	-3.21	-11.23	-8.24	-24.5	-25.62
ING	9.38	10.50	-1.12	-10.70	-2.99	-24.2	-27.95
Surgutneftegas	23.70	24.34	-0.64	-2.64	-7.45	-23.9	-33.52
RollsRoyce	92.00	103.50	-11.50	-11.11	-26.02	-22.0	-18.48
Deut Bank	10.41	11.26	-0.85	-7.57	-2.80	-21.2	-21.73
IntSPaolo	2.12	2.29	-0.18	-7.72	-0.54	-20.4	-20.79
BNP Parib	48.94	52.51	-3.58	-6.81	-11.74	-19.3	-23.65
Lukoil	5000.00	3962.00	1038.00	26.20	-1170.81	-19.0	-28.41
Continental	69.11	76.80	-7.69	-10.01	-15.62	-18.4	-17.81
Gzprm neft	227.39	225.05	2.35	1.04	-48.87	-17.7	-32.07
Cred Agr	10.58	11.47	-0.89	-7.76	-2.22	-17.3	-21.60
Booking Holdings	2109.88	2172.25	-62.37	-2.87	-408.34	-16.2	-13.41
KBC Grp	60.46	64.52	-4.06	-6.29	-11.54	-16.0	-21.87
Swiss Re	81.66	87.82	-6.16	-7.01	-14.42	-15.0	-17.31
BASF	55.52	59.25	-3.73	-6.30	-9.75	-14.9	-15.99
Sberbank	194.08	110.00	84.08	76.44	-33.94	-14.9	-23.89
WPP	1004.50	1057.50	-53.00	-5.01	-170.00	-14.5	-13.11
Engie SA	12.39	14.27	-1.88	-13.19	-2.02	-14.0	-11.82

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

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

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

BONDS: GLOBAL INVESTMENT GRADE

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

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

INTEREST RATES: OFFICIAL

Mar 01	Rate	Current	Since	Last	Mnth Ago	Year Ago
US	Fed Funds	0.08	10-01-2021	0.00-0.25	1.50-1.75	1.25-1.50
US	Prime	3.25	03-16-2020	4.75	5.25	4.25
US	Discount	0.25	03-16-2020	2.65	2.75	1.75
Euro	Repo	0.00	16-03-2016	0.00	0.00	0.00
UK	Repo	0.50	03-02-2022	0.25	0.25	0.25
Japan	O'night Call	0.00-0.10	01-02-2016	0.00	0.00--0.10	0.00--0.10
Switzerland	Libor Target	-1.25-0.25	15-01-2015	-0.75--0.25	-1.25--0.25	-1.25--0.25

INTEREST RATES: MARKET

Mar 01 (Libor: Feb 28)	Over night	Change Day	Change Week	Change Month	One month	Three month	Six month	One year
US$ Libor	0.07714	0.000	0.002	0.011	0.24143	0.50429	0.80471	1.28800
Euro Libor	-0.64957	-0.064	0.000	0.001	-0.61943	-0.58057	-0.55600	-0.48571
£ Libor	0.18063	-0.005	0.000	0.047	0.60190	0.87800	1.30810	0.81363
Swiss Fr Libor				-0.002	-0.77540	-0.75300	-0.70280	-0.55320
Yen Libor				0.000	-0.06375	-0.01138	0.04083	0.04867
Euro Euribor				-0.008	-0.55100	-0.53300	-0.49300	-0.34900
Sterling CDs				0.000	0.50000	0.63000	0.78500	
US$ CDs				0.030	0.22000	0.38000	0.55000	
Euro CDs				-0.090	-0.62000	-0.61000	-0.49000	

Mar 01	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	-0.67	-0.37	-0.77	-0.47	-0.77	-0.47	-0.76	-0.46	-0.64	-0.34	-0.54	-0.24
Sterling					0.45	0.55	0.58	0.68	0.71	0.86	0.90	1.05
US Dollar	0.08	0.28	0.02	0.22	0.12	0.32	0.28	0.48	0.45	0.65	0.77	0.97
Japanese Yen	-0.25	-0.05	-0.25	-0.05	-0.20	0.00	-0.15	0.05	-0.15	0.15	-0.15	0.15

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

BOND INDICES

	Index	Day's change	Month's change	Year change	Return 1 month	Return 1 year
Markit IBoxx						
ABF Pan-Asia unhedged	218.16	-0.06	0.00	-0.74	0.10	-1.68
Corporates(£)	373.08	0.13	-2.69	-5.74	-3.15	-4.76
Corporates($)	-	-	-	-	-	-
Corporates(€)	231.71	0.12	-2.74	-4.07	-3.04	-4.21
Eurozone Sov(€)	246.67	0.37	-1.97	-3.05	-2.29	-4.02
Gilts(£)	340.07	0.31	-1.60	-5.40	-2.42	-3.20
Global Inflation-Lkd	-	-	-	-	-	-
Markit iBoxx £ Non-Gilts	-	-	-	-	-	-
Overall ($)	-	-	-	-	-	-
Overall(£)	342.78	0.27	-1.78	-5.31	-2.50	-3.47
Overall(€)	238.41	0.28	-2.23	-3.35	-2.55	-4.21
Treasuries ($)	-	-	-	-	-	-
FTSE						
Sterling Corporate (£)	-	-	-	-	-	-
Euro Corporate (€)	104.47	-0.05	-	-	0.54	-1.73
Euro Emerging Mkts (€)	688.34	-15.47	-	-	-10.87	-0.56
Eurozone Govt Bond	110.04	-0.19	-	-	-0.34	-0.64

CREDIT INDICES	Index	Day's change	Week's change	Month's change	Series high	Series low
Markit iTraxx						
Crossover 5Y	372.16	28.36	23.73	86.23	387.80	238.24
Europe 5Y	76.40	5.48	5.32	16.93	78.01	47.15
Japan 5Y	61.86	-1.14	2.53	9.36	63.32	45.63
Senior Financials 5Y	85.61	4.60	5.97	17.48	87.98	54.29
Markit CDX						
Emerging Markets 5Y	287.37	38.11	59.76	75.18	287.37	168.20
Nth Amer High Yld 5Y	365.17	6.47	-4.48	26.01	379.61	287.02
Nth Amer Inv Grade 5Y	67.70	1.28	-1.11	7.59	70.55	48.82

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

VOLATILITY INDICES

	Mar 01	Day Chng	Prev	52 wk high	52 wk low
VIX	33.72	3.57	30.15	38.94	14.10
VXD	30.27	2.93	27.34	45.37	2.67
VXN	35.38	2.66	32.72	44.05	18.01
VDAX	39.04	4.87	34.17	93.30	-

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

BONDS: BENCHMARK GOVERNMENT

	Red Date	Coupon	Bid Price	Bid Yield	Day chg yield	Wk chg yield	Month chg yld	Year chg yld
Australia	04/24	2.75	103.46	1.11	-0.11	-0.08	0.15	0.99
	05/32	1.25	91.81	2.15	-0.09	-0.08	-	-
Austria	05/34	2.40	120.43	0.66	-0.03	-0.01	0.35	0.54
	02/47	1.50	113.52	0.89	-0.01	-0.01	0.28	0.48
Belgium	10/23	0.20	101.15	-0.49	-0.09	-0.07	0.11	0.11
Canada		-	-	-	-	-	-	-
	09/24	1.50	99.92	1.53	-0.09	-0.04	0.16	0.89
Denmark		-	-	-	-	-	-	-
	11/23	1.50	103.37	-0.46	-0.13	-0.09	0.09	0.03
Finland	09/24	0.00	100.75	-0.29	-0.07	0.00	0.21	0.29
	04/31	0.75	102.41	0.48	-0.04	-0.02	0.33	0.55
France	05/23	1.75	102.92	-0.61	-0.06	-0.04	0.03	0.00
	05/27	1.00	104.61	0.12	-0.10	-0.07	0.25	0.44
Germany		-	-	-	-	-	-	-
	08/23	2.00	103.94	-0.68	-0.08	-0.05	0.00	-0.01
	08/27	0.50	103.37	-0.12	-0.12	-0.07	0.19	0.38
	08/50	0.00	89.35	0.40	-0.05	-0.05	0.19	0.21
Greece	01/28	3.75	111.93	1.62	-0.03	-0.05	0.67	0.85
Ireland		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	03/24	3.40	107.68	-0.34	-0.08	-0.06	0.16	0.15
Italy	07/24	1.75	103.52	0.24	-0.10	-0.14	0.23	0.32
	08/27	2.05	105.49	1.01	-0.09	-0.15	0.38	0.66
	05/31	6.00	138.18	1.52	-0.08	-0.16	0.41	0.77
	03/48	3.45	121.70	2.33	-0.03	-0.14	0.31	0.76
Japan	04/23	0.05	99.98	0.07	0.00	-0.01	0.02	-0.02
	03/28	0.10	103.99	-	-	-	-	-
	03/35	1.20	110.83	0.35	-0.03	-0.03	0.04	0.00
	12/49	0.40	88.57	0.86	-0.02	-0.01	0.13	0.12
Netherlands	07/23	1.75	103.32	-0.66	-0.08	-0.05	0.00	-0.01
	07/27	0.75	103.99	0.01	-0.10	-0.06	0.24	0.42
New Zealand	04/27	4.50	108.76	2.66	-0.04	0.05	0.19	1.38
	05/31	1.50	89.89	2.75	-0.04	0.00	0.14	0.85
	05/31	1.50	89.89	2.75	-0.04	0.00	0.14	0.85
Norway		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
Portugal	10/23	4.95	108.78	-0.35	-0.05	-0.04	0.21	0.17
	04/27	4.13	118.97	0.37	-0.08	-0.09	0.42	0.45
Spain		-	-	-	-	-	-	-
	10/23	4.40	107.73	-0.22	-0.03	0.05	0.18	0.19
Sweden	11/23	1.50	102.65	-0.06	-0.06	-0.08	0.05	0.20
	12/27	0.13	126.69	-2.19	-0.16	-0.45	-0.27	-0.59
	06/30	0.13	126.69	-2.17	-0.15	-0.47	-0.32	-0.68
Switzerland		-	-	-	-	-	-	-
	06/24	1.25	103.82	-0.42	-0.06	-0.03	0.05	0.28
United Kingdom		-	-	-	-	-	-	-
	07/23	0.75	99.64	1.01	-0.11	-0.16	0.15	0.89
	07/27	1.25	100.88	1.08	-0.11	-0.15	0.05	0.56
	07/47	1.50	97.17	1.64	-0.02	0.11	0.21	0.27
United States	03/23	0.50	99.39	1.09	-0.11	-0.04	0.29	0.92
	03/27	0.63	94.60	1.74	-0.16	-0.09	0.11	0.73
	04/32	3.38	145.22	-	-	-	-	-
	02/50	0.25	108.92	0.13	-	-	-	-

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

GILTS: UK CASH MARKET

Mar 01	Price £	Red Yield	Change in Yield Day	Week	Month	Year	52 Week High	52 Week Low	Amnt £m
	-	-	-	-	-	-	-	-	-
Tr 1.75pc '22	100.62	0.55	-1.79	-19.12	-17.91	5400.00	104.08	100.51	29.68
Tr 0.75pc '23	99.98	0.77	-22.22	-36.89	-18.95	755.56	101.08	99.08	33.73
Tr 0.125pc '24	98.66	0.83	-22.43	-37.59	-21.70	361.11	100.03	97.31	34.12
Tr 2pc '25	104.11	0.81	-24.30	-38.17	-23.58	285.71	119.28	99.56	38.33
Tr 0.125pc '26	97.43	0.79	-24.76	-38.76	-26.17	125.71	99.56	94.88	33.89
Tr 1.25pc '27	102.29	0.82	-23.36	-36.43	-26.13	70.83	105.60	98.96	39.34
Tr 0.875pc '29	99.26	0.98	-21.60	-27.94	-18.33	40.00	103.32	95.65	41.87
Tr 4.25pc '32	129.85	1.16	-18.88	-22.15	-12.78	30.34	138.01	125.04	38.71
Tr 4.25pc '36	137.14	1.34	-15.72	-16.25	-4.96	22.94	147.98	132.25	30.41
Tr 4.5pc '42	156.03	1.39	-14.72	-13.66	-6.08	9.45	169.96	148.84	27.21
Tr 3.75pc '52	159.01	1.37	-13.84	-11.61	-4.86	4.58	180.27	150.30	24.10
Tr 4pc '60	180.58	1.30	-13.91	-9.09	-2.26	3.17	213.01	170.76	24.12

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

GILTS: UK FTSE ACTUARIES INDICES

Price Indices Fixed Coupon	Mar 01	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
1 Up to 5 Years	85.71	0.55	2447.26	0.62	-1.06	0.81
2 5 - 10 Years	174.78	1.88	3646.53	1.73	-1.40	0.97
3 10 - 15 Years	202.74	2.76	4570.41	1.36	-1.77	1.28
4 5 - 15 Years	180.76	2.17	3873.99	1.60	-1.49	1.11
5 Over 15 Years	346.83	4.75	5850.53	1.33	-0.46	1.35
7 All stocks	175.67	2.76	3861.54	1.21	-0.92	1.27

Index Linked	Mar 01	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	323.95	0.75	2.57	7.08	2715.94	2.57	8.27
2 Over 5 years	887.17	4.69	3.49	14.51	6735.35	3.49	14.92
3 5-15 years	552.88	3.08	4.36	10.69	4445.79	4.36	11.53
4 Over 15 years	1163.48	5.37	3.14	15.63	8583.60	3.14	15.87
5 All stocks	787.67	4.26	3.40	13.70	6096.76	3.40	14.19

Yield Indices	Mar 01	Feb 28	Yr ago		Mar 01	Feb 28	Yr ago
5 Yrs	0.83	1.09	0.33	20 Yrs	1.43	1.67	1.29
10 Yrs	1.16	1.42	0.83	45 Yrs	1.24	1.44	1.23
15 Yrs	1.37	1.62	1.15				

Real yield	inflation 0% Mar 01	Dur yrs	Previous	Yr ago	inflation 5% Mar 01	Dur yrs	Previous	Yr ago
Up to 5 yrs	-4.44	2.19	-4.10	-2.94	-4.90	2.19	-4.57	-3.38
Over 5 yrs	-2.35	23.55	-2.15	-1.99	-2.37	23.60	-2.18	-2.01
5-15 yrs	-3.11	9.52	-2.79	-2.51	-3.20	9.53	-2.89	-2.61
Over 15 yrs	-2.25	28.72	-2.07	-1.93	-2.26	28.73	-2.08	-1.94
All stocks	-2.37	21.42	-2.17	-2.00	-2.40	21.50	-2.20	-2.03

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

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

POWERED BY MORNINGSTAR

COMMODITIES

www.ft.com/commodities

Energy		Price*	Change	Agricultural & Cattle Futures		Price*	Change
Crude Oil†	Apr	99.81	6.81	Corn♦	Mar	730.75	33.75
Brent Crude Oil‡		106.53	8.39	Wheat♦	Mar	977.00	49.25
RBOB Gasoline†	May	3.04	0.10	Soybeans♦	Mar	1700.00	51.75
Heating Oil†		-	-	Soybeans Meal♦	Mar	464.20	7.70
Natural Gas†	Apr	4.48	0.08	Cocoa (ICE Liffe)✠	Mar	1658.00	16.00
Ethanol♦		-	-	Cocoa (ICE US)♥	Mar	2491.00	-12.00
Uranium†		-	-	Coffee(Robusta)✠	Mar	2242.00	7.00
Carbon Emissions‡		-	-	Coffee (Arabica)♥	Mar	234.25	0.00
Diesel†		-	-	White Sugar✠		507.20	11.60
Base Metals (♠ LME 3 Months)				Sugar 11♥		18.09	0.45
Aluminium		3480.50	85.50	Cotton♥	Mar	121.62	-1.50
Aluminium Alloy		2550.00	25.00	Orange Juice♥	Mar	146.10	0.00
Copper		10079.50	220.00	Palm Oil♣		-	-
Lead		2419.50	22.00	Live Cattle♣	Apr	141.50	-0.40
Nickel		25245.00	1020.00	Feeder Cattle♣	May	134.88	-
Tin		45890.00	785.00	Lean Hogs♣	Apr	103.18	-0.58
Zinc		3776.50	123.50				
Precious Metals (PM London Fix)					Feb 28	% Chg Month	% Chg Year
Gold		1909.85	25.05				
Silver (US cents)		2435.00	14.00	S&P GSCI Spt	717.75	11.65	51.86
Platinum		1063.00	8.00	DJ UBS Spot	119.44	8.69	40.94
Palladium		2509.00	189.00	TR/CC CRB TR	286.14	3.52	41.40
Bulk Commodities				LEBA EUA Carbon	58.91	-1.98	129.94
Iron Ore		136.50	0.00	LEBA UK Power	1048.00	-37.43	-39.60
GlobalCOAL RB Index		232.50	6.00				
Baltic Dry Index		2069.00	29.00				

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

BONDS: INDEX-LINKED

	Price Feb 28	Yield Feb 28	Yield Prev	Month return	Value stock	Market	No of stocks
Can 4.25%' 26	125.16	-0.921	-0.761	1.33	5.25	78950.81	8
Fr 2.10%' 23	108.79	-3.879	-3.662	0.98	18.05	274788.91	17
Swe 1.00%' 25	125.08	-2.362	-2.211	2.02	35.88	221674.03	6
UK 0.125%' 24	109.94	-4.433	-4.187	1.67	15.24	823894.12	31
UK 2.50%' 24	373.43	-3.992	-3.753	1.65	6.82	823894.12	31
UK 2.00%' 35	307.17	-2.561	-2.493	0.48	9.08	823894.12	31
US 0.625%' 23	104.98	-3.675	-3.341	1.44	47.03	1778845.28	46
US 3.625%' 28	130.17	-1.120	-0.871	0.81	16.78	1778845.28	46

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

BONDS: TEN YEAR GOVT SPREADS

	Bid Yield	Spread vs Bund	Spread vs T-Bonds		Bid Yield	Spread vs Bund	Spread vs T-Bonds
Australia	2.15	-	-	Netherlands	0.01	-	-
Austria	0.66	-	-	New Zealand	2.75	-	-
Canada	-	-	-	Norway	-	-	-
Denmark	-	-	-	Portugal	0.37	-	-
Finland	0.48	-	-	Spain	-	-	-
Germany	-	-	-	Sweden	-2.17	-	-
Ireland	-	-	-	Switzerland	-	-	-
Italy	1.52	-	-	United Kingdom	-	-	-
Japan	0.35	-	-	United States	-	-	-

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

A revolutionary for all seasons

A New York show of drawings and sketches by Jacques-Louis David reveals his talent and his adaptability. By Ariella Budick

Jacques-Louis David's roller-coaster life carried him from troughs of obscurity to teetering heights of power. Nurtured on conventional academic style, he reached for a radical aesthetic, shedding rococo frills for raw muscle. When the French Revolution exploded, he was ready. The austerity of his technique dovetailed neatly with the severity of Jacobin principles, creating a serendipitous feedback loop between stylistic virtue and political purity. Beauty, as he defined it, served the moral good, as the state defined it.

The Metropolitan Museum's magnificent *Jacques-Louis David: Radical Draftsman* traces the full arc of his career, from his formative student days in Rome, through his early neoclassical manifestos, to the propaganda of his revolutionary years, a stint in jail, glory under Napoleon and, finally, exile in Brussels. The unprecedented gathering of works on paper includes loans from two dozen institutions and private collections. Such a concentrated display of skill would be enough to give the exhibition its lustre, but the show also makes blindingly clear how, even as his fortunes tossed and his politics yawed, David clung to the solid beam of his art.

He was a slow starter. Having twice unsuccessfully applied for the Prix de Rome, he threatened a hunger strike, was denied a third time anyway and finally succeeded on his fourth try. That sojourn in Rome defined for him what it meant to be French: a revival of ancient discipline. He filled his days with drawings of the Forum, the Pantheon, nudes and figures costumed as Greco-Roman archetypes, arming himself with an arsenal of memories.

The Met's installation reveals the profound and life-long impact of those sketchbooks. From the beginning, we see the emergence of David's abiding themes, such as patriotic sacrifice and unbreachable divides between male and female worlds. In a sketch for his early painting "Belisarius Begging for Alms" (which triumphed at the Salon of 1781), a blind, impoverished old general reaches out and opens his palm to accept the charity of a passing stranger. That outstretched arm entered the body language of David's tableaux, though its meaning shifted over time. A similar gesture recurs, with more terrible force,

> Even as his fortunes tossed and his politics yawed, David clung to the solid beam of his art

in that world-changing masterpiece, "The Oath of the Horatii" (1784).

The Met tracks the multiyear process of distilling that painting through a series of studies. A virtuosic chalk drawing enshrines the central composition: the cluster of brothers, virile bodies tensed for battle, dominates one half of the frame, while the women liquefy into a swoon on the other. On the male side, stiff arms and steel swords form a tensile structure, electrifying the scene through sinew and contour. A later oil sketch envelops the scene in a rococo blur of hazy oranges and reds, which David eventually rejected.

It's too bad that the final product remains at home in the Louvre, so viewers can't see how ruthlessly he stripped away all softness and superfluities. The colours have turned cold and grey, the light is unforgiving and the men's steely limbs radiate moral clarity. Even architecture has had to sacrifice something to the warriors' high purpose. The oil sketch's Doric columns have now been pruned of their bases, so that pure, unornamented cylinders spring straight from the floor. The storming of the Bastille was still years away, but already "all the required ingredients for revolutionary rhetoric were spectacularly announced in this painting: patriotism, fraternity and martyrdom", writes Simon Schama in *Citizens: A Chronicle of the French Revolution*.

Above: David's 'The Oath of the Horatii' (1784-85). Left: 'The Lictors Bringing Brutus the Bodies of His Sons' (1787)
RMN-Grand Palais/Art Resource, NY; photo: Michel Urtado; The Metropolitan Museum of Art, New York, purchase, Lila Acheson Wallace Gift

Just about any ideology can adopt those lofty principles, and David elevated them, along with integrity and sacrifice, well before he had an agenda to proselytise. More than a dozen studies preceded "The Lictors Bringing Brutus the Bodies of His Sons", which depicts the implacable founder of the Roman Republic, Lucius Junius Brutus, soon after ordering the execution of his two rebellious sons.

At first, the artist experimented with the energy of frenzied crowds. Gradually, he deleted distractions, cutting down the cast of characters, simplifying lines, compressing depth of field. Instead, he illuminated three sets of extremities as if with separate spotlights: a corpse's bare legs, elevated on a stretcher; the mother's arm, extended in longing and accusation; and Brutus's knot of twisted toes, which express the immensity of a father's grief and the ordeals of power. His face is in shadow.

The story of that work highlights art's adaptability. Louis XVI commissioned it, David developed it through the last years of the old regime and it appeared in the 1789 Salon just six weeks after the Bastille fell on July 14, repurposed to promote an utterly different political era. David's allegiance to antiquity made him seem suddenly current, historical allegories freshly relevant, and his paintings struck the architects of the Revolution as both prophecy and justification.

The exhibition culminates in a large pen-and-ink drawing of "The Oath of the Tennis Court", a political manoeuvre that set the stage for violence in the streets. On June 20, members of the newly formed National Assembly defied the king by gathering on a tennis court near Versailles, where they vowed to stay until they'd completed a new constitution. David knew just how to solemnify a contentious meeting: with his signature choreography of straight arms raised at an angle. Thanks to the tremendously popular "Oath of the Horatii", everyone recognised that gesture as an emblem of zeal, unity and loyalty. In 1794, David and his friend Robespierre organised a parade; participants re-enacted the salute, adding ersatz ancient dignity to the marshalled crowds.

When Napoleon assumed control of the nation and of the Revolution's rhetoric, David once again popped up, Zelig-like, as the leader's designated glorifier. Then, too, he responded to a new political reality with old tropes that proved sturdy enough to survive even Napoleon's metamorphoses. The collective raised arm reappears in an oil sketch for "The Distribution of the Eagles" (1809-10), forming the central triangle. Here, that collective oath-taking and the raising of the eagle standard mark France's transition from republic to empire — the betrayal, in other words, of everything David had claimed he would defend with his life. (David's semaphore outlasted the Napoleonic era, too, eventually morphing into the fascist "Roman salute", still popular with today's neo-Nazis.)

One event did overcome his insistence on manly stoicism and theatrical poses: his own arrest in 1794. During two periods of relatively brief and luxurious confinement in the Palais de Luxembourg, he drew his fellow Jacobin prisoners, observing them with a quality that was new to him: empathy. An ink-and-gouache portrait of the naval commander Jeanbon Saint-André shows the fearless warrior in profile on a round medallion, like a hero of antiquity. But he looks stressed-out now, shoulders hunched, hair unkempt beneath a plain black hat, arms folded protectively, his stare less defiant than apprehensive. Artist and subject both survived that round of humiliation and went on to complete their illustrious careers, but at least in this portrait (and others like it) we see what happens when nimbleness fails and certainties have crumbled away.

To May 15, metmuseum.org

'The Prisoner' (c1816-22)
The Cleveland Museum of Art

Game censorship is a murky business

GAMING
Tom Faber

The curious case of *The Sims 4: My Wedding Stories* was never going to be the biggest news coming out of Russia this month. Yet developer EA still managed to froth the gamer community into a mighty uproar on fansite Sims Community and social media, when it announced that it would not be releasing its latest expansion pack in Russia due to the country's so-called "gay propaganda" law, which makes it illegal to show LGBT content to minors.

The Sims has long been a standard-bearer for queer representation in gaming, and the marketing campaign for *My Wedding Stories* focused on a lesbian couple planning their marriage. While a few voices applauded EA for taking a stand, many fans were furious, particularly queer Russian players on Twitter. Many pointed out that EA had misunderstood the law, which is ambiguously worded and inconsistently applied. A week later, EA sheepishly backtracked and said it would release the game in Russia uncensored.

It was a PR mess. Yet controversy around censorship in gaming is becoming increasingly common. As the global market grows, developers endeavour to make their content appropriate for audiences in wildly different cultural contexts. If they release a game with uncensored content internationally, they can face criticism for cultural insensitivity and even upset governments, get banned and lose profits. But censor a game and audiences could argue they're compromising artistic integrity or pandering to repressive regimes. Should developers refuse to censor outright? Or do gamers need to accept that games may take different forms depending on geography?

Since the 1980s, games have been censored in some form. The original game development hubs often censored for one another: American games reduced their violence for Japan and Japanese games toned down sexual content for the US. For the most part, these alterations simply filtered out extremes of sex and gore. But there is another, thornier reason for censorship — when a game developer alters content to appease a government rather than its people.

The epicentre of this debate is China, the biggest gaming market in the world. The Chinese government has always had a volatile relationship with games — consoles were mainly banned between 2000 and 2014, while a ban was introduced last year on under-18s playing online for more than three hours per week. The country's National Press and

> Many 'Sims' fans were furious, particularly queer Russian players on Twitter

Publication Administration also censors and bans games with critical views of the country. And in the hugely popular action role-playing game *Genshin Impact*, the words "Taiwan", "Tibet", "Stalin", "Putin", "Hong" and "Kong" are blocked from the in-game chat.

Two recent incidents ignited the fury of the international gaming community. One was the case of *Devotion*, an acclaimed horror game from Taiwanese studio Red Candle Games, which was pulled from sale because of a background detail comparing Xi Jinping to Winnie the Pooh. More troublingly, in 2019 Californian game publisher Blizzard expelled a professional gamer from a tournament and withdrew his winnings after he expressed support for Hong Kong's pro-democracy movement. The outcry went all the way to US senators, prompting Blizzard to return the prize money and reduce the player's ban. The idea that an American company could act as a political censor for China was a frightening thought.

Governments rarely explicitly tell developers to censor their games. More often, developers self-censor for commercial reasons, entering murky ethical territory. But perhaps more important than whether companies are censoring is the question of why. Developers owe their players transparency. They should state clearly what is being changed and why, so gamers can decide what they want to buy and play. In certain cases, the decision is understandable — such as a mission in *Fallout 3* which was removed for Japanese audiences, in which you can choose to detonate an atomic bomb. In others, such as the Blizzard controversy, gamers end up feeling as if a company has sacrificed its integrity for the sake of its bottom line.

Meanwhile, on an isolated server of *Minecraft* is a digital building called *The Uncensored Library*. This is a project by NGO Reporters Without Borders which noticed that, while many news websites and political blogs are censored in authoritarian countries, *Minecraft* is accessible everywhere. So it stocked this virtual library with censored reporting to prove that games don't merely have to navigate censorship — they can also fight it.

'Sims 4: My Wedding Stories' was the subject of controversy

FT BIG READ. UK ECONOMY

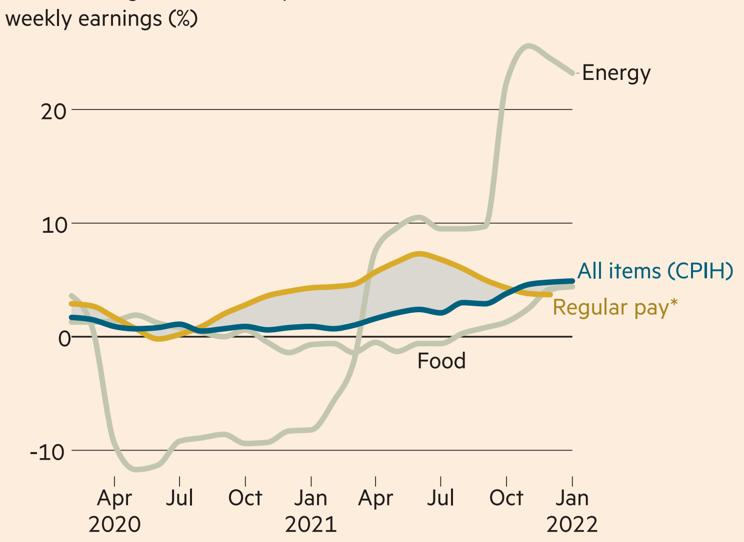
With labour shortages, falling real wages and spiralling inflation, workers from the universities sector to the London Underground are downing tools over pay, cuts to pensions and workplace conditions.

By Bethan Staton, Delphine Strauss and Josephine Cumbo

A new season of strikes

Earnings are falling in real terms as prices rise

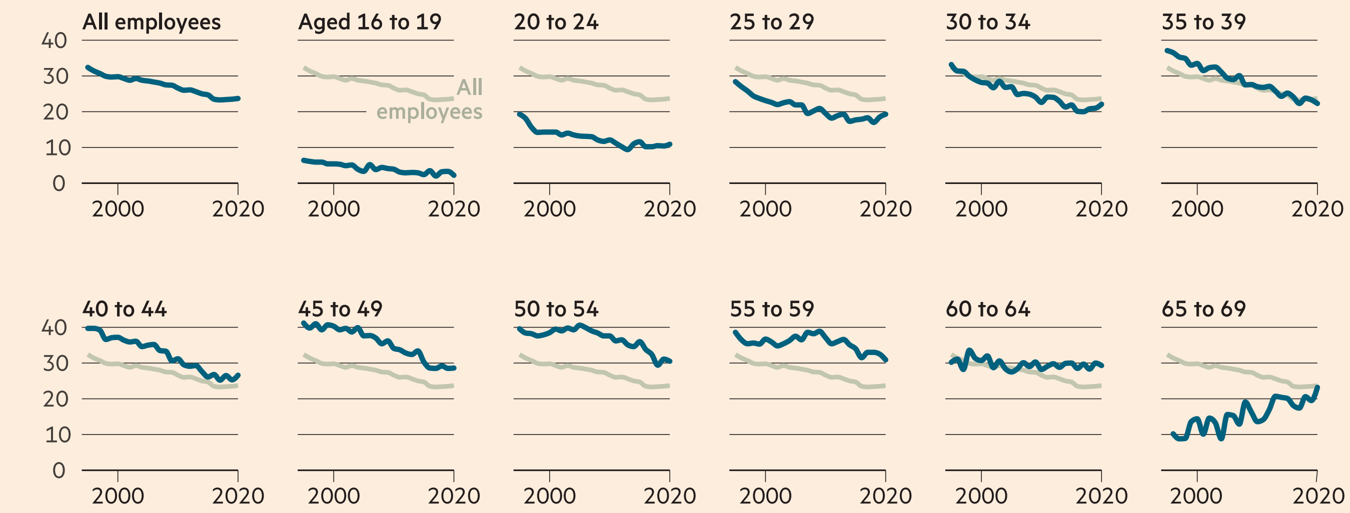
Annual change in consumer price index and sub-indices, weekly earnings (%)



* Seasonally adjusted, three-month average
Sources: Office for National Statistics, FT inflation tracker

Trade union membership has declined for all age groups except the oldest

Membership as a share of all employees, by age group, 1995-2020 (%)



Source: Gov.uk

Like many young university lecturers, Carl lives in a state of constant uncertainty. A teaching assistant in the politics department of a London university, he does not find out whether he will have work until a month before the start of each term, when he is given a schedule of a few hours of paid teaching each week.

To make ends meet, the 32-year-old often pieces together teaching jobs on multiple courses. The time in each contract is rarely enough to adequately prepare for lectures, mark students' work or give feedback, so much of the work is unpaid. "There's a lot of insecurity," he said. "We don't know if we're going to get work next year."

Carl, who asked to be identified by a pseudonym, is one of thousands of staff at dozens of universities across the UK taking part in three weeks of strikes over pay, cuts to pensions and workplace conditions. It is one of the most high-profile and disruptive industrial actions now in the UK.

But university workers are not alone. At a recent strike by academic staff at City, University of London, the lecturers and teachers were joined on the picket lines by security staff, represented by another union entirely. What united them was not just pent-up demand for higher pay and a safer working environment, but also a sense of injustice that is fuelling the country's most confrontational pay bargaining season in years.

For the past two years, industrial action has largely paused while unions focused their energies on saving jobs threatened by coronavirus lockdowns. But in 2022, with employers battling staff shortages and inflation already at a 30-year high, workers in a range of sectors from transport to custodial work to education, on the front lines and in white collar offices, are downing tools.

Londoners experienced this first-hand yesterday when strike action over pension reforms shut down the entire London Underground network. Elsewhere in the rail sector, unions are making plans for national strike action if talks with train operators and Network Rail over a restructuring of the industry break down.

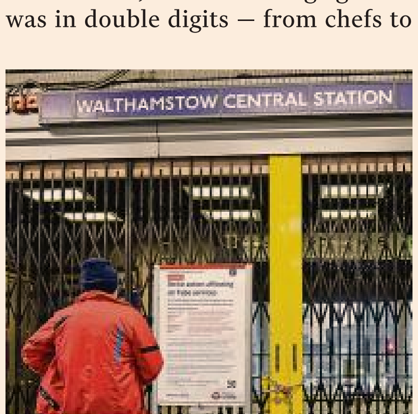
In Wales and Gloucestershire, about 3,000 employees at Airbus factories have voted to take strike action over pay from March, as have workers at a nearby subsidiary of GE Aviation Systems. Outsourced cleaners whose workloads intensified during the pandemic, with little reward, have gone on strike at hospitals, railway stations and at Facebook's London offices.

White-collar workers are also up in arms: 1,500 teachers at the Girls' Day School Trust — a group of 23 private schools and two academies across England and Wales — are striking in a dispute over pensions, and industrial action is threatened at the Financial Conduct Authority, where staff are angry at a transformation plan that will effectively cut pay for many of them.

"People work way beyond what they are expected to do in their job descriptions," says Daniel Shannon-Hughes, a branch rep for Unison, which represents security and support staff as well as workers in the public sector. "Even before inflation started increasing at a rapid rate, our members had seen real terms pay cuts for over a decade. It gets to the point where you have to say enough is enough — it can't go on like this. And we've reached that point."

Some see the resurgence of industrial action as a sign that workers are wielding new bargaining power, especially in sectors facing acute labour shortages and desperate to hold on to staff.

Data gathered by Indeed, the online job search site, shows that advertised wage rates for driving, manufacturing and construction jobs have risen about 8 per cent over the past year. For certain skilled roles, advertised wage growth was in double digits — from chefs to warehouse packers and mental health nurses. "Workers in some occupations are in a position to bargain for higher wages to cushion themselves from the cost of living squeeze," said Jack Kennedy, economist at Indeed.



A strike over pension reforms shut the London Underground yesterday

But for most people, inflation is rising at a much faster rate than wages. The latest official data showed regular pay, excluding bonuses, was just 3.7 per cent higher than a year earlier in the three months to December, similar to pre-pandemic rates. In real terms, average earnings fell and the squeeze is set to worsen in the months ahead as energy prices push inflation to fresh 30-year highs.

This squeeze on living standards is one factor fuelling anger among key workers, who faced extraordinary demands in the early stages of the pandemic — with most employers now unwilling to offer pay deals that would match inflation, because they are facing cost pressures on all fronts. It adds up to a combustible moment in labour relations, and a test for Britain's unions in the most intense period of worker unrest since the 2016 Trade Union Act placed new, onerous limits on their activities.

"For a few decades now, there's been relatively low levels of industrial dispute. What we're starting to see in recent years is an uptick [and] a counter attack from the employers to try and shut off that emergence of labour struggles," says James Eastwood, the branch head of the University and College Union (UCU) at Queen Mary University of London.

'Some workers are in a position to bargain for higher wages to cushion themselves from the cost of living squeeze'

The pension dispute

At UK universities, the core of the industrial action is a dispute over pension benefits provided by the Universities Superannuation Scheme, the main pension scheme provided by UK universities and colleges.

Many of the 200,000 active members regard these benefits as deferred wages that make up for academia offering less in terms of pay and security that would be offered elsewhere.

Members are now facing a potential cut of 35 per cent to their guaranteed pensions, according to union calculations, after a valuation carried out in March 2020 identified a large deficit in the scheme's finances.

The UCU argued the valuation gives a pessimistic view of the scheme's finances and that universities should be able to foot the bill for worker benefits.

Despite its assets recovering to pre-pandemic levels since that assessment, USS said the cuts were necessary because the cost of funding pensions had increased, and because of new pension promises. Universities UK, which represents the sector, said without change pensions would have become "unaffordable" for members and employers.

Jo Grady, the union's general secretary, said strike action was driven by members' "complete disgust and desire to protect what is rightfully theirs", arguing that university bosses were "needlessly attacking" pensions.

But the dispute goes beyond pensions to the overall working environment in the sector. In a series of separately balloted strikes, the union is also demanding pay increases, action on gender and race pay gaps, and an end to the precarious, short-term and zero-hours contracts endemic in the sector.

UCU estimates that its workers have experienced an average 25.5 per cent real terms pay cut over the past 13 years, while almost 90,000 academic and academic-related staff are employed on insecure contracts. In response, the Universities and Colleges Employers Association says over half of academic staff had received a pay increase of between 1.5 per cent and 4.5 per cent this year, and that the sector was reducing its reliance on fixed-term contracts.

A lecturer takes part in industrial action in London last week
Charlie Bibby/FT

When the pandemic hit in March 2020, union members scaled back industrial action. But during a strenuous two years in which staff on part-time contracts worked overtime to move teaching online and support students, while struggling to do the research demanded for career progression in the unforgiving world of academia, the grievances became even more acute.

"The experience of the pandemic has alienated staff even further," Eastwood says. "People were working really hard to keep the show on the road and not getting any consideration back. There was a real sense of disrespect, that our goodwill was not being reciprocated."

Universities, Eastwood adds, require this "goodwill" in the form of additional hours spent marking, supporting students or organising events, for their day-to-day running — work that is "critical to the functioning of the university," he says.

Academics say their goodwill and willingness to provide free labour has run out. Further action could include a marking boycott.

The decision to escalate action is in part in response to the approval, last week, of the pension cuts that prompted this wave of strikes. But it is also prompted by outrage at some universities threatening to withhold pay from striking staff for months beyond the action, in what the UCU said amounts to a "lockout".

As well as withholding pay for strike days, several universities including QMUL and City this month said they could deduct 100 per cent of pay from striking staff who did not reschedule lectures cancelled during the strike. The full pay withdrawal could be imposed for a period of "working to contract" or action short of a strike, scheduled until at least May.

Several other universities threatened to deduct pay in part.

UCEA, which advised universities to make the threat, said they were not only "legally entitled" but "compelled" to do so due to a "duty to students".

The union, however, regards rescheduling activities from strike days as undermining strike action and have refused.

"Rescheduling makes the whole strike powerless," says Grietje Baars, a UCU member and legal scholar at City. "We see this as a strikebreaking tactic that we think might have national repercussions, not just within the higher education sector but more broadly."

City said it would "reserve the right" to deduct 100 per cent of pay. "We respect the right of members of our recognised trade unions to take industrial action, but we will continue to do all that we can within the law to mitigate the impact that action has on our students' education," it said.

QMUL said it would "reasonably request" that staff carry out contractual duties.

The challenges to unions' power

Union members fear universities' actions could set a precedent for more punishing responses from employers. "They're underhand tactics, designed to stop a return to a time when staff could take industrial action to defend their conditions," Eastwood said.

Unpredictable employer responses present a challenge for the UK's biggest unions. New leaders have pledged to prioritise members' interests in workplaces rather than becoming embroiled in party politics, but the hurdles to industrial action have become higher since 2016, when the Conservative government passed controversial legislation that tightened the rules on balloting, with a view to reducing disruption to public services.

Unions' power is also limited by the long-term decline in their membership and their weak presence in many parts of the service sector where low-paid workers are concentrated.

Sharon Graham, the general secretary of the union Unite, ran for office with a promise of practical action to fight job cuts and defend pay. She also set out a detailed manifesto on how she planned to achieve this, including by authorising industrial action ballots whenever cuts to pay or conditions were imposed, and targeting large employers whose standards set the norm for their sector.

Melanie Simms, professor of work and employment at the University of Glasgow, said this new focus on "bread and butter, practical improvements" was a distinct change of tone from the party political focus and backroom deals of the past, but would take time to filter through — while cautioning that unions' influence was weak in many parts of the UK economy. "If you happen to be a binman in Brighton, you're doing all right," she said, referring to a pay rise won by the city's refuse workers after strikes in October. But workers in other low-paid sectors, such as retail and hospitality could be in a very different position, she said, because "the sectors that have labour shortages are not the ones with union representation".

'Across the economy, we are seeing relatively small pockets of quite significant industrial action'

OECD data shows just 26 per cent of UK employees were covered by collective bargaining agreements in 2017 — ahead of the US, where collective bargaining coverage was just 11.6 per cent but well behind the levels seen in major EU economies and the OECD average of about 32 per cent.

Kevin Rowan, head of organising at the Trades Union Congress, gave a similar warning about the limits of unions' power. "Across the economy, we are seeing relatively small pockets of quite significant industrial action," he said.

Because balloting thresholds made it difficult to organise national strikes in the public sector, this would not necessarily lead to a "big wave of industrial action", he said. But he added: "The government should not assume public service workers are happy with their pay or workload issues."

For many workers, industrial action is the only recourse they have left. Jackie, a rail sector cleaner, joined strike action in Westminster last week to demand higher hourly wages and better sick pay from the outsourcing company Churchill. "I have to work 84 hours a week to bring enough money in," she said.

Despite 14 years of service, she said, she had received only 80 per cent of her usual pay when she was forced to take three months off work after catching Covid — she believes, from a passenger who sneezed in her face while she was cleaning a train.

Now, she said, she found herself scouring supermarkets late at night for discounted food to make ends meet.

"A lot of cleaners are single people with children," she said. "You shouldn't have to do that."

FINANCIAL TIMES
'Without fear and without favour'
WEDNESDAY 2 MARCH 2022

The shock and awe of sanctions on Russia

West has shown resolve but measures should be managed carefully

Such is the shock over Russia's invasion of Ukraine that western sanctions have gone much further than seemed likely even a week ago. Not only have several Russian banks been barred from the Swift messaging network, but the EU, US and UK have placed sanctions on Russia's central bank, sharply reducing access to its foreign currency reserves. These moves will not stop Vladimir Putin's war in its tracks. But they will put huge pressure on the Russian economy and squeeze over time the Kremlin's capacity to wage its war.

Since Russia's aggression towards Ukraine in 2014, Moscow has sought to protect its financial system from possibly being cut off from international markets by the US. Its central bank amassed $630bn in foreign exchange reserves and shifted them away from the dollar and towards the euro, China's renminbi and gold. Moscow seemed to believe a disunited Europe, dependent on Russian gas, would not join with the US. But around half of Russia's total reserves are now frozen.

Combined with broader financial sanctions, the impact has been sizeable. The rouble has already fallen by more than during Russia's 1998 default, even though the central bank has doubled interest rates to 20 per cent. Bank runs have not yet materialised but many Russians have been queueing to get hold of cash. While the west is not seeking to target the Russian people directly, the package will squeeze living standards, potentially eroding support for a leader who came to power promising stability after the chaotic 1990s.

Oil and gas payments remain largely excluded from sanctions. That may be regrettable, but for as long as Europe depends on Russian supplies to avoid shortages, sanctions on payments would be pointless. If Moscow's shipments were only partially restricted and not completely stopped, moreover, higher global energy prices would offset some of the cost to Russia.

Some of the measures have been put together at high speed. The west now needs to take stock of their impact. Democracies are seeking both to ensure the Putin regime pays a high price for its increasingly bloody attack, and alter the Russian president's calculus on how far he is prepared to go in his aggression. They must also take into account that imposing a rapid economic collapse would risk provoking a backlash among Russians, who are not responsible for the war, and driving an increasingly paranoid leader into a corner. Sanctions must be calibrated to impose heavy but controlled pressure.

Public messaging around their goal also needs to be united and consistent. Loose talk such as France's finance minister suggesting the purpose was "total economic and financial war against Russia, Putin and his government" can be seized on by the Kremlin. Dmitry Medvedev, former president and now deputy head of Russia's security council, warned that economic wars often turn into real ones. Signalling to the Kremlin is needed over "off-ramps" — or under what circumstances sanctions could start being eased — to avoid both sides becoming locked into an escalatory cycle.

Urgent political and technical planning is required, too, to manage spillover effects on the western financial system. The negative consequences could be unpredictable, with some investors forced to sell their most liquid, safe assets — such as US Treasuries — to compensate for Russian-linked assets being frozen. The effect may also ripple through supply chains in unforeseen ways, with missed payments from Russian trade partners affecting European and US companies. The west has shown unexpected resolve; it will need to show it can take economic pain as well.

A sea change is needed to tackle climate change

Adapting to irreversible effects is as important as curbing warming

Australia is grappling with record levels of rain and flooding that have killed eight people so far. It is just one more example of extreme weather events that are becoming far more frequent. In grimly apt timing, it underscores the point of a UN report this week that laid bare the irreversible damage climate change is already wreaking on the planet: it is worse than was predicted. Even if, by some miracle, countries abide by pledges to keep global warming to 1.5C above pre-industrial levels, some consequences are now unavoidable. That requires a sea change in tackling the climate emergency. While trying to cut emissions is fundamental, just as much focus is now needed on adapting to the inevitable — while it is still possible.

The report by the UN's Intergovernmental Panel on Climate Change, and its stark conclusions, may seem distant doom-mongering when civilians are being killed today in Russia's senseless war against Ukraine. Scenes of conflict on European soil not seen since the 20th century have ushered in equally retrograde calls to revive fossil fuel extraction in the west. Reducing Europe's energy dependence on Russia will be key over the long term but there ought not to be a dichotomy between security and climate. To safeguard both, governments must now redouble efforts to boost renewable energy.

In the short term, the unpalatable truth is that western countries may be forced to look closer to home for their oil and gas just to keep the lights on and avoid political and economic instability. But this is precisely because little more than lip service has been paid by many countries to weaning themselves off their dirty energy habit. More geopolitical risk, more instability and ultimately more conflict is inevitable if they do not try to break this addiction in the longer term.

Not least this is because 40 per cent of the world's population, or as many as 3.6bn people, now live in countries that are "highly vulnerable" to climate change, according to the IPCC report. It concludes that just a small temperature rise could trigger significant risks to life. Unsurprisingly, it is people in the very poorest countries that are most vulnerable. A climate "apartheid" that at the very least could spark mass migration is an all too real prospect. As has been proven true during the pandemic, it is in richer countries' enlightened self-interest to help others.

This will take money. The IPCC tried to sidestep the issue of "loss and damage" — a politically charged term that implies richer nations should pay poorer ones for the damage wrought by historical emissions. Countries led by the US have pushed hard against the concept of climate compensation, and the issue is forecast to be a flashpoint of negotiations during the next COP summit in Egypt later this year.

Regardless, richer countries need to keep promises already made. A 2009 pledge to channel $100bn in both public and private climate finance to poorer nations by 2020 still has not fully materialised. Doing nothing will only push up costs in the long run.

But how money is spent is also key. Climate finance to date has overwhelmingly focused on mitigation rather than adaptation, as the jargon has it. This has meant trying to cut emissions and curb the rate of global warming. As crucial as that still is, finance is needed to help populations adapt to the dangers they already face. That could be in bolstering coastal defences and early warning systems, in improving water efficiency in cities, in better pest control or in rolling out carbon sequestration and storage. These concrete steps should be taken now, before it is too late.

Letters

Email: letters.editor@ft.com
Include daytime telephone number and full address
Corrections: corrections@ft.com
If you are not satisfied with the FT's response to your complaint, you can appeal to the FT Editorial Complaints Commissioner: complaints.commissioner@ft.com

Make funds measure their ESG impact to deter greenwashing

I am writing in response to your Big Read on the risks of a green investing mis-selling scandal ("Green funds risk a red flag", Big Read, February 21).

As sustainable investment moves increasingly into the mainstream, the authors are right to point to the worrying fact that some asset managers and investment platforms are patently not meeting the Financial Conduct Authority's standard of being "fair, clear and not misleading" when describing their environmental, social and governance investment products.

Many of these "responsible" investments, however, do not purport to deliver positive benefit. Instead they merely seek to "do no harm", making clear that the fund holds no investments in, say, fossil fuels or arms manufacturers. This appears to be the case for the interviewee quoted in the article, who was (understandably) disappointed that her Nutmeg ESG fund invested mainly in banks.

Impact investment — which delivers a positive environmental or social benefit alongside a financial return — goes further than merely stating it will not have a negative ESG impact, and seeks not just to deliver positive benefits for stakeholders but to contribute to solutions, for example to the climate crisis or to social injustice.

In this type of investment, managers have to be explicit about the benefit it is seeking to provide (its impact "goal"), it must measure that impact and in this way can be held accountable if it does not deliver.

If asset managers and investee companies purporting to market and run ESG products or strategies had to define and measure their impact, this in itself would be an extremely effective counter to greenwashing.

More transparent labelling of products, enforced by regulators — as the FCA is seeking to deliver with its current work on product disclosures and labelling — will also help investors make a more informed choice.

Investors, whether individuals or institutions, also have a powerful voice if they choose to use it. They have a right to expect asset managers to be able to demonstrate the positive results of their investments, if they have committed to deliver them, and should demand this information when it is not provided.

Sarah Gordon
Chief Executive, Impact Investing Institute
London EC4, UK

Artificial intelligence can help the elderly get online

I have been waiting, frankly, for quite a while for something like Andrew Hill's Work & Careers page column on the challenge faced by older people using digital banking and other services ("'I'm old, not an idiot': the elderly are ill-served online", February 28).

This is a serious problem, but not just for older people. People of any age, and especially non-professionals, spend far too much time interacting with online systems, because of the complexity and ambiguities. True, young and middle-aged nerds enjoy the challenge, but those systems should be simple to use and reliable, and not like electronic games. Artificial intelligence is well capable of helping to solve the problem, provided that the various suppliers find it convenient to do so.

Ideally, a user should type his or her task (paying a bill, buying an aeroplane ticket or enrolling a child in school) on one of the applications we all use today. The system should be interactive so if the question is not complete, the missing data should be requested in an unambiguous way and the dialogue should continue until the question is comprehensible to the system. This is a good application for AI.

At this point the system with its rich and variable AI content should take over and do all the complex and ambiguous tasks that today are requested of the user, and generate the frustrations Hill talks about.

With all the steps completed, the system should then of course deliver the answer, rapidly, correctly and without upsetting our nervous systems.

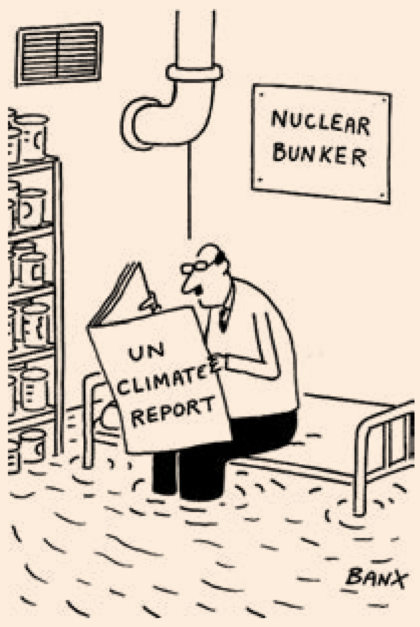
Raffaele Esposito
Rome, Italy

It's sensible to think twice before installing an app

Resistance to downloading of unnecessary or opaque apps is not the preserve of the elderly (Work & Careers, February 28). Data protection and telecom regulators have long been concerned about the security and privacy settings of some apps, such as those which come hidden with advertising and tracking software. Only last week the UK's Information Commissioner reprimanded the Scottish government over the lack of clear information provided to users of the NHS Scotland Covid status app.

This isn't to say all apps are bad — far from it — but it's certainly not idiotic to think twice before installing them.

Jon Baines
Senior Data Protection Specialist
Mishcon de Reya, London WC2, UK



On sustainability, business schools must walk, not talk

Recent reporting by the FT ("Profit to purpose: Business schools find sustainability is hard to teach", FT.com, January 18) shows that business schools worldwide have been eager to take up sustainability. Stakeholders — notably students, business and accreditation bodies — have been important in driving this, urging business schools to reflect on their societal responsibilities and integrate sustainability into their courses, their research and organisation.

While reports suggest there is a lot more sustainability "talk" than "walk" going on in business schools, our research of the websites of 680 business schools — all UN Principles for Responsible Management Education members — indicates there might be a more profound problem.

Just six of them mention the UN's sustainable development goals or depict the SDG logo on their homepage, with only 5.8 per cent of all schools in our database displaying SDG-related information elsewhere on their websites.

A meagre 1.3 per cent mention climate change. Just 11.2 per cent mention sustainability or sustainable development and even business interpretations of these topics are mentioned sparsely. Similar results were found for the deans' messages and mission or vision statements.

This is sobering, as these schools are meant to be the frontrunners.

Lars Moratis and Frans Melissen
Joint Holders of the Chair in Management Education in Sustainability
Antwerp Management School, Belgium
Breda University of Applied Sciences
The Netherlands

Brexit Britain is chance for financial services reform

Reports that ministers and industry leaders are concerned about the pace of the UK's review of financial regulation ("Rees-Mogg urges speedy rewrite of financial rules", Report, February 21) highlight the importance of upcoming proposals for bank and insurer capital for the wider economy.

What these views understate, however, is just how different the UK's financial services regulatory environment will be following its departure from the EU.

The EU makes financial regulation through a legislative process that can take two or more years. Since Brexit, the UK plans to delegate more rulemaking to regulators and ensure that revisions can be consulted on and adopted much more quickly.

So, while the EU may have been first out of the blocks in proposing revisions to Solvency II and the Basel capital framework, it does not necessarily mean that it will cross the finish line first.

Furthermore, not all upcoming initiatives will necessarily be deregulatory. Some, such as the implementation of Basel 3.1, will actually impose new requirements on banks. Deciding how to design these rules in a way that also allows the economy to prosper will require a careful impact assessment — the UK's new, nimbler, regulatory process should allow plenty of time and scope for this.

A resilient financial services industry is central to the competitiveness of the country and the wellbeing of its people.

If regulators, politicians and industry can work together to reform the capital regime to further those broader interests — that will be the real prize.

David Strachan
Head, Emea Centre for Regulatory Strategy, Deloitte, London EC4, UK

Is this Zuckerberg's idea of a joke?

In her Notebook comment (Opinion, February 25) Jemima Kelly describes the depressing future virtual reality dystopia being promoted by a recent Facebook/Meta advert.

She mentions that its soundtrack features the 1980s hit "Don't You (Forget About Me)". That song was originally by a band called Simple Minds.

Could it be that Facebook founder Mark Zuckerberg is having a wee joke about his anticipated customers?

Andy Milne
Edinburgh, UK

Risk for west is backing a strongman into a corner

I do hope there is a truce but like Volodymyr Zelensky, Ukraine's president, I don't have high expectations ("Kremlin battles to keep control of invasion narrative", Report, March 1).

Vladimir Putin's public objective was to "demilitarise" Ukraine and ensure it does not become a member of the EU or Nato. That doesn't look likely. But I don't think Ukraine will meet them halfway either, which presumably means giving away some territory or becoming a "neutral" state. I don't think the Ukrainian people will want that and nor will Nato.

So the possibility is that Putin loses — he comes away with a ruined economy and an isolated nation and a population that is understandably angry. Even if the war stops, there is a "new" normal. There is no collective amnesia.

This is a dangerous scenario — backing a "strongman" into a corner in front of a global audience, Putin defeated by an ex-comic, whom he labelled "a clown".

To defuse the situation Putin has to come away with a perceived win.

Mel Sutton
Glasgow, UK

Shareholder capitalism is opposite of competitive

Geoffrey Owen's opinion piece "Shareholder capitalism works best for society" (Opinion, February 21) illustrates the narrow mindedness of some conservatives today in the Anglo-Saxon world. The idea that a company should pursue its own self interest is not in dispute, as many reactionary pundits on the right would make you believe.

The main criticism of current day shareholder capitalism is that companies can, and often do, by pursuing their interests in a competitive market, become so large that they can then shape the rules of the markets they operate in, be it through the political leverage or the dominant position they acquire, thus rendering these markets the opposite of competitive.

Is the idea that companies should pursue their interests within a legal and societal framework established through democratic institutions really all that strange? Or is it that some people are so detached from reality they start arguing against propositions no one has made?

José Milheiro
Porto, Portugal

Starmer is taking on the Labour left over Ukraine

UK Notebook

by Sebastian Payne

For perhaps the first time, Sir Keir Starmer made Tory strategists sweat. As Boris Johnson announced the first round of British sanctions against Russia last week, the Labour party leader stared down the prime minister. "We must be prepared to go further," he told the House of Commons. "A threshold has already been breached."

After days of soaring rhetoric about tough action if Russia invaded Ukraine, Johnson had misfired. One Tory aide watched Starmer's attack aghast: "There is no way we can look weaker on security than Labour, that's core for us." As the Russian invasion of Ukraine has progressed, the prime minister announced harsher sanctions and military aid, but that initial exchange was striking.

Days later, Starmer confronted the left of his own party. Eleven MPs had signed a letter by the Stop the War campaign group that lambasted the "eastward expansion" of Nato and attacked the British government for "inflaming tensions and indicating disdain for Russian concerns". The Labour leader gave them an ultimatum: unsign the letter or be kicked out.

And they duly did unsign, with one notable exception: Jeremy Corbyn, Starmer's predecessor, who is currently suspended from the Parliamentary Labour party. His refusal to recant his long-held views on foreign policy confirmed, as one Starmer ally put it, that "Corbyn has sealed his fate".

Since becoming leader of the opposition almost two years ago, Starmer has become increasingly tough in his dealings with the party's left flank — to the chagrin of some activists who point out that his 2020 leadership manifesto was aligned to much of Corbyn's avowedly socialist platform. But, piece by piece, that platform is being dismantled.

One senior Labour figure says Starmer's stance on Ukraine has "crushed rather than marginalised" the left. "If they go further, he will go further for sure," they add. "He is operating with zero tolerance."

Two things are driving Starmer. First is a total focus on winning back so-called red wall seats in former English heartlands where defence issues are salient. The party's strategists have concluded they must revert to the stances adopted when Tony Blair led the party and, politically speaking, wrapped himself in the flag.

The numbers show the scale of this challenge. According to pollsters YouGov, the Tories had a 25 point lead over Labour on defence issues at the previous election. That has now sunk to 11 points. But whereas the gap is three points in London, it is 13 points in the Midlands. Labour should be under no illusions about how far it still has to go. Being strong on defence is necessary to win back the red wall, but nowhere near sufficient.

At a meeting last week, at least six members of the shadow cabinet argued that the signatories of the letter should be "booted out", according to one person present. The latter adds: "That was an eye-opener for Keir, but his eyes are already open. Within the rules of the party, he is not going to cut them slack."

There is, however, a risk that having threatened to expel 11 MPs looks heavy-handed and risks distracting internecine conflict at a time of international crisis. Blair, by contrast, tended simply to ignore internal dissidents who, he thought, wielded very little influence.

Starmer's other motivation is simple: power. When he was elected leader, he privately told supporters he may be a figure akin to Lord Neil Kinnock, who fought the left in the 1980s but failed twice at the ballot box. Yet as Johnson's standing has waned due to the "partygate" scandal, Starmer's ambitions have grown. "Keir has had a sniff of power," one shadow minister explains. "He privately thought the odds were too great. Now he can see a route to No 10."

There is a timeworn maxim that divided parties don't win elections. But the same is true of parties that appear distracted or incompetent to voters. In the midst of Europe's worst military conflict in decades, Starmer is focused on ensuring Labour is neither. As he told his MPs on Monday night, "there will be no place in this party for false equivalence between the actions of Russia and the actions of Nato".

sebastian.payne@ft.com

Opinion

The incoherence at the heart of anti-westernism

AMERICA

Janan Ganesh

An oligarch-free London and Côte d'Azur, a more militarised Germany, a Finnish public with eyes for Nato: these are the novelties that have been set in motion over the past week. The ethical rigour of Fifa, which has barred Russia from a World Cup four years after it hosted one, nearly tops the list of surprises.

But not quite. For real exotica, consider the spectacle of a united Washington. No world event since the attacks of September 11 has rallied the west's most divided capital more than the invasion of Ukraine. Where President Joe Biden is attacked by Republicans, it is for not sanctioning Russia early or harshly enough. Marco Rubio and Lindsey Graham are among the GOP senators who have pushed the tough, if pun-marred, Never Yielding Europe's Territory Act ("Nyet"). There are takers of the Kremlin line in the wider conservative movement, no doubt, but few where it matters — on Capitol Hill.

A DC-to-Berlin show of unity and resolve is not the same thing as ultimate victory. There is no guarantee it will even last. But it does expose the central glitch in so much anti-western thought.

In the telling of its most devoted enemies, the west is an all-powerful oppressor, and a decadent pushover. It foists its values on other parts of the world with violent certitude, and fails to stand up for its way of life due to a fog of post-Christian self-doubt. It is a monolith — *the* west — and a paper tiger that will come apart at the folds any minute now. It is arrogantly universalist and cringing in its relativism. It is Napoleon crossing the Alps and it is Jane Fonda in Hanoi.

Both sets of prejudices can't be true at the same time. In reality, each is a hopeless exaggeration. But of the two, the more flattering account — the west as domineering — is the one that is being borne out by events. It is also the one that corresponds with a deeper body of evidence. True, the US made commitments in Syria a decade ago that it didn't keep. Europe was weak and incoherent over the Balkans in the 1990s. But the main follies of the west since the second world war — Suez, Vietnam, Iraq — were examples of too much zeal, not too much timidity.

> In the telling of its enemies, the west is an all-powerful oppressor, and a decadent pushover

The west "contained" the Soviet Union so tenaciously as to alarm the author of that policy, George Kennan. It then took Nato, wisely or not, to the borders of Russia. The surprise of the past week's sanctions and condemnations, then, is that anyone is surprised. Democratic societies can be slow to stir but, if they lacked the capacity for concerted and lasting action, they wouldn't have built up the ascendancy against which Russia and other revisionist powers now chafe.

Not that this misapprehension is new. In 2004's *Occidentalism*, one of those rare works of nonfiction that should be longer, Ian Buruma and Avishai Margalit trace the history of the idea that a westerner is a "timid, soft bourgeois". It was there in Imperial Japan and in al-Qaeda. It simmers away on the wilder edges of American and French conservatism. It is an argument that would almost be worth entertaining if it wasn't so often paired with its exact inverse: a gripe that the west rides roughshod over the interests of non-liberal powers.

The incoherence here is of more than academic consequence. It is what leads enemies of the west to test its mettle so recklessly. Saddam Hussein didn't think the US would make a fuss over its invasion of Kuwait in 1990. To demonise an enemy is one thing. To underrate it at the same time almost guarantees a miscalculation at some point. Prussia, perhaps the most Occidentalist power that has ever existed inside the west, used to doubt the fibre of Britain (too commercial a culture) and France (too bloodlessly rational). Two of those three states still exist. But the winnowing process made killing fields of Europe.

The west can't do much to stop its rivals reading it wrong. But it can choose not to encourage them. Too often, its own public discourse goes along with the trope that democracies lack some ineffable fortitude. As well as being wrong on (most of) the facts, this is succour for the other side. Biden left Afghanistan in chaos last August, and deserved criticism for it. But a hysterical political class spoke of the US as a dilettante that had only given that ill-starred country a brief go, not 20 years and hundreds of billions of dollars.

The latest version of this self-blame is the idea that Ukraine would have been safe had Donald Trump still occupied the White House. It is a notion both perverse (he was impeached, in part, for not making free with armed support for Ukraine) and weirdly messianic. The west's enemies need no help in misunderstanding it.

janan.ganesh@ft.com

Putin's war against liberal democracy

Martin Wolf Economics

A conflict of choice on the children of a peaceful country is not an action we can allow ourselves to forget

Nobody knows how this will end. But we do know how it began. Vladimir Putin has mounted an unprovoked assault on an innocent country. He has committed the worst act of aggression on European soil since 1945 and has justified this vile act with outrageous lies. He has also, for the moment, united the west against him. Putin is not the first tyrant to confuse a wish for peace with cowardice. He has instead roused the anger of western peoples. The result is a range of sanctions on Russia as impressive as it is justified.

Putin may be the most dangerous man who has ever lived. He is dedicated to restoring Russia's lost empire, indifferent to the fate of his own people and, above all, master of a vast nuclear force. Yet resistance, however risky, is imperative. Some will insist that Putin's actions are the west's fault and above all the result of its decision to extend Nato. The reverse is the case. Putin has reminded us why the countries that knew Russian rule best were desperate for Nato's expansion. He has also demonstrated why it was necessary. Europe needed a defended border between Russia and its former possessions. Ukraine's tragedy is to be on the wrong side of that line. It did not pose a threat to Russia, other than by wanting to be free; Russia posed a threat to it.

Sanctions are often ineffective. Those imposed this time will not be. The US imposed sanctions on the secondary market in sovereign debt on February 22. Germany suspended the certification of the controversial Nord Stream 2 gas pipeline on the same day. On February 24, the US, EU and other members of the G7 limited Russia's ability to transact in foreign currencies. And two days later, a number of Russian banks were removed from the Swift payments network, a freeze was imposed on the Bank of Russia's assets and transactions with the central bank were prohibited.

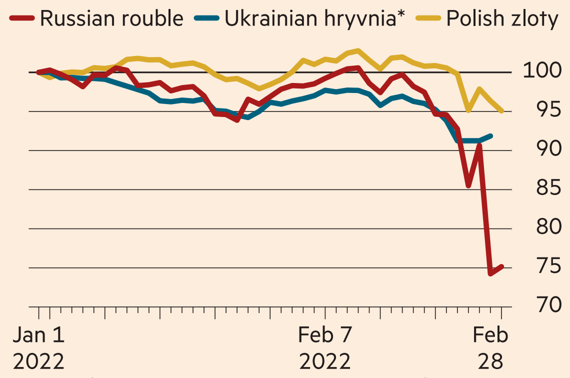
A thorough analysis by the Institute for International Finance sums all this up: "We expect sanctions imposed in recent days to have a dramatic effect on Russia's financial system as well as the country as a whole." A big share of the country's $630bn in liquid reserves will be rendered useless. The central bank has already had to double interest rates. There are runs on banks. With the exception of energy, the economy will be substantially isolated. (See charts.)

The pain will not all fall on Russia. Costs of oil and gas will be high for longer, exacerbating global inflationary pressure. Food prices will also rise. Should Russia cut off its energy exports (at great cost to itself), the disruption would be even more severe. Russian natural gas generates 9 per cent of gross available energy in the eurozone and the EU as a whole. But winter, the season of greatest need, is at least passing.

Beyond these relatively specific effects, the combination of war, nuclear threats and economic sanctions hugely increases uncertainty. Central banks will find deciding how to tighten monetary policy even more difficult. The same will be true for governments trying to cushion the blow of energy shocks.

The rouble has plummeted against the dollar

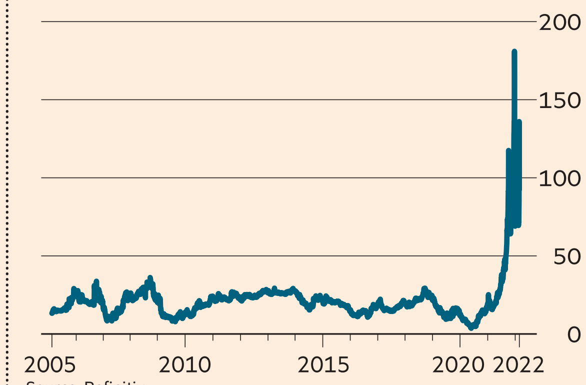
Currencies against the dollar (rebased to 100)



Source: Refinitiv *Ukrainian currency not trading as of February 25 2022

Prices of natural gas have soared to exceptional levels

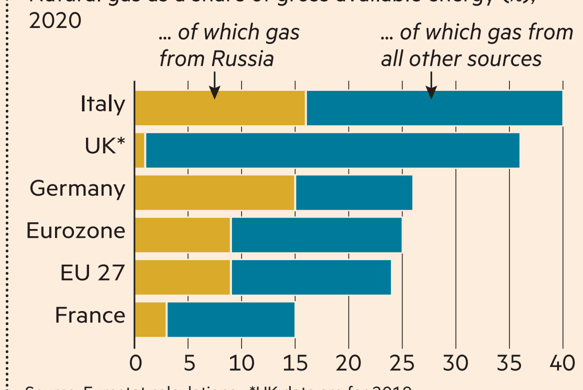
European natural gas prices (€ per megawatt hour)



Source: Refinitiv

Germany and Italy are particularly dependent on Russian natural gas

Natural gas as a share of gross available energy (%), 2020



Source: Eurostat calculations *UK data are for 2019

In the long term, the economic effects will follow geopolitics. If the outcome is a deep and prolonged division between the west and a bloc centred on China and Russia, economic divisions will follow. Everybody would try to reduce their dependence on contentious and unreliable partners. Politics trumps economics in such a world. At a global level, the economy would be reconfigured. But in times of war, politics always trumps economics. We do not yet know how.

> As master of a vast nuclear force, Russia's president may be the most dangerous man who has ever lived

Europe will surely change most. A huge step has been taken by Germany, with its recognition that its post-cold war stance is now untenable. It has to become the heart of a powerful European security structure able to protect itself against a revanchist Russia. This must include a huge effort to reduce energy dependency. Tragically, Europe needs to recognise that the US will not be a reliable ally so long as Donald Trump, who views Putin as a "genius", commands the Republican party. Britain, for its part, has to recognise that it will always be a European power. It must commit itself more deeply to the defence of the continent, above all of its eastern European allies. All this will need resolve and cost money.

In this new world, the position of China will be a central concern. Its leadership needs to understand that supporting Russia is now incompatible with friendly relations with western countries. On the contrary, the latter will have to make strategic security an overriding imperative of their economic policy. If China decides to rely on a new axis of irredentist authoritarians against the west, global economic division must follow. Businesses have to take note of this.

A war of choice on the children of a peaceful democracy is not an action we in the west can allow ourselves to forget. Nor can we forgive those who started it or those who support it. The memories of our own past must forbid it. We are in a new ideological conflict, not one between communists and capitalists, but one between irredentist tyranny and liberal democracy. In many ways, this will be more dangerous than the cold war. Putin holds unchecked and arbitrary power. So long as he is in the Kremlin, the world will be perilous. It is not clear whether the same is true of China's Xi Jinping. But we may yet learn that it is.

This is not a conflict with the Russian people. We should still hope for them a political regime worthy of their contribution to our civilisation. It is a conflict with their regime. Russia has emerged as a pariah ruled by a gangster. We cannot live in peace and security with such a neighbour. This invasion must not stand, since its success would threaten us all. We are in a new world. We must understand that and act accordingly.

martin.wolf@ft.com

Germany's foreign policy shift is about more than Ukraine

Daniela Schwarzer

The German Bundestag last Sunday convened for an extraordinary session to discuss Vladimir Putin's war on Ukraine. It turned out to be a historic occasion: Chancellor Olaf Scholz announced a seismic shift in Germany's foreign, defence and security policy.

From the first moment, the atmosphere was unusual — a combination of solidarity and an urge to act in the face of senseless aggression. There was a standing ovation for the Ukrainian ambassador, Andrij Melnyk, who had previously attracted significant pushback after publicly pressuring the German government to deliver arms to his country.

The turn that Scholz announced was about far more than Ukraine. With a war on the EU's doorstep, the chancellor promised German leadership to fight for democracy and freedom on the European continent.

There was one big difference to his predecessor Angela Merkel's speech at the 2019 Munich security conference which earned her the title "leader of the free world": Scholz's claims were credible as he detailed concrete steps and put his money where his mouth is.

Germany will press ahead to meet Nato's target of defence spending of 2 per cent of gross domestic product and will create a €100bn fund for defence investments. He pledged to modernise the poorly equipped military to prepare it for the conflicts of the future, committed to nuclear sharing, reiterated the need to purchase armed drones and promised investment in resilience.

This budget increase will make Germany the biggest defence spender in Europe and a far more interesting partner to the US. As France re-engages with Nato and Germany commits further resources to EU defence co-operation, there is a real opportunity to strengthen the European pillar in the transatlantic defence architecture.

> Unlike Merkel's claims, Scholz's were credible as he put his money where his mouth is

At a stroke, Scholz settled issues that are complicated for pacifists in his own Social Democratic party and the Greens. It may prove difficult to keep the coalition together when the going gets tougher, although all three parties have moved over the past few months. The chancellor has merely capitalised on this momentum.

The SPD had to revise its attitude towards Russia and the story it has told about the benefits of interdependence. When the war in Ukraine is over, Russia is unlikely to return to being Germany's principal energy supplier.

In the wake of Russian aggression against a peaceful and independent Ukraine, the Greens have had to revise their attitude to hard power, defence spending and German support for military action in its neighbourhood. And the liberal FDP had to accept that the country needs to take on additional debt for matters of national security.

That includes further investment in energy infrastructure. Scholz, finally, laid out how Germany will diversify its energy sources. Since 2014, when Russia annexed Crimea, energy security has been acknowledged to be the Achilles heel of Europe's approach to an increasingly authoritarian Russia. But instead of betting on new sources, Germany built the controversial Nord Stream 2 gas pipeline (although Scholz has now halted the approval process).

The sanctions regime will impose significant costs on Germany not only over gas, but also in other ways. But for now it is standing firm with other EU member states. It will be essential that the government secures public support for this new approach. And, sadly, the moment has never been better. While Scholz was speaking in the Bundestag, more than 100,000 people gathered in central Berlin to demonstrate their support for Ukraine as Russian attacks were reported in real time.

Germany's policy turn might have come late, but it is hugely significant nonetheless. As Green foreign minister, Annalena Baerbock, rightly said: "The rules we set for ourselves must not keep us from living up to our responsibilities. When our world is a different one, our policy must be as well."

One rule, however, has not changed: Germany must not allow itself to be isolated. That is why the government changed course in the 48 hours before Scholz's speech — on energy, sanctions, the supplying of arms and solidarity with Ukraine alongside the rest of Europe and the US. It is also why this new engagement is not only about security for Germany. The government will seek to anchor its new foreign and security policy more deeply in the EU — better to fight for peace and the future of the continent, and to reassure Germany's partners they have nothing to fear from an economic giant becoming a leader in foreign and security policy, too.

The writer is executive director of the Open Society Foundations in Europe and Eurasia

Lex.

Twitter: @FTLex

Ukraine/Russia: sanctions-busting bitcoin

Crypto enthusiasts boast of advancing financial liberty. But digital currencies may now be commandeered by Russia as weapons in the battle to crush the freedom of Ukraine.

Crypto assets could help Russia continue trading with the west even as intensifying sanctions choke off conventional payments channels.

It would hardly be a frictionless switch. Bitcoin, for example, is a volatile transaction medium. The stock of cryptos is also tiny compared with key currencies such as the dollar. The entire crypto market has a market cap of $1.7tn, not much bigger than the Russian banking assets targeted by sanctions, says consultancy Elliptic.

Sanctions busters would need to use non-compliant platforms. Crypto exchanges such as Binance are blocking the accounts of any Russian clients targeted by sanctions, though holding out against Ukrainian requests to freeze all Russian users. Any business that facilitates prohibited transactions can expect severe repercussions. Last September, the US Treasury imposed sanctions on Suex, a virtual currency exchange, for its role in ransomware deals. Last month, the FBI announced it was launching a unit for blockchain analysis and virtual asset seizure.

Law enforcement is helped by gaps in the secrecy around cryptos. Bitcoin users, for example, are linked to a public address. But there are anonymity-enhancing services that can help mask the origin of such deals. Russian cyber-expertise suggests that it is reasonable to expect they are developing ever more sophisticated techniques. Cryptos may play a more tangential role in Russia's struggle with the west than as a replacement for correspondent banking. They provide funding via cyber crime. Criminals in Russia last year stole nearly $400mn of digital assets, says crypto analytics firm Chainalysis.

Cryptos can play a positive role. Witness their use by people fighting for freedom in Ukraine and Myanmar. Yet this role is overshadowed by sanctions-busting potential. The deployment of financial shock-and-awe tactics against Russia will only accelerate those efforts.

Collateral damage is likely. Expect large-scale abuses to put the brakes on crypto assets' uptake by financial institutions.

Cryptos began moving into the mainstream last year. That advance is about to stall.

Toyota/cyber warfare: lamed manufacturing

A cyber attack on a supplier shut down operations at all Toyota's plants in Japan yesterday. Officials fear the hack was a reprisal against Japan for imposing tough sanctions on Russia.

The stoppage will deepen doubts over the carmaker's just-in-time system at a time when cyber warfare is seen as a growing threat. Tech security experts have predicted widespread Russian hacking, though this has not materialised so far.

Toyota halted production at all 14 sites in Japan, which account for about a third of its global output. Kojima, a plastic-parts supplier to Toyota, was hit by a system failure that prevented it from shipping parts, accompanied by a demand for payment. A one-day suspension affects the production of about 13,000 cars. The impact from disruption at a lowly component group shows how vulnerable Toyota's lean manufacturing philosophy has made it. It is tightly integrated with more than 400 suppliers, allowing it to run on as little inventory as possible

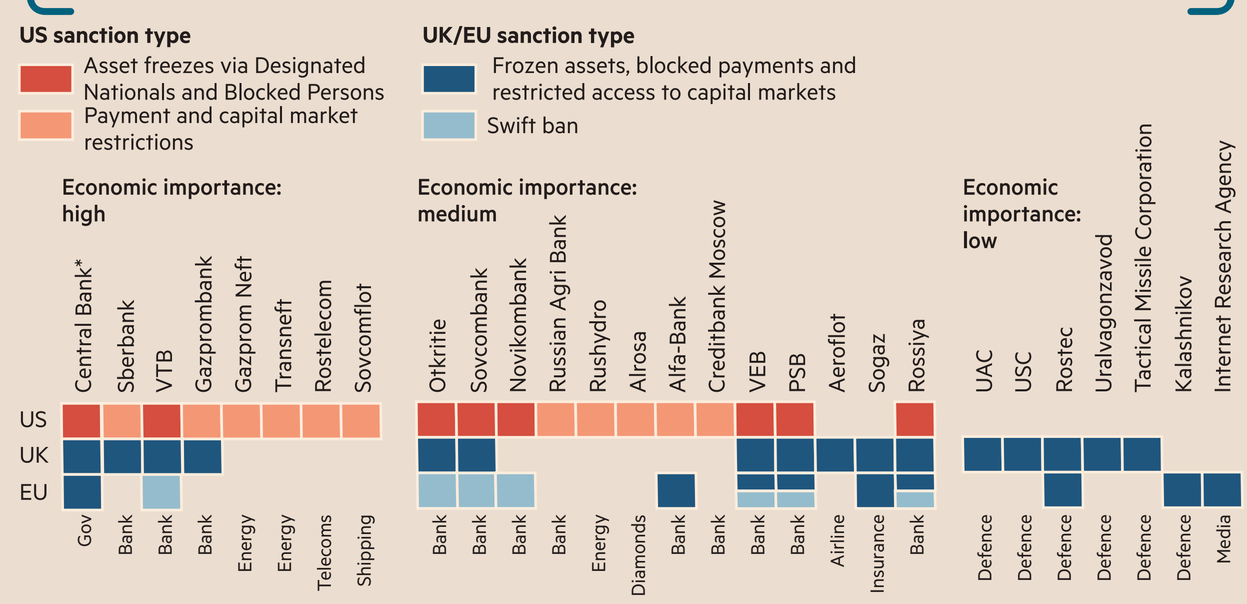
Wafer-thin inventories have already amplified supply-chain disruption. The company cut output forecasts three times last year. Shares are down 12 per cent from a January high.

Japanese business is lagging behind peers in cyber security. System failures at Mizuho Bank this month disrupted ATMs. It was the bank's 11th such incident since last year despite a $3.6bn systems overhaul. Government agencies and game companies have also suffered attacks. A Mizuho-commissioned analysis blamed a culture where staff were reluctant to voice criticisms and struggled to respond to crises. Almost two-thirds of financial groups claimed a lack of sufficient cyber defence personnel, according to a Bank of Japan survey.

The volume of cyber attacks globally more than doubled last year. Cyber crime is estimated to cost $6tn a year. The Ukraine war increases the threat. The consensual culture that made businesses such as Toyota a success may also make them very vulnerable.

Sanctions: compliance challenges

Investors, bankers and professional advisers are scrambling to keep up with proliferating western sanctions on Russian banks, companies and oligarchs. The most significant of these are freezes on the overseas assets of Russia's central bank. Several other banks now face expulsion from the Swift payments system.



FT graphic *National Wealth Fund / Ministry of Finance
Note: Entities selected and ranked by Lex according to their economic significance and/or level of connection to west. Sanctions ranked by severity according to assessment by Lex. Sources: US and UK governments, European Commission, FT research

Sanctions against Russian groups and individuals have unleashed frenzied activity in compliance departments of asset managers and banks.

Complex ownership structures too often defeat Know Your Client checks. Investors holding listed securities have more clarity, even as sanctions become the complex matrix illustrated by the graphic accompanying this article. But they cannot dump many assets when Russian markets are closed.

Meanwhile politicians and savers are putting pressure on pension funds. A group of California senators is urging state agencies, including Calpers and Calstrs, to divest all their Russian assets immediately. That ban would hit securities previously worth more than $1bn. The UK's Universities Superannuation Scheme still has about 0.5 per cent of its £90bn portfolio connected to Russia, despite halving equity investments recently. Asset managers such as Abrdn and Man Group have also been dumping stock.

Disinvestment is especially awkward for passive funds. But exposure is modest, luckily. Russia accounts for just over 3 per cent of emerging market benchmarks run by MSCI and FTSE Russell, and about 30-40 basis points of MSCI's All Country World index.

Russia may be carved out of benchmarks at zero value. Funds are unlikely to salvage much more than this. Even if the Moscow exchange reopens shortly, smooth disinvestment would need open, liquid marketplaces for foreign exchange, settlement, clearing and payment. Not to mention counterparties.

Investors clearly underestimated the chances of war and sanctions. The London stock market yesterday said that BlackRock on Friday raised its stake in Polymetal above 10 per cent. That implies a loss of up to £260mn in the ensuing rout in UK-listed shares of the Russian miner.

Funds such as USS talk about the "moral" case for disinvestment. That raises awkward questions about the west's skewed priorities.

Many emerging market funds that are dumping Russian stocks remain exposed to China. It is equally repressive. Add fiduciary duty and the trilemma becomes painful.

Defence stocks: war regains symmetry

Weapons makers are in vogue again. Russia's invasion of Ukraine represents the return of bloody, conventional warfare to Europe. War is once again symmetrical. Some lobbyists are even pushing for western weapons makers to receive ethical investment status.

In its biggest postwar defence pivot, Germany has announced a massive €100bn fund to modernise its military. It also pledged to raise spending to 2 per cent of GDP, up from the 1.5 per cent it currently spends. Expect other countries to follow suit. Global military spending is entering a secular upswing.

European defence stocks — led by Germany's Rheinmetall — have surged. US companies are set to benefit too.

Shares in Raytheon, maker of the Stinger missile that Germany is sending to Ukraine, have risen 11 per cent since the war began. Lockheed Martin, behind the F-35 fighter jet, is up 15 per cent. Northrop Grumman, which makes attack and surveillance drones, has climbed 16 per cent.

The run up in share prices means Lockheed now trades at 16 times forward earnings, while Northrop and Raytheon are on a multiple of about 18 and 21 times respectively. The three stocks traded on a valuation of about 15 times three years ago.

Defence stocks can push higher still. Many European countries cut military spending after the Cold War in the belief that trade and diplomacy had made war in the region obsolete. Digital technology, AI and cyber security were the new preoccupations.

Russia's invasion of Ukraine signals a recovery in the conventional arms sector. Ethics are fluid. German defence sector lobby group BDSV says the EU should recognise the defence industry as a "legitimate sustainable actor" under ESG taxonomy.

Investment bank Citi is calling for a debate on the "social value" of defence.

It is difficult to see weapons of mass destruction as ethical investments. But that designation would give funds driven out of Russian hydrocarbons somewhere to put their money.

Cheniere/LNG: super cool

"Anybody who wants gas in 2021-22 had better start making deals today," Charif Souki told the Financial Times in 2016. Little did he know that by 2022 a global energy crisis would be brewing.

At the time, Souki was leaving Cheniere Energy after spearheading an expensive bet on exporting liquefied natural gas from the US Gulf Coast. That gambit has paid off spectacularly.

Years ago, Cheniere was spending several billion dollars a year building LNG export terminals with virtually no immediate revenue. Last week, it announced that it expected to hit at least $7bn in operating profits this year.

It has enough cash flow to begin paying down a $30bn debt load as well as start a dividend. Among the challenges of making a long bet on the super-chilled fuel was the risk that fossil-fuel consumption would ease quickly, leaving pricey assets stranded. But with Russian gas becoming untouchable, replacement resources look more attractive than ever.

The US, a longtime net importer of natural gas, began LNG exports just five years ago. The US Energy Department predicts that it will soon have the largest peak export capacity of any nation in the world, going from 11.6 billions of cubic feet per day to 16.3 Bcf/d by the end of 2024.

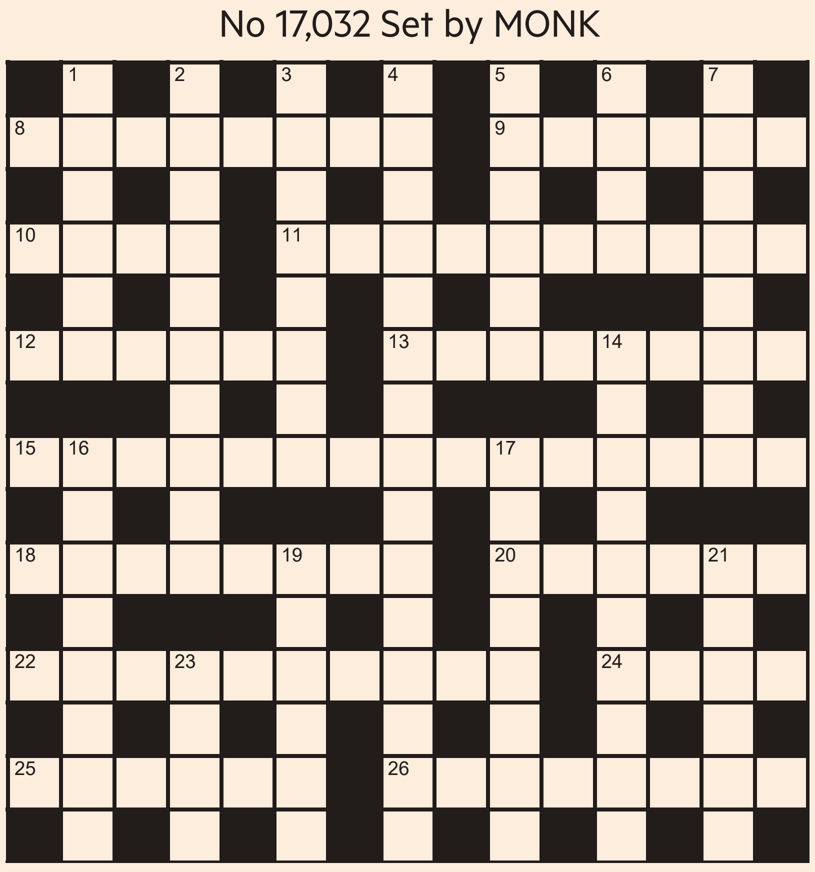
Europe, even before the Ukraine crisis, was worried about how resilient and affordable its gas supply was given that 80 per cent came from abroad. An analysis by consultancy Wood Mackenzie says European benchmark gas futures are trading at about $30 per million British thermal units. Factoring transport costs, US LNG is priced at roughly $10 per million BTU.

Long-term bets take long to pay off. Cheniere spent a decade and $30bn of investment to hit an enterprise value of nearly $70bn. European countries raising LNG import infrastructure are probably years away from capturing the benefits of the US's natural resource boom. But for US investors, politics and profits are nicely aligned.

FT Lex on the web
For notes on today's stories go to www.ft.com/lex

CROSSWORD

No 17,032 Set by MONK



ACROSS

8 I see you can set back a language (8)
9 Empire's last Dark Lord, one effecting escape (6)
10 Metal swizzle stick once seen centrally (4)
11 Shortage that is stopping cynic getting fed bananas (10)
12 Foreign character sick over hot dish (6)
13 Traces martens back to Eurasian ground (8)
15 The effing stupid allowance concerning future IT? (5-10)
18 Cross over to enter function with international food (8)
20 Rules charge should follow offence in hearing? (6)
22 Too much in rat race, orderly that's fired (10)
24 Host owning many branches? (4)
25 Renounce exam success at college (4,2)
26 Assailant formerly working with yours truly? (8)

DOWN

1 Tailless little bird taps shallow drinking vessel (6)
2 Reckoned copper has entered name and date incorrectly (10)
3 Moving slowly, old man being fed by wife Heather (8)
4 Exact definition of "offer" initiated new term for "suggestion" (15)
5 Snapper on line getting no space? (6)
6 Partly overturned degeneracy charge (4)
7 Shakespearean character worked out crime (8)
14 News time for some day workers, maybe those who wait on (10)
16 Monk supposes said year will be terrible (1,4,3)
17 Fish in 50% of dishes after starters of roll and soup (8)
19 Hold old trophy in, ultimately, Pyrrhic victory (6)
21 Band finally together in East-End group of houses? (6)
23 Danger of search lacking force (4)

JOTTER PAD

Solution 17,031