FINANCIAL TIMES

MONDAY 15 JUNE 2020

WORLD BUSINESS NEWSPAPER

USA $2.50 Canada C$3.00

**Progress at risk**
Decades of advances for women at work now under threat — PAGE 12

**The new epicentre**
Poverty and populism fuel Covid-19 in Latin America — BIG READ, PAGE 15

**Worker's block**
Motivating staff once the adrenaline runs out — ANDREW HILL, PAGE 12

# Poor nations borrow more despite debt relief initiative

- $83bn worth of sovereign bonds sold
- Speculative grade issuers step up

**JONATHAN WHEATLEY** — LONDON

Emerging economies have raised more than $83bn through the international bond market since the beginning of April, just weeks after a push by the G20 to offer many poorer nations debt relief.

Data collated by the Institute of International Finance, an industry association, show that developing economies are financing their coronavirus-driven deficits by borrowing more from the global financial markets.

The return to the bond market marks a turnround from the panic that gripped markets in March, when issuance froze and foreign investors withdrew a record $83bn from the 30 largest emerging economies, according to the IIF — outflows that dwarfed those experienced in the financial crisis of 2008-09. Some $23bn has found its way back since, IIF figures suggest.

"There has been a rebound, and funding conditions are normalising," said Robin Brooks, chief economist at the IIF.

In response to the liquidity crunch, the G20 group of wealthy nations offered to let 73 of the world's poorest countries postpone repayments on official bilateral loans until next year. About half the countries have expressed interest and are expected to defer around $12bn of payments.

Although the G20 appealed to banks and bondholders to offer relief on similar terms, as yet there have been no reports of private sector involvement. Some countries have expressed concern that restructuring private sector debt could harm access to financial markets.

Much of the recent issuance has come from investment-grade borrowers, such as Israel, Saudi Arabia, Qatar and the United Arab Emirates, which between them have raised more than $50bn. But non-investment grade countries have also issued bonds, including Guatemala, Paraguay, Egypt, Albania and Brazil.

"In May, we had record issuance of emerging market hard currency debt [issued primarily in dollars and euros]," said Uday Patnaik, head of emerging market debt at Legal and General Investment Management. "In the past two weeks we've seen the market open up for [speculative grade] issuers."

Brazil was among the latest to come to market, raising $3.5bn this month by selling a five-year bond paying interest of 3 per cent and a 10-year bond paying 4 per cent — lower rates than expected.

Analysts attribute the improvement in conditions to the US Federal Reserve's action to pump dollars and extra liquidity into global financial markets.

"The Fed fire hose has reached emerging markets," said Jim Barrineau, head of emerging market debt strategy at asset manager Schroders.

Nevertheless, analysts warn the outlook for economic growth is bleak, which could increase countries' need for finance. The IMF is expected this month to revise downwards its global economic forecasts, having already predicted the worst recession since the 1930s.

**Companies & Markets** page 6

# Battle stations Beijing springs into action after virus cluster emerges

Roman Pilipey/EPA/EFE/Shutterstock

**DON WEINLAND** — BEIJING

Beijing has moved swiftly to counter a new outbreak of Covid-19 in the Chinese capital, after the discovery of a cluster of new infections linked to a large food market.

City authorities at the weekend confirmed 41 symptomatic cases and 46 without symptoms, according to a statement from the World Health Organization. Many had links to Beijing's largest fresh seafood and vegetable market.

A city of more than 20m people, Beijing enforced some of China's strictest travel controls at the start of the pandemic. Until the latest outbreak, the city had gone more than 50 days without a new case.

In the early days of the pandemic, Beijing managed to keep total infections below 600.

The home of the country's top leadership, city managers imposed severe restrictions on entering the capital that included mandatory quarantines in government facilities. Most international flights have been diverted to nearby cities to lower the risk of imported infections into Beijing.

Over the weekend, authorities closed Xinfadi market, above, a sprawling complex that provides most of Beijing's fresh seafood and produce. Several residential compounds were locked down and pop-up test sites were erected to screen people living near the market.

Several cities across China also warned their residents against travelling to the capital.

China has adopted a "zero tolerance" stance toward new cases. Areas that present any new infections have been quickly locked down, often trapping millions of people.

## Briefing

**Ikea set to return furlough money**
The world's largest furniture retailer, Ikea, is in talks about returning money to nine governments, from Europe to the US, that gave it support via Covid-19 furlough schemes.— PAGE 6

**Global debt near wartime peak**
State actions to curb the impact of the coronavirus pandemic have driven global debt levels close to the peaks seen in the second world war, according to Goldman Sachs.— PAGE 6

**Refugee apprentices fear deportation**
Thousands of refugees and asylum seekers enrolled as apprentices across Germany fear deportation because the pandemic has made it harder for their companies to offer them permanent jobs.— PAGE 2

**Spain risks eurozone minister dispute**
Pedro Sánchez, the Spanish premier, has set up a clash with northern eurozone countries by backing Spain's Nadia Calviño, right, to head the eurogroup of finance ministers. — PAGE 2

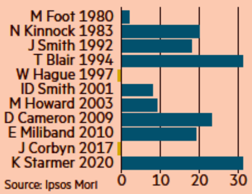
**Telecoms groups eye reviving deals**
Telecoms companies are anticipating a dealmaking bonanza in Europe after an EU court overturned the decision to block the takeover of O2 in the UK by its rival Three.— PAGE 4

**Virus stalls China's North Korea plans**
China's plans for closer ties with North Korea have been interrupted after Pyongyang was forced to close the border with its biggest trading partner because of the coronavirus pandemic.— PAGE 4

**Business education: financial training**
The FT's 2020 ranking of masters in finance programmes, plus: jobs prospects for graduates and how business schools are having to practise what they teach.— SEPARATE SECTION

## Datawatch

**Opposites attract**
Net satisfaction ratings* of leaders of the opposition (%)



Source: Ipsos Mori
* % satisfied minus % dissatisfied

Two months into his role as leader of the opposition, UK Labour leader Keir Starmer has satisfaction ratings that are comparable to Tony Blair and David Cameron, both of whom went on to reach Number 10 from opposition

### Tourism blow poised to damage global economy

Tourism has become an increasingly important economic driver over the past decade, because of the rise of the middle-class in emerging markets and the boom in low-cost flights. However, the industry is expected to record its worst year since 1950, dealing heavy and lasting damage to global growth, economists warn. Some countries are hoping that domestic tourists who remain wary of flying abroad will help to soften the blow.

**Analysis** ▸ PAGE 3

# SoftBank puts $500m in Credit Suisse vehicles that back Vision Fund bets

**ROBERT SMITH AND ARASH MASSOUDI** — LONDON

SoftBank has quietly poured more than $500m into Credit Suisse investment funds that in turn made big bets on the debt of struggling start-ups backed by the Japanese technology conglomerate's Vision Fund.

SoftBank made the investment into the Swiss bank's $7.5bn range of "supply-chain finance" funds, according to three people familiar with the matter. Credit Suisse touts these funds to professional investors, such as corporate treasurers, as a safe place to park their cash in the short-term debt of seemingly diversified companies.

Marketing documents show that these funds have ramped up their exposure to several start-ups in the Japanese group's $100bn Vision Fund over the past year. This has coincided with a disastrous stretch for SoftBank's investment vehicle, that pushed the company to its biggest ever annual loss.

At the centre of the circular flow of funding is Greensill Capital, a Vision Fund-backed company. The London-based firm, which employs former British prime minister David Cameron as an adviser, selects all of the assets that go into the Credit Suisse funds under an agreement dating back to 2017.

The arrangement has effectively allowed SoftBank to provide financial assistance to Vision Fund companies through a fund commingled with other investors. This means external investors also bear the risk of these companies failing to pay their debts, which one person familiar with the arrangement said could prove problematic if they are unaware of SoftBank's interest.

"You thought you were in an arms-length arrangement where all your fellow investors had a pure financial interest," he said. "Imagine you then found that, in fact, some of your co-investors were funding themselves."

SoftBank, Credit Suisse and Greensill Capital declined to comment.

Marketing documents for Credit Suisse's main supply-chain finance fund show that, at the end of March, four of its top 10 largest exposures were to Vision Fund companies, accounting for 15 per cent of its $5.2bn assets. This included companies such as Indian hotel business Oyo and struggling car subscription start-up Fair.

Clients have withdrawn more than $1.5bn from these supply-chain finance funds this year, after a string of Greensill Capital's clients defaulted on their debts in high-profile collapses and scandals.

## World Markets

STOCK MARKETS

| | Jun 12 | Jun 5 | %Week |
|---|---|---|---|
| S&P 500 | 3041.31 | 3193.93 | -4.78 |
| Nasdaq Composite | 9588.81 | 9814.08 | -2.30 |
| Dow Jones Ind | 25605.54 | 27110.98 | -5.55 |
| FTSEurofirst 300 | 1381.50 | 1461.07 | -5.45 |
| Euro Stoxx 50 | 3153.74 | 3384.29 | -6.81 |
| FTSE 100 | 6105.18 | 6484.30 | -5.85 |
| FTSE All-Share | 3379.82 | 3589.76 | -5.85 |
| CAC 40 | 4839.26 | 5197.79 | -6.90 |
| Xetra Dax | 11949.28 | 12847.68 | -6.99 |
| Nikkei | 22305.48 | 22695.74 | -1.72 |
| Hang Seng | 24301.38 | 24366.30 | -0.27 |
| MSCI World $ | 2154.44 | - | |
| MSCI EM $ | 993.59 | - | |
| MSCI ACWI $ | 514.89 | - | |

CURRENCIES

| | Jun 12 | Jun 5 | | Jun 12 | Jun 5 |
|---|---|---|---|---|---|
| $ per € | 1.125 | 1.131 | £ per $ | 0.798 | 0.786 |
| $ per £ | 1.254 | 1.273 | € per £ | 1.115 | 1.125 |
| £ per € | 0.897 | 0.889 | ¥ per € | 120.708 | 124.160 |
| ¥ per $ | 107.330 | 109.745 | £ index | 77.251 | 77.681 |
| ¥ per £ | 134.592 | 139.657 | SFr per £ | 1.193 | 1.225 |
| SFr per € | 1.070 | 1.089 | | | |
| € per $ | 0.889 | 0.884 | | | |

COMMODITIES

| | Jun 12 | Jun 5 | %Week |
|---|---|---|---|
| Oil WTI $ | 36.53 | 39.08 | -6.53 |
| Oil Brent $ | 39.00 | 41.92 | -6.97 |
| Gold $ | 1738.25 | 1700.05 | 2.25 |

INTEREST RATES

| | price | yield | chg |
|---|---|---|---|
| US Gov 10 yr | | 0.70 | 0.03 |
| UK Gov 10 yr | | 0.21 | 0.01 |
| Ger Gov 10 yr | 104.24 | -0.44 | -0.03 |
| Jpn Gov 10 yr | | 0.01 | 0.01 |
| US Gov 30 yr | 131.11 | 1.45 | 0.01 |
| Ger Gov 2 yr | 104.85 | -0.68 | -0.02 |

| | price | prev | chg |
|---|---|---|---|
| Fed Funds Eff | 0.05 | 0.05 | 0.00 |
| US 3m Bills | 0.17 | 0.17 | 0.00 |
| Euro Libor 3m | -0.38 | -0.37 | -0.01 |
| UK 3m | 0.20 | 0.20 | 0.00 |

Prices are latest for edition Data provided by Morningstar

A Nikkei Company

No: 40,426 ★

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

25100>
6 14919 00001 5

FT Weekend

Get **How to Spend It**, inside FT Weekend on Saturday and Sunday 20-21 June

## CORONAVIRUS ROUND-UP

### Belgium and the Netherlands among first EU states to reopen borders

The European Commission has called on all EU member states to reopen their internal borders to EU nationals from today.

Belgium and the Netherlands are among those doing so. Pedro Sánchez, Spain's prime minister, said yesterday the country would open borders to travellers from other Schengen countries as of June 21 — with the exception of Portugal, with which the border will open on July 1. Poland reopened its frontiers on Saturday.

### Iran president issues warning as daily deaths top 100 for first time since April

Iran's daily death toll from the coronavirus has surpassed 100 for the first time since mid-April.

Sima Lari, Iran's health ministry spokeswoman, said yesterday 107 patients had died in the past 24 hours.

President Hassan Rouhani warned at the weekend that restrictions, which the country began to relax on April 11, could be reimposed if people failed to observe social distancing, noting that compliance with the rules had declined to 20 per cent this month.

### India to use train carriages as wards

A woman in India is tested for Covid-19. The government yesterday said it would give New Delhi 500 rail coaches equipped to care for patients as hospital beds run short.

### Southern states underpin jump in US cases as they reopen for business

The number of US virus cases increased by more than 25,000 over the weekend, with southern states reporting the sharpest rises as they reopened for business.

In Texas, cases climbed by 2,331 to more than 86,000, according to the Covid Tracking Project. Alabama and South Carolina also went up and in Florida — a jump of 2,581 on Saturday broke records for a third day in a row.

More than 2m people have tested positive for Covid in the US and more than 100,000 have died of the virus.

### Beijing fears second wave after spike in cases centred around fresh food market

Beijing is braced for a second wave of coronavirus after the Chinese capital was forced to lock down several residential compounds, quarantine 100 people and close a large market in response to new locally transmitted coronavirus cases.

City authorities at the weekend confirmed 41 symptomatic cases and 46 without symptoms, according to a statement from the World Health Organization. Many had links to the Xinfadi market, which provides most of Beijing's fresh seafood, fruit and vegetables.

### Cases so far

7,835,340

— and 431,140 deaths, as at 1800 BST on 14 June

Source: Johns Hopkins University, CSSE

Read more at ft.com/coronavirus

Finance post

# Spain backs Calviño to head eurogroup

Contest comes as bloc negotiates €750bn coronavirus recovery plan

**DANIEL DOMBEY** — MADRID
**MEHREEN KHAN** — BRUSSELS

Pedro Sánchez, Spain's prime minister, openly declared his support for the country's economy minister to head the eurogroup, setting up a clash with northern eurozone capitals over one of the region's top jobs.

Speaking at his regular weekend press conference, Mr Sánchez said Madrid would be "very interested" in Nadia Calviño, Spain's deputy prime minister for the economy, leading the group of eurozone finance ministers which helps co-ordinate policy among the members of the single currency.

The contest to replace Mário Centeno, who last week announced his resignation as Portugal's finance minister and eurogroup chief, is particularly significant since it comes as EU member states negotiate a huge coronavirus recovery plan, of which Spain expects to be one of the main beneficiaries.

Spain has been one of the European countries hardest hit by the pandemic in human and economic terms. The central bank warned last week that its economy could contract by as much as 15 per cent this year.

"The government of Spain would logically be very interested in this kind of responsibility," Mr Sánchez said when asked about Ms Calviño's prospects of leading the eurogroup.

He added that were Ms Calviño to accede to the post, "it would be recognition of her work, and of Spain, and very good news for our country as well".

Ms Calviño — a former top European Commission official — has not yet officially announced her candidacy, saying on Thursday that Mr Sánchez would make the decision on whether she would run, "taking into account the public interest".

Mr Sánchez's Socialist-led government and Ms Calviño in particular have been champions of the recovery fund, mounting a campaign for it to make grants rather than loans. Such ideas have been taken up in part by the European Commission's €750bn proposal for the fund, which will be debated at an EU summit this week.

Other candidates to replace Mr Centeno as eurogroup chief next month include Pierre Gramegna and Paschal Donohoe, the finance ministers of Luxembourg and Ireland.

Ms Calviño is a polarising figure among eurozone finance ministers, according to some EU diplomats, who said she would need to battle to win round sceptics in northern and eastern European capitals. The debate over the recovery fund has largely divided the bloc between north and south, although Germany now supports the idea of grants and Olaf Scholz, the country's Social Democratic finance minister, is an ally of Ms Calviño.

One EU diplomat said some northern European countries would try and form an "anyone but Calviño" alliance by rallying around a rival candidate — either Mr Gramegna or Mr Donohoe. Officials also pointed out that Spain currently holds two major EU posts, hurting Ms Calviño's chances. Josep Borrell, a former foreign minister under Mr Sánchez, is the EU's top diplomat, while Luis de Guindos, economy minister in a previous Spanish centre right government, is vice-president of the European Central Bank.

Candidates have until June 25 to submit their names. The appointment will be made during next month's eurogroup meeting.

'It would be recognition of her work, and of Spain, and very good news for our country as well'

Europe. Migration

# Refugee apprentices fear for future in Germany

Trainees risk losing right to remain if they cannot find alternative training scheme

**JOE MILLER** — LOHNE

Murtaza Tahmasebi is weeks away from realising his dream. The 21-year-old, who arrived in Germany after fleeing Iran, where he belonged to a persecuted Afghan minority, has been an apprentice at Nordluft's factory in the northwest of the country for two years and will soon sit his final exam.

But due to the economic effects of Covid-19, the family-owned company — which specialises in industrial ventilation technology and supplies carmakers such as Volkswagen — is unable to hire him, leaving him at risk of deportation. "I have a lot of anxiety about the future," said Mr Tahmasebi, who was stateless when he arrived in Germany. "I want to stay here, but with everything that is going on — it makes me very worried."

Mr Tahmasebi's residency permit, or *Aufenthaltsbescheinigung*, is contingent on him being in an apprenticeship scheme, and its renewal largely depends on his finding permanent employment once qualified.

He is not alone. The Association of German Chambers of Industry and Commerce (DIHK), which has supported the placement of refugees and asylum seekers in apprenticeships, has raised the alarm, warning insolvencies could leave apprentices stranded.

More than 55,000 refugees and asylum seekers are enrolled in training schemes across Germany. Those whose right to remain is tied to their roles are allowed just six months to find an alternative apprenticeship or job if they lose their positions.

Yet the precise number of those in Mr Tahmasebi's position is unknown. "The extent to which the legally regulated period is sufficient in the current economic situation to find a new training place or job . . . will probably only become apparent in the coming months," the DIHK said, although some estimate tens of thousands could be at risk.

Murtaza Tahmasebi at Nordluft's factory. His residency permit is contingent on him being in an apprenticeship scheme — Joe Miller

Netzwerk, a government-funded agency that assists German businesses with employing refugees, is compiling data on the phenomenon, after several of its members expressed concerns.

"In our discussions with companies, we keep hearing that if an apprentice is en route to becoming a qualified, tax-paying member of society, it doesn't make any economic sense to deport him," said Netzwerk consultant Lorenz Lauer.

The six-month period was sufficient when Germany's economy was booming, Mr Lauer added — especially in the hospitality sector, where foreign nationals make up more than 34 per cent of the workforce, according to the industry federation Dehoga.

The opportunities for qualified refugees to find a job at another firm in the sector in which they trained are also shrinking. Nordluft said it could not hire any new staff while almost 80 employees were enrolled in *Kurzarbeit*, the state-sponsored furlough scheme.

Andreas Zimmermann, a manager at restaurant chain MoschMosch, which has previously trained and employed refugees, told the FT he was unable to do so "because I have several employees in *Kurzarbeit*".

Some exceptions are being made. Katja Kortmann, director of the Hotel Esplanade in Dortmund, said she received permission from Germany's Federal Employment Agency to hire the company's apprentice, a 31-year-old Syrian refugee, despite having furloughed 36 employees after the hotel was forced to close at the end of March.

Those looking to begin training, however, are likely to find fewer vacancies.

This month, the government said it would support companies with a subsidy of €2,000 for each apprenticeship position they maintained and €3,000 for each additional place.

Yet as of May, the number of open positions contracted by 9 per cent, according to official statistics.

By the end of the year, the total number of places will probably have dropped to 480,000, from 525,000 last year, according to Hubert Ertl, vice-president of the Federal Institute for Vocational Education and Training.

"We expect that the people who usually already find it difficult to get a training place in a company will probably be hardest hit," Prof Ertl said.

Industry voices are already warning that a reduction in the number of trainees will leave companies with a shortfall of qualified staff when the economy recovers.

At Nordluft, personnel chief Ulla Kampers said the company, which is trying to help Mr Tahmasebi find another permanent job in the industry, will continue to run an apprenticeship scheme and employ refugees.

Before the Covid-19 crisis began, she pointed out, the local town of Lohne had an unemployment rate of just 3 per cent, and finding staff was a challenge. "Germany needs refugees," she said. "I hope most people realise that by now."

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
Southwest Offset Printing, San Jose, CA
Sun Publication Inc, Lakeland, FL
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# 09159460.

**Reprints** are available of any FT article with your company logo or contact details inserted if required (minimum order 100 copies). One-off copyright licences for reproduction of FT articles are also available.
For both services phone +44 20 7873 4816, or alternatively, email syndication@ft.com

US policing

# Black Lives Matter strives to keep campaign for justice local

**KADHIM SHUBBER AND**
**KATRINA MANSON** — WASHINGTON
**CLAIRE BUSHEY** — CHICAGO

When the mayor of Washington recently painted "Black Lives Matter" on a street near the White House, it drew the ire of local civil rights activists operating under the name.

Muriel Bowser had intended the outsized yellow letters as a rebuke to President Donald Trump. But the small group of campaigners operating under the BLM name in the nation's capital joined with others to add a riposte targeted at the mayor and her police chief: "Defund the Police."

The exchange highlighted the dynamics of the decentralised protest movement that has swept the US since the killing of George Floyd in police custody in Minneapolis, in what has been the most significant civil unrest in the country for decades.

Tens of thousands of people have marched under the Black Lives Matter banner, but they include a myriad of activist and community groups and local officials, all responding to a highly fragmented system of policing in a country with 18,000 different police departments.

The number of actual Black Lives Matter representatives at any particular protest can be quite small. NeeNee Taylor, an organiser with the Washington chapter of Black Lives Matter, said her group was made up of "literally five black women and one black male".

"That's what we have that does this powerful work," Ms Taylor said, adding that she hoped the momentum would last. "Don't make it a moment. Make it a movement."

A broad coalition of antiracism activist groups have emerged in the US since 2013 in response to a spate of killings of black Americans that drew national attention, including the shooting of Trayvon Martin in Florida by George Zimmerman, who was acquitted on murder charges.

Black Lives Matter was the most prominent, with largely autonomous branches across the US and overseas that worked with local community groups. In 2014, activists including BLM formed an umbrella group called the Movement for Black Lives.

After Floyd's killing, these networks have provided a language of radical change, social media platforms for organising, and logistics for the protests. They liaise with volunteer medics, legal observers and scouts who watch out for trouble from the police, troublemakers in their ranks or far-right opponents.

The influence of BLM has its limits. Ms Taylor for example, said her organisation opposed such widely used US protest tactics as "die-ins" — sit-ins that mimic prone bodies — and the chant: "Hands up, don't shoot." To BLM, they are unduly submissive.

Another variable in the protests is the fragmented nature of US policing. Cities and other local authorities determine budgets, rules of conduct, and accountability for their departments. Though Floyd's name has become known worldwide, activists in every corner of the US also carry the names of lesser-known victims for whom they seek justice.

Muriel Bowser had intended the yellow letters as a rebuke to Trump

"Policing is very local. It is either happening on the state, or happening on the city or county level," said Dominique Hazzard, an organiser in Washington with BYP100, a youth activist group that works alongside Black Lives Matter.

In Washington, Ms Taylor and her fellow organisers have offered to mentor new groups of young activists — such as DC Freedom Fighters — urging them to build an organisation that will include local people in their leadership and take on local issues. Ms Taylor said such groups should lead marches not on Congress, but on the city council and the Metropolitan Police Department, overseen by Ms Bowser, the district's African-American mayor.

"Trump is not [Washington] DC's problem," Ms Taylor said. "Our problem is Muriel Bowser and Chief [Peter] Newsham."

# Tourism blow from pandemic set to linger in global economy

## Countries turn to domestic travellers as they race to reposition themselves

**VALENTINA ROMEI** — LONDON

The recovery in tourism is slow in Italy because 'there are no foreign visitors' — Alessia Pierdomenico/Bloomberg

The blow that coronavirus has dealt to the global travel and tourism industry is set to do lingering damage to the world's growth, economists warn, as areas that are dependent on visitors for income struggle to reposition local economies.

Tourism's contribution to the global economy has risen over the past decade as the expansion of the middle class in emerging economies, particularly in Asia, translates into a rise in spending on leisure activities, including travel. The growth of low-cost travel has also boosted tourist numbers.

Globally, tourism accounts for one in four of all jobs created over the past five years, on a net basis, and about 10 per cent of economic output, according to the World Travel and Tourism Council.

"The pandemic triggered an unprecedented crisis for the tourism economy, which has significant implications for international service trade, jobs and growth that support many local communities and regional development," said Lamia Kamal-Chaoui, director of the OECD Centre for Entrepreneurship, SMEs, Regions and Cities.

Although tourism has long benefited some advanced economies, such as Greece, Italy and Spain, it has become a key source of growth in recent years for many developing economies. In some places, including South Asia, southern Europe and Central America, it contributes up to 30 per cent of the economy.

But with global tourism this year expected to put in its worst performance since 1950, in terms of the number of travellers and revenues, that source of growth has exposed vulnerabilities.

Globally, the number of foreign visitors fell by 57 per cent in March compared to the same period last year, said the UN World Tourism Organization; that means there were 67m fewer tourists. In April, air passenger demand plunged 94 per cent compared to April 2019, said the International Air Transport Association (Iata).

Forecasts for tourism-dependent countries have been revised sharply downwards this year, and now they face losses of up to 10 percentage points of gross domestic product compared to pre-pandemic estimates. The IMF has warned that tourist-dependent areas such as the Caribbean face their deepest recession in more than half a century.

But as countries scramble to help their devastated industry, some areas have begun to develop potential solutions, starting with domestic tourism. The beach town of Sanya, on Chinese holiday island Hainan, points the way. Hotel occupancy rates are rising faster than in other Chinese tourist areas, found STR, a hotel research company.

"The suspension of international flights makes Sanya one of the best options for China's beachgoers," said Susan Zhang, at the Ritz-Carlton Sanya.

Although the hotel's bookings are still down on normal levels and it is offering promotional discounts, the occupancy rate has "at least doubled" since it bottomed out in February when pandemic-related shutdowns in China peaked.

"China has started to see a recovery as lockdowns have lifted and hotels reopened across the country," said Thomas Emanuel, STR director. "This is being driven by domestic demand, predominantly from the leisure traveller."

Other countries, such as Mexico, are also trying to boost domestic tourism to replace lost international visitors.

There are signs it is starting to work; globally, visits to websites of hotels and other accommodation rose 11 per cent in the last week of May, compared to the previous week, found internet tracker SimilarWeb, but visits to airlines' websites rose only 1 per cent. The number of global domestic flights rose more than international flights in May, Iata added.

"Due to the number of international travel restrictions that remain in place, a domestic trip will be viewed [by many] as a more convenient option . . . More remote and rural destinations are likely to benefit, at least in the first stages of recovery," said David Goodger, at Oxford Economics, who said the pandemic's impact was "like nothing the modern [travel] industry has experienced before".

So regions which rely more on foreign tourism are likely to find it harder to recover, analysts warn.

"Both the US and destinations in Asia enjoy more domestic travel than international, meaning they are better placed to recover than destinations in Europe, where international travel accounts for the lion's share," he added.

The next step in recovery is regional tourism, and a number of east Asian and Pacific countries are negotiating to form corridors or "bubbles" in which visitors might travel without facing quarantine.

In Europe, there are also hopes for a domestic tourism revival, and the EU is pushing for the return of intraregional travel, which accounts for about 85 per cent of European arrivals.

"We are starting to see some bookings, but the recovery is slow as there are no foreign visitors," said Marina Lalli, president of Italy's national association of travel and tourism. "This summer tourism will be mainly local . . . We are not expecting international arrivals to go back to 2019 levels until 2023."

> 'Due to the number of international travel restrictions that remain in place, a domestic trip will be viewed [by many] as a more convenient option'

Even if countries succeed in boosting domestic and regional tourism, the sector will not regain its former strength in the short term, analysts warn.

The pick-up in domestic tourism helped boost occupancy rates in May compared to April, but hotels are still at less than half their capacity in China, one-third in the US and just above one-tenth in Europe, said STR.

That leaves places like Hainan, where tourism has already begun to return, needing to adjust to a smaller number of visitors.

"Sanya needs to change the mindset that the purpose of the tourism industry is to have as many visitors as possible," said Tang Xiaoyun, deputy director of China Tourism Academy, a think-tank under the culture and tourism ministry.

He added: "Given the lingering concerns of a second outbreak, [the] local authority needs to control the number of visitors and focus on creating a better travelling quality."

*Additional reporting by Sun Yu in Beijing and John Reed in Bangkok*

INTERNATIONAL

EU court ruling

# Telecoms groups consider reviving mergers

Markets in Sweden, Spain and Denmark tipped for consolidation

**JAVIER ESPINOZA** — BRUSSELS
**NIC FILDES** — LONDON

Bankers and lawyers acting for some of Europe's largest telecoms companies are anticipating a bonanza of deals on the back of a court ruling last month that dealt a blow to the EU's strict competition policy.

At the end of May, the General Court, the EU's second-highest court, overturned the European Commission's 2016 decision to block the £10.25bn takeover of O2 in the UK by its smaller rival Three, owned by Hong Kong conglomerate CK Hutchison.

The ruling has potentially paved the way for a new round of consolidation in the sector, antitrust experts said. Its impact could also stretch into other industries, including steel, where the merger of Tata Steel and Thyssenkrupp was thwarted by the commission last year.

Markets where there are still four mobile telecoms operators, such as Denmark and Sweden, have been tipped as candidates for consolidation.

Hutchison, which struck deals to buy mobile rivals in Italy, Ireland and Austria before it was thwarted in the UK, is a potential consolidator, according to one person with direct knowledge of the company's strategy. Hutchison declined to comment.

Margrethe Vestager, EU competition commissioner, was opposed to a telecoms merger in Denmark in 2015. This led to the abandonment of a deal between Telia and Telenor to merge in the country, say people with knowledge of the matter. Spain, which has five telecoms participants, is also seen as a candidate for consolidation, particularly after MasMovil, the country's fast growing challenger brand, agreed to be taken private by three large funds.

"The ruling will have knocked the commission's confidence and it has called into question how aggressive they can be when blocking mergers," said Sara Ashall, counsel in the antitrust practice of Shearman & Sterling in Brussels. "It has also given companies more confidence to try to merge."

Brussels finds itself in a weakened position after the General Court ruled that the EU made "several errors of law" in assessing the potential harmful effects to consumers of the Three-O2 deal, and that it had not provided enough evidence that prices would rise or competition would suffer.

"Businesses with big deal plans will rejoice that the commission's wings have been clipped, and mobile operators will be dusting off the consolidation plans they shelved four years ago," Ms Ashall said.

The ruling comes at a difficult time for the EU and commission. European companies find themselves exposed to state-backed foreign takeovers given the recent drop in valuations triggered by lockdowns. Meanwhile, Paris and Berlin, among others, have urged Brussels to allow creation of so-called European champions after the blocked merger of France's Alstom and Germany's Siemens last year.

The commission has two months to challenge the decision. Officially, Ms Vestager has kept her options open. "We are urgently analysing the judgment," she told journalists a day after the ruling. "There are a lot of new legal issues being raised in the judgment, and on the basis of that of course we will decide whether to appeal or not."

*Additional reporting by Michael Pooler*

Trade flows. Lockdown

# Life stalls on the border with North Korea

Sanctions and pandemic dash Chinese city Dandong's hope of deals with hermit kingdom

**CHRISTIAN SHEPHERD AND EMMA ZHOU**
DANDONG, CHINA

The Chinese border city of Dandong has seen its GDP fall in the first quarter of 2020; Below: Tourists on a boat trip on the Yalu river in Dandong — Greg Baker; Fred Dufour/AFP/Getty

At this time of year in the Chinese border city of Dandong, travellers board boats to catch a glimpse of the pariah state on the other side of the Yalu river. The more adventurous even visit the hermit kingdom for a few days.

But, nearly five months after the coronavirus pandemic forced Pyongyang to close its border with its largest trading partner, the city at the heart of Beijing's plans for closer relations with North Korea is all but deserted.

Guides hawking photo shoots wearing traditional Korean hanbok robes sit idle near the entrance to the "Broken Bridge". The former railway line from China to North Korea, which was bombed by American jets during the 1950s Korean war, is now Dandong's main attraction.

"Dandong has seen its quiet days, but nothing like this," said Rowan Beard, a tour manager for Young Pioneer Tours. "With zero tours happening it's put my business into slumber mode." Another tour operator added: "Without the border open, there's no reason for people to come."

The freeze in cross-border trade between Pyongyang and Dandong has worsened the impact of UN sanctions, which limit the purchase of almost all goods from North Korea, analysts said.

It has also damped hopes of North Korea's economy opening up and frustrated Beijing's efforts to coax Pyongyang towards market reforms in return for scaling back its nuclear programme.

With the diplomatic process losing steam, China no longer prioritises the issue, said Zhao Tong, of the Carnegie-Tsinghua Center in Beijing. "The lack of better infrastructure is not the bottleneck; it's still sanctions," he added.

In Dandong, the impact of these tensions has been exacerbated by North Korea's closure of its 880-mile border with China in January to minimise the risks of a coronavirus outbreak.

While it is two months since Dandong had a confirmed case of Covid-19, cross-border activity has only tentatively restarted and tourists still cannot visit.

Pyongyang claims to have no cases of the virus, a statement international experts have questioned, especially as the country has such a low testing capacity. North Korea's economy is showing signs of a serious downturn, with its leader demanding more cash from the moneyed class to weather the shock.

"There is no doubt that the epidemic has further halted China and North Korea's normal economic dealings," Zhang Huizhi, a scholar at Jilin University, said. "North Korea has sacrificed economic growth to counter risks from the spread of Covid-19."

Despite Mr Kim's push for "self-reliance", China remains North Korea's economic lifeline and imports coal, textiles and rare earths through Dandong. Sanctions had already crippled trade flows, but Covid-19 made matters far worse. The number of vehicles crossing the Yalu river were far below normal levels when the Financial Times visited this month, with no more than four trucks crossing at one time.

A 2018 summit between Mr Kim and President Donald Trump sparked hope in Dandong of strong trade ties across the Yalu and a possible economic windfall. Property prices in Dandong soared about 50 per cent.

Grand infrastructure projects — such as a $350m bridge linking Dandong's New District to North Korea's Sinuiju and multiple free trade zones — were meant to strengthen Dandong's economic relationship with its neighbour across the border. But many of the free trade zones are almost entirely empty of North Korean traders.

"There was never much hope to start with, [because] these are Chinese initiatives designed in a China-centric way," said Théo Clément of the Ecole des hautes études en sciences sociales in Paris.

"The economic co-operation pattern they imply, where North Korea supplies low value added goods and China sophisticated goods, is precisely what Pyongyang has been trying to avoid."

'There is no doubt the epidemic has further halted China and North Korea's normal economic dealings'

The coronavirus lockdown stopped what little momentum there had been. Dandong's GDP fell 11.8 per cent year on year in the first quarter of 2020.

"The instability of policy from the other side [of the Yalu River] means local investors show little interest [in buying houses] compared to investors from elsewhere in China, who are more easily excited when they hear news about North Korea opening up," said Li Leiyuan, a freelance real estate agent.

One source of hope has been activity on the North Korean side of the unfinished New Yalu River bridge, where bulldozers have been laying tarmac since April after years of inactivity, according to photographs taken by locals and satellite imagery.

But residents doubt the bridge will resolve longstanding problems with cross-border trade. "Whether it opens or not, it won't make a big difference to business," said the owner of a shop selling taps and tiling grout, who declined to give her name. "They are too poor."

Africa

# Mnangagwa accused of Zimbabwe opposition crackdown

**JOSEPH COTTERILL** — JOHANNESBURG

Zimbabwe's former finance minister has accused President Emmerson Mnangagwa of seeking to destroy the country's main opposition party under the cover of the coronavirus pandemic, following sweeping arrests and a raid on its headquarters.

The crackdown on opposition activity comes as the government faces criticism over the alleged improper award of contracts worth millions of dollars for the supply of medical equipment to battle the spread of Covid-19.

"They want to destroy the MDC," Tendai Biti, a senior figure in the opposition Movement for Democratic Change, told the Financial Times from a police holding cell. Mr Biti was arrested this month with other MDC officials after they protested the seizure by security forces of the party's headquarters.

Following his release, Mr Biti accused Mr Mnangagwa of targeting the opposition to hide his administration's failure to rebuild the state and address rampant corruption. "It is an unprecedented level of extraction and aggrandisement," Mr Biti said.

Mr Mnangagwa came to power after the 2017 coup that unseated Robert Mugabe, with a pledge to reopen the economy and end the former dictator's repressive rule. As he loosened coronavirus restrictions on Friday Mr Mnangagwa said that "the liberalisation of our economy must continue in earnest".

But critics say Mr Mnangagwa has done little to revive economic activity, and opposition leaders accuse the former intelligence chief of running a dictatorship, like Mr Mugabe.

This week UN experts called on Mr Mnangagwa to "end a reported pattern of disappearances and torture that appear aimed at suppressing protests and dissent." In particular they want a full investigation into the abduction of three female MDC activists last month.

The National Security Council, including security ministers and army chiefs, gave an unprecedented press conference on Wednesday to dismiss rumours of an imminent military coup.

Public anger was fanned further this week by allegations published in the Zimbabwean press that government contracts for the supply of coronavirus testing and prevention kits were improperly awarded and looted.

Hopewell Chin'ono, an independent Zimbabwe journalist, and other media outlets have alleged, citing leaked documents and invoices, that the government was overcharged for the equipment and that the suppliers, including UAE-registered pharmaceuticals trading group Drax International, were not transparently appointed.

Mr Chin'ono and other Zimbabwean media accused Collins Mnangagwa, the president's son, of involvement in the contracts — claims that he has denied.

Drax International also denied wrongdoing and said in a statement that it had never done business with any member of the Mnangagwa family.

Mr Mnangagwa's office did not respond to a request for comment.

The government cancelled the contract with Drax this week and opened an investigation into the alleged fraud.

The World Bank has forecast up to a 10 per cent contraction this year for the Zimbabwe economy.

Regional tension

# Nepal snubs India with Himalayan claim

**AMY KAZMIN** — NEW DELHI

Nepal has snubbed its powerful neighbour India by adopting a new political map depicting disputed mountain territory as its own in the latest example of rising geopolitical tensions in strategic areas of the Himalayas.

Under the changes, which come as New Delhi and Beijing are vying for influence in the region, the Nepali parliament this weekend passed a constitutional amendment altering the country's official map to depict the Lipulekh Pass and other disputed areas as definitive parts of Nepal.

The Nepali legislators' move prompted an angry response from New Delhi, which denounced Kathmandu's effort to lay claim to what it described as "Indian territory".

"This artificial enlargement of claims is not based on historical fact or evidence and is not tenable," India's foreign ministry said. "It is also violative of our current understanding to hold talks on outstanding boundary issues."

The escalating tensions between India and its smaller neighbour, with which it shares strong cultural ties, come as Indian troops are locked in a tense stand-off with China's People's Liberation Army at several locations along the disputed Sino-Indian border in remote Ladakh.

Analysts say the simultaneous eruption of the Indo-Nepal border dispute reflects the growing challenges New Delhi faces in maintaining strong relations with its smaller neighbours, which Beijing has been wooing with development finance and promises of greater infrastructure investment.

Protesters at a rally in Kathmandu hold a banner showing a map including the disputed territory

Many Nepalis also retain bitter memories of India's months-long blockade of their land border in 2015, when New Delhi choked off critical supplies of fuel, medicine and other essential items out of ire over some of the contents of Nepal's newly adopted democratic constitution.

"India took these countries for granted for a long time and could get away with having a lot of political influence without investing in basic infrastructure and integrating the region," said Constantino Xavier, a fellow at Brookings India, the think-tank. "That balance has changed.

"Any Nepali government feels more emboldened to take stronger positions against India because the Chinese have their back."

India's prime minister Narendra Modi tried to forge solid ties with Nepal's prime minister KP Sharma Oli after the leader of the Nepal Communist party was sworn in for a second term in 2018.

But in October 2019, Xi Jinping became the first Chinese president in more than two decades to visit Nepal, highlighting Beijing's determination to strengthen relations with Kathmandu as Nepal's leaders seek to reduce their dependence on India.

US unemployment

# Trump adviser says benefits discourage work

**DEMETRI SEVASTOPULO** — WASHINGTON

Larry Kudlow, the White House economic adviser, said the administration opposed extending federal unemployment payments beyond July because the measure created to respond to Covid-19 was a "disincentive" to work.

"The $600 . . . is in effect a disincentive. We're paying people not to work. It's better than their salaries," Mr Kudlow told CNN yesterday. "That might have worked for the first couple of months [but] it will end in late July."

Congress passed a $2.2tn package in March that provided $600 a week for unemployed Americans, but the payments end in July. The Democratic-controlled House passed a $3tn stimulus that would extend the measure through to the end of the year, but the Republican-controlled Senate has refused to entertain the bill, arguing that the economy is recovering.

Mr Kudlow said Donald Trump was considering "some kind of bonus for returning to work" but that it would not be as large as the $600 cheques. The federal benefits were intended to help unemployed Americans shore up their finances beyond the standard jobless benefits provided by states.

The federal unemployment payments have helped millions of Americans who have been forced out of work as businesses have closed due to lockdowns.

While the US economy added an unexpected 2.5m jobs in May — lowering the unemployment rate to 13.3 per cent — 21m Americans remain out of work, according to the latest report from the US labour department.

'The $600 . . . is in effect a disincentive. We're paying people not to work. It's better than their salaries'

Mr Kudlow said the administration was optimistic that the economy was recovering because the number of new unemployment claims had fallen for the past 10 weeks. "We are reopening, and businesses are coming back. And, therefore, the jobs are coming back," he told CNN.

The debate over how much Congress should provide in any package has become a source of controversy as Democrats and Republicans prepare for November's presidential and congressional elections.

While Republicans argue that the nascent recovery underscores the need for less stimulus, Democrats say the number of unemployed Americans warrants another big package until the economy has largely recovered.

Peter Navarro, a White House official, on Saturday said Mr Trump would back a $2tn stimulus package to return manufacturing jobs to the US. Kevin Hassett, another White House economic adviser, this week said that the odds of Mr Trump supporting another package were very high.

Since the start of the pandemic, Congress has provided more than $3tn in stimulus funding, including $660bn for small businesses to help them pay their staff and remain open during the crisis.

**Rana Foroohar** ‘Protests over racial justice have the potential to seed a new labour movement in the US’ OPINION

# Companies & Markets

# Ikea in talks with countries over return of furlough cash

- Retailer suffers less than expected
- Stores reopen to ‘pent-up demand’

RICHARD MILNE
NORDIC AND BALTIC CORRESPONDENT

Ikea is in talks over returning money to all nine countries that gave the world’s largest furniture retailer government support through furlough schemes as it has suffered less than expected from the Covid-19 crisis.

Tolga Oncu, retail operations manager at Ingka Group, the main Ikea retailer, said the company had decided to start a dialogue with Belgium, Croatia, the Czech Republic, Ireland, Portugal, Romania, Serbia, Spain and the US.

Mr Oncu added Ikea had thought business could fall by 70-80 per cent at the start of the crisis. However, now that all but 23 of its stores had reopened it is experiencing a large amount of “pent-up demand” for home improvements.

> ‘The depth of the crisis was not as deep as we had feared’
>
> Tolga Oncu, Ingka Group

“Now we know more than what we did in February and March, it’s just the right thing to go back and say, ‘hey guys thanks very much, you helped us through this difficult period and so now can we see about paying this back or forward’,” he told the Financial Times.

Ikea is in early talks with the relevant national authorities. Because of differences in how the furlough or short-time working schemes are set up, the company does not yet know how it will pay the governments back.

Mr Oncu also said the flat-pack retailer did not know how much money it would cost or exactly how many workers were involved across the nine countries.

Ikea’s decision to return the money lays bare a dilemma for many companies as economies start to recover after the immediate shock following lockdowns from coronavirus across much of the world.

Some other companies have returned furlough money in individual countries, often under pressure from external scrutiny, but few large multinational companies have committed to returning all support.

Mr Oncu said Ikea’s priority at the beginning of the crisis in February and March had been to protect employees and their livelihoods as it closed down most of its 374 stores worldwide.

“When the thick fog started to fade away we saw that our ability to adapt to the new circumstances . . . made us realise that the depth of the crisis was not as deep as we had feared and would not last as long as we first thought.”

Mr Oncu said the move to repay the money had nothing to do with how Ikea is perceived but was simply “the right thing to do”.

He added: “It’s important to keep good relations with societies and communities we are close to. Connected with the fact that we work in the long term and we talk in terms of generations, it gives us the responsibility and opportunity to work with these questions.”

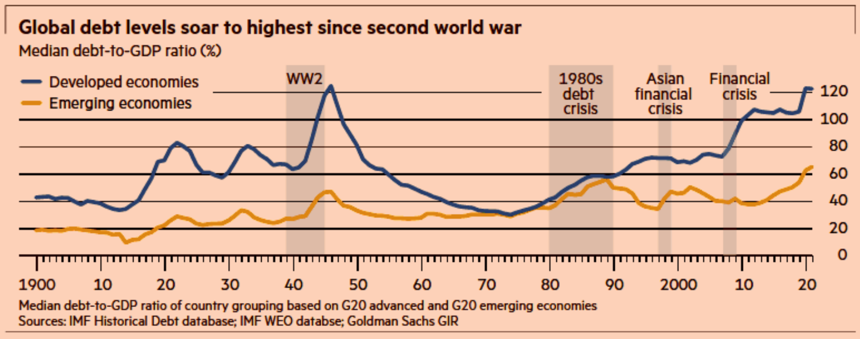
Ikea has also set up a €26m fund for Ikea store leaders to distribute in their local communities.

This is on top of looking at improving both remote solutions for its workers and customers as it boosts its digital offering.

Ikea, which was founded in Sweden but now has a family of companies, many of which are headquartered in the Netherlands, is facing scrutiny from European regulators about its tax affairs.

# Borrowed time Virus relief spending drives global debt close to second world war level

Lee Smith/Reuters



Global debt levels soar to highest since second world war

Median debt-to-GDP ratio (%)

Median debt-to-GDP ratio of country grouping based on G20 advanced and G20 emerging economies
Sources: IMF Historical Debt database; IMF WEO databse; Goldman Sachs GIR

ROBERT ARMSTRONG — NEW YORK

Governments’ interventions to offset the impact of the pandemic have driven the level of global debt close to the peaks seen in the second world war, according to Goldman Sachs.

Economists say this raises questions about how the burden of servicing the debt mountain will be shared; how the related surge in bond issuance will affect markets; and what the long-term impact on growth will be.

Some of those knock-on effects have already been seen: in April, credit rating agency Fitch docked Italy on concerns over the sustainability of its debts, tipped to rise this year to more than 150 per cent of gross domestic product.

Harvard’s Kenneth Rogoff has written extensively on the role of excessive debt in financial crises. In this case, however, he sees the borrowing as necessary. “I would have no problem with policymakers taking the same actions twice over if it means we get out of this in one piece,” he told Goldman. While rising debt is not a free lunch, he said, “that doesn’t mean we shouldn’t be buying lunch for everyone right now. We should be.”

In recent years several economists, among them Amir Sufi, have argued that financial crises are not the only risk posed by high levels of debt, relative to GDP. Huge debts are also a drag on growth, because borrowers who pay the interest and the lenders who collect it use their money differently. Borrowers tend to be less wealthy, so when they receive an incremental dollar, they tend to spend it. This creates demand and stimulates investment to meet that demand.

Lenders are generally the wealthy, or governments of countries with excess savings such as Germany. Such lenders tend to save dollars they receive — adding to the global savings glut, rather than stimulating demand or investment. This has the effect of driving down rates, which encourages yet more borrowing. And so the cycle continues: debt rising, demand dwindling and growth falling.

“The secular trend is unsustainable because it is going to lead [the world] to become like Japan, with growth that is sub-par,” Prof Sufi told the FT.

# Owners of AS Roma seek buyers after sale collapses

ARASH MASSOUDI — LONDON
JAMES FONTANELLA-KHAN — NEW YORK

The owners of Italy’s AS Roma are searching for new buyers for the Serie A football club after a planned €750m sale collapsed due to the pandemic, according to two people with direct knowledge of the matter.

AS Roma’s existing ownership group, which includes the club’s president James Pallotta, are working with bankers at Goldman Sachs as they seek fresh bids, these people said.

The search comes after a deal clinched late last year with Texas-based billionaire Daniel Friedkin fell apart in recent months, they added.

Goldman has reached out to several potential buyers, including wealthy clients and Wall Street investors, but has not received any firm offers. Goldman declined to comment and AS Roma did not respond to a request for comment.

The collapse of the deal represents the latest fallout from the suspension of football fixtures in the wake of the coronavirus pandemic.

Even with Serie A matches due to resume on June 20, steep falls in revenues for clubs in Europe’s top leagues due to lost broadcasting, sponsorship and ticketing income this season have made it difficult for investors to assess the value of teams.

Two people close to Mr Friedkin, whose family owns the Gulf States Toyota Distributors car dealership franchise and other business interests, said that the US billionaire made a revised offer of €575m in late May, which was rebuffed on May 28 by Mr Pallotta.

These people added that Mr Friedkin offered to pay in instalments beginning with €125m at signing. After that he would have paid a further €52m over six months and €85m by the end of the year.

They added he would have also covered €300m in debts by the end of the year and would have covered minority interests in the club with an extra €13m.

Mr Friedkin would be open to re-engaging with Mr Pallotta, said a person close to the US billionaire, who added, however, he was not going to put more money on the table.

One adviser to AS Roma said that several people within the club were dismayed by Mr Pallotta’s decision to walk away from the deal.
*Additional reporting by Murad Ahmed and Samuel Agini*

## Legal Notices

COMPANIES LAW (2020 REVISION)
OF THE CAYMAN ISLANDS
NOTICE OF MEETING OF CREDITORS
**SAAD INVESTMENTS COMPANY LIMITED**
**- IN OFFICIAL LIQUIDATION**
**("THE COMPANY")**

**TAKE NOTICE** that a meeting of creditors of the Company, registration number 36729 whose registered office is situated at Grant Thornton Specialist Services (Cayman) Limited, 10 Market Street, PO Box #765, Camana Bay, Grand Cayman, KY1 9006, Cayman Islands, is to be held on **Wednesday, 29 July 2020 at 9:00 am Cayman Islands time** by way of telephone conference call.

Those creditors wishing to attend the telephone conference meeting are required to advise the JOLs of their intention to do so, and apply for confidential dial-in details, by no later than 12pm Cayman time (6pm UK time) on Friday, 24 July 2020 by contacting the JOLs on one of the following:

email: SICLcreditorsmeeting@uk.gt.com;
michal.segal@uk.gt.com
telephone: +1 345 769 7217 (contact Ms Michal Segal)

Any creditor who fails to notify the JOLs of its intention to participate in the meeting via telephone conference may not be granted access to the meeting.

In order for a creditor to attend and vote at the telephone conference meeting, the creditor is required to complete and submit to the JOLs, by no later than 12pm Cayman time (6pm UK time) on Friday, 24 July 2020, a proof of debt form together with all supporting documentation, if they have not done so previously. Should you require a proof of debt form please contact the JOLs using the details provided below.

Corporate creditors entitled to attend the meeting must appoint a proxy by completing and returning a proxy form, which they may obtain by contacting the JOLs on the details below.

Please note that both the proof of debt (unless previously submitted) and proxy form are to be submitted to the JOLs by returning the completed forms to either of the addresses for service detailed below or by emailing the documents to the email address provided by 12pm Cayman time (6pm UK time) on Friday, 24 July 2020

Dated this 15th day of June 2020

**Hugh Dickson**
Joint Official Liquidator
Contact for Enquiries:
Michal Segal
T: +1 (345) 769 7217
E: michal.segal@uk.gt.com
**Addresses for delivery of proofs of debt and proxy forms:**
E: SICLcreditorsmeeting@uk.gt.com
michal.segal@uk.gt.com

Basic resources. Environment

# Seeing red: Norilsk disaster revives investor concerns

Metals group faces president’s fury and tighter regulations as diesel spills from ageing tank

NEIL HUME — LONDON
MAX SEDDON — NEW YORK

Norilsk Nickel, the metals group controlled by Russia’s richest man Vladimir Potanin, has generated the highest shareholder return of any large diversified miner over the past five years.

But a diesel spill in Siberia that has turned two rivers crimson and threatened a vast area of pristine wilderness has rekindled investor concerns.

“You have to wonder about the resilience of other assets in the Arctic after this,” said Tal Lomnitzer, a senior fund manager at Janus Henderson.

The 21,000-tonne slick, caused when an ageing fuel tank sank into thawing permafrost, is the latest disaster to hit a company that is among the world’s biggest emitters of sulphur dioxide, a cause of acid rain. Environmentalists say it is comparable with the 1989 Exxon Valdez accident off the coast of Alaska.

A generous dividend policy has helped Norilsk’s share price more than double since 2015, boosted by rising demand for palladium from carmakers that use it in catalytic converters. The company has a market value of almost $50bn — the same as Anglo American and Glencore combined.

Russian president Vladimir Putin reacted with fury to the disaster, publicly chiding Mr Potanin and ordering a tightening of regulations. Mr Potanin, who holds a 34.5 per cent stake, on Thursday proposed Norilsk cap dividends this year at $1bn, prompting a more than 4 per cent drop in its share price in Moscow and London.

Environmentalists say the estimated Rbs10bn ($144m) clean-up cost will be dwarfed by the price of new safety measures and compliance with new regulations. But with more than $5bn of cash on its balance sheet and $2bn of undrawn facilities, analysts say the company can absorb any costs.

But the disaster has highlighted another challenge facing the company: climate change. Norilsk’s operations are deep in the Arctic Circle, where rising temperatures are melting the permafrost that sits above the region’s vast reserves of metals and hydrocarbons.

Norilsk said in its 2019 annual report that it had implemented “a range of measures to monitor and control” risks from climate change “in the longer run” but admitted in a call with investors on Tuesday that it had not used “precise monitoring” before the accident.

Russian investigators arrested the plant’s director, Pavel Smirnov, and its two top engineers on Wednesday on charges of negligence. They said Mr Smirnov had known the fuel tank required serious repairs since 2018 but continued to operate it in violation of safety regulations. A day later, Norilsk’s mayor was charged with negligence for failing to organise an emergency response to contain the spill.

Critics accuse Norilsk, the world’s biggest producer of palladium and nickel, of using the permafrost as an excuse for failing to properly address longstanding threats from climate change. Environmentalists say Norilsk — which said the supports under the fuel tank had “served for more than 30 years without problems” — has paid too little attention to the need to modernise the plant’s outdated Soviet-era equipment.

“What Norilsk did is a . . . version of what all Russian companies with old Soviet assets want,” said Evgeny Shvartz, a former head of conservation policy at the World Wide Fund for Nature who is an independent director at Norilsk. “They don’t want to invest in modernisation, they try every which way to block even the most reasonable initiatives from the state.”

Transneft staff help to clean up a diesel spill in Siberia — Irina Yarinskaya/AFP/Getty

Alexei Knizhnikov of the WWF said Norilsk had not adequately assessed the risks. “It should be obvious that you have to replace metal oil containers over the course of 40 years.”

Maxim Poletaev, deputy director of 28 per cent stakeholder Rusal, is pushing to appoint a senior executive with responsibility for the company’s environmental footprint and force Norilsk’s management to relocate from Moscow to the remote Siberian city.

“Operational and management decisions should be taken where the production facilities are. The added value is all created there,” Mr Poletaev said. “This is a moment for management to reflect seriously on how the company is run.”

Rusal also wants to set up an independent board committee to investigate the spill and audit Norilsk’s remaining permafrost infrastructure.

Gareth Penny, the former De Beers executive who was appointed chairman in 2013, said the spill was “deeply concerning” because it would detract from the progress being made by the company on key environmental, social and governance issues tracked by institutional investors. “We have a strong board — seven independent directors out of 13 — and governance processes that are light years better than they were five years ago,” he said.

“Our safety record is improving and we have taken this very significant decision to spend at least $2.5bn on a sulphur programme that in the next two years will capture just under 50 per cent of our emissions and over 90 per cent sulphur capture in second phase of the project.”

# Trouble flares for energy upstart Tellurian

## Founder Souki dismisses 40% of staff as shares fall and fixed assets are worth less than asking price for his Aspen ranch

**GREGORY MEYER** — NEW YORK

Energy tycoon Charif Souki launched Tellurian four years ago in an effort to repeat his success at Cheniere Energy, the US liquefied natural gas pioneer he founded. But lightning has not struck twice.

Tellurian's LNG plant remains unbuilt years after construction was due to begin. The company's market capitalisation has slid below $500m from $4bn since it listed and its fixed assets are worth less than the $220m Mr Souki is now asking for his Aspen ranch.

Forty per cent of staff have been dismissed. At its annual meeting on Wednesday it won approval to double the number of common stock shares to allow future issuance that would dilute existing owners.

The LNG market has been pummelled as the coronavirus pandemic saps demand. Gas prices overseas have fallen below those in the US, undercutting the economics of exports. While many expensive new projects to liquefy and ship the fuel have stalled, none has been headed by as well-known a promoter as Mr Souki.

A restaurateur and investment banker, Mr Souki established Cheniere in 1996 and eventually constructed an LNG import terminal at Sabine Pass, Louisiana. He pivoted to build an export terminal at the site when fracking was transforming the American gas supply, a prescient move that made him a doyen of the industry.

Cheniere fired him in 2015, weeks before its inaugural cargo, in a boardroom coup orchestrated by activist investor Carl Icahn. Mr Souki soon returned with Tellurian, introducing a plan to undercut his former business by 15-20 per cent on costs.

> 'They came out of the gate walking and talking and acting like a company the size of Cheniere'

"I am right: it's just a matter of when it happens," he told the Financial Times in 2016.

His Houston-based company launched with grand ambitions, spending more than $80m a year and hiring away top Cheniere executives as it drummed up business for the Driftwood LNG plant 40 miles east of Sabine Pass, which at a cost of $30bn and a capacity of 27.6m tonnes of LNG a year could have been the largest in the US.

"They went big. They came out of the gate walking and talking and acting like a company the size of Cheniere," said Michael Webber, managing partner at Webber Research & Advisory.

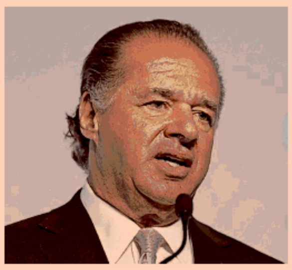
The plan was to procure low-cost gas supplies and race ahead of a crowded field that Martin Houston, co-founder alongside Mr Souki, derided as "amateur hour". They found an important early backer in French oil major Total, which agreed last July to further increase its investment and buy 2.5m tonnes of LNG a year from Driftwood.

No other buyers have finalised sales contracts. A tentative deal with Indian gas importer Petronet — signed last year during a visit to Houston by Narendra Modi, the Indian prime minister — expired in May.

Total, now with a 17.2 per cent stake in Tellurian, has raised doubts about the need for Driftwood. The company has the right to back out of its new capital contribution agreement if Tellurian fails to greenlight Driftwood by July 2021, according to a securities filing.

"The priority is not to invest more in merchant projects in the US," Patrick Pouyanné, Total's chief executive, told analysts in early May, adding: "I think there is no reason it would be sensible to move forward on this one."

Mr Souki, Tellurian's chairman, controlled 22.6 per cent of the company's outstanding shares in January. The position has been halved by involuntary sales earlier this year "effected by a lender to satisfy certain loan requirements", according to securities filings. Held in trust for his children, the sold shares had been pledged as collateral "to secure financing for various investments", the filings showed.


Charif Souki launched Tellurian four years ago with grand ambitions

Mr Souki's stake now amounts to 10.7 per cent of the company, or 28.5m shares. Of those, 25m have also been pledged "as part of a collateral package to secure a loan for certain real estate investments", Tellurian said in a proxy statement.

John Coffee, a business law professor at Columbia University, said such pledges were rare. "This is an uncommon practice — sufficiently so that there are not generally rules against it," he said.

Mr Souki sent a confident and occasionally defiant message in an interview with the Financial Times last week. Acknowledging setbacks resulting from the pandemic, the weak global economy and the onrush of competing supplies, he said Driftwood's progress had been slowed by a year-and-a-half to two years, but not stopped.

"There is no questioning the fundamental business model. America has cheap gas, cheap infrastructure; the rest of the world needs the gas. It's just a matter of time," Mr Souki said. To raise capital the company "can sell stock any time we want".

Wall Street has shown less patience. Tellurian's shares have rebounded this week amid a broader rally in energy stocks, but at less than $2 a share they remain at a 10th of their peak. World LNG trade will have grown by a fifth between 2019 and 2025, but export capacity is likely to outpace imports, the International Energy Agency said on Wednesday.

Jason Gabelman, energy analyst at Cowen, said of Mr Souki: "The fact that he was able to build one LNG company made some investors more comfortable that he could successfully build a second. Thus far, that thesis really hasn't proven out to be true."

The 813-acre Aspen Valley Ranch in Colorado once grew potatoes that fed silver miners, a local broker said. Mr Souki and his children developed eight custom-built homes, a clubhouse, a gym and pool house, a barn with arcade games and another with horse stalls, according to promotional material.

> 'America has cheap gas, cheap infrastructure; the rest of the world needs the gas'

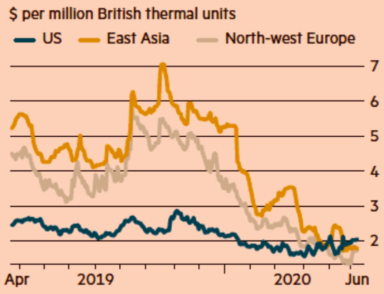
The property was among a number of real estate investments for which his pledged Tellurian shares were used as collateral, Mr Souki said. The decision to sell it, through an Aspen broker he also owns, was "completely unrelated to Tellurian", he added.

With the spread of coronavirus, Mr Souki has been staying at the ranch since a February trip to India. He said he sought to spend a third of his time on Tellurian, a third on his private businesses and the last third enjoying himself.

"I'm 67," he said. "I don't want to wake up one day and find myself past my shelf life."

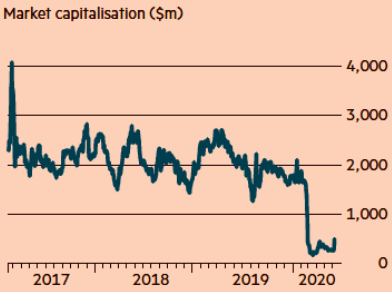

Cheniere Energy's LNG import terminal, which was built by Charif Souki , at Sabine Pass, Louisiana — Lindsey Janies/Bloomberg

**US gas exports under threat as prices top foreign markets**



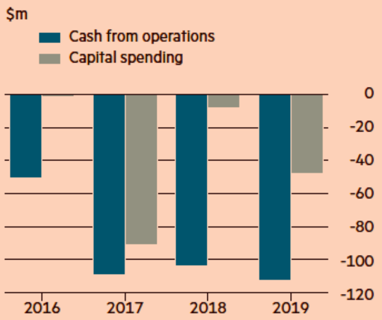
Source: S&P Global Platts

**Investors losing patience with Tellurian's LNG plans**



Source: S&P Global Market Intelligence

**Cash outflows from Tellurian**



Source: S&P Global Market Intelligence

Oil & gas

# Virus crushes export demand for US gas

**GREGORY MEYER** — NEW YORK
**DEREK BROWER** — LONDON

The coronavirus has crushed exports of liquefied natural gas from US shores, curtailing an important sales outlet for the world's largest gas producer.

Shipments will have dropped by 60 per cent in July from their peak in January, the Energy Information Administration forecast last week, with the US sending out the least liquid gas since before a string of new processing units opened between Texas and Georgia.

Trade in LNG has tied together gas markets once segmented by continents, as gas is chilled and condensed for transport on ships. The US contributed more than half the liquefaction capacity added in the world last year, according to the International Gas Union. When Sempra Energy's Cameron LNG produced its first volumes last May, President Donald Trump visited the plant to cheer on the US as "the energy superpower of the world".

Some European countries have hoped these rising supplies would help break their dependence on Russian natural gas imports. Poland recently decided it would not renew a long-term supply deal with Russia's Gazprom that expires in 2022, favouring imports of Norwegian and American gas instead.

The US state department last year hailed the country's new LNG capacity as allowing "molecules of freedom to be exported to the world".

For now, though, natural gas prices on the Gulf of Mexico coast are above those in east Asia and Europe, putting US LNG out of the market, according to brokers, especially once shipping costs are factored in. The pandemic has caused the biggest fall on record in world gas demand, giving buyers the upper hand.

Natural gas prices are so cheap in Europe that an LNG cargo from France is scheduled to arrive in Mexico this month, undercutting exports of US gas delivered by pipeline, said Tudor, Pickering, Holt, an investment bank.

"Essentially, the world doesn't need more LNG from the US at this moment," said Dumitru Dediu, a partner at McKinsey.

> 'The world doesn't need more LNG from the US at this moment'
>
> Dumitru Dediu, McKinsey

Just over 750,000 tonnes of LNG left US ports on 11 tankers from June 1 to late last week, according to ClipperData, a vessel-tracking service. In May, 3.6m tonnes of LNG had been shipped on 53 vessels. Volumes of pipeline gas fed to the six LNG terminals in the mainland US have dropped below 4bn cubic feet per day, down from more than 9bn cu ft/d in January, IHS Markit PointLogic data showed. US oil and gasfields will produce about 90bn cu ft/d of gas this year, the EIA estimates.

Around 45 shipments planned in July, or more than 60 per cent of the total, have now been cancelled, said brokers and analysts. But about half of the US's exports are underpinned by long-term contracts that require buyers to pay even for cargoes they cancel, insulating the revenues of plant operators.

Buyers' appetite for US gas will eventually perk up again, say analysts. "How much Qatari exposure do you really want? How much exposure to Russia do you want?" asked Frank Harris, head of global LNG at Wood Mackenzie, a consultancy. "So there will be a need for more US LNG."

Oil & gas

# Gunvor chief attacks Singapore lending

Törnqvist blames loose credit practices for commodity trade scandals

**DAVID SHEPPARD AND NEIL HUME**

The head of Gunvor, one of the world's largest independent oil traders, has blamed loose lending practices in Singapore for a string of scandals that have rocked the commodity trading industry.

Torbjörn Törnqvist, chief executive of Switzerland-based Gunvor, said the fallout from a series of company collapses in the city state, including the spectacular implosion of Hin Leong Trading, was a concern as it risked tarnishing the reputation of the entire sector.

"The sheer size of the failures is surprising — it's a concern that the banks are taking so many hits from the sector," Mr Törnqvist told the Financial Times. "But this is a Singapore problem. One needs to differentiate between the local companies and the international traders like us."

Mr Törnqvist said small traders had received too much financing due to "a combination of competition and excess banking liquidity in the Singapore market" that he said had led to a "spiralling cycle of loosely structured credit facilities".

Hin Leong Trading crumpled under almost $4bn of debt after its founder admitted hiding $800m losses from lenders, which include HSBC, ABN Amro and Singaporean banks DBS Group and OCBC.

"The industry can't afford a problem like this at a big international trader," he said.

Commodity traders rely on access to relatively cheap finance as moving a 2m barrel-capacity supertanker requires almost $100m in credit at current crude prices. The industry operates on razor-thin margins, requiring large volumes to generate decent returns. Financing costs are one of their largest expenses.

Mr Törnqvist's comments come as Singapore faces calls to take a tougher line on failed companies. The city-state has a suffered a number of blows in the commodity trading sector in recent years, including the near collapse of once publicly listed Noble Group.

Singapore's location, straddling the shipping lanes that connect China with global markets, has seen it develop into one of the world's biggest commodity hubs — and a natural home for traders, which the country has courted with low corporate tax rates and other benefits.

Trafigura, whose top executives largely sit in Switzerland, moved its legal headquarters to Singapore eight years ago. Gunvor, Vitol, Glencore and Mercuria all have significant operations there. They rub shoulders with a group of aggressive local players.

Mr Törnqvist said Gunvor was having a strong second quarter after the extreme volatility created by coronavirus had weighed on profits in the first three months of the year. As oil prices have stabilised, traders have been able to generate more consistent profits from storage trades at sea and elsewhere.

Market questions. Global challenge

# Central banks face pressure to garner fresh stimulus

**FT REPORTERS**

### What next for a volatile Wall Street?

Violent swings returned to the US stock market last week. The S&P 500 index at one point climbed into positive territory for the year, only for investors to then witness the heaviest sell-off since the big collapse in March. The Cboe volatility index — known as Wall Street's "fear gauge" — jumped from 25 points on Monday to more than 41 points by Friday.

But the pullback was not totally unexpected. The US market had soared about 30 per cent since the trough, driven in part by record amounts of central bank and government stimulus, leading to worries the rally had become too detached from economic reality.

On the question of whether equity investors cared about fundamentals, analysts at Rabobank said it was "clear they currently don't".

The analysts cited a backdrop of the World Bank "calling a deep global recession" and the worst US economic downturn since the 1930s, among other factors.

Shutdowns to curtail the spread of the pandemic have claimed the jobs of tens of millions of Americans, sapping business activity and leading to a drop in corporate profits.

A first-quarter slide in earnings for companies in the S&P 500 is set to continue in the second, while many businesses are withdrawing the guidance investors often rely on to gauge the trajectory of profits.

Second-quarter figures due to be reported next month will be "shocking", said Bill Blain, market strategist at Shard Capital. "As the recession bites, and unemployment rises . . . markets could experience a serious reality check."

In recent weeks, however, the rally had expanded beyond the tech and healthcare stocks that powered the early rebound.

Cyclical stocks, such as energy companies, had begun to outpace the broader market — a sign the rally was strengthening and could even endure, said Michael Mullaney, global head of research for Boston Partners, a fund manager.

But Bank of America is less sanguine. The S&P 500 is currently above 3,000 points but the bank's new year-end target is 2,900. Its analysts highlight the threat of a second Covid-19 wave and "US election risks". *Richard Henderson*

Powering on: A wind farm run by General Electric in Fleming, Colorado. Cyclical stocks, including energy companies, have begun to outpace the broader market
Matthew Staver/Bloomberg

### What extra measures has the BoJ got up its sleeve?

A major change in direction from the Bank of Japan's meeting today and tomorrow is unlikely.

But governor Haruhiko Kuroda — just like his peers at other major central banks — is expected to give a show of determination to tackle the fallout of the coronavirus crisis.

Japan has already revealed its largest ever supplementary budget and a significant increase in government bond issuance to go along with it. Some clarity is expected from Mr Kuroda over how aggressively the BoJ will buy longer-dated JGBs with maturities over 25 years. Prices in that part of the market have been weak recently, sending yields on the 30-year bond to their highest level in a year.

Naoya Oshikubo, an economist at SuMi Trust, argues the BoJ will "aim to impress" at this month's meeting, and may double the size of a loan scheme for small and medium-sized companies. "Going forward, the BoJ's monetary policy will be swayed by new cases of Covid-19," Mr Oshikubo said. "As such, it is very likely that we will see large-scale monetary and fiscal co-ordination as part of corporate funding measures." *Leo Lewis*

### Will the Bank of England steer the pound lower?

Recent strength in the pound against the dollar could be lost if the Bank of England takes a step into the unknown at its policy meeting on Thursday.

Sterling has recovered against the dollar from its multi-decade lows of $1.15 in March to trade near $1.28 in the second week of June, benefiting from brighter tone in global markets that has pushed down the haven US currency.

But that trend was broken at the end of the week, when stock market nerves resurfaced and the UK economy was later shown to have collapsed by 20 per cent in April alone. The pound retreated closer to $1.25. The UK currency has barely budged against the euro for a month. Clearly, much here hinges on the path of the dollar. Still, the BoE has the power to knock it lower still.

The central bank has already slashed its key interest rate to near zero in response to the pandemic, but speculation has moved on to whether it might consider moving rates below zero — a debate that gained momentum after senior BoE policymakers said they were at least contemplating the possibility.

Analysts expect the bank to steer clear of rate cuts, opting instead for an expansion of its asset purchasing programme. George Buckley, an economist at Nomura, said the BoE is likely to add an extra £150bn to its quantitative easing scheme, giving policymakers breathing space to monitor recovery.

Thomas Flury, a strategist at UBS Wealth Management, said he saw "little to no chance" of negative rates at this meeting, noting that such a decision would "hammer" the pound.

But talk of negative rates will continue to haunt sterling. Analysts at RBC Capital Markets said late last month that the BoE will eventually make that leap, probably in November. *Eva Szalay*

**Wall Street's bumpy ride in 2020**

S&P 500 index ('000)

Source: Refinitiv

Pharmaceuticals

# Shionogi boss warns against hopes of early Covid vaccine

**KANA INAGAKI** — TOKYO

The head of Japanese drugmaker Shionogi has called for a longer-term international strategy to develop and distribute coronavirus vaccines, warning that political hopes for a quick solution may be disappointed.

"Politicians may not want to hear this but everything will not go according to script and back-up plans will be needed," Isao Teshirogi, who is heading efforts at Shionogi to develop a Covid-19 vaccine as well as an antiviral drug for infected patients, said in an interview.

"There needs to be a commitment from companies, academics and governments that these efforts will continue over the longer term."

More than 100 coronavirus vaccines are in development worldwide to combat a virus that has already killed more than 420,000 people.

Governments are eager to offer hope to citizens and reactivate their economies but there has been a lack of global co-operation on how vaccines will be manufactured and offered to emerging economies if and when they become available.

"In addition to the question of which vaccine is safe and effective, we need to consider how much capacity would be secured where and at what price they can be offered," Dr Teshirogi said.

It also remained taboo to discuss whether all the investments by drugmakers and governments would bear fruit. "If the virus is gone in two years, that's great for mankind but it could also be hell for us if no one uses what we developed after all the investments we have made," he said.

The Shionogi boss also cast doubt on aggressive timetables and production targets set by rivals. The earliest Shionogi would be able distribute its potential vaccine to health professionals would be January, even though the company has set aside all other major projects to focus on coronavirus.

The Osaka-based drugmaker, which specialises in infectious diseases and anti-flu medication, is developing a traditional protein-based vaccine and will aim to supply about 10m doses, initially in Japan.

While the 10m figure was small, Dr Teshirogi said the target was deliberately set low and its actual capacity could be up to 60m if its vaccine could be administered with a single dose and not require a follow-up jab.

"In normal circumstances, it takes about three to five years to build up data to analyse the strength of antibodies produced by a vaccine and its medium to longer term impact on the body," Dr Teshirogi said. "Frankly speaking, I think each drugmaker wants to take this step by step, but that's not allowed in the current environment."

Shionogi's approach contrasts with other companies that are pursuing vaccines based on less-proven science that could yield quicker results but carry a higher risk of failure.

Last month Moderna, a Boston-based biotech company, unveiled early positive results for its potential vaccine, which is using a "messenger RNA" platform that has never yielded a product approved by regulators.

AstraZeneca has also said it has secured orders for at least 400m doses of its potential vaccine being developed with Oxford university.

Financial services

# Quicken Loans IPO likely to open up market

**ROBERT ARMSTRONG** — NEW YORK

A successful public offering by Quicken Loans, the biggest mortgage lender in the US, could pry open the market for other non-bank lenders, executives and analysts say.

The Detroit-based company has filed paperwork for an IPO that could come as soon as July, it emerged last week, in what would be one of the most significant financial company listings of recent years.

The move comes on the heels of a liquidity crunch that caused alarm across the sector in March, and after rocketing unemployment that prompted millions of Americans to temporarily stop paying their mortgages. But the crisis has also driven down interest rates and handed the industry a bonanza of refinancing revenue and the widest margins in a decade.

"Non-banks might be thinking, we are having a phenomenal quarter [so] this might be a good time to tell my story to public markets," said Sanjiv Das, chief executive of Caliber Home Loans, another private mortgage lender. "If the Quicken offering is successful, more investors will realise it makes sense to have more access to this asset class."

He added: "A lot of the liquidity issues have gone away [now], but non-banks have learnt one thing . . . if you lose control of your liquidity, you are in trouble."

Quicken originated $145bn in mortgages last year and together the non-bank lenders account for about 50 per cent of the market in the US. Other private non-bank lenders include Freedom, United Wholesale, Ocwen and Amerihome.

While such companies sell on the mortgages they originate, they continue to service the loans, collecting payments and passing them to bondholders. Lenders had to scramble for funding to cover borrowers' who were given permission to skip payments. According to the Mortgage Bankers Association, 8.5 per cent of American mortgages were in forbearance by the end of May.

Jay Bray, chief executive of Mr Cooper, one of the few publicly traded non-bank lenders, said larger non-banks were able to secure the debt funding they needed.

Asked whether other companies would follow Quicken in raising equity capital, Mr Bray said: "Tapping the equity market is a different riddle. You have to have a great story to tell investors. I think there could be a couple more [offerings] but it is not going to be a huge thing."

The industry has since been working through a backlog in demand. In the last half of April and the first half of May, the number of mortgage refinancings was more than 200 per cent higher than in the same period last year in the US, and it was still up 80 per cent this week, according to the Mortgage Bankers Association.

Mortgages approved for new home purchases have turned positive too, rising 12 per cent in the past three weeks as coronavirus lockdowns have eased.

"The mortgage industry is a simple thing — it correlates to rates," said Chris Whalen of Whalen Global Advisors. While mortgage servicing is a tough business, "it's the relationship that matters. If the lender can [refinance] their borrowers, that's a home run [for profits]".

Retail

# Timberland owner hunts for acquisitions

**ALISTAIR GRAY**

The company behind Timberland, Vans and The North Face is on the lookout for further acquisitions despite coronavirus uncertainty, saying it could be a good time to expand its collection of clothing, footwear and accessories brands.

"In times like this, some of the greatest returns could be generated through acquiring," Steve Rendle, chairman and chief executive of New York-listed VF Corp, said in an interview.

While he made clear that organic growth was VF's biggest priority, Mr Rendle said he saw potential opportunities to buy smaller rivals in subsectors including athleisure, outdoor and activewear.

Analysts said Canada Goose, Gap's Athleta and Columbia Sportswear could be among the types of targets for VF, which has a market capitalisation of $24bn. Mr Rendle did not comment on any particular company.

Coronavirus has caused a slump in global dealmaking, and the total mergers and acquisitions value of $955bn so far in 2020 is the lowest since 2013. There have been some transactions in sectors such as technology, but concern about the outlook for consumer spending has made buyers reluctant to swoop on retail and consumer companies.

Total deal value in the sector of $96bn is the slowest since 2010, according to Refinitiv.

VF traces its roots back to 1899, when the company was established in Pennsylvania as a glove and mitten maker. It later expanded into lingerie and named itself Vanity Fair Silk Mills.

'Some of the greatest returns could be generated through acquiring'

Steve Rendle, CEO, VF Corp

Over the decades the company has reshaped its portfolio, adopting the abbreviated name in the 1960s to reflect an increasingly diverse product line-up.

A series of acquisitions in the early 21st century created the modern day group, although VF has not made a sizeable purchase since it added Icebreaker, the merino clothier brand, and Altra, the running shoes brand, in 2018.

Most recently it has focused on disposals. VF spun off its Wrangler and Lee jeans businesses, among other assets, as Kontoor Brands last year, and in January it put its workwear division that sells to businesses up for sale.

Today the company is focused on 12 brands, mostly outdoor and activewear related, including the JanSport and Eastpak backpack divisions and Napapijri, an upmarket label known for its Skidoo jackets.

"We'll be thoughtful, but there will be opportunities, we know that" for acquisitions, said Mr Rendle, who has run the group since 2017.

Asked how much firepower VF had to do deals, he said the company had access to $5bn in cash following a recent bond offer and revolver. "We'll use that as we see fit, with near-term liquidity being the most important thing today." Acquisitions could include not just clothing brands, but companies that could help expand its capabilities in data and digital.

### How to Lead. Kinya Seto, chief executive, Lixil

# Why the crisis is a 'disguised blessing'

Lixil's chief has made rapid changes that were previously unthinkable in Japan, write Kana Inagaki and Leo Lewis

Kinya Seto relishes the chance to hear his staff be forthcoming about their concerns
Akio Kon/Bloomberg

On May 1, after nearly two months of lockdown and upheaval, the chief executive of one of the world's biggest building materials companies ended negotiations, agreed to terms and put his digital signature on the sale of a major subsidiary.

The sale of Lixil's Italian engineering business, Permasteelisa, looked humdrum. Lixil's chief executive, Kinya Seto, had made many divestments in his career. And while Permasteelisa may have played a central role in London's Shard and Apple's doughnut-shaped headquarters, ultimately it was being sold at a loss to Atlas Holdings, a US private equity group, for less than a hundred million dollars, over a virtual handshake in the middle of the night.

But to Mr Seto, the deal was of paramount importance: the culmination of a vicious boardroom struggle that had stretched for almost five years and had been derailed by a successful plot to have him sacked, a miraculous reinstatement and arguably the most spectacular proxy shareholder showdown Japan has ever seen. Much of the significance of the sale may get lost in the distractions of the pandemic, he admits, but this was a symbolic victory for a new breed of professional CEO over the traditions of corporate Japan.

"During my first term, I had to fight with old folks and I had to make compromises," Mr Seto says in a video interview from his Tokyo apartment, wearing a dark polo shirt. "Then I came back and I realised I shouldn't compromise anything. I feel like this is an ideal situation now. If I can't do the job, either I'm not capable or nobody can do it."

Mr Seto chooses his words carefully, but since Japan went into lockdown in April, he has evolved a contentious idea: that the pandemic, for all its misery, is a "disguised blessing" — not just for Lixil, but for the parts of corporate Japan that realise they can use this moment to make changes that would otherwise never happen. In the right hands, he says, it will accelerate a long overdue transformation of the way work is measured, and the way that information and ideas are transmitted within Japanese companies.

The sale of Permasteelisa was not his only unfinished business. When he was first appointed Lixil CEO in June 2016, he tried to inject a dose of freewheeling entrepreneurial spirit into the group, which was born from a merger of five traditional domestic companies. Recruited for Lixil's top role after his success at MonotaRo, the online tool and supply retailer he founded in 2000, he set about turning the company into a flatter, more modern organisation.

Flexible working hours and new digital tools to transform its showrooms were introduced. But he met resistance, particularly from his sales staff. While working from home was introduced, few took the option and those that did had to fill out forms for their managers well in advance.

His efforts were abruptly curtailed when he was removed as CEO in October 2018, after a clash with members of Lixil's founding family. Others might have moved quickly to another challenge. But Mr Seto's quest to reinstall himself as CEO has become the stuff of legend in Japan, where shareholder activism was only very tentatively gaining acceptability as he called on shareholders to reverse his forced resignation. His success in the proxy battle last June was decisive: and to clarify that to the staff, Mr Seto was back at his old desk at 6am on the day after investors voted for his return.

The landscape then transformed with the arrival this year of Covid-19.

The pandemic forced Lixil's salespeople to meet local contractors and builders virtually. Soon, they realised it was more productive to set up 20 video calls a day than meet each client in person. By the time Japan declared a state of emergency in April, more than 98 per cent of employees at its Tokyo head office were working from home. When 93 of its showrooms shut across the country, customers were able to design their kitchen virtually using digital tools. Jin Montesano, Lixil's chief people officer, who works closely with Mr Seto, says the outbreak was "the perfect storm" to put old norms to bed.

Virtual meetings have their shortcomings. But Mr Seto relishes the opportunity to hear his staff be forthcoming about their concerns when they chat using Facebook's Workplace, an online communication tool used by Lixil's 75,000 employees.

"We management tend to be very spoiled," he says. "I used to get information from US general managers that was pretty much sugared and filtered all the time. Sometimes, what I want to know is unfiltered information."

FT

**Leadership**
More interviews illuminating the personalities of high-profile leaders by focusing on the issues they faced
ft.com/howtolead

He admits he spends his time "checking everything" on Workplace, and in many cases he acts immediately. When a showroom attendant posted a question asking why women had to wear high heels in showrooms, he replied "Why is that?" and the rule was changed. A day after Prime Minister Shinzo Abe asked for schools to be closed in late February, Lixil introduced unlimited paid holiday after Mr Seto learnt of employee concerns about juggling work and childcare. "It usually takes at least a week for this kind of information to get delivered to me. So it is an important tool for me to understand what is going on," Mr Seto says.

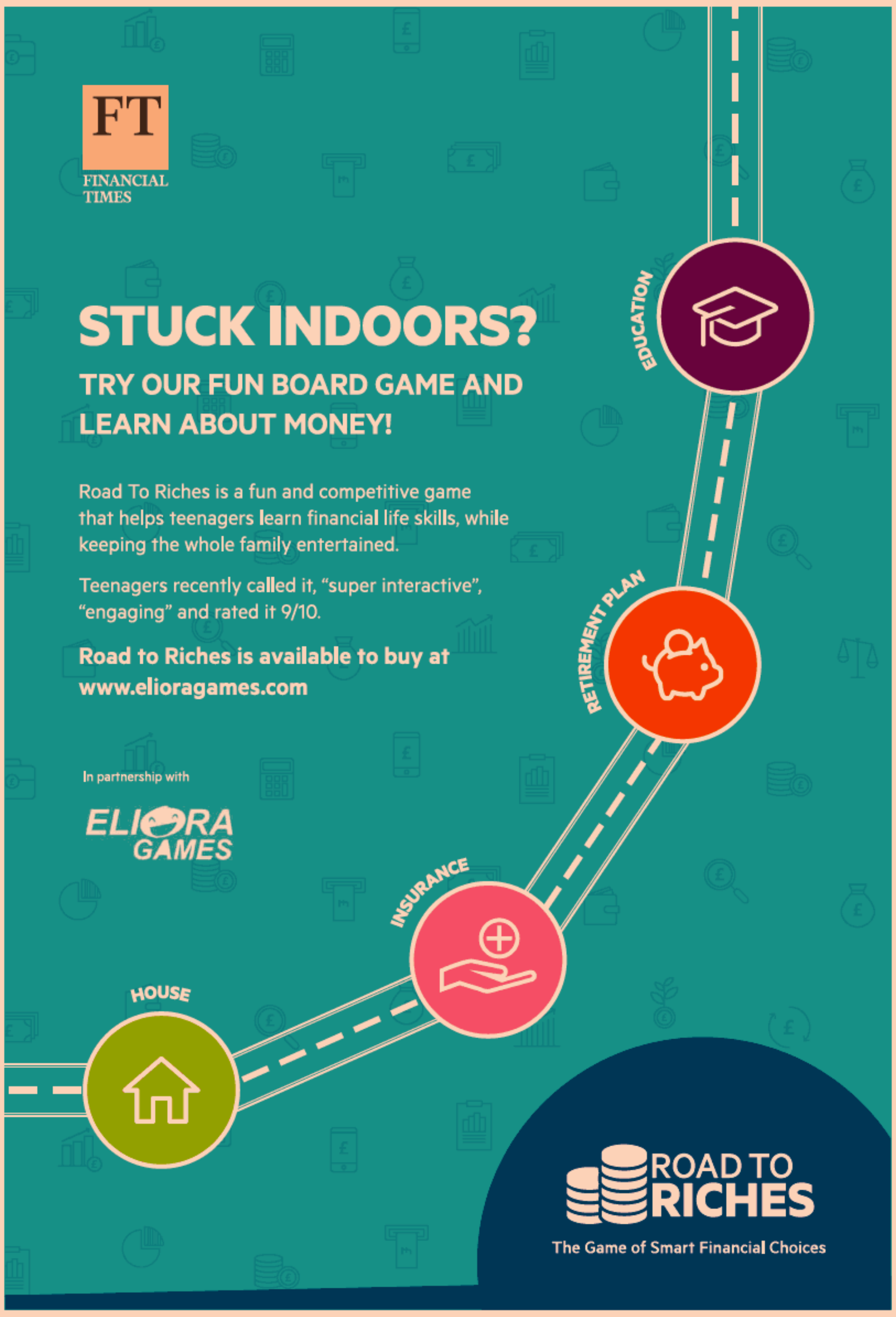
Beyond the change in working style, the outbreak also had a material impact on its business. It forced Lixil to stop taking new orders from February until late March, following panic buying of toilets by housebuilders, as Chinese factories closed and supply chains were halted. But fewer plants were affected compared with rivals, and as business continued virtually, the group managed a 12 per cent gain in net profit for the year that ended in March.

> **'We management tend to be very spoiled. Sometimes, what I want is unfiltered information'**

Despite the huge hit that Lixil and other companies have taken through the lockdown and the predictions of only a very gradual return to health for the Japanese economy, Mr Seto is determined to stick with the "blessing in disguise" dogma.

He focuses on the way Covid-19 has changed the troubled relationship between Japanese people and their homes. Families spending increased time together in poorly segregated living areas has exposed, he says, basic shortcomings of design. There is a rethink coming, says Mr Seto, of the way Japanese homes are designed — and Lixil is poised to benefit.

"If all the families are staying home, then you understand that you need multiple toilets. You need a more secluded space and many things. You begin to understand the value of family, too," he says.

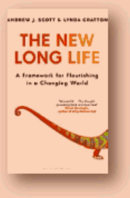


---

# *A manifesto for better living in our later years*

## Book Review

*Michael Skapinker*



**The New Long Life: A Framework for Flourishing in a Changing World**
by Andrew J Scott and Lynda Gratton
Bloomsbury, £20

When is your brain at its best? It depends what you are trying to do. Your late teens are when you are probably fastest at number calculation. Your short-term memory peaks in your thirties. Your social understanding is at its highest a decade or two later.

These descriptions don't apply to everyone. There is large variation within age groups. And being engaged and enquiring can keep your brain fitter for longer. In *The New Long Life*, Andrew Scott and Lynda Gratton, say: "The real reason you can't teach an old dog new tricks is not because the dog has become old, but because it has not continually learnt new tricks."

The authors have a distinguished record in this field. Scott is a professor of economics at London Business School and a consulting scholar at Stanford University's Center on Longevity, and Gratton is a professor of management practice at LBS.

Their previous work, *The 100-Year Life*, made an influential contribution to understanding the consequences of increased longevity.

This book, while covering some of the same ground, is broader, taking aim at one of our best-entrenched and most outdated structures: the three-stage life. The first stage was traditionally spent growing up and getting educated. The second was consumed by working, making money and raising children. The third was spent in retirement.

In the old days, the three-stage life largely worked, at least in the developed world. It allowed many to support a family, buy a house and look forward to a pension. Today, few young people can afford a house and many of the elderly don't have adequate pensions. The three-stage life has broken down.

Governments partly accept this, which is why they are raising the retirement age. Employers, with a few exceptions, have carried on as though the three-state life is still with us.

Not everything the authors try to do comes off. They introduce us to some characters to illustrate their points: Radhika, a college-educated Mumbai freelance worker, Tom, a Dallas truck driver, and others. But they are not fleshed out, so when their names come up it is hard to remember who they are.

And Scott and Gratton chase after so many research papers that their narrative occasionally meanders. But their argument is robust and their themes sufficiently important to make this book essential reading for policymakers and chief executives.

We are not just living longer. Many of us are also healthier for longer. This may sound strange when the world has been upended by a virus that kills mostly the old, a calamity that came after Scott and Gratton had written their book

While the deaths are tragic, they are not going to noticeably thin the ranks of the elderly. Nor will they change the fundamental dilemma of many developed countries, as well as China: that they have too few young people to support a dependent older population. It is not tolerable for those who have spent decades working to retire into poverty. Nor, as Scott and Gratton point out, is it fair for youngsters to pay higher taxes to fund their parents and grandparents' pensions when they have so little hope of decent pensions themselves.

Governments, employers and the over-65s have to take action, the writers say. Governments, for example, need to help reshape education, making it a life-long process rather than something people do only in their teens and early 20s. Employers need to understand the value of older workers. While the authors decry the stereotyping that labels generations as baby boomers, millennials and so on, they point to research that shows that while some mental capacities decline with age, older employees often demonstrate "crystallised" intelligence — "the information, knowledge, wisdom and strategies that are accumulated over time".

What is required from employers is well-known but rarely acted on: flexible ways of dealing with older staff, such as consulting projects and reduced working weeks in return for lower pay.

But older workers need to reimagine their lives too: investing in continuing education, thinking of what work they could do next and keeping in touch with younger people.

And avoid retirement villages, the authors say. Multigenerational living helps old dogs learn new tricks.

# 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 $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.31% | 1.01% | 1.90% | 0.47% | 0.24% | -0.75% | -0.73% | 0.29% | -1.142% | -0.791% | 0.642% | -0.333% | 1.50% | 0.94% |

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

### AMERICAS

May 13 - - — Index — All World

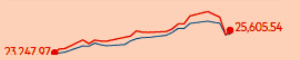
S&P 500 New York

Day ↗ 1.31% Month ↗ 5.96% Year ↗ 5.61%

Nasdaq Composite New York

Day ↗ 1.01% Month ↗ 6.51% Year ↗ 23.05%

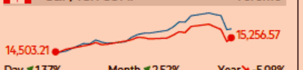
Dow Jones Industrial New York



Day ↗ 1.90% Month ↗ 7.75% Year ↘ -1.54%

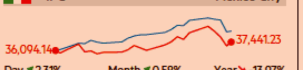
May 13 - Jun 12 — Index — All World

S&P/TSX COMP Toronto



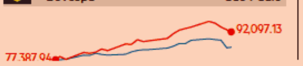
Day ↗ 1.37% Month ↗ 2.52% Year ↘ -5.98%

IPC Mexico City



Day ↗ 2.31% Month ↗ 0.58% Year ↘ -13.97%

Bovespa São Paulo



Day ↘ -2.00% Month ↗ 19.16% Year ↘ -5.62%

### EUROPE

May 13 - Jun 12 — Index — All World

FTSE 100 London

Day ↗ 0.47% Month ↗ 1.60% Year ↘ -17.33%

FTSE Eurofirst 300 Europe

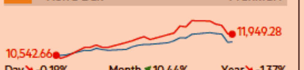
Day ↗ 0.24% Month ↗ 3.55% Year ↘ -7.70%

CAC 40 Paris

Day ↗ 0.49% Month ↗ 8.20% Year ↘ -9.97%

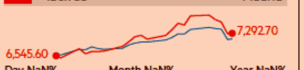
May 13 - Jun 12 — Index — All World

Xetra Dax Frankfurt



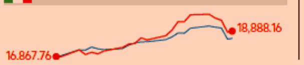
Day ↘ -0.18% Month ↗ 10.44% Year ↘ -1.37%

Ibex 35 Madrid



Day NaN% Month NaN% Year NaN%

FTSE MIB Milan



Day ↗ 0.43% Month ↗ 7.36% Year ↘ -7.87%

### ASIA

May 13 - Jun 12 — Index — All World

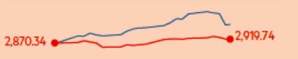
Nikkei 225 Tokyo

Day ↘ -0.75% Month ↗ 9.39% Year ↗ 5.19%

Hang Seng Hong Kong

Day ↘ -0.73% Month ↘ -1.20% Year ↘ -12.53%

Shanghai Composite Shanghai



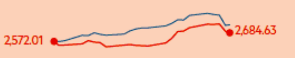
Day ↘ -0.04% Month ↗ 0.86% Year ↘ -0.20%

May 13 - Jun 12 — Index — All World

Kospi Seoul

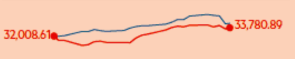
Day ↘ -2.04% Month ↗ 10.17% Year ↗ 0.97%

FTSE Straits Times Singapore



Day ↘ -0.72% Month ↗ 2.97% Year ↘ -16.22%

BSE Sensex Mumbai



Day ↗ 0.72% Month ↗ 7.03% Year ↘ -15.44%

| Country | Index | Latest | Previous |
|---|---|---|---|
| Argentina | Merval | 43417.15 | 43057.94 |
| Australia | All Ordinaries | 5959.90 | 6079.50 |
| | S&P/ASX 200 | 5847.80 | 5960.60 |
| | S&P/ASX 200 Res | 4413.30 | 4512.00 |
| Austria | ATX | 2307.56 | 2270.52 |
| Belgium | BEL 20 | 3296.63 | 3271.67 |
| | BEL Mid | 7564.78 | 7547.39 |
| Brazil | IBovespa | 92795.27 | 94685.98 |
| Canada | S&P/TSX 60 | 920.06 | 908.66 |
| | S&P/TSX Comp | 15256.57 | 15050.92 |
| | S&P/TSX Div Met & Min | 398.08 | 453.27 |
| Chile | S&P/CLX IGPA Gen | 19990.42 | 18465.50 |
| China | FTSE A200 | 10562.05 | 10555.90 |
| | FTSE B35 | 9000.71 | 8988.96 |
| | Shanghai A | 3060.43 | 3061.65 |
| | Shanghai B | 207.44 | 207.22 |
| | Shanghai Comp | 2919.74 | 2920.90 |
| | Shenzhen A | 1957.62 | 1951.95 |
| | Shenzhen B | 858.06 | 859.51 |
| Colombia | COLCAP | 1121.55 | 1177.99 |
| Croatia | CROBEX | 2013.05 | 2011.29 |
| Cyprus | CSE M&P Gen | 68.46 | 68.68 |
| Czech Republic | PX | 930.94 | 907.84 |
| Denmark | OMXC Copenahgen 20 | 1224.69 | 1226.03 |
| Egypt | EGX 30 | 10831.92 | 10933.58 |
| Estonia | OMX Tallinn | 1177.41 | 1180.13 |
| Finland | OMX Helsinki General | 9164.88 | 9108.18 |
| France | CAC 40 | 4839.26 | 4815.59 |
| | SBF 120 | 3814.36 | 3794.38 |
| Germany | M-DAX | 25477.06 | 25514.79 |
| | TecDAX | 3069.17 | 3079.51 |
| | XETRA Dax | 11949.28 | 11970.29 |
| Greece | Athens Gen | 646.80 | 644.90 |
| | FTSE/ASE 20 | 1570.31 | 1557.48 |
| Hong Kong | Hang Seng | 24301.38 | 24480.15 |
| | HS China Enterprise | 9832.53 | 9944.60 |
| | HSCC Red Chip | 3794.04 | 3836.09 |
| Hungary | Bux | 37403.57 | 36640.64 |
| India | BSE Sensex | 33780.89 | 33538.37 |
| | Nifty 500 | 8196.40 | 8137.00 |
| Indonesia | Jakarta Comp | 4880.36 | 4854.75 |
| Ireland | ISEQ Overall | 5885.35 | 5851.20 |
| Israel | Tel Aviv 125 | 1409.24 | 1439.33 |
| Italy | FTSE Italia All-Share | 20623.42 | 20539.62 |
| | FTSE Italia Mid Cap | 32534.83 | 32437.76 |
| | FTSE MIB | 18888.16 | 18806.86 |
| Japan | 2nd Section | 6411.18 | 6475.08 |
| | Nikkei 225 | 22305.48 | 22472.91 |
| | S&P Topix 150 | 1305.01 | 1318.52 |
| | Topix | 1570.68 | 1588.92 |
| Jordan | Amman SE | 1648.69 | 1650.08 |
| Kenya | NSE 20 | 1995.03 | 1986.48 |
| Kuwait | KSX Market Index | 6633.44 | 6603.51 |
| Latvia | OMX Riga | 1029.55 | 1036.15 |
| Lithuania | OMX Vilnius | 727.72 | 728.05 |
| Luxembourg | LuxX | 1020.04 | 995.10 |
| Malaysia | FTSE Bursa KLCI | 1546.02 | 1557.25 |
| Mexico | IPC | 37679.24 | 36827.36 |
| Morocco | MASI | 9996.29 | 10043.41 |
| Netherlands | AEX | 545.16 | 540.26 |
| | AEX All Share | 778.50 | 773.04 |
| New Zealand | NZX 50 | 10905.94 | 11154.93 |
| Nigeria | SE All Share | 25182.67 | 25215.04 |
| Norway | Oslo All Share | 897.72 | 890.90 |
| Pakistan | KSE 100 | 34611.23 | 35128.58 |
| Philippines | Manila Comp | 6476.24 | 6439.37 |
| Poland | Wig | 50169.11 | 51486.94 |
| Portugal | PSI 20 | 4359.99 | 4356.08 |
| | PSI General | 3103.78 | 3119.05 |
| Romania | BET Index | 8731.99 | 8527.32 |
| Russia | Micex Index | 2743.80 | 2785.18 |
| | RTX | 1238.11 | 1277.58 |
| Saudi-Arabia | TADAWUL All Share Index | 7309.80 | 7328.09 |
| Singapore | FTSE Straits Times | 2684.63 | 2704.21 |
| Slovakia | SAX | 359.84 | 359.84 |
| Slovenia | SBI TOP | 873.85 | - |
| South Africa | FTSE/JSE All Share | 53639.64 | 53295.30 |
| | FTSE/JSE Res 20 | 49390.31 | 49175.05 |
| | FTSE/JSE Top 40 | 49247.69 | 48892.12 |
| South Korea | Kospi | 2132.30 | 2176.78 |
| | Kospi 200 | 281.78 | 288.62 |
| Spain | IBEX 35 | 7292.70 | 7278.00 |
| Sri Lanka | CSE All Share | 4914.83 | 4917.24 |
| Sweden | OMX Stockholm 30 | 1609.07 | 1609.06 |
| | OMX Stockholm AS | 624.92 | 624.71 |
| Switzerland | SMI Index | 9796.37 | 9828.58 |
| Taiwan | Weighted Pr | 11429.94 | 11535.77 |
| Thailand | Bangkok SET | 1382.56 | 1396.77 |
| Turkey | BIST 100 | 116840.94 | 116315.98 |
| UAE | Abu Dhabi General Index | 4294.87 | 4331.26 |
| UK | FT 30 | 2303.50 | 2284.90 |
| | FTSE 100 | 6105.18 | 6076.70 |
| | FTSE 4Good UK | 5638.74 | 5610.90 |
| | FTSE All Share | 3379.82 | 3363.63 |
| | FTSE techMARK 100 | 5230.93 | 5246.25 |
| USA | DJ Composite | 8280.24 | 8137.92 |
| | DJ Industrial | 25605.54 | 25128.17 |
| | DJ Transport | 9081.90 | 8839.36 |
| | DJ Utilities | 793.00 | 793.23 |
| | Nasdaq 100 | 9663.78 | 9588.48 |
| | Nasdaq Cmp | 9588.81 | 9492.73 |
| | NYSE Comp | 11867.17 | 11659.17 |
| | S&P 500 | 3041.31 | 3002.10 |
| | Wilshire 5000 | 30947.19 | 30532.19 |
| Venezuela | IBC | 328490.09 | 329633.12 |
| Vietnam | VNI | 863.52 | 867.37 |
| Cross-Border | DJ Global Titans ($) | 358.97 | 357.09 |
| | Euro Stoxx 50 (Eur) | 3153.74 | 3144.57 |
| | Euronext 100 ID | 953.39 | 947.73 |
| | FTSE 4Good Global ($) | 7608.43 | 7561.48 |
| | FTSE All World ($) | 341.05 | 340.06 |
| | FTSE E300 | 1381.50 | 1378.16 |
| | FTSE Eurotop 100 | 2657.80 | 2653.10 |
| | FTSE Global 100 ($) | 1983.11 | 1974.34 |
| | FTSE Gold Min ($) | 2245.52 | 2277.91 |
| | FTSE Latibex Top (Eur) | 4440.00 | 4432.20 |
| | FTSE Multinationals ($) | 2130.60 | 2240.92 |
| | FTSE World ($) | 606.67 | 604.83 |
| | FTSEurofirst 100 (Eur) | 3612.98 | 3595.59 |
| | FTSEurofirst 80 (Eur) | 4317.59 | 4302.09 |
| | MSCI ACWI Fr ($) | 514.89 | 539.76 |
| | MSCI All World ($) | 2154.44 | 2267.36 |
| | MSCI Europe (Eur) | 1438.91 | 1497.16 |
| | MSCI Pacific ($) | 2607.74 | 2668.47 |
| | S&P Euro (Eur) | 1439.86 | 1434.25 |
| | S&P Europe 350 (Eur) | 1416.88 | 1413.00 |
| | S&P Global 1200 ($) | 2404.03 | 2388.89 |
| | Stoxx 50 (Eur) | 2933.20 | 2929.16 |

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

## STOCK MARKET: BIGGEST MOVERS

### AMERICA

| ACTIVE STOCKS | stock traded m's | close price | Day's change |
|---|---|---|---|
| Boeing | 168.5 | 189.51 | 19.51 |
| Apple | 167.3 | 338.80 | 2.90 |
| Amazon.com | 136.7 | 2545.02 | -12.94 |
| Microsoft | 79.3 | 187.74 | 1.47 |
| Nvidia | 50.2 | 357.30 | 5.45 |
| Facebook | 50.0 | 228.58 | 4.15 |
| United Airlines Holdings | 38.6 | 39.66 | 6.34 |
| Advanced Micro Devices | 37.9 | 53.50 | 0.67 |
| Adobe | 33.6 | 406.54 | 18.87 |
| American Airlines | 26.7 | 16.74 | 2.36 |

| BIGGEST MOVERS | Close price | Day's change | Day's chng% |
|---|---|---|---|
| **Ups** | | | |
| United Airlines Holdings | 39.66 | 6.34 | 19.03 |
| Norwegian Cruise Line Holdings Ltd | 20.50 | 3.25 | 18.84 |
| American Airlines | 16.74 | 2.36 | 16.41 |
| Carnival | 19.98 | 2.54 | 14.56 |
| Royal Caribbean Cruises Ltd | 61.18 | 6.67 | 12.24 |
| **Downs** | | | |
| Pvh | 49.61 | -3.11 | -5.90 |
| Oneok | 34.09 | -1.24 | -3.51 |
| Viacomcbs | 22.90 | -0.69 | -2.92 |
| Dollar General | 184.00 | -4.28 | -2.27 |
| Mylan Nv | 15.94 | -0.36 | -2.21 |

Based on the constituents of the S&P500

### LONDON

| ACTIVE STOCKS | stock traded m's | close price | Day's change |
|---|---|---|---|
| Rio Tinto | 351.6 | 4596.00 | 101.00 |
| Segro | 262.9 | 871.60 | 18.40 |
| Astrazeneca | 184.6 | 8201.00 | -75.00 |
| Unilever | 175.0 | 4304.00 | -32.00 |
| Hsbc Holdings | 134.4 | 380.35 | 4.10 |
| British American Tobacco | 133.4 | 3000.00 | -0.50 |
| Bp | 122.8 | 323.05 | 2.15 |
| Bhp | 116.8 | 1667.40 | 18.20 |
| Royal Dutch Shell | 114.0 | 1305.80 | 26.00 |
| Diageo | 113.5 | 2780.00 | 6.00 |

| BIGGEST MOVERS | Close price | Day's change | Day's chng% |
|---|---|---|---|
| **Ups** | | | |
| Pearson | 573.00 | 60.00 | 11.70 |
| Games Workshop | 7720.00 | 620.00 | 8.73 |
| Aston Martin Lagonda Global Holdings | 71.10 | 5.60 | 8.55 |
| Airtel Africa | 56.30 | 4.00 | 7.65 |
| Centrica | 43.16 | 3.04 | 7.58 |
| **Downs** | | | |
| Helios Towers | 160.00 | -24.00 | -13.04 |
| Puretech Health | 248.50 | -16.50 | -6.23 |
| Allianz Technology Trust | 2040.00 | -80.00 | -3.77 |
| Centamin | 161.25 | -6.15 | -3.67 |
| Brewin Dolphin Holdings | 266.00 | -9.00 | -3.27 |

Based on the constituents of the FTSE 350 index

### EURO MARKETS

| ACTIVE STOCKS | stock traded m's | close price | Day's change |
|---|---|---|---|
| Asml Holding | 419.1 | 306.00 | 5.60 |
| Sap Se O.n. | 376.1 | 115.30 | -1.08 |
| Airbus | 373.9 | 66.95 | -0.11 |
| Allianz Se Na O.n. | 353.3 | 178.08 | -0.14 |
| Adidas Ag Na O.n. | 322.4 | 230.10 | -4.20 |
| Iberdrola | 315.9 | 9.75 | 0.07 |
| Lvmh | 312.6 | 379.15 | 4.05 |
| Basf Se Na O.n. | 307.6 | 51.12 | -0.39 |
| Daimler Ag Na O.n. | 307.0 | 36.02 | 0.70 |
| Bnp Paribas Act.a | 306.9 | 34.97 | 0.22 |

| BIGGEST MOVERS | Close price | Day's change | Day's chng% |
|---|---|---|---|
| **Ups** | | | |
| Seadrill | 0.54 | 0.05 | 9.29 |
| Ses | 6.80 | 0.55 | 8.73 |
| Thyssenkrupp Ag O.n. | 6.95 | 0.50 | 7.75 |
| Klepierre | 18.40 | 0.80 | 4.54 |
| Arcelormittal Sa | 9.53 | 0.41 | 4.46 |
| **Downs** | | | |
| Vopak | 47.83 | -1.46 | -2.96 |
| Coloplast B A/s | 140.10 | -2.62 | -1.83 |
| Adidas Ag Na O.n. | 230.10 | -4.20 | -1.79 |
| Kinnevik Ab Ser. B | 21.48 | -0.37 | -1.70 |
| Fresen.med.care Kgaa O.n. | 74.24 | -1.28 | -1.70 |

Based on the constituents of the FTSEurofirst 300 Eurozone index

### TOKYO

| ACTIVE STOCKS | stock traded m's | close price | Day's change |
|---|---|---|---|
| Softbank . | 1750.2 | 5071.00 | -114.00 |
| Fast Retailing Co., | 1295.6 | 64000.00 | 680.00 |
| Sony | 600.5 | 7404.00 | -91.00 |
| Toyota Motor | 501.4 | 6853.00 | -52.00 |
| Mitsubishi Ufj Fin,. | 488.2 | 439.50 | -6.40 |
| Tokyo Electron | 470.3 | 23165.00 | -345.00 |
| Recruit Hldgs Co Ltd | 367.5 | 3813.00 | -110.00 |
| Sumitomo Mitsui Fin,. | 330.4 | 3151.00 | -59.00 |
| Fanuc | 326.9 | 19900.00 | -300.00 |
| Advantest | 278.1 | 5890.00 | -60.00 |

| BIGGEST MOVERS | Close price | Day's change | Day's chng% |
|---|---|---|---|
| **Ups** | | | |
| Yahoo Japan | 461.00 | 19.00 | 4.30 |
| Toyobo Co., | 1529.00 | 37.00 | 2.48 |
| Chugai Pharmaceutical Co., | 16245.00 | 390.00 | 2.46 |
| Rakuten . | 971.00 | 19.00 | 2.00 |
| Hitachi, | 3573.00 | 45.00 | 1.28 |
| **Downs** | | | |
| Mitsui Eng & Shipbuilding Co., | 565.00 | -25.00 | -4.24 |
| Yaskawa Electric | 3730.00 | -155.00 | -3.99 |
| Nippon Sheet Glass , | 424.00 | -17.00 | -3.85 |
| Dainippon Screen Mfg.co., | 5140.00 | -200.00 | -3.75 |
| Astellas Pharma . | 1737.50 | -63.50 | -3.53 |

Based on the constituents of the Nikkei 225 index

## UK MARKET WINNERS AND LOSERS

| FTSE 100 | Jun 12 price(p) | %Chg week | %Chg ytd |
|---|---|---|---|
| **Winners** | | | |
| Fresnillo | 794.20 | 10.7 | 23.3 |
| Pearson | 573.00 | 7.9 | -11.8 |
| Polymetal Int | 1525.00 | 7.8 | 28.0 |
| Rio Tinto | 4596.00 | 1.0 | 1.5 |
| Centrica | 43.16 | 0.9 | -52.1 |
| Reckitt Benckiser | 6908.00 | 0.5 | 11.4 |
| National Grid | 916.20 | -0.3 | -3.6 |
| Rentokil Initial | 480.40 | -0.6 | 5.4 |
| Pennon | 1097.00 | -0.6 | 6.9 |
| Tesco | 226.20 | -0.7 | -11.6 |
| Hargreaves Lansdown | 1615.00 | -0.8 | -17.7 |
| Hikma Pharmaceuticals | 2305.00 | -1.1 | 16.1 |
| **Losers** | | | |
| Melrose Industries | 118.55 | -20.4 | -51.1 |
| Meggitt | 290.00 | -18.7 | -55.7 |
| Just Eat Takeaway.com N.v. | 7376.00 | -16.1 | - |
| Int Consolidated Airlines S.a. | 275.50 | -15.9 | -56.7 |
| Whitbread | 2364.00 | -13.9 | -43.8 |
| Compass | 1150.00 | -13.9 | -39.6 |
| Intermediate Capital | 1224.00 | -13.7 | -25.4 |
| Royal Bank Of Scotland | 118.70 | -13.6 | -51.4 |
| Smiths | 1258.00 | -12.3 | -27.1 |
| 3i | 813.00 | -11.9 | -27.2 |
| Informa | 460.60 | -11.9 | -46.9 |
| Wpp | 618.60 | -11.7 | -42.1 |

| FTSE 250 | Jun 12 price(p) | %Chg week | %Chg ytd |
|---|---|---|---|
| **Winners** | | | |
| Petropavlovsk | 27.35 | 13.3 | 115.4 |
| Centamin | 161.25 | 9.6 | 27.3 |
| Hochschild Mining | 198.00 | 6.7 | 12.2 |
| Airtel Africa | 56.30 | 5.8 | -28.6 |
| Oxford Instruments | 1388.00 | 4.0 | -10.2 |
| Dixons Carphone | 92.00 | 2.2 | -35.3 |
| Plus500 Ltd | 1240.00 | 2.1 | 42.7 |
| 3i Infrastructure | 279.00 | 1.8 | -5.3 |
| Lancashire Holdings | 784.00 | 1.8 | 0.4 |
| Pz Cussons | 183.00 | 1.8 | -11.8 |
| Avast | 475.80 | 1.4 | 0.3 |
| Foresight Solar Fund | 114.00 | 1.3 | -10.2 |
| **Losers** | | | |
| Ssp | 273.40 | -20.1 | -58.7 |
| Hammerson | 110.70 | -19.2 | -64.2 |
| Rhi Magnesita N.v. | 2506.00 | -17.2 | -34.4 |
| Elementis | 67.25 | -17.1 | -63.6 |
| Watches Of Switzerland | 264.00 | -16.7 | -32.3 |
| Cineworld | 76.66 | -16.7 | -65.2 |
| Kainos | 710.00 | -16.5 | -9.7 |
| Biffa | 205.00 | -16.2 | -23.9 |
| Wood (john) | 207.20 | -15.3 | -46.5 |
| Bodycote | 608.50 | -15.2 | -36.2 |
| Babcock Int | 368.90 | -15.2 | -41.5 |
| Go-ahead | 1006.00 | -15.1 | -54.4 |

| FTSE SmallCap | Jun 12 price(p) | %Chg week | %Chg ytd |
|---|---|---|---|
| **Winners** | | | |
| Cmc Markets | 268.50 | 36.9 | 81.9 |
| Metro Bank | 105.00 | 25.0 | -49.8 |
| Brown (n) | 35.90 | 24.4 | -77.5 |
| Asa Int | 154.25 | 18.7 | - |
| Indivior | 71.90 | 16.0 | 82.0 |
| Ricardo | 460.00 | 15.0 | -41.2 |
| Pendragon | 10.01 | 15.0 | -22.0 |
| Volution | 205.00 | 14.5 | -19.3 |
| Petropavlovsk | 27.35 | 13.3 | 115.4 |
| Robert Walters | 392.00 | 13.0 | -29.5 |
| Kier | 93.50 | 12.7 | -1.3 |
| Dp Eurasia N.v. | 40.40 | 12.2 | -22.8 |
| **Losers** | | | |
| Lamprell | 21.10 | -33.9 | -47.3 |
| Lookers | 21.00 | -33.3 | -62.8 |
| Connect | 12.50 | -30.6 | -64.8 |
| Luceco | 96.10 | -21.9 | -26.6 |
| Superdry | 138.80 | -21.8 | -72.7 |
| Intu Properties | 7.43 | -19.8 | -77.3 |
| Card Factory | 40.75 | -18.8 | -71.8 |
| On The Beach | 273.00 | -17.3 | -44.2 |
| Schroder Real Estate Investment Trust | 34.05 | -16.6 | -39.6 |
| Kainos | 710.00 | -16.5 | -9.7 |
| Biffa | 205.00 | -16.2 | -23.9 |
| Stobart Ld | 40.00 | -15.7 | -62.4 |

| Industry Sectors | Jun 12 price(p) | %Chg week | %Chg ytd |
|---|---|---|---|
| **Winners** | | | |
| Index - Technology Hardware & Equipment | 1865.32 | -0.4 | -5.4 |
| Gas Water & Multiutilities | 5012.65 | -0.8 | -7.2 |
| Mining | 17635.38 | -1.4 | -7.7 |
| Household Goods | 16795.87 | -2.6 | -6.4 |
| Pharmaceuticals & Biotech. | 17759.90 | -2.9 | -0.8 |
| Personal Goods | 36017.93 | -3.1 | -5.5 |
| Food & Drug Retailers | 4064.74 | -3.3 | -3.5 |
| Nonlife Insurance | 2615.07 | -3.9 | - |
| Equity Investment Instruments | 10208.30 | -4.3 | -7.2 |
| Beverages | 21791.78 | -4.3 | - |
| Electricity | 7121.31 | -4.4 | - |
| Fixed Line Telecommunication | 1417.70 | -4.6 | - |
| **Losers** | | | |
| Oil Equipment & Services | 4370.01 | -14.3 | - |
| General Industrials | 5103.81 | -12.5 | - |
| Travel & Leisure | 6557.60 | -11.0 | - |
| Automobiles & Parts | 3094.78 | -10.8 | - |
| Banks | 2298.65 | -10.5 | - |
| Life Insurance | 6107.67 | -9.8 | - |
| Oil & Gas Producers | 5022.71 | -9.8 | - |
| Mobile Telecommunications | 2865.89 | -9.4 | -14.4 |
| Construction & Materials | 5997.76 | -8.8 | - |
| Forestry & Paper | 16137.62 | -8.7 | - |
| Industrial Transportation | 1785.67 | -8.6 | - |
| Industrial Engineering | 11231.11 | -8.6 | - |

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

## CURRENCIES

| Jun 12 | 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 | 69.3707 | 0.0572 | 78.0174 | -0.8680 | 86.9907 | -0.6425 |
| Australia | Australian Dollar | 1.4619 | 0.0129 | 1.6441 | -0.0050 | 1.8332 | 0.0013 |
| Bahrain | Bahrainin Dinar | 0.3771 | - | 0.4240 | -0.0051 | 0.4728 | -0.0039 |
| Bolivia | Bolivian Boliviano | 6.9100 | - | 7.7713 | -0.0930 | 8.6651 | -0.0712 |
| Brazil | Brazilian Real | 5.0649 | 0.0909 | 5.6962 | 0.0353 | 6.3514 | 0.0627 |
| Canada | Canadian Dollar | 1.3609 | 0.0061 | 1.5305 | -0.0114 | 1.7066 | -0.0063 |
| Chile | Chilean Peso | 792.9450 | 9.3250 | 891.7811 | -0.0542 | 994.3508 | 3.6181 |
| China | Chinese Yuan | 7.0742 | 0.0044 | 7.9560 | -0.0902 | 8.8710 | -0.0673 |
| Colombia | Colombian Peso | 3757.8350 | 13.5650 | 4226.2283 | -35.1129 | 4712.3155 | -21.5759 |
| Costa Rica | Costa Rican Colon | 577.5550 | -2.4650 | 649.5440 | -10.5749 | 724.2523 | -9.0684 |
| Czech Republic | Czech Koruna | 23.8163 | 0.3627 | 26.7849 | 0.0924 | 29.8656 | 0.2131 |
| Denmark | Danish Krone | 6.6291 | 0.0791 | 7.4553 | 0.0008 | 8.3128 | 0.0317 |
| Egypt | Egyptian Pound | 16.1761 | 0.0110 | 18.1924 | -0.2050 | 20.2848 | -0.1527 |
| Hong Kong | Hong Kong Dollar | 7.7501 | -0.0001 | 8.7161 | -0.1044 | 9.7186 | -0.0800 |
| Hungary | Hungarian Forint | 308.6516 | 5.1545 | 347.1233 | 1.7142 | 387.0482 | 3.3361 |
| India | Indian Rupee | 75.8525 | 0.0612 | 85.3071 | -0.9507 | 95.1188 | -0.7042 |
| Indonesia | Indonesian Rupiah | 14165.0000 | 150.0000 | 15930.5936 | -19.8452 | 17762.8728 | 43.6550 |
| Israel | Israeli Shekel | 3.4760 | 0.0223 | 3.9093 | -0.0214 | 4.3589 | -0.0077 |
| Japan | Japanese Yen | 107.3300 | 0.6850 | 120.7081 | -0.6642 | 134.5915 | -0.2400 |
| ..One Month | | 107.3299 | 0.6849 | 120.7081 | -0.6642 | 134.5915 | -0.2401 |
| ..Three Month | | 107.3298 | 0.6847 | 120.7082 | -0.6641 | 134.5914 | -0.2403 |
| ..One Year | | 107.3292 | 0.6834 | 120.7082 | -0.6639 | 134.5915 | -0.2408 |
| Kenya | Kenyan Shilling | 106.4500 | - | 119.7184 | -1.4320 | 133.4880 | -1.0970 |
| Kuwait | Kuwaiti Dinar | 0.3079 | 0.0004 | 0.3463 | -0.0037 | 0.3861 | -0.0027 |
| Malaysia | Malaysian Ringgit | 4.2675 | 0.0210 | 4.7994 | -0.0335 | 5.3514 | -0.0174 |
| Mexico | Mexican Peso | 22.4408 | 0.0435 | 25.2379 | -0.2524 | 28.1406 | -0.1763 |
| New Zealand | New Zealand Dollar | 1.5598 | 0.0154 | 1.7542 | -0.0034 | 1.9560 | 0.0034 |
| Nigeria | Nigerian Naira | 388.0000 | - | 436.3620 | -5.2195 | 486.5509 | -3.9985 |
| Norway | Norwegian Krone | 9.6550 | 0.1547 | 10.8584 | 0.0462 | 12.1073 | 0.0962 |
| Pakistan | Pakistani Rupee | 164.3000 | -0.1500 | 184.7791 | -2.3809 | 206.0317 | -1.8828 |
| Peru | Peruvian Nuevo Sol | 3.4635 | 0.0120 | 3.8952 | -0.0329 | 4.3432 | -0.0205 |
| Philippines | Philippine Peso | 50.2050 | - | 56.4628 | -0.6754 | 62.9569 | -0.5174 |
| Poland | Polish Zloty | 3.9563 | 0.0268 | 4.4494 | -0.0227 | 4.9612 | -0.0068 |
| Romania | Romanian Leu | 4.2970 | 0.0475 | 4.8325 | -0.0037 | 5.3884 | 0.0158 |
| Russia | Russian Ruble | 69.7075 | 0.2400 | 78.3961 | -0.6646 | 87.4130 | -0.4149 |
| Saudi Arabia | Saudi Riyal | 3.7535 | 0.0015 | 4.2214 | -0.0488 | 4.7069 | -0.0368 |
| Singapore | Singapore Dollar | 1.3928 | 0.0054 | 1.5664 | -0.0126 | 1.7466 | -0.0075 |
| South Africa | South African Rand | 17.1195 | 0.0575 | 19.2533 | -0.1649 | 21.4678 | -0.1037 |
| South Korea | South Korean Won | 1203.8000 | 7.4500 | 1353.8470 | -7.7150 | 1509.5618 | -2.9865 |
| Sweden | Swedish Krona | 9.3578 | 0.1358 | 10.5242 | 0.0287 | 11.7347 | 0.0753 |
| Switzerland | Swiss Franc | 0.9513 | 0.0121 | 1.0698 | 0.0010 | 1.1929 | 0.0055 |
| Taiwan | New Taiwan Dollar | 29.6630 | 0.0050 | 33.3603 | -0.3933 | 37.1973 | -0.2994 |
| Thailand | Thai Baht | 30.9775 | 0.0375 | 34.8387 | -0.3740 | 38.8457 | -0.2718 |
| Tunisia | Tunisian Dinar | 2.8534 | 0.0325 | 3.2091 | -0.0014 | 3.5782 | 0.0117 |
| Turkey | Turkish Lira | 6.8380 | 0.0120 | 7.6904 | -0.0783 | 8.5749 | -0.0552 |
| United Arab Emirates | UAE Dirham | 3.6732 | - | 4.1310 | -0.0494 | 4.6061 | -0.0379 |
| United Kingdom | Pound Sterling | 0.7975 | 0.0065 | 0.8968 | -0.0033 | - | - |
| ..One Month | | 0.7975 | 0.0065 | 0.8968 | -0.0033 | - | - |
| ..Three Month | | 0.7975 | 0.0065 | 0.8967 | -0.0033 | - | - |
| ..One Year | | 0.7977 | 0.0065 | 0.8962 | -0.0033 | - | - |
| United States | United States Dollar | - | - | 1.1246 | -0.0135 | 1.2540 | -0.0103 |
| ..One Month | | - | - | 1.1246 | -0.1397 | 1.2540 | -0.0103 |
| ..Three Month | | - | - | 1.1244 | -0.1397 | 1.2541 | -0.0103 |
| ..One Year | | - | - | 1.1236 | -0.1397 | 1.2543 | -0.0103 |
| Venezuela | Venezuelan Bolivar Fuerte | - | - | - | - | - | - |
| Vietnam | Vietnamese Dong | 23207.0000 | -9.5000 | 26099.6432 | -323.0190 | 29101.5761 | -251.1378 |
| European Union | Euro | 0.8892 | 0.0105 | - | - | 1.1150 | 0.0041 |
| ..One Month | | 0.8891 | 0.0105 | - | - | 1.1150 | 0.0041 |
| ..Three Month | | 0.8889 | 0.0105 | - | - | 1.1149 | 0.0041 |
| ..One Year | | 0.8882 | 0.0105 | - | - | 1.1144 | 0.0041 |

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 Jun 12 | Day's chge% | Euro Index | £ Strlg Jun 11 | £ Strlg Jun 10 | Year ago | Div yield% | Cover | P/E ratio | X/D adj | Total Return |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FTSE 100 (100) | 6105.18 | 0.47 | 5303.22 | 6076.70 | 6329.13 | 7368.57 | 4.92 | 1.44 | 14.14 | 107.14 | 5740.34 |
| FTSE 250 (251) | 17077.34 | 0.61 | 14834.10 | 16973.67 | 17605.46 | 19172.37 | 3.74 | 1.77 | 15.06 | 136.88 | 13399.18 |
| FTSE 250 ex Inv Co (186) | 17464.01 | 0.80 | 15169.98 | 17325.81 | 18056.52 | 20156.99 | 4.08 | 1.40 | 17.56 | 111.35 | 13986.76 |
| FTSE 350 (351) | 3418.45 | 0.49 | 2969.41 | 3401.69 | 3540.54 | 4076.53 | 4.72 | 1.48 | 14.29 | 54.51 | 6410.78 |
| FTSE 350 ex Investment Trusts (285) | 3352.38 | 0.52 | 2912.02 | 3335.20 | 3474.31 | 4031.25 | 4.83 | 1.42 | 14.54 | 54.13 | 3243.72 |
| FTSE 350 Higher Yield (107) | 2739.75 | 0.77 | 2379.87 | 2718.75 | 2849.04 | 3615.50 | 7.29 | 1.27 | 10.83 | 60.91 | 5609.79 |
| FTSE 350 Lower Yield (244) | 3877.60 | 0.25 | 3368.25 | 3867.87 | 4002.07 | 4190.30 | 2.49 | 2.04 | 19.73 | 40.46 | 4549.79 |
| FTSE SmallCap (262) | 4969.74 | 0.14 | 4316.92 | 4962.55 | 5109.15 | 5591.70 | 4.63 | 1.02 | 21.11 | 58.87 | 7791.93 |
| FTSE SmallCap ex Inv Co (145) | 3885.90 | 0.53 | 3375.46 | 3865.55 | 4014.46 | 4577.27 | 5.68 | 0.57 | 30.79 | 34.03 | 6392.37 |
| FTSE All-Share (613) | 3379.82 | 0.48 | 2935.85 | 3363.63 | 3499.69 | 4022.84 | 4.72 | 1.47 | 14.44 | 53.41 | 6403.17 |
| FTSE All-Share ex Inv Co (430) | 3286.27 | 0.52 | 2854.59 | 3269.42 | 3405.61 | 3950.44 | 4.85 | 1.41 | 14.68 | 52.60 | 3229.79 |
| FTSE All-Share ex Multinationals (539) | 1011.44 | 0.46 | 728.18 | 1006.79 | 1047.41 | 1135.06 | 4.18 | 1.28 | 18.61 | 11.24 | 2000.70 |
| FTSE Fledgling (93) | 8088.44 | -0.54 | 7025.96 | 8132.03 | 8254.15 | 9424.49 | 4.32 | 1.58 | 14.67 | 107.78 | 16437.87 |
| FTSE Fledgling ex Inv Co (40) | 9524.32 | -0.64 | 8273.22 | 9585.26 | 9821.52 | 11440.15 | 6.90 | 1.05 | 13.75 | 81.34 | 18957.06 |
| FTSE All-Small (355) | 3440.50 | 0.10 | 2988.56 | 3436.89 | 3535.49 | 3878.44 | 4.61 | 1.05 | 20.58 | 41.07 | 6920.98 |
| FTSE All-Small ex Inv Co (185) | 2899.40 | 0.49 | 2518.54 | 2885.32 | 2995.14 | 3416.23 | 5.72 | 0.59 | 29.58 | 25.37 | 6041.79 |
| FTSE AIM All-Share (728) | 866.99 | 0.16 | 753.11 | 865.61 | 887.22 | 938.97 | 1.53 | 1.39 | 47.06 | 3.25 | 991.26 |
| **FTSE Sector Indices** | | | | | | | | | | | |
| **Oil & Gas (12)** | **5199.09** | **1.39** | **4516.15** | **5127.86** | **5471.50** | **9457.16** | **9.22** | **1.40** | **7.75** | **206.26** | **5714.31** |
| Oil & Gas Producers (8) | 5052.36 | 1.36 | 4388.69 | 4984.54 | 5316.10 | 9173.08 | 9.18 | 1.41 | 7.70 | 202.92 | 5756.12 |
| Oil Equipment Services & Distribution (4) | 4455.01 | 3.64 | 3869.81 | 4298.58 | 4755.44 | 9276.61 | 12.15 | 0.54 | 15.20 | 6.80 | 3836.10 |
| **Basic Materials (23)** | **5784.76** | **1.56** | **5024.89** | **5695.93** | **5893.68** | **6709.45** | **5.99** | **2.15** | **7.75** | **140.61** | **6827.54** |
| Chemicals (7) | 11672.00 | 0.14 | 10138.79 | 11655.14 | 12192.18 | 14622.16 | 2.99 | 2.04 | 16.35 | 87.38 | 11104.20 |
| Forestry & Paper (1) | 17609.11 | 0.53 | 15296.02 | 17516.98 | 18426.00 | 21349.59 | 1.76 | 5.96 | 9.55 | 0.00 | 20835.42 |
| Industrial Metals & Mining (2) | 3283.61 | 0.13 | 2852.28 | 3279.34 | 3437.10 | 6917.87 | 16.52 | 1.08 | 5.62 | 273.09 | 4206.66 |
| Mining (13) | 16876.74 | 1.77 | 14659.85 | 16582.81 | 17122.30 | 19136.31 | 6.33 | 2.15 | 7.35 | 444.07 | 10522.12 |
| **Industrials (99)** | **4987.10** | **0.17** | **4332.01** | **4978.80** | **5194.03** | **5362.96** | **2.74** | **1.45** | **25.26** | **19.30** | **5483.92** |
| Construction & Materials (14) | 6264.80 | 0.65 | 5441.87 | 6224.22 | 6528.17 | 6036.95 | 3.09 | 0.56 | 57.81 | 95.82 | 7197.27 |
| Aerospace & Defense (9) | 3671.07 | -0.87 | 3188.85 | 3703.36 | 3872.49 | 4854.97 | 3.38 | 1.04 | 28.47 | 2.61 | 4164.94 |
| General Industrials (7) | 4107.70 | 1.94 | 3568.12 | 4029.37 | 4307.60 | 4636.78 | 3.97 | 0.93 | 26.97 | 0.00 | 5059.30 |
| Electronic & Electrical Equipment (10) | 9893.64 | -0.31 | 8594.03 | 9924.62 | 10114.14 | 9510.63 | 1.39 | 2.14 | 33.50 | 0.00 | 9418.39 |
| Industrial Engineering (12) | 12255.08 | -0.05 | 10645.28 | 12260.65 | 12843.44 | 14007.56 | 2.69 | 1.70 | 21.90 | 40.37 | 15866.03 |
| Industrial Transportation (6) | 2771.54 | 0.61 | 2407.48 | 2754.76 | 2897.15 | 3354.71 | 8.76 | 0.80 | 14.22 | 0.00 | 2803.78 |
| Support Services (41) | 7944.89 | 0.06 | 6901.27 | 7940.18 | 8242.25 | 8171.72 | 2.12 | 2.19 | 21.56 | 25.92 | 8754.71 |
| **Consumer Goods (42)** | **18146.69** | **0.17** | **15762.98** | **18116.19** | **18659.87** | **19892.31** | **4.41** | **1.74** | **13.03** | **259.89** | **15053.98** |
| Automobiles & Parts (2) | 3110.63 | 1.40 | 2702.03 | 3067.70 | 3365.79 | 6330.70 | 1.07 | 6.65 | 14.10 | 0.00 | 3182.85 |
| Beverages (6) | 21848.87 | 0.34 | 18978.85 | 21775.47 | 22532.58 | 27184.17 | 2.60 | 2.14 | 18.02 | 197.15 | 16512.53 |
| Food Producers (10) | 6467.57 | 0.58 | 5618.00 | 6430.57 | 6630.87 | 7581.13 | 2.78 | 1.97 | 18.32 | 12.36 | 5935.11 |
| Household Goods & Home Construction (14) | 14027.04 | 0.35 | 12184.48 | 13978.72 | 14289.08 | 13663.49 | 3.50 | 2.29 | 12.47 | 141.01 | 11163.30 |
| Leisure Goods (2) | 19777.60 | 8.35 | 17179.66 | 18252.74 | 19390.73 | 13971.98 | 2.57 | 1.48 | 26.35 | 109.33 | 20506.65 |
| Personal Goods (6) | 31134.28 | -0.34 | 27044.55 | 31240.03 | 31803.91 | 35807.17 | 3.27 | 2.79 | 10.96 | 447.31 | 22984.97 |
| Tobacco (2) | 31119.36 | -0.12 | 27031.59 | 31157.74 | 32379.07 | 32298.52 | 7.92 | 1.11 | 11.42 | 785.33 | 24199.56 |
| **Health Care (16)** | **12555.34** | **-0.84** | **10906.10** | **12661.39** | **12903.53** | **11063.24** | **3.40** | **0.98** | **29.98** | **247.69** | **10782.89** |
| Health Care Equipment & Services (7) | 6773.48 | -0.69 | 5883.73 | 6820.60 | 7007.92 | 7714.65 | 2.03 | 1.72 | 28.61 | 77.97 | 6200.86 |
| Pharmaceuticals & Biotechnology (9) | 17653.86 | -0.85 | 15334.88 | 17805.67 | 18130.98 | 15088.49 | 3.55 | 0.94 | 30.13 | 363.15 | 13613.36 |
| **Consumer Services (85)** | **4307.05** | **0.71** | **3741.28** | **4276.68** | **4467.41** | **5122.88** | **3.61** | **1.56** | **17.72** | **47.28** | **4384.89** |
| Food & Drug Retailers (5) | 4222.46 | -0.68 | 3667.81 | 4251.25 | 4316.14 | 3968.87 | 3.16 | 1.20 | 26.45 | 78.41 | 5306.74 |
| General Retailers (27) | 1867.47 | 1.12 | 1622.17 | 1846.84 | 1938.32 | 2014.11 | 3.08 | 1.92 | 16.91 | 2.90 | 2327.28 |
| Media (17) | 7378.06 | 1.11 | 6408.90 | 7297.27 | 7610.52 | 8817.42 | 3.70 | 1.55 | 17.47 | 80.73 | 4940.61 |
| Travel & Leisure (36) | 6450.72 | 0.84 | 5603.37 | 6397.27 | 6772.79 | 8960.13 | 4.07 | 1.57 | 15.68 | 79.44 | 6616.76 |
| **Telecommunications (6)** | **1782.43** | **0.26** | **1548.29** | **1777.86** | **1911.45** | **2133.06** | **7.62** | **-0.46** | **-28.45** | **41.51** | **2407.63** |
| Fixed Line Telecommunications (3) | 1469.72 | 0.89 | 1276.66 | 1456.74 | 1535.84 | 2539.72 | 12.14 | 1.25 | 6.56 | 0.00 | 1606.39 |
| Mobile Telecommunications (3) | 2861.56 | 0.05 | 2485.67 | 2860.16 | 3094.59 | 2936.00 | 6.13 | -1.59 | -10.29 | 88.67 | 3486.54 |
| **Utilities (8)** | **7025.40** | **1.48** | **6102.56** | **6922.62** | **7165.85** | **6557.77** | **6.13** | **0.41** | **40.16** | **53.87** | **9412.61** |
| Electricity (3) | 7105.14 | 1.91 | 6171.82 | 6972.20 | 7218.72 | 6680.02 | 7.43 | -0.36 | -37.76 | 151.05 | 12535.99 |
| Gas Water & Multiutilities (5) | 6624.73 | 1.37 | 5754.52 | 6535.24 | 6764.47 | 6173.20 | 5.78 | 0.68 | 25.63 | 26.05 | 8776.67 |
| **Financials (307)** | **3840.72** | **0.54** | **3336.21** | **3820.06** | **3986.04** | **4841.48** | **4.47** | **1.72** | **13.03** | **44.95** | **3964.61** |
| Banks (10) | 2268.13 | 1.11 | 1970.19 | 2243.21 | 2409.98 | 3748.97 | 5.81 | 1.99 | 8.64 | 0.02 | 1868.05 |
| Nonlife Insurance (8) | 2993.46 | 0.28 | 2600.24 | 2985.07 | 3065.66 | 3751.89 | 4.77 | 1.57 | 13.34 | 31.79 | 5805.17 |
| Life Insurance/Assurance (7) | 6221.07 | 0.70 | 5403.88 | 6177.70 | 6518.30 | 7826.05 | 5.93 | 1.74 | 9.67 | 154.93 | 6967.53 |
| Real Estate Investment & Services (17) | 2271.93 | 0.30 | 1973.49 | 2265.08 | 2336.88 | 2387.41 | 2.59 | 2.90 | 13.30 | 12.75 | 6475.79 |
| Real Estate Investment Trusts (41) | 2301.49 | 2.28 | 1999.17 | 2250.21 | 2316.98 | 2598.66 | 4.38 | -0.91 | -25.00 | 34.43 | 3232.41 |
| General Financial (41) | 8841.34 | -0.60 | 7679.96 | 8894.77 | 9125.35 | 9140.06 | 3.70 | 1.17 | 23.15 | 173.40 | 11268.66 |
| Equity Investment Instruments (183) | 10303.07 | -0.03 | 8949.68 | 10306.08 | 10536.47 | 10411.18 | 2.75 | 3.14 | 11.61 | 130.67 | 6087.20 |
| **Non Financials (306)** | **4121.99** | **0.46** | **3580.53** | **4103.05** | **4264.94** | **4808.87** | **4.80** | **1.39** | **14.97** | **70.75** | **6854.56** |
| **Technology (15)** | **1874.25** | **-0.05** | **1628.06** | **1875.25** | **1940.91** | **2299.85** | **3.65** | **0.80** | **34.32** | **23.53** | **2603.30** |
| Software & Computer Services (13) | 2011.56 | -0.28 | 1747.32 | 2017.27 | 2090.85 | 2570.37 | 3.86 | 0.73 | 35.74 | 25.75 | 2956.10 |
| Technology Hardware & Equipment (2) | 4572.86 | 2.45 | 3972.18 | 4463.57 | 4548.83 | 3074.87 | 1.50 | 2.76 | 24.15 | 43.15 | 5650.10 |

| Hourly movements | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | High/day | Low/day |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FTSE 100 | 5997.72 | 6070.59 | 6146.14 | 6155.94 | 6141.44 | 6135.81 | 6147.87 | 6162.48 | 6105.60 | 6183.99 | 5994.00 |
| FTSE 250 | 16755.63 | 16979.26 | 17194.31 | 17219.15 | 17153.14 | 17114.65 | 17161.65 | 17250.85 | 17146.94 | 17275.20 | 16709.16 |
| FTSE SmallCap | 4934.87 | 4940.92 | 4973.54 | 4978.12 | 4974.08 | 4975.97 | 4979.76 | 4989.84 | 4987.05 | 4994.54 | 4916.70 |
| FTSE All-Share | 3320.80 | 3360.61 | 3401.92 | 3407.19 | 3398.51 | 3394.81 | 3401.78 | 3411.38 | 3382.63 | 3420.62 | 3320.20 |

Time of FTSE 100 Day's high:13:41:45 Day's Low07:05:30 FTSE 100 2010/11 High: 7674.56(17/01/2020) Low: 4993.89(23/03/2020)
Time of FTSE All-Share Day's high:13:42:00 Day's Low07:04:00 FTSE 100 2010/11 High: 4257.93(17/01/2020) Low: 2727.86(23/03/2020)

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

| | Jun 12 | Jun 11 | Jun 10 | Jun 09 | Jun 08 | Yr Ago | High | Low |
|---|---|---|---|---|---|---|---|---|
| FT 30 | 2303.50 | 2284.90 | 2411.80 | 2444.30 | 2519.40 | 0.00 | 3314.70 | 1337.80 |
| FT 30 Div Yield | - | - | - | - | - | 0.00 | 3.93 | 2.74 |
| P/E Ratio net | - | - | - | - | - | 0.00 | 19.44 | 14.26 |

FT 30 since compilation: 4198.4 high: 19/07/1999; low49.4 18/02/1900Base Date: 1/7/35

**FT 30 hourly changes**

| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | High | Low |
|---|---|---|---|---|---|---|---|---|---|---|
| 2284.9 | 2291.6 | 2332 | 3120.5 | 2399.1 | 2395.8 | 2394.3 | 2414 | 2426.7 | 2439.2 | 2366.1 |

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

## FX: EFFECTIVE INDICES

| | Jun 11 | Jun 10 | Mnth Ago | | Jun 12 | Jun 11 | Mnth Ago |
|---|---|---|---|---|---|---|---|
| Australia | - | - | - | Sweden | - | - | - |
| Canada | - | - | - | Switzerland | - | - | - |
| Denmark | - | - | - | UK | 77.25 | 78.00 | 77.76 |
| Japan | - | - | - | USA | - | - | - |
| New Zealand | - | - | - | Euro | - | - | - |
| Norway | - | - | - | | | | |

Source: Bank of England. New Sterling ERI base Jan 2005 = 100. Other indices base average 1990 = 100. Index rebased 1/2/95. for further information about ERIs see www.bankofengland.co.uk

## FTSE GLOBAL EQUITY INDEX SERIES

| Jun 12 Regions & countries | No of stocks | US $ indices | Day % | Mth % | YTD % | Total retn | YTD % | Gr Div Yield |
|---|---|---|---|---|---|---|---|---|
| FTSE Global All Cap | 8901 | 576.00 | -4.7 | 5.3 | -9.5 | 878.73 | -8.5 | 2.6 |
| FTSE Global All Cap | 7079 | 462.39 | 0.3 | 7.3 | -0.3 | 624.68 | 0.2 | 2.5 |
| FTSE Global Large Cap | 1771 | 522.64 | -4.5 | 5.0 | -7.9 | 820.96 | -6.8 | 2.6 |
| FTSE Global Mid Cap | 2185 | 716.05 | -4.9 | 6.5 | -13.7 | 1028.19 | -12.9 | 2.4 |
| FTSE Global Small Cap | 4945 | 737.94 | -5.3 | 5.3 | -14.7 | 1019.73 | -14.0 | 2.2 |
| FTSE All-World | 3956 | 340.06 | -4.6 | 5.3 | -8.9 | 548.96 | -7.9 | 2.6 |
| FTSE World | 2594 | 604.83 | -4.8 | 5.2 | -9.0 | 1310.80 | -7.9 | 2.6 |
| FTSE Global All Cap ex UNITED KINGDOM In | 8599 | 607.13 | -4.7 | 5.3 | -8.7 | 909.76 | -7.8 | 2.4 |
| FTSE Global All Cap ex USA | 7125 | 456.09 | -3.0 | 8.7 | -12.1 | 757.79 | -10.9 | 3.3 |
| FTSE Global All Cap ex JAPAN | 7549 | 591.13 | -4.9 | 5.0 | -9.8 | 910.36 | -8.9 | 2.6 |
| FTSE Global All Cap ex Eurozone | 8250 | 605.48 | -4.7 | 4.6 | -9.0 | 904.66 | -8.1 | 2.5 |
| FTSE Developed | 2170 | 553.95 | -4.9 | 4.9 | -8.5 | 852.47 | -7.5 | 2.5 |
| FTSE Developed All Cap | 5632 | 575.27 | -5.0 | 4.9 | -9.2 | 872.97 | -8.3 | 2.5 |
| FTSE Developed Large Cap | 884 | 521.64 | -4.9 | 4.7 | -7.5 | 816.89 | -6.4 | 2.6 |
| FTSE Developed Europe Large Cap | 235 | 330.29 | -3.8 | 9.2 | -14.0 | 611.67 | -12.4 | 3.9 |
| FTSE Developed Europe Mid Cap | 354 | 533.55 | -3.9 | 9.2 | -15.6 | 864.18 | -14.8 | 3.2 |
| FTSE Dev Europe Small Cap | 694 | 725.81 | -3.6 | 9.2 | -19.2 | 1133.69 | -18.4 | 3.3 |
| FTSE North America Large Cap | 253 | 658.78 | -5.8 | 2.3 | -5.5 | 952.90 | -4.6 | 2.1 |
| FTSE North America Mid Cap | 409 | 822.66 | -6.1 | 4.4 | -13.1 | 1097.63 | -12.4 | 1.9 |
| FTSE North America Small Cap | 1302 | 809.46 | -6.8 | 3.4 | -15.2 | 1043.65 | -14.6 | 1.8 |
| FTSE North America | 662 | 427.43 | -5.8 | 2.7 | -6.9 | 631.77 | -6.0 | 2.0 |
| FTSE Developed ex North America | 1508 | 240.70 | -3.2 | 9.4 | -11.5 | 431.38 | -10.2 | 3.4 |
| FTSE Japan Large Cap | 181 | 378.53 | -1.7 | 8.7 | -4.6 | 525.36 | -3.4 | 2.5 |
| FTSE Japan Mid Cap | 327 | 579.21 | -1.6 | 8.2 | -7.8 | 763.68 | -6.8 | 2.2 |
| FTSE Global wi JAPAN Small Cap | 844 | 626.03 | -1.8 | 6.0 | -10.0 | 855.40 | -8.9 | 2.3 |
| FTSE Japan | 508 | 158.40 | -1.7 | 8.6 | -5.2 | 246.17 | -4.1 | 2.4 |
| FTSE Asia Pacific Large Cap ex Japan | 921 | 674.57 | -2.3 | 7.6 | -7.2 | 1150.88 | -6.3 | 3.0 |
| FTSE Asia Pacific Mid Cap ex Japan | 848 | 766.06 | -2.3 | 10.7 | -11.5 | 1254.63 | -10.7 | 3.3 |
| FTSE Asia Pacific Small Cap ex Japan | 1814 | 508.74 | -1.8 | 9.1 | -6.3 | 814.07 | -5.5 | 3.1 |
| FTSE Asia Pacific Ex Japan | 1769 | 525.30 | -2.3 | 7.9 | -7.5 | 952.05 | -6.7 | 3.0 |
| FTSE Emerging All Cap | 3269 | 697.45 | -1.9 | 8.2 | -11.7 | 1129.95 | -10.8 | 3.1 |
| FTSE Emerging Large Cap | 887 | 674.90 | -2.0 | 7.6 | -10.9 | 1100.44 | -10.1 | 3.0 |
| FTSE Emerging Mid Cap | 899 | 796.18 | -1.9 | 12.7 | -18.2 | 1290.43 | -17.1 | 3.8 |
| FTSE Emerging Small Cap | 1483 | 669.73 | -1.6 | 8.5 | -11.4 | 1038.98 | -10.6 | 3.4 |
| FTSE Emerging Europe | 75 | 336.53 | -2.5 | 12.0 | -23.5 | 610.19 | -22.8 | 7.5 |
| FTSE Latin America All Cap | 242 | 665.44 | -2.8 | 26.3 | -32.5 | 1123.69 | -31.6 | 3.8 |
| FTSE Middle East and Africa All Cap | 328 | 549.46 | -1.6 | 9.4 | -20.3 | 944.14 | -18.4 | 4.2 |
| FTSE Global wi UNITED KINGDOM All Cap In | 302 | 271.76 | -4.8 | 4.9 | -24.0 | 511.14 | -22.9 | 4.9 |
| FTSE Global wi USA All Cap | 1776 | 730.90 | -6.0 | 2.7 | -7.4 | 1021.00 | -6.6 | 1.9 |
| FTSE Europe All Cap | 1432 | 386.63 | -3.8 | 9.3 | -15.0 | 687.83 | -13.7 | 3.8 |
| FTSE Eurozone All Cap | 651 | 372.68 | -4.0 | 12.9 | -14.3 | 660.80 | -13.2 | 3.6 |
| FTSE EDHEC-Risk Efficient All-World | 3956 | 380.10 | -4.4 | 5.9 | -12.2 | 566.44 | -11.2 | 2.7 |
| FTSE EDHEC-Risk Efficient Developed Europe | 589 | 293.44 | -3.6 | 8.8 | -13.2 | 485.10 | -12.2 | 3.4 |
| Oil & Gas | 150 | 243.72 | -6.8 | 4.2 | -33.0 | 443.68 | -31.4 | 6.2 |
| Oil & Gas Producers | 104 | 234.85 | -6.8 | 4.8 | -33.5 | 436.97 | -31.8 | 6.4 |

| Jun 12 Sectors | No of stocks | US $ indices | Day % | Mth % | YTD % | Total retn | YTD % | Gr Div Yield |
|---|---|---|---|---|---|---|---|---|
| Oil Equipment & Services | 36 | 178.34 | -7.6 | -7.6 | -33.4 | 292.63 | -31.8 | 5.7 |
| Basic Materials | 350 | 458.58 | -4.1 | -4.1 | -10.8 | 767.05 | -9.4 | 3.6 |
| Chemicals | 159 | 666.90 | -4.7 | -4.7 | -11.1 | 1105.20 | -10.0 | 3.2 |
| Forestry & Paper | 20 | 228.14 | -4.1 | -4.1 | -18.0 | 428.91 | -16.3 | 3.5 |
| Industrial Metals & Mining | 93 | 299.25 | -4.5 | -4.5 | -20.9 | 502.65 | -19.8 | 4.3 |
| Mining | 78 | 702.28 | -2.7 | -2.7 | -3.7 | 1202.33 | -1.6 | 4.2 |
| Industrials | 746 | 396.26 | -5.0 | -5.0 | -11.7 | 605.47 | -10.9 | 2.2 |
| Construction & Materials | 148 | 476.63 | -3.8 | -3.8 | -14.0 | 763.77 | -13.1 | 2.6 |
| Aerospace & Defense | 37 | 627.19 | -8.5 | -8.5 | -29.9 | 944.01 | -29.4 | 2.7 |
| General Industrials | 64 | 188.59 | -6.1 | -6.1 | -17.3 | 315.43 | -16.0 | 3.0 |
| Electronic & Electrical Equipment | 140 | 474.47 | -3.5 | -3.5 | -6.8 | 657.43 | -6.1 | 1.8 |
| Industrial Engineering | 145 | 752.69 | -4.2 | -4.2 | -9.2 | 1144.75 | -8.2 | 2.5 |
| Industrial Transportation | 126 | 678.41 | -5.1 | -5.1 | -10.4 | 1041.89 | -9.6 | 2.5 |
| Support Services | 86 | 496.44 | -4.8 | -4.8 | -1.6 | 717.12 | -0.9 | 1.4 |
| Consumer Goods | 545 | 468.36 | -3.5 | -3.5 | -8.2 | 747.18 | -7.2 | 2.8 |
| Automobiles & Parts | 132 | 344.91 | -4.9 | -4.9 | -9.4 | 537.45 | -8.5 | 3.3 |
| Beverages | 67 | 607.20 | -4.6 | -4.6 | -14.3 | 975.60 | -13.5 | 2.7 |
| Food Producers | 130 | 649.06 | -2.4 | -2.4 | -4.8 | 1059.98 | -3.4 | 2.5 |
| Household Goods & Home Construction | 60 | 471.63 | -3.3 | -3.3 | -6.9 | 748.04 | -5.9 | 2.6 |
| Leisure Goods | 42 | 254.33 | -0.9 | -0.9 | 5.0 | 348.92 | 5.8 | 1.1 |
| Personal Goods | 101 | 829.82 | -3.3 | -3.3 | -7.9 | 1225.96 | -7.4 | 1.9 |
| Tobacco | 13 | 843.64 | -4.7 | -4.7 | -15.3 | 2037.19 | -13.6 | 7.1 |
| Health Care | 280 | 599.90 | -4.1 | -4.1 | -1.8 | 917.14 | -0.7 | 2.0 |
| Health Care Equipment & Services | 95 | 1104.11 | -5.4 | -5.4 | -5.8 | 1324.02 | -5.5 | 1.0 |
| Pharmaceuticals & Biotechnology | 185 | 411.24 | -3.5 | -3.5 | 0.2 | 667.24 | 1.7 | 2.5 |
| Consumer Services | 452 | 546.47 | -4.0 | -4.0 | -2.0 | 762.35 | -1.4 | 1.4 |
| Food & Drug Retailers | 66 | 265.60 | -3.5 | -3.5 | -9.9 | 397.79 | -8.7 | 2.7 |
| General Retailers | 148 | 1003.67 | -3.4 | -3.4 | 10.9 | 1347.59 | 11.3 | 0.9 |
| Media | 88 | 344.76 | -4.7 | -4.7 | -10.3 | 483.90 | -9.8 | 1.6 |
| Travel & Leisure | 150 | 404.57 | -5.2 | -5.2 | -21.9 | 576.83 | -21.2 | 2.4 |
| Telecommunication | 94 | 142.79 | -3.4 | -3.4 | -11.0 | 304.00 | -9.2 | 4.8 |
| Fixed Line Telecommuniations | 41 | 114.09 | -4.0 | -4.0 | -15.7 | 271.82 | -13.7 | 5.7 |
| Mobile Telecommunications | 53 | 159.85 | -2.6 | -2.6 | -4.2 | 298.76 | -2.7 | 3.7 |
| Utilities | 190 | 288.66 | -3.4 | -3.4 | -9.2 | 622.37 | -7.7 | 3.7 |
| Electricity | 133 | 323.75 | -3.4 | -3.4 | -9.1 | 688.27 | -7.6 | 3.6 |
| Gas Water & Multiutilities | 57 | 290.90 | -3.4 | -3.4 | -9.4 | 647.14 | -8.1 | 3.9 |
| Financials | 860 | 208.26 | -5.7 | -5.7 | -21.3 | 372.72 | -20.1 | 3.9 |
| Banks | 280 | 152.02 | -6.1 | -6.1 | -28.8 | 297.44 | -27.7 | 5.5 |
| Nonlife Insurance | 73 | 245.62 | -5.8 | -5.8 | -20.4 | 382.83 | -19.1 | 2.6 |
| Life Insurance | 58 | 184.62 | -5.2 | -5.2 | -23.5 | 325.39 | -21.9 | 4.2 |
| Financial Services | 210 | 332.31 | -5.7 | -5.7 | -10.2 | 484.02 | -9.4 | 1.9 |
| Technology | 289 | 386.35 | -4.6 | -4.6 | 7.4 | 493.00 | 8.0 | 1.2 |
| Software & Computer Services | 149 | 668.88 | -4.5 | -4.5 | 10.0 | 798.85 | 10.4 | 0.7 |
| Technology Hardware & Equipment | 140 | 290.29 | -4.7 | -4.7 | 4.4 | 393.93 | 5.2 | 1.9 |
| Alternative Energy | 10 | 127.08 | -3.6 | -3.6 | 0.4 | 179.69 | 1.4 | 1.4 |
| Real Estate Investment & Services | 158 | 316.89 | -2.8 | -2.8 | -14.2 | 574.89 | -12.8 | 3.5 |
| Real Estate Investment Trusts | 81 | 416.81 | -5.8 | -5.8 | -15.9 | 898.93 | -14.7 | 4.3 |
| Real Estate Investment & Services | 152 | 258.63 | 2.8 | 2.8 | -30.0 | 463.40 | -29.7 | 4.2 |

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

## FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

| | | | | | |
|---|---|---|---|---|---|
| Leisure Goods | 18.92 | Mobile Telecomms | -14.18 | Media | -20.55 |
| Tech Hardware & Eq | 5.10 | Construct & Material | -15.18 | Telecommunications | -21.59 |
| Pharmace & Biotech | -0.24 | Electricity | -15.29 | FTSE 250 Index | -21.96 |
| Health Care | -2.46 | FTSE SmallCap Index | -16.48 | General Retailers | -22.45 |
| Food & Drug Retailer | -3.18 | Industrials | -16.80 | Real Est Invest & Se | -22.64 |
| Electronic & Elec Eq | -3.30 | Industrial Eng | -16.88 | Real Est Invest & Tr | -23.67 |
| Personal Goods | -6.02 | Technology | -17.19 | Consumer Services | -24.20 |
| Household Goods & Ho | -6.83 | NON FINANCIALS Index | -17.28 | Life Insurance | -24.26 |
| Gas Water & Multi | -7.12 | Chemicals | -17.75 | Financials | -25.36 |
| Mining | -7.16 | Software & Comp Serv | -18.82 | Industrial Transport | -29.54 |
| Equity Invest Instr | -8.37 | Financial Services | -18.88 | Aerospace & Defense | -29.60 |
| Basic Materials | -8.87 | FTSE 100 Index | -19.06 | Travel & Leisure | -36.24 |
| Utilities | -9.02 | Forestry & Paper | -19.13 | Oil & Gas Producers | -37.59 |
| Tobacco | -9.76 | Nonlife Insurance | -19.26 | Oil & Gas | -37.76 |
| Consumer Goods | -9.88 | Industrial Metals & | -19.33 | Fixed Line Telecomms | -37.83 |
| Support Services | -12.87 | FTSE All{HY-}Share Index | -19.46 | Banks | -39.29 |
| Beverages | -13.95 | Health Care Eq & Srv | -19.85 | Automobiles & Parts | -43.42 |
| | | Food Producers | -19.90 | Oil Equipment & Serv | -48.62 |

## FTSE 100 SUMMARY

| FTSE 100 | Closing Price | Week's Change | FTSE 100 | Closing Price | Week's Change |
|---|---|---|---|---|---|
| 3I Group PLC | 813.00 | -110.20 | Land Securities Group PLC | 619.60 | -72.20 |
| Admiral Group PLC | 2263 | -57.00 | Legal & General Group PLC | 225.60 | -25.30 |
| Anglo American PLC | 1825.2 | -40.60 | Lloyds Banking Group PLC | 31.93 | -3.62 |
| Antofagasta PLC | 868.00 | -59.00 | London Stock Exchange Group PLC | 7962 | -110.00 |
| Ashtead Group PLC | 2361 | -249.00 | M&G PLC | 151.50 | -13.65 |
| Associated British Foods PLC | 1928 | -122.00 | Meggitt PLC | 290.00 | -66.60 |
| Astrazeneca PLC | 8201 | -226.00 | Melrose Industries PLC | 118.55 | -30.40 |
| Auto Trader Group PLC | 530.00 | -21.00 | Mondi PLC | 1433.5 | -138.50 |
| Aveva Group PLC | 3872 | -243.00 | Morrison (Wm) Supermarkets PLC | 183.90 | -2.40 |
| Aviva PLC | 276.50 | -19.80 | National Grid PLC | 916.20 | -2.40 |
| Bae Systems PLC | 504.80 | -9.60 | Next PLC | 5028 | -452.00 |
| Barclays PLC | 117.06 | -14.34 | Ocado Group PLC | 1958 | -165.00 |
| Barratt Developments PLC | 525.80 | -24.40 | Pearson PLC | 573.00 | 42.00 |
| Berkeley Group Holdings (The) PLC | 4181 | -199.00 | Pennon Group PLC | 1097 | -7.00 |
| Bhp Group PLC | 1667.4 | -54.60 | Persimmon PLC | 2324 | -216.00 |
| BP PLC | 323.05 | -39.20 | Phoenix Group Holdings PLC | 638.00 | -57.80 |
| British American Tobacco PLC | 3000 | -182.50 | Polymetal International PLC | 1525 | 110.00 |
| British Land Company PLC | 412.90 | -48.50 | Prudential PLC | 1142 | -132.50 |
| Bt Group PLC | 115.30 | -4.65 | Reckitt Benckiser Group PLC | 6908 | 34.00 |
| Bunzl PLC | 1884 | -133.00 | Relx PLC | 1834 | -75.50 |
| Burberry Group PLC | 1594 | -127.00 | Rentokil Initial PLC | 480.40 | -3.00 |
| Carnival PLC | 1269 | -162.50 | Rightmove PLC | 560.60 | -36.40 |
| Centrica PLC | 43.16 | 0.37 | Rio Tinto PLC | 4596 | 46.00 |
| Coca-Cola Hbc AG | 2056 | -108.00 | Rolls-Royce Holdings PLC | 327.50 | -28.40 |
| Compass Group PLC | 1150 | -186.00 | Royal Bank Of Scotland Group PLC | 118.70 | -18.65 |
| Crh PLC | 2676 | -253.00 | Royal Dutch Shell PLC | 1305.8 | -120.80 |
| Croda International PLC | 5008 | -166.00 | Royal Dutch Shell PLC | 1350.4 | -126.80 |
| Dcc PLC | 6702 | -250.00 | Rsa Insurance Group PLC | 405.60 | -30.00 |
| Diageo PLC | 2780 | -120.00 | Sage Group PLC | 650.20 | -40.20 |
| Easyjet PLC | 805.00 | -86.20 | Sainsbury (J) PLC | 195.00 | -2.60 |
| Evraz PLC | 287.80 | -26.30 | Schroders PLC | 2915 | -230.00 |
| Experian PLC | 2724 | -122.00 | Scottish Mortgage Investment Trust PLC | 726.00 | -24.50 |
| Ferguson PLC | 6068 | -542.00 | Segro PLC | 871.60 | -21.20 |
| Flutter Entertainment PLC | 10750 | -675.00 | Severn Trent PLC | 2406 | -73.00 |
| Fresnillo PLC | 794.20 | 76.80 | Smith & Nephew PLC | 1601.5 | -134.50 |
| Glaxosmithkline PLC | 1599.2 | -38.40 | Smith (Ds) PLC | 320.00 | -29.30 |
| Glencore PLC | 172.34 | -8.64 | Smiths Group PLC | 1258 | -177.00 |
| Halma PLC | 2185 | -137.00 | Smurfit Kappa Group PLC | 2460 | -192.00 |
| Hargreaves Lansdown PLC | 1615 | -13.00 | Spirax-Sarco Engineering PLC | 9570 | -550.00 |
| Hikma Pharmaceuticals PLC | 2305 | -25.00 | Sse PLC | 1238.5 | -49.00 |
| HSBC Holdings PLC | 380.35 | -42.60 | St. James's Place PLC | 926.60 | -79.90 |
| Imperial Brands PLC | 1485.5 | -21.00 | Standard Chartered PLC | 426.90 | -37.60 |
| Informa PLC | 460.60 | -62.00 | Standard Life Aberdeen PLC | 251.10 | -29.10 |
| Intercontinental Hotels Group PLC | 3852 | -462.00 | Taylor Wimpey PLC | 151.50 | -9.90 |
| Intermediate Capital Group PLC | 1224 | -194.00 | Tesco PLC | 226.20 | -1.50 |
| International Consolidated Airlines Group S.A. | 275.50 | -52.00 | Unilever PLC | 4304 | -105.00 |
| Intertek Group PLC | 5278 | -196.00 | United Utilities Group PLC | 902.00 | -14.00 |
| Itv PLC | 78.70 | -9.50 | Vodafone Group PLC | 126.10 | -12.86 |
| Jd Sports Fashion PLC | 628.20 | -63.00 | Whitbread PLC | 2364 | -383.00 |
| Johnson Matthey PLC | 2090 | -171.00 | Wpp PLC | 618.60 | -82.00 |
| Just Eat Takeaway.Com N.V. | 7376 | -1418.00 | | | |

## UK STOCK MARKET TRADING DATA

| | Jun 12 | Jun 11 | Jun 10 | Jun 09 | Jun 08 | Yr Ago |
|---|---|---|---|---|---|---|
| | - | - | - | - | - | - |
| Order Book Turnover (m) | 62.96 | 108.26 | 205.10 | 82.59 | 133.81 | 133.81 |
| Order Book Bargains | 1246675.00 | 1230472.00 | 1414560.00 | 1582124.00 | 1464485.00 | 1464485.00 |
| Order Book Shares Traded (m) | 2113.00 | 2070.00 | 2476.00 | 2844.00 | 2732.00 | 2732.00 |
| Total Equity Turnover (£m) | 10736.60 | 5486.66 | 8413.09 | 6881.42 | 6460.39 | 6460.39 |
| Total Mkt Bargains | 1492264.00 | 1476981.00 | 1703415.00 | 1890652.00 | 1795823.00 | 1795823.00 |
| Total Shares Traded (m) | 7568.00 | 6773.00 | 8007.00 | 12691.00 | 12267.00 | 12267.00 |

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

All data provided by Morningstar unless otherwise noted. All elements listed are indicative and believed accurate at the time of publication. No offer is made by Morningstar or the FT. The FT does not warrant nor guarantee that the information is reliable or complete. The FT does not accept responsibility and will not be liable for any loss arising from the reliance on or use of the listed information.
For all queries e-mail ft.reader.enquiries@morningstar.com

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

POWERED BY MORNINGSTAR

## 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aberdeen Diversified Income and Growth Trust | Int | | | **38.733L** | 8.598L | **12.190L** | 1.910L | **1.36000** | 1.34000 | Jul 10 | **2.693** | 2.650 |
| Baillie Gifford UK Growth Fund | Pre | | | **37.636L** | 0.257 | **25.000L** | 0.170 | **0.00000** | 2.95000 | - | **0.000** | 4.450 |
| City Pub Group (The) | Pre | **60.028** | 45.674 | **2.203** | 2.619 | **2.109** | 3.298 | **0.00000** | 2.63628 | - | **0.000** | 2.636 |
| Echo Energy | Pre | **2.586** | 0.000 | **10.031L** | 9.661L | **0.026L** | 0.055L | **0.00000** | 0.00000 | - | **0.000** | 0.000 |
| Edinburgh Investment Trust (The) | Pre | | | **333.660L** | 38.712 | **180.700L** | 19.200 | **9.45000** | 9.25000 | Jul 31 | **15.850** | 15.500 |
| JPMorgan European Smaller Companies Trust | Pre | | | **108.459L** | 50.621L | **68.900L** | 32.400L | **0.00000** | 5.50000 | - | **1.200** | 6.700 |
| Nationwide Building Society | Int | **856.100** | 809.700 | **254.700** | 241.400 | | | **0.00000** | 0.00000 | - | **0.000** | 0.000 |
| Nexus Infrastructure | Int | **84.194** | 71.022 | **3.369** | 2.801 | **6.700** | 4.560 | **0.00000** | 2.20000 | - | **4.376** | 6.600 |

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) |
|---|---|---|---|---|---|---|---|---|---|

§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

| | | | 52 Week | | | | |
|---|---|---|---|---|---|---|---|
| Stock | Price | +/-Week | High | Low | Yld | P/E | MCap m |
| **Australia (A$)** | | | | | | | |
| ANZ | 18.92 | -0.29 | 28.95 | 14.10 | 7.65 | 13.47 | 36706.49 |
| BHPBilltn | 35.99 | -0.32 | 42.33 | 24.05 | 5.09 | 13.98 | 72523.86 |
| CmwBkAu | 67.32 | -0.34 | 91.05 | 53.44 | 6.23 | 15.21 | 81520.04 |
| CSL | 284.32 | -9.91 | 342.75 | 209.02 | 0.91 | 46.22 | 88307.61 |
| NatAusBk♦ | 18.59 | -0.33 | 30.00 | 13.20 | 8.08 | 18.39 | 41768.1 |
| Telstra | 3.16 | -0.11 | 4.01 | 2.87 | 3.08 | 18.78 | 25708.55 |
| Wesfarmers | 42.47 | 0.17 | 47.42 | 29.75 | 4.08 | 24.86 | 32939.91 |
| Westpc | 17.89 | -0.29 | 30.05 | 13.47 | 8.80 | 14.84 | 44198.61 |
| Woolworths | 36.67 | 0.07 | 43.96 | 32.03 | 2.71 | 33.82 | 31683.5 |
| **Belgium (€)** | | | | | | | |
| AnBshInBv | 45.20 | -5.97 | 92.71 | 29.03 | 3.72 | 12.43 | 86074.14 |
| KBC Grp | 49.07 | -4.07 | 73.56 | 33.44 | 7.04 | 10.31 | 22979.28 |
| **Brazil (R$)** | | | | | | | |
| Ambev | 13.57 | -0.48 | 20.77 | 10.36 | 4.31 | 15.34 | 42157.84 |
| Bradesco | 19.89 | -0.56 | 32.63 | 14.05 | 1.10 | 7.37 | 17416.8 |
| Cielo | 4.21 | -0.29 | 9.07 | 3.23 | 4.86 | 9.63 | 2258.24 |
| ItauHldFin | 24.47 | -1.26 | 32.79 | 19.46 | 3.96 | 10.20 | 23954.94 |
| Petrobras | 21.24 | -1.61 | 33.65 | 10.50 | 2.72 | 7.51 | 31210.45 |
| Vale | 53.40 | -1.21 | 57.36 | 32.45 | 3.37 | 260.62 | 55715.01 |
| **Canada (C$)** | | | | | | | |
| BCE | 57.29 | -2.21 | 65.45 | 46.03 | 5.50 | 17.11 | 38069.61 |
| BkMontrl | 74.45 | -1.62 | 104.75 | 55.76 | 5.42 | 8.69 | 34992.83 |
| BkNvaS | 58.51 | -2.03 | 76.75 | 46.38 | 5.92 | 8.78 | 52080.53 |
| Brookfield | 46.44 | -2.28 | 60.48 | 31.35 | 1.18 | 31.04 | 53673.44 |
| CanadPcR | 342.39 | -15.08 | 365.69 | 252.00 | 0.94 | 20.34 | 34124.8 |
| CanImp | 94.02 | -3.88 | 115.96 | 67.52 | 5.91 | 8.56 | 30754.49 |
| CanNatRs | 24.34 | -4.52 | 42.57 | 9.80 | 6.12 | 5.40 | 21119.83 |
| CanNatRy♦ | 119.52 | -2.76 | 127.79 | 92.01 | 1.77 | 20.03 | 62456.32 |
| Enbridge | 42.13 | -2.71 | 57.32 | 33.06 | 6.96 | 16.13 | 62691.94 |
| GtWesLif | 23.80 | -0.52 | 35.60 | 18.88 | 6.90 | 9.61 | 16223.67 |
| ImpOil♦ | 23.14 | -1.72 | 37.75 | 10.27 | 3.71 | 6.18 | 12481.84 |
| Manulife | 18.78 | -0.74 | 27.78 | 12.58 | 5.29 | 6.82 | 26764 |
| Nutrien | 49.27 | -2.11 | 73.00 | 34.80 | 4.60 | 22.50 | 20630.86 |
| RylBkC | 91.35 | -5.45 | 109.68 | 72.00 | 4.44 | 10.37 | 95542.97 |
| Suncor En | 24.87 | -3.70 | 45.12 | 14.02 | 6.71 | 13.46 | 27871.63 |
| ThmReut | 91.65 | -3.78 | 109.99 | 75.91 | 2.02 | 22.80 | 33387.32 |
| TntoDom | 62.41 | -2.60 | 77.96 | 49.01 | 4.64 | 9.67 | 82658.99 |
| TrnCan | 58.88 | -4.31 | 76.58 | 47.05 | 5.03 | 13.84 | 40664.57 |
| ValeantPh | 30.80 | 0.74 | 36.02 | 14.01 | - | -4.62 | 8158.48 |
| **China (HK$)** | | | | | | | |
| AgricBkCh | 3.08 | -0.11 | 3.50 | 2.69 | 6.25 | 4.65 | 12215.92 |
| Bk China | 2.90 | -0.02 | 3.39 | 2.71 | 7.06 | 4.30 | 31290.62 |
| BkofComm | 4.79 | -0.10 | 6.56 | 4.20 | 6.93 | 4.47 | 21639.43 |
| BOE Tech | 0.64 | 0.04 | 1.04 | 0.47 | - | -10.31 | 16.43 |
| Ch Coms Cons | 4.79 | -0.09 | 7.47 | 4.56 | 5.47 | 4.13 | 2736.46 |
| Ch Evrbrght♦ | 2.93 | -0.31 | 3.80 | 2.65 | 6.08 | 4.35 | 4793.32 |
| Ch Rail Cons | 6.85 | -0.31 | 10.18 | 6.81 | 3.39 | 4.94 | 1835.15 |
| Ch Rail Gp | 4.16 | -0.04 | 6.41 | 3.45 | 3.41 | 4.04 | 2258.4 |
| ChConstBk | 6.20 | -0.14 | 6.85 | 5.55 | 5.48 | 5.29 | 192331.45 |
| China Vanke | 25.00 | -1.85 | 34.75 | 21.65 | 4.64 | 6.50 | 6108.09 |
| ChinaCitic | 3.40 | -0.08 | 4.79 | 3.30 | 7.48 | 3.42 | 6528.8 |
| ChinaLife | 15.98 | 0.62 | 22.90 | 11.64 | 1.06 | 7.40 | 15343.03 |
| ChinaMBank | 36.90 | -1.30 | 42.75 | 29.80 | 2.82 | 8.98 | 21858.34 |
| ChinaMob♦ | 54.25 | -0.25 | 71.80 | 45.20 | 5.07 | 9.94 | 143326.54 |
| ChinaPcIns♦ | 21.70 | -0.60 | 34.75 | 17.90 | 5.11 | 5.79 | 7770.73 |
| ChMinsheng | 5.43 | -0.05 | 6.06 | 4.91 | 7.06 | 3.96 | 5829.53 |
| ChMrchSecs | 16.91 | -0.09 | 19.75 | 15.20 | 1.57 | 18.22 | 13670.6 |
| Chna Utd Coms | 4.92 | -0.12 | 6.96 | 4.88 | 1.09 | 31.67 | 14952.93 |
| ChShenEgy♦ | 12.50 | -0.58 | 17.48 | 11.96 | 8.02 | 5.56 | 5481.51 |
| ChShpbldng | 4.08 | -0.02 | 6.86 | 4.00 | 0.22 | 212.93 | 10545.06 |
| ChStConEng | 5.01 | -0.03 | 6.20 | 4.93 | 3.38 | 5.34 | 29216.21 |
| ChUncHK♦ | 4.33 | -0.12 | 8.76 | 3.84 | 3.33 | 11.11 | 17095.17 |
| CNNC Intl | 4.07 | -0.02 | 5.67 | 4.02 | 2.97 | 15.34 | 8955.27 |
| CSR | 3.65 | -0.08 | 6.81 | 3.60 | 4.56 | 9.18 | 2058.6 |
| Daqin | 6.94 | 0.01 | 8.85 | 6.69 | 6.98 | 8.39 | 14584.77 |
| Gree Elec Apl | 0.08 | -0.01 | 0.37 | 0.01 | - | -0.02 | 3.65 |
| GuosenSec | 10.64 | -0.11 | 14.28 | 10.38 | 1.14 | 21.10 | 12333.29 |
| HaitongSecs | 6.06 | 0.04 | 9.58 | 5.79 | 2.74 | 7.83 | 2666.04 |
| Hngzh HikVDT | 28.82 | 0.18 | 40.09 | 24.61 | 2.10 | 22.15 | 32959.44 |
| Hunng Pwr | 2.85 | -0.18 | 4.89 | 2.24 | 3.81 | 271.53 | 1728.52 |
| IM Baotou Stl | 1.08 | -0.01 | 1.77 | 1.04 | 0.66 | -238.71 | 4836.16 |
| In&CmBkCh | 5.12 | -0.05 | 6.11 | 4.81 | 5.42 | 5.33 | 57339.62 |
| IndstrlBk | 15.97 | -0.28 | 20.42 | 14.93 | 4.36 | 5.01 | 44281.43 |
| Kweichow | 1416.37 | 8.38 | 1435 | 897.00 | 1.04 | 40.95 | 251511.29 |
| Midea | 0.69 | 0.05 | 1.42 | 0.58 | - | -2.46 | 19.14 |
| New Ch Life Ins | 25.90 | 0.65 | 40.00 | 20.45 | 3.29 | 4.61 | 3455.87 |
| PetroChina | 2.66 | -0.08 | 4.46 | 2.20 | 5.54 | 22.92 | 7241.56 |
| PingAnIns | 80.60 | 0.05 | 101.00 | 69.00 | 2.47 | 9.13 | 77453.83 |
| PngAnBnk | 12.99 | -0.58 | 17.60 | 11.91 | 1.13 | 8.64 | 35633.81 |
| Pwr Cons Corp | 3.47 | 0.01 | 5.47 | 3.40 | 2.84 | 7.83 | 5466.44 |
| SaicMtr | 17.99 | -0.24 | 27.48 | 17.46 | 7.06 | 11.28 | 29711.51 |
| ShenwanHong | 0.03 | 0.00 | 0.13 | 0.03 | - | -0.13 | 36.17 |
| ShgPdgBk | 10.55 | -0.09 | 13.33 | 9.82 | 3.35 | 5.48 | 41911.99 |
| Sinopec Corp♦ | 3.41 | -0.12 | 5.40 | 3.20 | 12.59 | 15.91 | 11225.66 |
| Sinopec Oil | 1.74 | 0.00 | 2.65 | 1.67 | - | 61.68 | 2962.01 |
| **Denmark (kr)** | | | | | | | |
| DanskeBk | 87.86 | -2.88 | 123.60 | 68.04 | - | 7.06 | 11427.21 |
| MollerMrsk | 7540 | 26.00 | 10555 | 4976 | 1.88 | 52.24 | 11442.97 |
| NovoB | 432.10 | 2.60 | 453.20 | 312.00 | 1.90 | 25.68 | 118147.98 |
| **Finland (€)** | | | | | | | |
| Nokia | 3.73 | -0.22 | 5.12 | 2.08 | 2.53 | 1584.15 | 23698.55 |
| SampoA | 30.57 | -2.32 | 42.55 | 21.34 | 8.81 | 15.86 | 19051.95 |
| **France (€)** | | | | | | | |
| Airbus Grpe | 66.95 | -14.03 | 139.40 | 48.12 | 2.33 | -40.49 | 59036.11 |
| AirLiquide | 123.05 | -3.70 | 140.70 | 94.86 | 1.85 | 27.54 | 65517.49 |
| AXA | 18.29 | -1.75 | 25.62 | 11.84 | 6.92 | 12.75 | 49728.56 |
| BNP Parib | 34.97 | -4.15 | 54.22 | 24.51 | 8.16 | 5.96 | 49153.09 |
| ChristianDior | 375.80 | -32.20 | 498.20 | 252.40 | 1.56 | 24.45 | 76289.94 |
| Cred Agr | 8.13 | -0.97 | 13.80 | 5.70 | 8.02 | 5.75 | 26362.77 |
| Danone | 61.24 | -2.26 | 82.38 | 50.26 | 2.99 | 21.97 | 47255.35 |
| EDF | 8.16 | -0.44 | 13.61 | 5.98 | 3.59 | 5.24 | 28496.21 |
| Engie SA | 10.96 | -0.74 | 16.80 | 8.63 | 3.28 | 34.10 | 30003.88 |
| EssilorLuxottica | 113.90 | -11.40 | 145.00 | 86.76 | 1.69 | 49.41 | 56052.92 |
| Hermes Intl | 738.40 | -47.80 | 788.20 | 516.00 | 0.58 | 53.71 | 87668.78 |
| LOreal | 263.40 | -6.30 | 278.50 | 196.00 | 1.38 | 41.86 | 165679.13 |
| LVMH | 379.15 | -25.10 | 439.05 | 278.70 | 1.54 | 28.20 | 215348.15 |
| Orange | 10.41 | -1.13 | 15.38 | 8.84 | 6.35 | 10.80 | 31142.75 |
| PernodRic | 143.65 | -3.05 | 179.50 | 112.25 | 0.94 | 26.27 | 42880.23 |
| Renault | 22.00 | -3.93 | 58.10 | 12.77 | 15.25 | -44.78 | 7316.81 |
| Safran | 89.84 | -12.11 | 152.30 | 51.10 | 1.91 | 16.89 | 43167.09 |
| Sanofi | 89.02 | -0.14 | 95.06 | 67.65 | 3.26 | 40.75 | 125755.89 |
| Sant Gbn | 29.91 | -2.73 | 39.57 | 16.41 | 4.20 | 12.27 | 18322.13 |
| Schneider | 91.12 | -7.26 | 105.50 | 61.72 | 2.44 | 22.26 | 59648.98 |
| SFR Group | 34.50 | 0.00 | 34.56 | 21.87 | - | -23.02 | 17905.81 |
| SocGen | 14.77 | -2.08 | 32.23 | 11.35 | 14.70 | 8.18 | 14171.51 |
| Total | 35.10 | -3.24 | 50.93 | 21.12 | 7.53 | 12.92 | 102695.4 |
| UnibailR | 190.00 | 0.35 | 236.45 | 177.35 | 5.49 | 24.87 | 22215.04 |
| Vinci | 82.98 | -7.34 | 107.35 | 54.76 | 3.09 | 15.09 | 56573.58 |
| Vivendi | 22.12 | -0.57 | 26.42 | 16.60 | 2.14 | 18.32 | 29492.1 |
| **Germany (€)** | | | | | | | |
| Allianz | 178.08 | -15.12 | 232.60 | 117.10 | 4.77 | 10.01 | 83549.99 |
| BASF | 51.12 | -6.31 | 72.17 | 37.36 | 5.91 | 20.04 | 52805.01 |
| Bayer | 65.23 | -0.92 | 78.34 | 44.86 | 4.24 | 24.49 | 72071.17 |
| BMW | 56.15 | -3.35 | 77.06 | 36.60 | 5.89 | 8.03 | 38015.26 |
| Continental | 86.30 | -12.34 | 133.76 | 51.45 | 5.20 | -14.90 | 19411.94 |
| Daimler | 36.02 | -3.81 | 54.50 | 21.02 | 8.90 | 104.30 | 43338.78 |
| Deut Bank | 8.28 | -0.43 | 10.37 | 4.45 | 1.31 | -3.00 | 19241.27 |
| Deut Tlkm | 14.59 | -0.62 | 16.75 | 10.41 | 4.53 | 18.83 | 78128.68 |
| DeutsPost | 30.21 | -1.48 | 35.00 | 19.11 | 3.76 | 17.70 | 42010.95 |
| E.ON | 9.74 | -0.31 | 11.56 | 7.60 | 4.17 | 42.95 | 28927.17 |
| Fresenius Med | 74.24 | -3.96 | 81.10 | 53.50 | 1.49 | 19.84 | 25418.53 |
| Fresenius SE | 42.22 | -2.78 | 51.54 | 24.25 | 1.79 | 13.22 | 21466.41 |
| HenkelKgaA | 73.95 | -3.40 | 90.30 | 54.65 | 2.34 | 16.34 | 21606.56 |
| Linde | 178.70 | -19.55 | 208.60 | 130.45 | 1.65 | 53.08 | 105548.56 |
| MuenchRkv | 224.70 | -17.60 | 284.20 | 141.10 | 3.89 | 12.54 | 35404.06 |
| SAP | 115.30 | -5.84 | 129.60 | 82.13 | 1.23 | 43.90 | 159301.97 |
| Siemens | 98.56 | -9.98 | 119.90 | 58.77 | 3.64 | 16.33 | 94218.21 |
| Volkswgn | 146.40 | -10.30 | 185.00 | 99.16 | 3.10 | 5.83 | 48585.93 |
| **Hong Kong (HK$)** | | | | | | | |
| AIA♦ | 71.40 | 0.40 | 88.50 | 60.05 | 1.55 | 17.67 | 111388.03 |
| BOC Hold | 24.10 | 0.40 | 31.65 | 20.30 | 5.74 | 8.41 | 32877.54 |
| Ch OSLnd&Inv | 24.15 | -0.35 | 31.00 | 21.80 | 3.70 | 6.03 | 34140.51 |
| ChngKng | 47.00 | 3.15 | 63.20 | 33.40 | 3.91 | 6.33 | 22398.41 |
| Citic Ltd | 7.81 | -0.06 | 11.46 | 6.88 | 5.30 | 4.48 | 29315.13 |
| Citic Secs | 14.90 | 0.00 | 18.72 | 12.60 | 2.60 | 13.76 | 4380.22 |
| CK Hutchison | 52.05 | 0.75 | 78.85 | 45.05 | 5.73 | 5.35 | 25898.67 |
| CNOOC♦ | 8.83 | -0.32 | 14.04 | 6.24 | 7.77 | 6.12 | 50868.63 |
| HangSeng | 129.50 | 5.20 | 202.00 | 117.50 | 5.67 | 10.77 | 31945.86 |
| HK Exc&Clr | 296.20 | 4.20 | 299.60 | 206.00 | 2.16 | 42.11 | 48455.28 |
| MTR | 40.85 | 1.30 | 55.75 | 36.20 | 2.77 | 22.37 | 32466.7 |
| SandsCh | 32.55 | 0.25 | 45.45 | 25.15 | 5.72 | 17.66 | 33973.45 |
| SHK Props | 100.30 | 4.45 | 137.60 | 87.60 | 4.65 | 7.75 | 37502.4 |
| Tencent | 441.00 | 6.00 | 455.40 | 312.20 | 0.21 | 43.42 | 543626.36 |
| **India (Rs)** | | | | | | | |
| Bhartiartl | 560.10 | -24.25 | 612.00 | 321.15 | - | -10.31 | 40284.22 |
| HDFC Bk | 982.75 | -50.60 | 1305.5 | 738.75 | 0.77 | 20.54 | 71081.16 |
| Hind Unilevr | 2107.25 | 19.65 | 2614.3 | 1659.05 | 1.15 | 66.67 | 65224.49 |
| HsngDevFin | 1792.2 | 25.60 | 2499.9 | 1473.45 | 1.18 | 14.17 | 40923.94 |
| ICICI Bk | 344.20 | -13.00 | 552.20 | 268.30 | 0.29 | 23.68 | 29382.77 |
| Infosys | 692.05 | -11.50 | 847.00 | 509.25 | 2.75 | 17.58 | 38858.52 |
| ITC | 193.90 | -6.10 | 282.90 | 134.60 | 2.98 | 15.83 | 31422.38 |
| L&T | 926.40 | -28.85 | 1591.65 | 661.00 | 1.95 | 13.43 | 17145.96 |
| OilNatGas | 83.90 | -3.05 | 173.45 | 50.00 | 8.39 | 4.90 | 13914.92 |
| RelianceIn | 1588.8 | 7.10 | 1618.4 | 867.40 | 0.41 | 22.20 | 132784.57 |
| SBI NewA | 179.15 | -8.65 | 373.80 | 149.45 | - | 11.95 | 21078.33 |
| SunPhrmInds | 480.10 | -14.15 | 512.70 | 312.00 | 0.58 | 28.63 | 15186.33 |
| Tata Cons | 2039.5 | -8.75 | 2296.2 | 1506.05 | 1.58 | 23.47 | 100893.03 |
| **Indonesia (Rp)** | | | | | | | |
| Bk Cent Asia | 22300 | 200.00 | 24700 | 16800 | - | - | 38879.26 |
| **Israel (ILS)** | | | | | | | |
| TevaPha | 40.00 | -4.85 | 46.45 | 21.75 | - | -13.34 | 12687.94 |
| **Italy (€)** | | | | | | | |
| Enel | 7.35 | -0.23 | 8.61 | 5.15 | 4.03 | 35.45 | 83981.96 |
| ENI | 8.59 | -0.92 | 14.94 | 6.26 | 9.65 | -8.06 | 35096.49 |
| Generali | 13.43 | -0.96 | 19.63 | 10.20 | 6.33 | 10.30 | 23795.79 |
| IntSPaolo | 1.62 | -0.15 | 2.63 | 1.31 | 11.47 | 7.29 | 31940.72 |
| Unicred | 7.94 | -0.98 | 14.44 | 6.01 | 3.21 | 9.81 | 19948.37 |
| **Japan (¥)** | | | | | | | |
| AstellasPh | 1737.5 | -121.50 | 1987 | 1375 | 2.10 | 15.84 | 30139.34 |
| Bridgestne | 3561 | -78.00 | 4734 | 2861.5 | 4.20 | 9.42 | 23679.12 |
| Canon | 2232.5 | -44.50 | 3256 | 2035 | 7.21 | 20.45 | 27742.73 |
| CntJpRwy♦ | 18170 | -285.00 | 23455 | 14340 | 0.77 | 8.45 | 34873.94 |
| Denso | 4010 | -294.00 | 5174 | 3021 | 3.26 | 16.74 | 29438.73 |
| EastJpRwy♦ | 8370 | -159.00 | 10830 | 7060 | 1.76 | 12.37 | 29472.6 |
| Fanuc♦■ | 19900 | 270.00 | 22030 | 12020 | 1.64 | 50.06 | 37438.27 |
| FastRetail | 64000 | 200.00 | 70230 | 39910 | 0.73 | 44.95 | 63250.85 |
| Fuji Hvy Ind | 2430.5 | -90.50 | 3184 | 1671.5 | 5.54 | 14.10 | 17418.07 |
| Hitachi | 3573 | -89.00 | 4693 | 2524 | 2.35 | 18.38 | 32220.76 |
| HondaMtr | 2815.5 | -100.50 | 3259 | 2120 | 3.72 | 11.19 | 47517.72 |
| JapanTob | 2149 | -23.50 | 2555 | 1862 | 7.21 | 12.08 | 40044.72 |
| KDDI | 3164 | -50.00 | 3451 | 2629 | 3.25 | 12.27 | 67925.32 |
| Keyence | 43500 | -2700.00 | 46740 | 28905 | 0.21 | 55.26 | 98570.15 |
| MitsbCp | 2409 | -86.00 | 2979 | 2094.5 | 4.93 | 7.72 | 33346.76 |
| MitsubEst | 1721.5 | -25.00 | 2283 | 1291 | 1.74 | 20.37 | 22315.96 |
| MitsubishiEle | 1439.5 | -6.00 | 1658 | 1096.5 | 2.60 | 14.52 | 28798.07 |
| MitsuiFud | 2185 | -22.50 | 3035 | 1538 | 1.97 | 13.58 | 19935.36 |
| MitUFJFin | 439.50 | -11.40 | 603.00 | 380.00 | 5.40 | 7.22 | 55616.23 |
| Mizuho Fin | 135.80 | 0.20 | 173.10 | 108.40 | 5.16 | 47.02 | 32128.11 |
| Murata Mfg | 6335 | -42.00 | 6920 | 4304 | 2.76 | 91.58 | 39887.58 |
| NipponTT | 2490.5 | -9.50 | 2908 | 2153 | 3.57 | 11.81 | 90514.45 |
| Nissan Mt | 422.10 | -9.50 | 789.60 | 311.20 | 8.53 | 42.32 | 16598.93 |
| Nomura | 476.20 | -11.00 | 586.40 | 341.00 | 3.53 | 6.72 | 15500.17 |
| Nppn Stl | 1016.5 | -27.00 | 1886 | 798.10 | 4.97 | 5.25 | 9000.29 |
| NTTDCMo | 2871.5 | -82.50 | 3475 | 2462 | 3.74 | 16.79 | 86378.56 |
| Panasonic | 951.30 | -22.80 | 1264 | 691.70 | 2.95 | 8.23 | 21744.62 |
| Seven & I | 3733 | -126.00 | 4485 | 3113 | 2.65 | 14.95 | 30830.97 |
| ShnEtsuCh♦ | 12455 | -175.00 | 13945 | 8751 | 1.58 | 17.72 | 48351.21 |
| Softbank | 5071 | -104.00 | 5886 | 2609.5 | 0.61 | -10.04 | 98737.06 |
| Sony | 7404 | 137.00 | 8113 | 5297 | 0.51 | 15.26 | 86992.26 |
| SumitomoF | 3151 | -47.00 | 4145 | 2507.5 | 5.49 | 8.79 | 40313.64 |
| Takeda Ph | 3989 | -47.00 | 4562 | 2894.5 | 4.22 | -61.79 | 58587.12 |
| TokioMarine | 4808 | -43.00 | 6317 | 4167 | 3.60 | 12.96 | 31447.09 |
| Toyota | 6853 | -121.00 | 8026 | 5771 | 3.00 | 8.48 | 208341.77 |
| **Mexico (Mex$)** | | | | | | | |
| AmerMvl | 15.34 | -0.31 | 16.82 | 12.33 | 2.21 | 56.61 | 30644.45 |
| FEMSA UBD | 147.88 | -8.25 | 190.00 | 127.25 | 1.96 | 12.74 | 14241.73 |
| WalMrtMex | 54.58 | -0.78 | 62.71 | 47.76 | 1.99 | 21.44 | 42469.27 |
| **Netherlands (€)** | | | | | | | |
| Altice | 3.60 | -0.55 | 6.86 | 2.26 | - | 19.59 | 4204.51 |
| ASML Hld | 306.00 | -14.50 | 321.80 | 166.32 | 1.02 | 49.70 | 146487.03 |
| Heineken | 81.46 | -5.14 | 105.00 | 68.82 | 1.96 | 24.59 | 52769.63 |
| ING | 6.37 | -0.76 | 11.26 | 4.23 | 10.08 | 6.74 | 27952.59 |
| Unilever | 47.33 | -0.52 | 57.77 | 38.42 | 3.23 | 23.41 | 77753 |
| **Norway (Kr)** | | | | | | | |
| DNB | 134.70 | -8.65 | 178.10 | 94.26 | 6.37 | 8.32 | 22047.29 |
| Equinor | 144.05 | -9.15 | 187.20 | 95.20 | 6.37 | 28.66 | 49811.92 |
| Telenor | 150.00 | -2.05 | 190.80 | 130.75 | 5.21 | 41.90 | 22410.01 |
| **Qatar (QR)** | | | | | | | |
| QatarNtBk | 17.70 | -0.31 | 21.25 | 15.71 | 3.46 | 11.97 | 44901.05 |
| **Russia (RUB)** | | | | | | | |
| Gzprm neft | 185.71 | 1.03 | 272.68 | 158.17 | 10.29 | 2.41 | 58976.64 |
| Lukoil | 4745.5 | 125.50 | 6810 | 3663 | 6.06 | 4.23 | 44107.51 |
| MmcNrlskNckl | 20150 | 432.00 | 23656 | 13352 | 12.39 | 7.95 | 42774.79 |
| Novatek | 973.20 | 15.40 | 1382.2 | 682.80 | 3.03 | 6.81 | 39639.58 |
| Rosneft | 324.00 | 10.10 | 489.90 | 229.80 | 9.20 | 4.53 | 46063.6 |
| Sberbank | 188.91 | -2.89 | 270.80 | 172.15 | 9.47 | 4.04 | 54705 |
| Surgutneftegas | 35.13 | 0.77 | 54.89 | 24.06 | 2.07 | 11.47 | 16833.73 |
| **Saudi Arabia (SR)** | | | | | | | |
| AlRajhiBnk | 59.20 | 1.10 | 73.20 | 51.00 | 6.05 | 15.28 | 39445.63 |
| Natnlcombnk | 38.50 | -0.95 | 61.50 | 30.50 | 5.86 | 9.87 | 30783.57 |
| SaudiBasic | 89.00 | 0.90 | 120.80 | 61.90 | 4.72 | 50.40 | 71162.04 |
| SaudiTelec | 99.20 | -0.70 | 114.20 | 72.30 | 4.11 | 17.97 | 52878.46 |
| **Singapore (S$)** | | | | | | | |
| DBS | 21.93 | -0.06 | 27.04 | 16.65 | 6.77 | 13.20 | 39978.3 |
| JardnMt US$ | 43.96 | 1.47 | 65.50 | 39.66 | 3.70 | 6.14 | 32264.83 |
| JardnStr US$ | 22.21 | 0.46 | 40.00 | 17.81 | 1.47 | 6.08 | 24615.52 |
| OCBC | 9.24 | -0.06 | 11.82 | 7.80 | 5.14 | 16.10 | 29223.8 |
| SingTel | 2.55 | -0.03 | 3.56 | 2.19 | 6.73 | 33.39 | 29895.2 |
| UOB | 22.28 | 0.65 | 27.02 | 17.28 | 4.62 | 8.95 | 26705.29 |
| **South Africa (R)** | | | | | | | |
| Firstrand | 43.67 | -2.56 | 71.79 | 31.13 | 7.72 | 7.43 | 14309.19 |
| MTN Grp | 52.53 | -5.67 | 114.43 | 26.25 | 11.47 | 9.23 | 5781.75 |
| Naspers N | 2980 | 56.80 | 3643 | 1843.8 | 0.28 | 23.56 | 75809.63 |
| **South Korea (KRW)** | | | | | | | |
| HyundMobis | 206000 | -11500.00 | 268500 | 126000 | 1.94 | 9.01 | 16266.21 |
| KoreaElePwr | 21150 | -850.00 | 29500 | 15550 | - | -8.84 | 11278.9 |
| SK Hynix | 85200 | -2500.00 | 106000 | 62400 | 1.17 | 37.40 | 51525.01 |
| SmsungEl | 52300 | -2300.00 | 62800 | 42300 | 2.67 | 16.76 | 259361.74 |
| **Spain (€)** | | | | | | | |
| BBVA | 3.13 | -0.40 | 5.34 | 2.46 | 13.24 | 158.54 | 23464.36 |
| BcoSantdr | 2.21 | -0.31 | 4.26 | 1.78 | 9.82 | 6.49 | 41359.83 |
| CaixaBnk | 1.86 | -0.19 | 2.94 | 1.50 | 5.31 | 10.13 | 12502.1 |
| Iberdrola | 9.75 | -0.28 | 11.35 | 7.76 | 3.72 | 17.04 | 70765.44 |
| Inditex | 24.41 | -2.49 | 32.28 | 18.51 | 2.53 | 22.29 | 85560.11 |
| Repsol | 8.69 | -0.84 | 15.67 | 5.92 | 10.10 | -3.70 | 15301.67 |
| Telefonica | 4.54 | -0.32 | 7.59 | 3.53 | 8.32 | 28.28 | 26522.08 |
| **Sweden (SKr)** | | | | | | | |
| AtlasCpcoB | 323.70 | -24.20 | 350.40 | 223.20 | 1.86 | 24.72 | 13498.25 |
| Ericsson | 83.60 | -4.80 | 94.56 | 59.54 | 0.86 | 141.16 | 27447.92 |
| H & M | 143.85 | -24.40 | 214.35 | 98.13 | 6.42 | 17.27 | 22453.74 |
| Investor | 483.00 | -44.40 | 568.60 | 370.10 | 2.57 | 14.91 | 23509.68 |
| Nordea Bk | 67.67 | -2.97 | 86.73 | 48.00 | - | 16.71 | 29286.82 |
| SEB | 78.28 | -9.02 | 104.90 | 59.80 | - | 9.98 | 18152.67 |
| SvnskaHn | 89.12 | -4.44 | 113.80 | 71.80 | - | 11.45 | 18521.3 |
| Swedbank | 123.22 | -7.54 | 162.70 | 99.14 | - | 11.37 | 14905.82 |
| Telia Co | 31.66 | -2.34 | 44.90 | 30.29 | 9.84 | 20.46 | 13836.33 |
| Volvo | 136.80 | -16.20 | 175.10 | 95.00 | - | 9.73 | 24158.13 |
| **Switzerland (SFr)** | | | | | | | |
| ABB | 19.76 | -1.27 | 24.69 | 14.11 | 7.88 | 45.63 | 45026.82 |
| CredSuisse | 9.45 | -0.76 | 13.80 | 6.18 | 2.76 | 6.13 | 25397.55 |
| Nestle | 102.80 | 0.20 | 113.20 | 83.37 | 2.22 | 25.71 | 321611.35 |
| Novartis | 80.26 | -2.78 | 96.38 | 65.09 | 3.65 | 25.83 | 208153.8 |
| Richemont | 60.80 | -4.42 | 87.44 | 44.64 | 3.20 | 23.30 | 33364.1 |
| Roche | 325.65 | -6.50 | 357.85 | 260.90 | 2.48 | 22.42 | 240514.63 |
| Swiss Re | 73.20 | -4.66 | 117.05 | 52.68 | 6.76 | 34.01 | 25194.24 |
| Swisscom | 487.20 | -14.00 | 577.80 | 446.70 | - | 15.09 | 167686.28 |
| Syngent | 453.40 | 1.40 | 471.20 | 402.50 | - | 39.22 | 43035.76 |
| UBS | 10.26 | -1.09 | 13.28 | 7.00 | 6.44 | 8.39 | 41602.74 |
| Zurich Fin | 327.00 | -23.50 | 439.90 | 248.70 | 5.25 | 13.11 | 51721.92 |
| **Taiwan (NT$)** | | | | | | | |
| Chunghwa Telecom | 113.00 | 0.00 | 123.50 | 103.00 | 3.93 | 26.93 | 29551.68 |
| Formosa PetChem | 91.00 | -2.50 | 119.00 | 66.10 | 4.94 | 25.17 | 29223.64 |
| HonHaiPrc | 78.00 | -0.40 | 101.50 | 65.70 | 4.80 | 10.11 | 36453.29 |
| MediaTek | 492.50 | 2.50 | 509.00 | 273.00 | 1.71 | 36.09 | 26380.1 |
| TaiwanSem | 316.00 | 10.00 | 366.00 | 230.50 | 3.92 | 20.17 | 276236.35 |
| **Thailand (THB)** | | | | | | | |
| PTT Explor | 37.25 | -0.75 | 49.50 | 23.60 | 5.52 | 11.89 | 34346.72 |
| **United Arab Emirates (Dhs)** | | | | | | | |
| Emirtestele | 16.36 | -0.34 | 17.80 | 11.04 | 4.99 | 16.05 | 38734.82 |
| **United Kingdom (p)** | | | | | | | |
| AscBrFd | 1928 | -122.00 | 2730 | 1554 | 2.40 | 21.57 | 19140.35 |
| AstraZen | 8201 | -226.00 | 9537.09 | 5871 | 2.71 | 88.43 | 130241.98 |
| Aviva | 276.50 | -19.80 | 439.40 | 205.70 | 10.94 | 4.38 | 13915.11 |
| Barclays | 117.06 | -14.34 | 192.99 | 73.04 | 2.56 | 9.79 | 25048.41 |
| BP | 323.05 | -39.20 | 563.00 | 4.69 | 10.21 | -24.47 | 80739.89 |
| BrAmTob | 3000 | -182.50 | 3507 | 34.85 | 6.77 | 12.05 | 70140.46 |
| BSkyB | 1727.5 | 0.50 | 1740 | 893.50 | 0.76 | 36.60 | 38843.72 |
| BT | 115.30 | -4.65 | 212.25 | 98.39 | 13.36 | 5.29 | 14345.68 |
| Compass | 1150 | -186.00 | 2150 | 20.62 | 3.35 | 16.45 | 23716.58 |
| Diageo | 2780 | -120.00 | 3633.5 | 2050.6 | 2.47 | 21.67 | 87760.97 |
| GlaxoSmh♦ | 1599.2 | -38.40 | 1857 | 1328.19 | 5.00 | 14.93 | 98622.28 |
| Glencore | 172.34 | -8.64 | 282.80 | 109.76 | 8.70 | -76.09 | 31173.88 |
| HSBC | 380.35 | -42.60 | 674.80 | 369.35 | 6.30 | 26.20 | 95630.71 |
| Imperial Brands | 1485.5 | -21.00 | 2256 | 1258.2 | 13.02 | 14.04 | 17766.34 |
| LlydsBkg | 31.93 | -3.62 | 73.66 | 25.68 | 3.51 | 13.30 | 28856.91 |
| Natl Grid | 916.20 | -2.40 | 1073.8 | 8.90 | 5.17 | 21.46 | 38564.01 |
| Prudential | 1142 | -132.50 | 1532.78 | 682.80 | 4.23 | 20.14 | 37051.59 |
| RBS | 118.70 | -18.65 | 265.00 | 100.34 | 1.68 | 5.28 | 17811.26 |
| ReckittB | 6908 | 34.00 | 8191.3 | 5130 | 2.51 | -17.58 | 61002.54 |
| RELX | 1834 | -75.50 | 2109 | 1382.86 | 2.36 | 23.85 | 44418.54 |
| RioTinto | 4596 | 46.00 | 5152 | 2954 | 5.44 | 12.48 | 77299.33 |
| RollsRoyce | 327.50 | -28.40 | 930.20 | 235.50 | 3.57 | -4.74 | 7638.07 |
| RylDShlA | 1350.4 | -126.80 | 2637.5 | 946.10 | 11.09 | 13.76 | 77847.81 |
| Shire# | 4690 | 0.00 | 4780 | 2944 | 0.58 | 11.63 | 56567.13 |
| StandCh | 426.90 | -37.60 | 742.60 | 368.40 | 1.32 | 11.00 | 17648.7 |
| Tesco♦ | 226.20 | -1.50 | 332.67 | 203.70 | 2.55 | 16.89 | 23224.79 |
| Vodafone | 126.10 | -12.86 | 169.46 | 92.76 | 6.31 | -19.08 | 42179.02 |
| WPP | 618.60 | -82.00 | 1085.5 | 450.00 | 9.70 | 12.42 | 9821.51 |
| **United States of America ($)** | | | | | | | |
| 21stC Fox A | 28.29 | -2.56 | 39.74 | 19.81 | 1.65 | 11.58 | 9693.35 |
| 3M | 154.87 | -12.54 | 187.72 | 114.04 | 3.78 | 17.97 | 89080.66 |
| AbbottLb | 89.02 | -0.84 | 100.00 | 61.61 | 1.50 | 44.46 | 157462.61 |
| Abbvie | 92.46 | -1.39 | 99.35 | 62.55 | 4.38 | 18.50 | 136539.59 |
| Accenture | 201.59 | -6.90 | 216.39 | 137.15 | 1.49 | 26.77 | 133413.95 |
| Adobe | 406.54 | 13.64 | 411.72 | 255.13 | - | 62.74 | 195871.32 |
| AEP | 81.80 | -3.71 | 104.97 | 65.14 | 3.14 | 22.27 | 40538.7 |
| Aetna | - | - | - | - | - | - | - |
| Aflac | 36.64 | -3.89 | 57.18 | 23.07 | 3.01 | 9.10 | 26289.49 |
| AirProd | 235.04 | -13.54 | 257.01 | 167.43 | 2.07 | 26.35 | 51909.68 |
| Alexion | 109.30 | -5.91 | 134.84 | 72.67 | - | 10.79 | 24136.44 |
| Allergan♦ | 193.02 | - | 202.22 | 114.27 | 1.44 | -12.82 | 63659.11 |
| Allstate | 95.70 | -9.77 | 125.92 | 64.13 | 1.98 | 7.21 | 30060.91 |
| Alphabet | 1412.92 | -27.10 | 1530.74 | 1008.87 | - | 28.21 | 423947.27 |
| Altria | 39.13 | -2.78 | 52.45 | 30.95 | 7.93 | -59.05 | 72717.94 |
| Amazon | 2545.02 | 62.02 | 2722.35 | 1626.03 | - | 120.24 | 1269394.98 |
| AmerAir | 16.74 | -1.85 | 34.99 | 8.25 | 2.42 | -8.80 | 7079.25 |
| AmerExpr | 101.68 | -8.05 | 138.13 | 67.00 | 1.67 | 15.23 | 81849.5 |
| AmerIntGrp | 33.04 | -3.32 | 58.66 | 16.07 | 3.92 | 6.64 | 28457.04 |
| AmerTower | 258.08 | -6.81 | 269.25 | 174.32 | 1.39 | 64.30 | 114408.53 |
| Amgen | 217.90 | -7.77 | 244.99 | 173.12 | 2.76 | 16.87 | 128179.11 |
| Anadarko | 72.77 | - | 76.23 | 40.40 | 1.50 | -63.37 | 36563.54 |
| Anthem♦ | 265.74 | -22.15 | 312.48 | 171.03 | 1.27 | 14.20 | 66997.33 |
| Aon Cp | 181.95 | -18.25 | 238.19 | 143.93 | 0.89 | 30.18 | 42045.84 |
| Apple | 338.80 | 7.30 | 354.77 | 190.30 | 0.92 | 26.19 | 1468472.7 |
| ArcherDan | 39.43 | -3.09 | 47.20 | 28.92 | 3.62 | 14.33 | 21903.22 |
| AT&T | 30.50 | -2.27 | 39.70 | 26.08 | 6.36 | 17.05 | 219084.72 |
| AutomData♦ | 147.01 | -13.12 | 182.32 | 103.11 | 2.34 | 24.93 | 63181.13 |
| Avago Tech | 300.25 | -16.83 | 331.58 | 155.67 | 3.55 | 52.26 | 120037.35 |
| BakerHu | 22.08 | 0.28 | 31.26 | 20.09 | 3.16 | 99.04 | 11412.93 |
| BankAm♦ | 24.78 | -3.33 | 35.72 | 17.95 | 2.82 | 10.00 | 214981.64 |
| Baxter♦ | 83.97 | -5.22 | 95.19 | 69.10 | 1.06 | 43.47 | 42590.1 |
| BB & T | 54.24 | -0.48 | 55.66 | 40.68 | 3.12 | 14.78 | 41564.3 |
| BectonDick♦ | 230.88 | -11.13 | 286.72 | 197.75 | 1.27 | 88.37 | 65461.51 |
| BerkshHat | 271515 | -29405.00 | 347400 | 239440 | - | 45.00 | 188128.67 |
| Biogen | 279.27 | -27.45 | 374.99 | 215.78 | - | 8.54 | 45573.37 |
| BkNYMeln | 38.44 | -3.86 | 51.60 | 26.40 | 2.91 | 9.00 | 34036.42 |
| BlackRock | 527.04 | -29.49 | 576.81 | 323.98 | 2.37 | 19.58 | 81302.34 |
| Boeing | 189.51 | -15.92 | 391.00 | 89.00 | 4.39 | -31.13 | 106945.3 |
| BrisMySq | 56.17 | -5.16 | 68.34 | 42.48 | 2.83 | 29.52 | 127095.28 |
| CapOne | 70.63 | -8.39 | 107.59 | 38.00 | 2.29 | 13.80 | 32158.55 |
| CardinalHlth | 52.89 | -4.38 | 60.69 | 39.05 | 3.44 | -3.90 | 15443.16 |
| Carnival | 19.98 | -1.53 | 53.71 | 7.80 | 9.83 | 7.54 | 10545.8 |
| Caterpillar | 123.15 | -11.97 | 150.55 | 87.50 | 2.91 | 12.11 | 66653.62 |
| Celgene | 108.24 | - | 110.70 | 58.59 | - | 12.71 | 77035.98 |
| CharlesSch | 36.56 | -6.26 | 51.65 | 28.00 | 1.78 | 13.26 | 47067.82 |
| Charter Comms | 522.57 | -8.15 | 549.00 | 345.67 | - | 63.01 | 107888.52 |
| Chevron Corp | 92.39 | -8.42 | 127.00 | 51.60 | 4.88 | 63.38 | 172490.16 |
| Chubb | 125.69 | -14.98 | 167.74 | 87.35 | 2.41 | 15.52 | 56731.09 |
| Cigna | 190.02 | -19.46 | 224.64 | 118.50 | 0.02 | 14.94 | 70113.77 |
| Cisco | 45.07 | -2.76 | 58.26 | 32.40 | 2.95 | 18.43 | 190298.89 |
| Citigroup | 52.25 | -6.61 | 83.11 | 32.00 | 3.83 | 7.15 | 108774.47 |
| CME Grp | 174.72 | -17.42 | 225.36 | 131.80 | 1.63 | 31.23 | 62652 |
| Coca-Cola♦ | 45.60 | -3.49 | 60.13 | 36.27 | 3.57 | 19.44 | 195847.05 |
| Cognizant | 54.80 | -3.02 | 71.48 | 40.01 | 1.38 | 17.60 | 29623.79 |
| ColgtPlm | 72.79 | 0.39 | 77.41 | 58.49 | 2.39 | 24.56 | 62346.71 |
| Comcast | 39.46 | -2.63 | 47.74 | 31.71 | 2.20 | 15.48 | 179728.98 |
| ConocPhil | 43.73 | -4.86 | 67.13 | 20.84 | 2.89 | 7.22 | 46897.15 |
| Corning♦ | 26.93 | 0.25 | 34.26 | 17.44 | 2.81 | 26.59 | 20492.33 |
| Costco | 298.70 | -13.34 | 325.26 | 255.77 | 0.85 | 35.71 | 131883.13 |
| CrownCstl | 164.37 | -4.23 | 176.85 | 114.18 | 2.86 | 91.82 | 68501.4 |
| CSX | 69.57 | -5.51 | 80.62 | 46.81 | 1.42 | 16.58 | 53253.46 |
| CVS | 64.15 | -4.20 | 77.03 | 52.04 | 2.95 | 13.34 | 83849.88 |
| Danaher | 168.38 | -4.85 | 174.52 | 119.60 | 0.38 | 54.56 | 117446.93 |
| Deere | 154.97 | -11.75 | 181.99 | 106.14 | 1.87 | 15.91 | 48483.7 |
| Delphi | 13.45 | -1.76 | 20.84 | 5.39 | - | 74.79 | 1161.4 |
| Delta | 30.43 | -3.73 | 63.44 | 17.51 | 5.18 | 5.60 | 19407.87 |
| Devon Energy♦ | 12.80 | -1.80 | 29.36 | 4.70 | 2.59 | -64.39 | 4898.56 |
| DiscFinServ | 52.99 | -7.63 | 92.98 | 23.25 | 3.28 | 7.84 | 16230.88 |
| Disney | 115.49 | -9.33 | 153.41 | 79.07 | 1.44 | 21.86 | 208605.75 |
| DominRes | 83.15 | -1.14 | 90.89 | 57.79 | 4.49 | 38.42 | 69783.72 |
| DowDupont♦ | 30.52 | -0.56 | 48.38 | 30.06 | 6.73 | -37.30 | 68559.76 |
| DukeEner | 86.74 | -2.75 | 103.79 | 62.13 | 4.09 | 18.07 | 63741.11 |
| Eaton | 86.01 | -9.42 | 105.78 | 56.42 | 3.36 | 16.71 | 34404 |
| eBay♦ | 47.66 | -1.16 | 51.88 | 26.02 | 1.23 | 21.72 | 33489.67 |
| Ecolab | 204.06 | -25.50 | 231.36 | 124.60 | 0.86 | 40.45 | 59014.51 |
| Emerson | 61.35 | -5.75 | 78.38 | 37.75 | 3.26 | 17.33 | 36655.11 |
| EOG Res | 52.57 | -6.74 | 95.29 | 27.00 | 1.83 | 11.79 | 30598.16 |
| EquityResTP | 63.57 | -2.83 | 89.55 | 49.62 | 3.38 | 25.83 | 23656.03 |
| Exelon | 37.91 | -2.45 | 50.95 | 29.28 | 3.62 | 13.31 | 36939.8 |
| ExpScripts | 92.33 | - | 101.73 | 66.93 | - | 11.10 | 52061.19 |
| ExxonMb | 47.17 | -5.91 | 77.93 | 30.11 | 7.29 | 13.47 | 199444.72 |
| Facebook | 228.58 | -2.19 | 241.21 | 137.10 | - | 31.00 | 549632.46 |
| Fedex | 132.72 | -9.49 | 178.50 | 88.69 | 2.40 | -105.61 | 34673.07 |
| FordMtr | 6.46 | -0.88 | 10.56 | 3.96 | 9.39 | -8.19 | 25233.97 |
| Franklin | 21.79 | -0.91 | 35.77 | 14.91 | 4.92 | 11.05 | 10792.72 |
| GenDyn | 149.20 | -13.02 | 193.76 | 100.55 | 2.77 | 12.45 | 42800.19 |
| GenElectric | 7.25 | -0.63 | 13.26 | 5.48 | 0.56 | 11.75 | 63416.42 |
| GenMills | 60.15 | -0.85 | 64.31 | 46.59 | 3.20 | 17.61 | 36459.26 |
| GenMotors | 27.96 | -2.65 | 41.90 | 14.33 | 5.53 | 4.47 | 40012.9 |
| GileadSci♦ | 73.20 | -3.55 | 85.97 | 60.89 | 3.26 | 18.32 | 91820.13 |
| GoldmSchs♦ | 201.78 | -16.14 | 250.46 | 130.85 | 2.31 | 10.83 | 69389.44 |
| Halliburton | 12.78 | -1.74 | 25.47 | 4.25 | 5.33 | -10.47 | 11211.61 |
| HCA Hold | 100.55 | -15.01 | 151.97 | 58.38 | 1.51 | 10.55 | 33947.58 |
| Hew-Pack | 16.28 | -1.13 | 23.93 | 12.54 | 3.84 | 8.47 | 23279.7 |
| HiltonWwde | 77.45 | -9.75 | 115.48 | 44.30 | 0.73 | 26.91 | 21473.9 |
| HomeDep | 242.45 | -12.45 | 259.29 | 140.63 | 2.13 | 24.86 | 260760.52 |
| Honywell | 144.51 | -16.86 | 184.06 | 101.08 | 2.41 | 16.42 | 101424.02 |
| HumanaInc | 378.72 | -11.14 | 412.70 | 208.25 | 0.61 | 19.20 | 50069.08 |
| IBM | 121.91 | -10.15 | 158.75 | 90.56 | 5.38 | 11.94 | 108242.91 |
| IllinoisTool | 164.94 | -17.93 | 190.85 | 115.94 | 2.38 | 22.51 | 52109.83 |
| Illumina | 341.61 | -12.50 | 380.76 | 196.78 | - | 53.28 | 50216.67 |
| Intcntl Exch | 93.26 | -4.55 | 101.93 | 63.51 | 1.22 | 24.66 | 51033.91 |
| Intel | 59.33 | -5.01 | 69.29 | 43.63 | 2.17 | 11.39 | 251203.22 |
| Intuit | 280.68 | -7.43 | 306.89 | 187.68 | 0.68 | 47.74 | 73193.3 |
| John&John | 142.15 | -5.15 | 157.00 | 109.16 | 2.70 | 21.93 | 374507.61 |
| JohnsonCn | 34.45 | -1.60 | 44.65 | 22.78 | 3.05 | 24.86 | 25626.06 |
| JPMrgnCh | 99.87 | -11.36 | 141.10 | 76.91 | 3.22 | 9.84 | 304306.17 |
| Kimb-Clark♦ | 135.94 | -3.34 | 149.23 | 110.66 | 3.09 | 19.62 | 46293.98 |
| KinderM | 15.50 | -1.22 | 22.58 | 9.42 | 6.52 | 26.42 | 35053.05 |
| Kraft Heinz♦ | 31.80 | -0.82 | 34.00 | 19.99 | 4.76 | 21.26 | 38854.29 |
| Kroger | 32.26 | -0.22 | 36.84 | 20.70 | 1.77 | 16.62 | 25362.41 |
| L Brands | 15.65 | -3.03 | 28.02 | 8.00 | 7.29 | -12.37 | 4327.75 |
| LasVegasSd | 49.87 | -3.10 | 74.29 | 33.30 | 6.29 | 17.94 | 38087.2 |
| LibertyGbl | 22.34 | -0.91 | 28.62 | 15.24 | - | -34.29 | 4070.71 |
| Lilly (E) | 143.54 | -5.67 | 164.90 | 101.36 | 1.88 | 23.69 | 137288.9 |
| Lockheed♦ | 381.87 | -28.88 | 442.53 | 266.11 | 2.44 | 17.13 | 107089.83 |
| Lowes | 126.05 | -4.92 | 133.39 | 60.00 | 1.61 | 24.14 | 95168.1 |
| Lyondell | 66.61 | -8.26 | 98.91 | 33.71 | 6.38 | 8.41 | 22228.17 |
| Marathon Ptl | 36.62 | -4.94 | 69.65 | 15.26 | 5.48 | 9.74 | 23812.55 |
| Marsh&M | 104.34 | -7.15 | 119.88 | 74.34 | 2.17 | 29.56 | 52808.44 |
| MasterCard | 297.79 | -14.09 | 347.25 | 199.99 | 0.47 | 37.65 | 295717.6 |
| McDonald's | 189.17 | -7.99 | 221.93 | 124.23 | 2.50 | 24.40 | 140658.52 |
| McKesson♦ | 148.25 | -13.37 | 172.18 | 112.60 | 1.08 | -44.83 | 23994.74 |
| Medtronic | 93.21 | -8.83 | 122.15 | 72.13 | 2.16 | 24.87 | 124916.89 |
| Merck | 76.30 | -5.96 | 92.64 | 65.25 | 2.93 | 20.94 | 192588.92 |
| Metlife | 37.45 | -3.29 | 53.28 | 22.85 | 4.40 | 6.53 | 33989.2 |
| Microsoft | 187.74 | 0.54 | 198.52 | 130.71 | 1.05 | 30.94 | 1423715.07 |
| Mnstr Bvrg | 68.30 | -3.93 | 73.43 | 50.06 | - | 35.54 | 35964.29 |
| MondelezInt | 50.73 | -1.80 | 59.96 | 41.19 | 2.03 | 20.22 | 72415.25 |
| Monsanto | 127.95 | - | 127.97 | 114.19 | 1.64 | 23.62 | 56462.29 |
| MorganStly | 46.28 | -3.25 | 57.57 | 27.20 | 2.66 | 9.42 | 72921.38 |
| MylanNV | 15.94 | -1.73 | 23.11 | 12.75 | - | 561.21 | 8240.14 |
| Netflix | 418.07 | -1.53 | 458.97 | 252.28 | - | 83.68 | 183868.87 |
| NextEraE | 246.91 | -7.47 | 283.35 | 174.80 | 2.11 | 33.86 | 120850.11 |
| Nike | 96.43 | -6.28 | 105.62 | 60.00 | 0.95 | 36.24 | 119574.89 |
| NorfolkS | 178.18 | -16.07 | 219.88 | 112.62 | 2.09 | 19.13 | 49266.75 |
| Northrop | 317.68 | -24.42 | 385.01 | 263.31 | 1.68 | 23.60 | 52958.12 |
| NXP | 106.17 | -7.65 | 139.59 | 58.41 | 1.31 | 124.98 | 29621.55 |
| Occid Pet | 18.50 | -2.29 | 54.05 | 9.00 | 16.07 | -16.29 | 16650.34 |
| Oracle | 51.86 | -2.12 | 60.50 | 39.71 | 1.82 | 16.82 | 163544.87 |
| Pepsico | 129.00 | -3.44 | 147.20 | 101.42 | 2.99 | 24.72 | 178987.56 |
| Perrigo | 51.49 | -4.12 | 63.86 | 40.01 | 1.51 | 50.84 | 7018.78 |
| Pfizer | 33.75 | -2.24 | 44.56 | 27.88 | 4.04 | 12.42 | 187475.64 |
| Phillips66 | 77.26 | -10.14 | 119.92 | 40.04 | 4.29 | 12.06 | 33737.49 |
| PhilMorris | 70.42 | -5.49 | 90.17 | 56.01 | 6.68 | 14.18 | 109653.06 |
| PNCFin | 110.76 | -17.27 | 161.79 | 79.41 | 4.02 | 10.21 | 46991.09 |
| PPG Inds | 101.63 | -12.32 | 134.36 | 69.77 | 2.00 | 20.38 | 23976.9 |
| Praxair♦ | 164.50 | -0.44 | 169.75 | 140.00 | 2.08 | 42.03 | 47306.22 |
| Priceline | 1905.64 | 20.64 | 2067.99 | 1612.41 | - | 17.15 | 92937.2 |
| ProctGmbl | 115.62 | -2.71 | 128.09 | 94.34 | 2.61 | 62.13 | 286233.8 |
| Prudntl | 63.16 | -6.07 | 103.56 | 38.62 | 5.99 | 6.60 | 24948.2 |
| PublStor♦ | 196.47 | -9.90 | 266.76 | 155.37 | 3.85 | 28.47 | 34341.53 |
| Qualcomm♦ | 85.24 | -3.31 | 96.17 | 58.00 | 2.75 | 25.58 | 95888.86 |
| Raytheon | 116.96 | - | 233.48 | 103.00 | 2.98 | 10.60 | 32566.46 |
| Regen Pharm | 588.39 | -8.61 | 625.79 | 271.37 | - | 33.67 | 65119.07 |
| S&P Global | 316.91 | -16.46 | 334.66 | 186.06 | 0.76 | 32.74 | 76356.09 |
| Salesforce | 175.11 | 1.23 | 195.72 | 115.29 | - | 1227.19 | 157774.11 |
| Schlmbrg♦ | 19.00 | -2.99 | 41.40 | 11.87 | 10.65 | -1.45 | 26368.45 |
| Sempra Energy | 124.05 | -9.74 | 161.87 | 88.00 | 3.22 | 18.45 | 36288.77 |
| Shrwin-Will | 547.62 | -37.67 | 603.36 | 325.43 | 0.87 | 30.71 | 49723.9 |
| SimonProp | 75.98 | -12.62 | 168.52 | 42.25 | 10.34 | 11.79 | 23220.57 |
| SouthCpr | 37.02 | -1.93 | 44.82 | 23.43 | 4.37 | 21.53 | 28618.64 |
| Starbucks | 76.38 | -5.76 | 99.72 | 50.02 | 2.04 | 26.97 | 89234.75 |
| StateSt | 63.12 | -7.58 | 85.89 | 42.10 | 3.25 | 10.72 | 22215.49 |
| Stryker | 187.79 | -19.24 | 226.30 | 124.54 | 1.08 | 36.20 | 70388.99 |
| Sychrony Fin | 23.77 | -1.75 | 38.18 | 12.15 | 3.70 | 5.28 | 13874.74 |
| T-MobileUS | 102.31 | 1.18 | 106.72 | 63.50 | - | 26.89 | 126430.96 |
| Target | 116.90 | -4.63 | 130.24 | 80.03 | 2.12 | 19.38 | 58451.81 |
| TE Connect | 78.59 | -12.45 | 101.00 | 48.62 | 2.37 | 37.54 | 25922.74 |
| Tesla Mtrs | 935.28 | 49.62 | 1027.48 | 207.51 | - | -200.82 | 173373.89 |
| TexasInstr | 123.97 | -7.47 | 135.70 | 93.09 | 2.72 | 23.48 | 113776.27 |
| TheTrvelers♦ | 113.33 | -11.03 | 155.09 | 76.99 | 2.93 | 12.10 | 28653.88 |
| ThrmoFshr | 339.76 | -14.44 | 356.42 | 250.21 | 0.24 | 36.84 | 134188.59 |
| TimeWrnr | 98.77 | - | 103.89 | 85.88 | 1.54 | 15.09 | 77269.69 |
| TJX Cos | 52.46 | -4.80 | 64.95 | 32.72 | 1.60 | 20.65 | 62840.63 |
| UnionPac | 166.18 | -18.65 | 188.96 | 105.08 | 2.31 | 19.11 | 112764.44 |
| UPS B | 101.48 | -5.17 | 125.31 | 82.00 | 3.58 | 20.98 | 71453.78 |
| USBancorp | 37.51 | -4.86 | 61.11 | 28.36 | 3.99 | 9.53 | 56500.9 |
| UtdHlthcre | 285.15 | -26.70 | 315.84 | 187.72 | 1.37 | 21.02 | 270430.41 |
| UtdTech♦ | 86.01 | -18.63 | 158.44 | 69.02 | 3.19 | 14.36 | 74498.84 |
| ValeroEngy | 63.79 | -10.85 | 101.99 | 31.00 | 5.83 | 65.70 | 26007.09 |
| Verizon | 56.53 | -1.21 | 62.22 | 48.84 | 4.38 | 12.62 | 233920.88 |
| VertexPharm | 268.56 | 2.87 | 295.55 | 165.23 | - | 46.02 | 69631.35 |
| VF Cp | 61.25 | -7.06 | 100.25 | 45.07 | 2.98 | 19.55 | 24176.62 |
| ViacomCBS | 22.90 | -1.92 | 53.71 | 10.10 | 3.22 | 4.56 | 12895.12 |
| Visa Inc | 192.26 | -7.35 | 214.17 | 133.93 | 0.52 | 37.06 | 324364.24 |
| Walgreen | 41.40 | -3.95 | 64.50 | 36.65 | 4.30 | 10.81 | 36316.92 |
| WalMartSto | 117.74 | -3.82 | 133.38 | 102.00 | 1.71 | 23.85 | 333640.06 |
| WellsFargo | 27.97 | -3.70 | 54.75 | 22.00 | 7.16 | 9.67 | 114676.93 |
| Williams Cos♦ | 18.23 | -2.91 | 29.06 | 8.41 | 7.89 | 27.12 | 22116.58 |
| YumIBrnds | 91.28 | -5.24 | 119.72 | 54.95 | 1.74 | 23.29 | 27474 |
| **Venezuela (VEF)** | | | | | | | |
| Bco de Vnzla | 7200 | -299.99 | 9000 | 310.00 | 580.58 | - | 129.87 |
| Bco Provncl | 490000 | -40000.00 | 530000 | 21000 | - | 53.46 | 261.29 |
| Mrcntl Srvcs | 550000 | -30000.00 | 580000 | 39000 | 0.01 | 19.47 | 165.59 |

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

## FT 500: TOP 20

| | Close | Prev | Day | | Week | | Month |
|---|---|---|---|---|---|---|---|
| | price | price | change | change % | change | change % | change % |
| Midea | 0.69 | 0.68 | 0.01 | 1.47 | 0.05 | 7.8 | 0.00 |
| ChngKng | 47.00 | 46.40 | 0.60 | 1.29 | 3.15 | 7.2 | -6.31 |
| BOE Tech | 0.64 | 0.60 | 0.04 | 6.67 | 0.04 | 6.7 | 4.92 |
| Tesla Mtrs | 935.28 | 972.84 | -37.56 | -3.86 | 49.62 | 5.6 | 15.52 |
| SHK Props | 100.30 | 99.50 | 0.80 | 0.80 | 4.45 | 4.6 | -2.30 |
| HangSeng | 129.50 | 131.70 | -2.20 | -1.67 | 5.20 | 4.2 | -6.18 |
| ChinaLife | 15.98 | 16.28 | -0.30 | -1.84 | 0.62 | 4.0 | 0.25 |
| Adobe | 406.54 | 387.67 | 18.87 | 4.87 | 13.64 | 3.5 | 11.35 |
| JardnMt US$ | 43.96 | 43.59 | 0.37 | 0.85 | 1.47 | 3.5 | -0.23 |
| MTR | 40.85 | 40.70 | 0.15 | 0.37 | 1.30 | 3.3 | -5.02 |
| TaiwanSem | 316.00 | 313.00 | 3.00 | 0.96 | 10.00 | 3.3 | 4.98 |
| UOB | 22.28 | 22.54 | -0.26 | -1.15 | 0.65 | 3.0 | 11.01 |
| New Ch Life Ins | 25.90 | 26.45 | -0.55 | -2.08 | 0.65 | 2.6 | -3.71 |
| Amazon | 2545.02 | 2557.96 | -12.94 | -0.51 | 62.02 | 2.5 | 7.90 |
| Apple | 338.80 | 335.90 | 2.90 | 0.86 | 7.30 | 2.2 | 8.80 |
| JardnStr US$ | 22.21 | 22.32 | -0.11 | -0.49 | 0.46 | 2.1 | 3.93 |
| Naspers N | 2980.00 | 2944.20 | 35.80 | 1.22 | 56.80 | 1.9 | -4.11 |
| Sony | 7404.00 | 7495.00 | -91.00 | -1.21 | 137.00 | 1.9 | 5.09 |
| BOC Hold | 24.10 | 24.35 | -0.25 | -1.03 | 0.40 | 1.7 | -1.64 |
| CK Hutchison | 52.05 | 52.70 | -0.65 | -1.23 | 0.75 | 1.5 | -9.27 |

Based on the FT Global 500 companies in local currency

## INTEREST RATES: OFFICIAL

| Jun 12 | Rate | Current | Since | Last | Mnth Ago | Year Ago |
|---|---|---|---|---|---|---|
| US | Fed Funds | 1.50-1.75 | 27-09-2018 | 1.00 | 1.75-2.00 | 1.25-1.50 |
| US | Prime | 3.25 | 27-09-2018 | 3.25 | 5.00 | 4.25 |
| US | Discount | 2.25 | 27-09-2018 | 0.75 | 2.50 | 1.75 |
| Euro | Repo | 0.00 | 16-03-2016 | 0.00 | 0.00 | 0.00 |
| UK | Repo | 0.10 | 02-08-2018 | 0.10 | 0.50 | 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

| | Over | Change | | | One | Three | Six | One |
|---|---|---|---|---|---|---|---|---|
| Jun 12 (Libor: Jun 11) | night | Day | Week | Month | month | month | month | year |
| US$ Libor | 0.06550 | 0.002 | 0.004 | -0.006 | 0.18475 | 0.31338 | 0.41963 | 0.60463 |
| Euro Libor | -0.56329 | -0.002 | -0.003 | 0.002 | -0.46314 | -0.37743 | -0.24429 | -0.16057 |
| £ Libor | 0.05263 | -0.002 | -0.005 | -0.003 | 0.09263 | 0.20375 | 0.35488 | 0.53388 |
| Swiss Fr Libor | | | | -0.001 | -0.76400 | -0.66120 | -0.59420 | -0.45520 |
| Yen Libor | | | | 0.002 | -0.09067 | -0.04883 | -0.00917 | 0.11300 |
| Euro Euribor | | | | -0.001 | -0.47900 | -0.35800 | -0.18300 | -0.11800 |
| Sterling CDs | | | | 0.000 | 0.75000 | 0.83000 | 0.89500 | |
| US$ CDs | | | | - | - | - | - | |
| Euro CDs | | | | - | - | - | - | |

| | Short | | 7 Days | | One | | Three | | Six | | One | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jun 12 | term | | notice | | month | | month | | month | | year | |
| Euro | -0.74 | -0.44 | -0.69 | -0.39 | -0.67 | -0.37 | -0.57 | -0.27 | -0.49 | -0.19 | -0.46 | -0.16 |
| Sterling | | | 0.45 | 0.55 | 0.70 | 0.80 | 0.78 | 0.88 | 0.82 | 0.97 | 0.89 | 1.04 |
| Swiss Franc | - | - | - | - | - | - | - | - | - | - | - | - |
| Canadian Dollar | - | - | - | - | - | - | - | - | - | - | - | - |
| US Dollar | 0.05 | 0.35 | -0.03 | 0.27 | 0.04 | 0.34 | 0.13 | 0.43 | 0.20 | 0.50 | 0.32 | 0.62 |
| Japanese Yen | -0.20 | 0.00 | -0.20 | 0.00 | -0.25 | 0.05 | -0.15 | 0.15 | -0.05 | 0.25 | -0.05 | 0.25 |

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

## COMMODITIES

www.ft.com/commodities

| Energy | | Price* | Change | Agricultural & Cattle Futures | | Price* | Change |
|---|---|---|---|---|---|---|---|
| Crude Oil† | Jun | 36.46 | 0.54 | Corn♦ | Jul | 330.25 | 0.75 |
| Brent Crude Oil‡ | | 38.83 | 0.66 | Wheat♦ | Jul | 501.25 | 2.00 |
| RBOB Gasoline† | Jun | 1.13 | 0.02 | Soybeans♦ | Jul | 872.00 | 5.75 |
| Heating Oil† | | - | - | Soybeans Meal♦ | Jul | 289.10 | -0.60 |
| Natural Gas† | Jun | 1.74 | -0.08 | Cocoa (ICE Liffe)⊕ | Jul | 1868.00 | 22.00 |
| Ethanol♦ | | - | - | Cocoa (ICE US)♥ | Jul | 2379.00 | 11.00 |
| Uranium† | Jun | 25.00 | 0.00 | Coffee(Robusta)⊕ | Jul | 1181.00 | -13.00 |
| Carbon Emissions‡ | | - | - | Coffee (Arabica)♥ | Jul | 94.95 | -1.75 |
| Diesel† | | - | - | White Sugar⊕ | | 382.80 | -4.60 |
| **Base Metals (◆ LME 3 Months)** | | | | Sugar 11♥ | | 12.03 | -0.08 |
| Aluminium | | 1583.00 | -11.00 | Cotton♥ | Jul | 59.76 | -0.22 |
| Aluminium Alloy | | 1210.00 | 0.00 | Orange Juice♥ | Jul | 122.65 | -5.65 |
| Copper | | 5794.50 | 41.50 | Palm Oil◆ | | - | - |
| Lead | | 1747.00 | 10.00 | Live Cattle♣ | Jun | 95.88 | -0.98 |
| Nickel | | 12685.00 | 35.00 | Feeder Cattle♣ | Aug | 134.88 | -0.98 |
| Tin | | 17025.00 | 85.00 | Lean Hogs♣ | Jul | 51.63 | -0.53 |
| Zinc | | 1990.50 | -2.00 | | | | |
| **Precious Metals (PM London Fix)** | | | | | | % Chg | % Chg |
| Gold | | 1738.25 | 16.20 | | Jun 11 | Month | Year |
| Silver (US cents) | | 1787.50 | 16.00 | S&P GSCI Spt | 314.28 | -3.23 | - |
| Platinum | | 820.00 | -18.00 | DJ UBS Spot | 63.71 | -1.53 | - |
| Palladium | | 1915.00 | -55.00 | TR/CC CRB TR | 142.64 | 9.55 | -21.40 |
| **Bulk Commodities** | | | | M Lynch MLCX Ex. Rtn | 231.14 | -9.84 | -33.05 |
| Iron Ore | | 105.35 | 1.40 | UBS Bberg CMCI TR | 11.93 | 10.26 | -15.22 |
| GlobalCOAL RB Index | | 57.00 | 0.75 | LEBA EUA Carbon | 23.51 | -4.62 | 5.43 |
| Baltic Dry Index | | 923.00 | 84.00 | LEBA CER Carbon | 0.24 | 26.32 | 0.00 |
| | | | | LEBA UK Power | 3376.00 | 81.02 | 23.98 |

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

## FT 500: BOTTOM 20

| | Close | Prev | Day | | Week | | Month |
|---|---|---|---|---|---|---|---|
| | price | price | change | change % | change | change % | change % |
| Airbus Grpe | 66.95 | 67.06 | -0.11 | -0.16 | -14.03 | -17.3 | 30.71 |
| L Brands | 15.65 | 15.48 | 0.17 | 1.10 | -3.03 | -16.2 | 39.41 |
| CanNatRs | 24.34 | 24.25 | 0.09 | 0.37 | -4.52 | -15.7 | 2.79 |
| Renault | 22.00 | 21.35 | 0.65 | 3.04 | -3.93 | -15.2 | 28.25 |
| CharlesSch | 36.56 | 36.16 | 0.40 | 1.11 | -6.26 | -14.6 | 6.41 |
| ValeroEngy | 63.79 | 60.68 | 3.11 | 5.13 | -10.85 | -14.5 | -2.90 |
| H & M | 143.85 | 144.60 | -0.75 | -0.52 | -24.40 | -14.5 | 8.98 |
| SimonProp | 75.98 | 71.92 | 4.06 | 5.65 | -12.62 | -14.2 | 38.80 |
| Compass | 1150.00 | 1161.00 | -11.00 | -0.95 | -186.00 | -13.9 | -99.06 |
| Williams Cos | 18.23 | 18.17 | 0.06 | 0.33 | -2.91 | -13.8 | -4.45 |
| TE Connect | 78.59 | 78.87 | -0.28 | -0.36 | -12.45 | -13.7 | 10.05 |
| Schlmbrg | 19.00 | 18.51 | 0.49 | 2.65 | -2.99 | -13.6 | 12.35 |
| RBS | 118.70 | 117.50 | 1.20 | 1.02 | -18.65 | -13.6 | -98.91 |
| PNCFin | 110.76 | 107.51 | 3.25 | 3.02 | -17.27 | -13.5 | 10.73 |
| Altice | 3.60 | 3.54 | 0.06 | 1.61 | -0.55 | -13.3 | -2.41 |
| HCA Hold | 100.55 | 101.11 | -0.56 | -0.55 | -15.01 | -13.0 | 1.16 |
| Suncor En | 24.87 | 24.22 | 0.65 | 2.68 | -3.70 | -13.0 | 4.94 |
| DiscFinServ | 52.99 | 49.41 | 3.58 | 7.25 | -7.63 | -12.6 | 35.71 |
| Continental | 86.30 | 85.84 | 0.46 | 0.54 | -12.34 | -12.5 | -12.51 |
| BcoSantdr | 2.21 | 2.20 | 0.01 | 0.39 | -0.31 | -12.4 | -17.43 |

Based on the FT Global 500 companies in local currency

## BOND INDICES

| | Index | Day's change | Month's change | Year change | Return 1 month | Return 1 year |
|---|---|---|---|---|---|---|
| **Markit IBoxx** | | | | | | |
| ABF Pan-Asia unhedged | 210.79 | -0.32 | 1.39 | 1.55 | 1.52 | 7.21 |
| Corporates( £) | 385.22 | -0.26 | 1.12 | 2.36 | 2.57 | 6.67 |
| Corporates($) | 324.31 | -0.15 | 1.15 | 4.09 | 1.15 | 4.09 |
| Corporates(€) | 234.62 | 0.05 | 1.25 | -1.29 | 2.17 | 0.47 |
| Eurozone Sov(€) | 253.78 | 0.16 | 0.11 | 1.14 | 1.14 | 3.21 |
| Gilts( £) | 383.15 | -0.32 | -0.37 | 9.96 | -0.12 | 12.16 |
| Global Inflation-Lkd | 290.21 | -0.30 | 1.29 | 3.81 | 3.64 | 5.95 |
| Markit iBoxx £ Non-Gilts | 376.95 | -0.22 | 0.79 | 2.89 | 1.98 | 6.46 |
| Overall ($) | 279.85 | 0.29 | 0.47 | 6.81 | 0.47 | 6.81 |
| Overall( £) | 377.39 | -0.29 | -0.04 | 7.66 | 0.48 | 10.32 |
| Overall(€) | 245.57 | 0.11 | 0.36 | 0.63 | 1.22 | 2.31 |
| Treasuries ($) | 264.25 | 0.63 | 0.08 | 9.11 | 0.08 | 9.11 |
| **FTSE** | | | | | | |
| Sterling Corporate (£) | - | - | - | - | - | - |
| Euro Corporate (€) | 104.47 | -0.05 | - | - | 0.54 | -1.73 |
| Euro Emerging Mkts (€) | 609.84 | 7.63 | - | - | 15.58 | 48.74 |
| 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 | 402.34 | 0.33 | 60.59 | -117.12 | 743.22 | 330.61 |
| Europe 5Y | 70.52 | -0.63 | 11.41 | -17.37 | 131.25 | 59.11 |
| Japan 5Y | 63.08 | 2.03 | 0.76 | -16.30 | 188.33 | 56.61 |
| Senior Financials 5Y | 82.06 | -0.69 | 15.40 | -23.77 | 150.83 | 66.65 |
| **Markit CDX** | | | | | | |
| Emerging Markets 5Y | 274.53 | 38.12 | 32.50 | -67.15 | 421.25 | 225.09 |
| Nth Amer High Yld 5Y | 504.03 | 52.96 | - | - | 504.03 | 451.07 |
| Nth Amer Inv Grade 5Y | 81.29 | 7.74 | 8.77 | -14.06 | 150.81 | 64.87 |

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

## BONDS: INDEX-LINKED

| | Price | Yield | | Month | Value | | No of |
|---|---|---|---|---|---|---|---|
| | Jun 11 | Jun 11 | Prev | return | stock | Market | stocks |
| Can 4.25%' 21 | 105.61 | 0.411 | 0.408 | 0.54 | 5.18 | 86701.59 | 8 |
| Fr 0.10%' 21 | 103.70 | -0.669 | -0.653 | 0.18 | 11.35 | 234869.01 | 14 |
| Swe 0.25%' 22 | 109.71 | -0.947 | -0.792 | 0.35 | 31.92 | 195891.59 | 7 |
| UK 1.875%' 22 | 111.31 | -2.582 | -2.607 | -0.39 | 15.74 | 795868.45 | 28 |
| UK 2.5%' 24 | 360.24 | -2.579 | -2.597 | -0.72 | 6.82 | 795868.45 | 28 |
| UK 2%' 35 | 305.44 | -2.667 | -2.629 | -0.54 | 9.08 | 795868.45 | 28 |
| US 0.625%' 21 | 101.35 | -0.608 | -0.739 | 0.38 | 35.84 | 1534700.10 | 42 |
| US 3.625%' 28 | 133.55 | -0.555 | -0.509 | 0.78 | 16.78 | 1534700.10 | 42 |

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

| | | Spread | Spread | | | Spread | Spread |
|---|---|---|---|---|---|---|---|
| | Bid | vs | vs | | Bid | vs | vs |
| | Yield | Bund | T-Bonds | | Yield | Bund | T-Bonds |
| Australia | - | - | - | Italy | 1.13 | 1.59 | - |
| Austria | -0.45 | - | - | Japan | - | - | - |
| Belgium | 0.66 | - | - | Netherlands | -0.53 | - | - |
| Canada | 0.53 | 0.98 | - | Norway | 0.39 | - | - |
| Denmark | - | - | - | Portugal | 0.13 | - | - |
| Finland | -0.17 | 0.28 | - | Spain | 0.50 | 0.96 | - |
| France | 0.62 | - | - | Switzerland | -0.47 | -0.02 | - |
| Germany | -0.45 | 0.00 | - | United Kingdom | - | - | - |
| Greece | 1.40 | - | - | United States | - | - | - |

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

## BONDS: HIGH YIELD & EMERGING MARKET

| | Red | | Ratings | | | Bid | Bid | Day's chge | Mth's chge | Spread vs |
|---|---|---|---|---|---|---|---|---|---|---|
| Jun 12 | date | Coupon | S* | M* | F* | price | yield | yield | yield | US |
| **High Yield US$** | | | | | | | | | | |
| HCA Inc. | 04/24 | 8.36 | BB- | Ba2 | BB | 111.75 | 4.95 | 0.59 | 0.00 | - |
| **High Yield Euro** | | | | | | | | | | |
| Aldesa Financial Services S.A. | 04/21 | 7.25 | - | - | B | 71.10 | 28.23 | 0.00 | 0.64 | 25.98 |
| **Emerging US$** | | | | | | | | | | |
| Peru | 03/19 | 7.13 | BBB+ | A3 | BBB+ | 104.40 | 2.60 | - | - | 0.34 |
| Colombia | 01/26 | 4.50 | BBB- | Baa2 | BBB- | 108.13 | 2.86 | 0.07 | -0.65 | 2.46 |
| Brazil | 04/26 | 6.00 | BB- | Ba2 | BB- | 112.85 | 3.53 | 0.16 | -0.38 | 3.13 |
| Poland | 04/26 | 3.25 | A- | A2 | A- | 111.17 | 1.25 | -0.02 | -0.31 | 0.85 |
| Turkey | 04/26 | 4.25 | - | B1 | BB- | 90.75 | 6.16 | 0.24 | -1.34 | 5.76 |
| Mexico | 05/26 | 11.50 | BBB+ | Baa1 | BBB- | 141.00 | 3.72 | 0.48 | -0.55 | 3.32 |
| Turkey | 03/27 | 6.00 | - | Ba2 | BB+ | 101.26 | 5.82 | 0.00 | 0.17 | 3.07 |
| Peru | 08/27 | 4.13 | BBB+ | A3 | BBB+ | 103.50 | 3.66 | 0.01 | -0.02 | 0.80 |
| Russia | 06/28 | 12.75 | BBB- | Ba1 | BBB | 172.58 | 2.65 | 0.04 | -0.39 | - |
| Brazil | 02/47 | 5.63 | BB- | Ba2 | BB- | 103.70 | 5.36 | 0.15 | -0.41 | - |
| **Emerging Euro** | | | | | | | | | | |
| Brazil | 04/21 | 2.88 | BB- | Ba2 | BB- | 103.09 | 0.05 | 0.01 | -0.09 | -1.19 |
| Mexico | 02/22 | 1.88 | BBB+ | Baa1 | BBB- | 101.70 | 0.86 | 0.04 | -1.24 | 0.67 |
| Mexico | 04/23 | 2.75 | BBB+ | A3 | BBB+ | 107.76 | 0.76 | 0.00 | -0.07 | -1.56 |
| 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.

## VOLATILITY INDICES

| | Jun 12 | Day Chng | Prev | 52 wk high | 52 wk low |
|---|---|---|---|---|---|
| VIX | 36.09 | -4.70 | 40.79 | 85.42 | 11.42 |
| VXD | 39.18 | -1.61 | 40.79 | 71.05 | 2.47 |
| VXN | 35.49 | -1.32 | 36.81 | 84.67 | 13.58 |
| VDAX | 42.39 | 3.65 | 38.74 | 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 | | Bid | Bid | Day chg | Wk chg | Month | Year |
|---|---|---|---|---|---|---|---|---|
| | Date | Coupon | Price | Yield | yield | yield | chg yld | chg yld |
| Australia | - | - | - | - | - | - | - | - |
| | 11/22 | 2.25 | 104.84 | 0.25 | -0.02 | -0.03 | 0.03 | -0.82 |
| Austria | 10/25 | 1.20 | 108.93 | -0.45 | -0.07 | -0.06 | -0.04 | -0.15 |
| | 02/47 | 1.50 | 129.35 | 0.35 | -0.09 | -0.09 | -0.01 | -0.45 |
| Belgium | 09/22 | 1.00 | 103.35 | -0.49 | -0.03 | -0.06 | -0.01 | 0.02 |
| | 06/47 | 1.60 | 123.12 | 0.66 | -0.08 | -0.10 | -0.08 | -0.43 |
| Canada | 11/22 | 2.00 | 103.96 | 0.35 | 0.00 | -0.08 | -0.08 | -1.62 |
| | 06/30 | 1.25 | 107.03 | 0.53 | -0.04 | -0.16 | -0.05 | - |
| Denmark | - | - | - | - | - | - | - | - |
| | 11/21 | 3.00 | 105.02 | -0.51 | -0.01 | -0.02 | -0.04 | 0.14 |
| Finland | 09/22 | 1.63 | 104.90 | -0.53 | -0.03 | 0.02 | 0.05 | 0.00 |
| | 09/29 | 0.50 | 106.27 | -0.17 | -0.08 | -0.08 | -0.07 | - |
| France | 10/22 | 2.25 | 106.69 | -0.55 | -0.03 | -0.04 | -0.01 | 0.00 |
| | 05/26 | 0.50 | 105.17 | -0.36 | -0.07 | -0.05 | -0.05 | -0.14 |
| | 05/48 | 2.00 | 135.17 | 0.62 | -0.09 | -0.10 | -0.08 | -0.41 |
| Germany | 09/22 | 1.50 | 104.85 | -0.66 | -0.04 | -0.05 | 0.11 | 0.02 |
| | 02/26 | 0.50 | 106.52 | -0.63 | -0.07 | -0.08 | 0.10 | -0.13 |
| | 08/29 | 0.00 | 104.24 | -0.45 | -0.09 | -0.10 | 0.10 | - |
| | 08/50 | 0.00 | 98.57 | 0.05 | -0.11 | -0.14 | 0.11 | - |
| Greece | 02/26 | 3.65 | 115.31 | 1.40 | -0.12 | -0.14 | -0.99 | -1.56 |
| | 02/26 | 3.65 | 115.31 | 1.40 | -0.12 | -0.14 | -0.99 | -1.56 |
| Ireland | 10/22 | 0.00 | 101.01 | -0.43 | -0.03 | -0.06 | -0.08 | -0.03 |
| | 05/30 | 2.40 | 122.50 | 0.12 | -0.09 | -0.08 | -0.10 | -0.29 |
| Italy | 08/22 | 0.90 | 101.33 | 0.27 | -0.04 | 0.04 | -0.46 | -0.75 |
| | 02/25 | 0.35 | 98.03 | 0.78 | -0.04 | 0.03 | -0.51 | - |
| | 05/30 | 0.40 | 93.14 | 1.13 | -0.02 | 0.11 | -0.57 | - |
| | 03/48 | 3.45 | 120.97 | 2.41 | -0.05 | 0.05 | -0.32 | -0.74 |
| Japan | - | - | - | - | - | - | - | - |
| | 11/22 | 0.05 | 99.99 | 0.05 | -0.01 | 0.00 | 0.01 | - |
| | 06/26 | 0.10 | 101.26 | -0.11 | -0.02 | -0.02 | 0.01 | 0.11 |
| | 09/47 | 0.80 | 107.90 | 0.49 | -0.02 | -0.02 | 0.03 | 0.14 |
| Netherlands | 07/22 | 2.25 | 106.01 | -0.61 | -0.04 | -0.04 | 0.07 | 0.02 |
| | 07/25 | 0.25 | 104.02 | -0.53 | -0.07 | -0.05 | 0.04 | -0.13 |
| New Zealand | - | - | - | - | - | - | - | - |
| | - | - | - | - | - | - | - | - |
| Norway | - | - | - | - | - | - | - | - |
| | 02/26 | 1.50 | 106.24 | 0.39 | -0.09 | -0.04 | 0.24 | -0.94 |
| Portugal | 10/22 | 2.20 | 105.98 | -0.34 | -0.03 | 0.02 | -0.19 | -0.14 |
| | 02/26 | 3.30 | 117.96 | 0.13 | -0.04 | 0.05 | -0.32 | -0.06 |
| Spain | 10/22 | 0.45 | 101.71 | -0.27 | -0.02 | 0.04 | -0.14 | -0.04 |
| | 10/29 | 0.60 | 100.87 | 0.50 | -0.05 | 0.07 | -0.26 | - |
| Sweden | - | - | - | - | - | - | - | - |
| | 06/22 | 3.50 | 107.43 | -0.28 | 0.00 | -0.03 | 0.05 | 0.30 |
| Switzerland | 05/22 | 2.00 | 105.27 | -0.68 | -0.01 | -0.03 | 0.00 | 0.10 |
| | 06/29 | 0.00 | 104.35 | -0.47 | -0.13 | -0.09 | 0.09 | 0.00 |
| United Kingdom | - | - | - | - | - | - | - | - |
| | 07/22 | 0.50 | 101.17 | -0.05 | -0.01 | -0.06 | -0.05 | -0.60 |
| | 09/25 | 2.00 | 110.84 | -0.07 | -0.03 | -0.08 | -0.08 | -0.71 |
| | 07/47 | 1.50 | 122.65 | 0.59 | -0.07 | -0.15 | 0.01 | -0.84 |
| United States | - | - | - | - | - | - | - | - |
| | 10/22 | 2.00 | 104.30 | 0.19 | -0.01 | -0.04 | -0.03 | -1.70 |
| | 05/26 | 1.63 | 107.16 | 0.40 | -0.06 | -0.13 | -0.09 | -1.63 |
| | 11/47 | 2.75 | 131.11 | 1.38 | -0.12 | -0.22 | -0.06 | -1.24 |

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

## BONDS: GLOBAL INVESTMENT GRADE

| | Red | | Ratings | | | Bid | Bid | Day's chge | Mth's chge | Spread vs |
|---|---|---|---|---|---|---|---|---|---|---|
| Jun 12 | date | Coupon | S* | M* | F* | price | yield | yield | yield | US |
| **US$** | | | | | | | | | | |
| FleetBoston Financial Corp. | 01/28 | 6.88 | BBB+ | Baa1 | A- | 125.55 | 3.07 | 0.08 | -0.58 | - |
| The Goldman Sachs Group, Inc. | 02/28 | 5.00 | BBB+ | A3 | A | 113.15 | 3.07 | -0.09 | -0.27 | - |
| NationsBank Corp. | 03/28 | 6.80 | BBB+ | Baa1 | A- | 125.08 | 3.13 | 0.08 | -0.54 | - |
| GTE LLC | 04/28 | 6.94 | BBB+ | Baa2 | A- | 126.06 | 3.16 | 0.01 | -0.70 | - |
| United Utilities PLC | 08/28 | 6.88 | BBB | Baa1 | A- | 126.61 | 3.15 | -0.12 | -0.76 | - |
| Barclays Bank plc | 01/29 | 4.50 | A | A1 | A+ | 96.19 | 5.05 | -0.09 | -0.08 | - |
| **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+ | 109.21 | -0.10 | -0.10 | -0.05 | - |
| **Yen** | | | | | | | | | | |
| Mexico | 06/26 | 1.09 | BBB+ | Baa1 | BBB- | 94.72 | 2.03 | -0.09 | 0.11 | 1.54 |
| **£ 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.

## GILTS: UK CASH MARKET

| | | Red | Change in Yield | | | | 52 Week | | Amnt |
|---|---|---|---|---|---|---|---|---|---|
| Jun 12 | Price £ | Yield | Day | Week | Month | Year | High | Low | £m |
| | - | - | - | - | - | - | - | - | - |
| | - | - | - | - | - | - | - | - | - |
| | - | - | - | - | - | - | - | - | - |
| Tr 2pc '20 | 100.20 | 0.03 | -25.00 | -57.14 | -70.00 | -95.59 | 102.93 | 100.00 | 32.53 |
| Tr 1.5pc '21 | 100.88 | 0.03 | 50.00 | -40.00 | -50.00 | -94.83 | 101.58 | 100.78 | 32.84 |
| Tr 4pc '22 | 106.97 | -0.03 | -40.00 | -400.00 | 50.00 | -105.66 | 109.50 | 106.96 | 38.77 |
| Tr 5pc '25 | 123.63 | 0.00 | -100.00 | -100.00 | -100.00 | -100.00 | 126.04 | 121.74 | 35.84 |
| Tr 1.25pc '27 | 108.58 | 0.04 | 100.00 | -75.00 | -50.00 | -94.67 | 108.81 | 103.72 | 30.03 |
| Tr 4.25pc '32 | 146.23 | 0.31 | 3.33 | -34.04 | -8.82 | -70.48 | 148.26 | 137.84 | 38.71 |
| Tr 4.25pc '36 | 157.33 | 0.47 | 6.82 | -25.40 | -2.08 | -61.79 | 160.46 | 144.85 | 30.41 |
| Tr 4.5pc '42 | 182.21 | 0.59 | 3.51 | -23.38 | 0.00 | -57.25 | 186.37 | 160.91 | 27.21 |
| Tr 3.75pc '52 | 193.37 | 0.57 | 5.56 | -25.00 | 3.64 | -58.70 | 198.36 | 160.72 | 24.10 |
| Tr 4pc '60 | 225.29 | 0.51 | 6.25 | -28.17 | 6.25 | -61.94 | 231.12 | 180.47 | 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 | | Day's | Total | Return | Return | |
|---|---|---|---|---|---|---|
| **Fixed Coupon** | Jun 12 | chg % | Return | 1 month | 1 year | Yield |
| 1 Up to 5 Years | 90.44 | -0.04 | 2487.33 | 0.12 | 1.62 | -0.01 |
| 2 5 - 10 Years | 188.42 | -0.11 | 3821.72 | 0.45 | 5.22 | 0.06 |
| 3 10 - 15 Years | 229.02 | -0.17 | 4930.19 | 0.49 | 8.67 | 0.31 |
| 4 5 - 15 Years | 197.64 | -0.13 | 4094.35 | 0.49 | 6.22 | 0.19 |
| 5 Over 15 Years | 416.92 | -0.52 | 6788.14 | -0.32 | 20.33 | 0.55 |
| 7 All stocks | 198.59 | -0.29 | 4212.48 | 0.00 | 11.38 | 0.46 |

| | | Day's | Month | Year's | Total | Return | Return |
|---|---|---|---|---|---|---|---|
| **Index Linked** | Jun 12 | chg % | chg % | chg % | Return | 1 month | 1 year |
| 1 Up to 5 Years | 304.35 | -0.13 | -0.06 | -1.92 | 2497.20 | 0.24 | -0.56 |
| 2 Over 5 years | 844.62 | -0.72 | 3.21 | 9.01 | 6374.88 | 3.30 | 9.45 |
| 3 5-15 years | 516.68 | -0.38 | 1.09 | 2.08 | 4100.48 | 1.22 | 2.90 |
| 4 Over 15 years | 1119.49 | -0.84 | 4.00 | 11.60 | 8233.03 | 4.07 | 11.90 |
| 5 All stocks | 749.83 | -0.66 | 2.91 | 7.80 | 5761.19 | 3.02 | 8.37 |

| **Yield Indices** | Jun 12 | Jun 11 | Yr ago | | Jun 12 | Jun 11 | Yr ago |
|---|---|---|---|---|---|---|---|
| 5 Yrs | -0.08 | -0.09 | 0.55 | 20 Yrs | 0.62 | 0.60 | 1.42 |
| 10 Yrs | 0.23 | 0.21 | 0.93 | 45 Yrs | 0.47 | 0.44 | 1.38 |
| 15 Yrs | 0.51 | 0.49 | 1.26 | | | | |

| | inflation 0% | | | | inflation 5% | | | |
|---|---|---|---|---|---|---|---|---|
| **Real yield** | Jun 12 | Dur yrs | Previous | Yr ago | Jun 12 | Dur yrs | Previous | Yr ago |
| Up to 5 yrs | -2.38 | 3.32 | -2.42 | -2.37 | -2.68 | 3.32 | -2.73 | -2.71 |
| Over 5 yrs | -2.30 | 24.70 | -2.33 | -1.91 | -2.32 | 24.74 | -2.34 | -1.93 |
| 5-15 yrs | -2.67 | 9.97 | -2.71 | -2.33 | -2.75 | 9.97 | -2.79 | -2.41 |
| Over 15 yrs | -2.26 | 29.74 | -2.28 | -1.87 | -2.26 | 29.75 | -2.29 | -1.88 |
| All stocks | -2.30 | 22.82 | -2.33 | -1.92 | -2.32 | 22.88 | -2.35 | -1.94 |

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

©2018 Tradeweb Markets LLC. All rights reserved. The Tradeweb FTSE Gilt Closing Prices information contained herein is proprietary to Tradeweb; may not be copied or re-distributed; is not warranted to be accurate, complete or timely; and does not constitute investment advice. Tradeweb is not responsible for any loss or damage that might result from the use of this information.

All data provided by Morningstar unless otherwise noted. All elements listed are indicative and believed accurate at the time of publication. No offer is made by Morningstar, its suppliers, or the FT. Neither the FT, nor Morningstar's suppliers, warrant or guarantee that the information is reliable or complete. Neither the FT nor Morningstar's suppliers accept responsibility and will not be liable for any loss arising from the reliance on the use of the listed information. For all queries e-mail ft.reader.enquiries@morningstar.com

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

POWERED BY MORNINGSTAR

## WORK & CAREERS

# ‘Worker’s block’ and the hidden risks of life after lockdown

**Andrew Hill**

**On management**

In late March, I canvassed managers of multinationals about how they were tackling the growing coronavirus crisis. Drawing on the experience of their staff in China, they observed that adrenalin had energised locked-down employees at first. Only at the five-week mark did enforced remote working start to breed anxiety.

Most companies have long since passed that milestone. Ten weeks after I started working from home I took a week off. It was relaxing, but I emerged to contemplate the endless flatness ahead. Lockdown may be lifting, but a return to regular office life is way off. I have just taken delivery of stationery that will last me at least another year. The prospect of measuring out my life in A6 notebooks, on a bland diet of video calls and virtual encounters is draining.

One colleague calls this “the blancmange era”. Many would willingly exchange their gristly daily stress for such blandness. The toll extracted by financial and job insecurity, or by high-pressure work on the front line of this pandemic, is vast. But workers there talk about the immediate future in similar terms. “Our lives are lived in a loop of hospital and home, with none of the teaching, meetings or networking we usually do, and I just do not think many doctors have the energy for this to go on,” one doctor told the Financial Times.

It is not hard to achieve commitment from your team during a crisis. Doubters’ stock objection to radical reform — “What you don’t understand about this is . . . ” — just evaporated under pressure, according to one business leader. But companies now recognise that the early solidarity is at risk of crumbling as the trade-offs ahead of a likely recession become more complex.

I spoke to one chief executive who had agreed an across-the-board salary sacrifice with his staff. He was now fielding complaints from people in one division who were fed up with having to work twice as hard to meet crisis-fed demand, while colleagues in another unit sat idle.

Some of the gestures that executives themselves made are also looking flimsy. In the US, many chief executives’ well-publicised decisions to renounce part of their salary sound hollow when compared with the potential value of stock option grants they received when shares were at a Covid-19 low. As furlough turns to redundancy, friction will increase.

Psychologists point out that past crises usually presaged periods of employee disengagement, dubbed “work inhibition” or “worker’s block”. As the FT’s bureau chief in New York after the World Trade Center attacks in 2001, I noticed that colleagues who were directly involved in covering the aftermath seemed on the surface to cope better than those whose roles were less central.

Most companies have recognised that the pressure of the coronavirus crisis and the unusual working conditions it imposes increase the risk of burnout and significant declines in mental wellbeing. But they also need to pay attention to a wider group of staff, many of whom are now stationed semi-permanently out of sight of their bosses, for whom the blancmange era increases the risk of “bore-out”, or even dropout.

Jeffrey Kleinberg, Manhattan-based former president of the American Group Psychotherapy Association, worked with organisations after the 9/11 attacks, including staff at the Nasdaq market. He found signs of work inhibition among those who failed to process the trauma. He anticipates an upsurge in similar symptoms after the wider coronavirus crisis. If a previously productive member of staff “seems to be not as creative, is going through the motions, or is more absent, these could be signs that something is broken that the company doesn’t know about”.

> The main burden of motivating staff through the featureless desert ahead will fall again on managers

Anxiety inevitably holds people back, says Harvard Business School’s Amy Edmondson, who has studied the importance of providing “psychological safety” for workers. One small advantage over past crises is that this time everyone is affected in some way, so everyone ought to be able to discuss their trauma more openly. “It needs to be said early and often that you won’t be at risk when you speak up or offer a well-intended criticism,” she says.

Expect, then, an increased demand for group therapy for those organisations that can afford it. Nasdaq’s leaders, for example, managed to restore the morale and trust of their staff by inviting them to talk about their responses to 9/11. As a result, the organisation suffered a lower dropout rate among employees than it had anticipated.

But the main burden of motivating staff through the featureless desert ahead will fall again on managers. They were able to call on a heroic collective effort from their teams at the start of the crisis. Can they sustain that shared sense of mission through the long, flat grind of the coming months?

*andrew.hill@ft.com*

## Working lives

# Is the coronavirus crisis taking women back to the 1950s?

Decades of advances are under threat as school closures sharpen divisions, write Emma Jacobs and Laura Noonan

Research suggests that women’s careers are being hurt by the pandemic’s economic fallout — FT montage, Getty

A few months into juggling work and caring for two school-age children, a female finance executive based in Dublin narrowed her ambitions down to a single bullet point: “Just survival”.

“This has been the hardest time as a working mother,” she writes, responding to an FT callout asking women to share experiences of how pandemic life is affecting their career progress.

The pull in two directions between work and home is exacerbated by the lack of childminders and a cleaner. She describes feeling unsupported by senior colleagues who have a stay-at-home partner. “The word ‘understanding’ is not part of finance,” she says, adding that while “the policies are all there, beautifully written” the reality is “the work has to get done and to the same standard — period”.

Her husband has some of the same pressures, but when he brings their children on to a video call, it is deemed adorable. There is no chance she would do the same. “Career suicide.” Her experience, echoed by other women who contacted the FT, falls far short of the inclusive workplace that many employers say they aspire to become.

Statistics and empirical research already suggest that women are being disproportionately hurt by the pandemic’s economic fallout. Sectors employing high numbers of women have been badly affected, notably hospitality and leisure, which accounted for 7.7m of the 20.5m jobs lost in the US in April, according to data from the US Bureau of Labor Statistics.

Allyson Zimmermann, executive director at Catalyst Europe, a non-profit that advocates for women at work, says the pandemic is “amplifying inequality”. Catalyst research in the US found that one in three jobs held by women is considered essential, a higher proportion than for men, and that women of colour are the most likely group to hold an essential job. These jobs are often low-paid and without sick pay.

One woman working in finance confesses to feeling indulgent for fretting about her career when she is taking food to parents in her son’s class who have lost their jobs. But her fears, and those of others, are acute as they contemplate a future where ambition and career plans become a fantasy. Or, as another financial services worker puts it, might post-Covid be a world “where we go back to the 1950s with a primary caregiver and a wage earner?”

Despite the impact of Black Lives Matter protests, and companies’ statements of support for diversity and inclusion, financial pressures could lead to these programmes being sidelined. And as teams are redeployed to deal with market changes, temporary jobs are filled without transparency. One man observes “a cultural bias towards seeing leadership in a crisis as requiring male attributes”.

Now that some workers are returning to offices, there are fears of a two-tier workforce as those with domestic duties are likely to remain very much “out of sight, out of mind”.

Deutsche Bank US chief executive Christiana Riley, who found herself alone with two school-aged children outside New York while her husband waited out the pandemic in Germany, admits it’s a concern. “We’re going to be very clear throughout this period of phased return that there is no distinction between someone who’s in the office or out of the office — they’re equally able to do their job and be part of the team,” she says, adding that she has been impressing a “family first” mantra across her senior management.

The optimists see this period as encouraging men to take on a greater share of domestic tasks and demanding enlightened work policies. A survey this month by Quantum Metrics, a behavioural analytics company, found that 60 per cent of men strongly agree that working remotely will improve women’s ability to advance to higher levels of business in the future.

This sunny view is not shared by activists who have seen how the pandemic is playing out in workplaces. Joeli Brearly, of Pregnant Then Screwed, a campaign group, says pregnant women are worried about their safety at work. “They know they have legal rights but they are too scared to use those rights as the labour market is so tricky.”

She adds that women’s enhanced protection from redundancy on maternity leave does not extend to the period when they are pregnant, or when they return from maternity leave. Campaigners fear pregnant women and new mothers will be first in line for job losses.

One mother of two who works in the energy sector in London, is concerned that “against the backdrop of headcount freezes and having to re-justify each role, women take a backward step. I will have to lobby and fight to get cover for [women on maternity leave] to the point that makes me reluctant to want to hire more women at the child-bearing age — that is painful to say out loud.”

Another mother of two who works in cyber security was made redundant while male peers were retained. “My job search now focuses on opportunities that are more remote, less travel, and sacrificing job responsibilities; lower expectations [but] hoping to move up the ladder again,” she says.

> Women are suddenly contemplating a future where ambition and career plans are fantasy

School closures have created sharp divisions. The Institute for Fiscal Studies found that UK mothers are combining “paid work with other activities — almost always childcare — in 47 per cent of their work hours, compared with 30 per cent of fathers’ work hours”.

Lorelei, a New York-based financial services worker with a three-year-old and six-year-old, says that in normal times she and her partner maintained a “delicate balance of full-time childcare, after school programmes, sitters and shared parenting”. Now, they juggle 12 hours a day of work meetings, calls, first-grade assignments, arts and crafts, virtual play dates and tantrums. “It’s completely unmanageable to deliver even a fraction of the work product I’m used to . . . I’m anxious and overwhelmed, frazzled and disjointed.”

Non-traditional family units feel the burden more acutely. Arlie Hochschild, author of *The Second Shift*, the groundbreaking 1989 book that shone a light on working women’s domestic load, says “while a lot more married men are sharing the second shift now than did in 1989, a lot more men aren’t living with the mothers of their children — that is we have a rise in single moms on whom the full burden of kids in shutdown schools now lands.”

The US academic Joan Williams, founding director at the Center for WorkLife Law at UC Hastings, says if workplaces call people back before childcare is ready “it will be a tremendous engine of increased gender inequality. This could have a negative impact on women’s employment prospects”. One solution is a uniform work-from-home policy such as that announced at Twitter, which is going to allow permanent homeworking, and Google, which is allowing staff to stay at home until the end of the year, so that women do not have to make a case to stay away from the office.

Research by the US National Bureau of Economic Research found grounds for optimism, suggesting “businesses are rapidly adopting flexible work arrangements, which are likely to persist.” Prof Williams agrees: “What has held back telework for decades is a failure of imagination that was remedied in 10 days.”

Jane van Zyl, chief executive of UK charity Working Families, has been heartened by some employers’ support for parents. She cites retailer Superdrug’s paid leave for any employee not able to work due to childcare challenges or living with vulnerable people.

“There’s no going back to business as usual after Covid-19,” she says. “It’s important that employers start prioritising flexible working . . . if they want to be resilient in the future.”

## Dear Jonathan

YOUR QUESTION FOR OUR EXPERT — AND READERS’ ADVICE

# I keep failing to win promotion — should I move on?

**This week’s problem**

I work for a multinational that is asking employees to take a 20 per cent pay cut because of coronavirus. I am worried that if I refuse, my career at the company will be over. I like my job but even before the virus I was considering moving on. I worry my failure to win promotion may be due to personal failings including an inability to play office politics. How do I assess my next move? **Male, late 20s**

**Jonathan’s answer**

Coronavirus has disrupted many jobs and brought underlying stresses to the surface. You are anxious about a pay cut, how you’re perceived by the company, and how you perceive your own performance. You were planning to address some of these anxieties on a longer timescale, but the pandemic has accelerated the need for action.

You describe a number of interconnected issues to disentangle so you can assess your next move. It is important to separate those outside your control that you can ignore — the fact your employer is enforcing a pay cut and your lack of promotion, for example — and the rest that you can control, and on which you can focus, (the office politics, whether to accept the pay cut and whether to leave the job).

Even though you like your job, you were already considering moving on. Perhaps the lack of promotion is indicative of your variance with the culture of your current employer. Are you sure that it is office politics or some other aspect of your performance that is holding you back? Specific feedback from your most recent formal review could provide useful information on how you are performing, while informal conversations with your seniors might give more candid insight.

The lack of promotion might actually be sending a more useful and important message: that this industry, size and style of organisation does not suit your true skills and deep values. Now is a good time to step back and evaluate your skills and what is truly important to you. Sometimes it takes an external push, like an enforced pay cut, to come to a decision that in your heart you know is overdue.

Fortunately, you are not being forced to make this decision quickly. From the security of your current role, you can take time to identify your values and skills, then research your options, including through networking. It may take two or three moves to arrive at your dream job: the next move may just build on your current skills in a new direction.

Sometimes you need to step outside your comfort zone and sail against the wind. But be careful not to drift or lie at anchor. The pandemic has stirred up a wind: decide on your destination, weigh anchor and set sail.

**Readers’ advice**

I wouldn’t consider the inability to play office politics a personal failure. Few people play that well, and those who do are often hated by the rest of the team, except management. That is not an enviable mental state you want to be in if you are going to spend at least a third of your day at work. **Okig**

Don’t solely rely on promotion in your current position — seek further internal options. It is good practice to interview internally and identify your weaknesses if unsuccessful. You are then gifted the opportunity to strengthen certain aspects and polish your approach when interviewing with other companies. **Jameson**

If you’re not feeling you’re making progress and you’ve been there five years or more, then definitely look for opportunities elsewhere. **techmind**

**The next problem**

I have been made redundant from the travel industry. I know I am not the only one but I have a family. I know the industry well and I am an expert in outdoor travel pursuits. Do I try to stay in what is likely to be an overcrowded sector post pandemic, or do I retrain in a different industry? How do I decide? **Male, 30s**

**Jonathan Black is director of the Careers Service at the University of Oxford. Every fortnight he answers your questions on personal and career development, and working life. Do you have a question for him? Email *dear.jonathan@ft.com***

# Pandemic puts remote courtrooms on trial

With most lawyers homeworking, hearings have gone virtual. Will digital justice outlast the crisis? By *Jane Croft*

When criminal barrister Merry van Woodenberg argued a recent case in the Court of Appeal she was on a phone in her living room, rather than addressing judges in the splendour of London's neo-Gothic Royal Courts of Justice.

"It felt surreal," she says. She was so focused on the task that it did not feel very different to standing in court. "I wore business dress and had a high desk so I argued the appeal standing up."

When the court gave judgment, Ms van Woodenberg had her headphones on and typed it up. "It felt like listening to the radio but it was a judgment in my case," she says. She won her appeal, "then I was just left in my living room and thought: 'Shall I make myself a cup of tea?'"

Such a hearing would have been unthinkable a few months ago, when London's legal district near Holborn was still operating as it had done for centuries. Each morning barristers, in their suits, horsehair wigs and black gowns, trooped off to argue their cases at London's High Court or the criminal courts. Now, their offices — or chambers — based in the Inns of Court, lie deserted as they and judges work from home.

Some courts are still holding jury trials spread across two video-linked courtrooms, with participants spaced apart

Loic Venance/AFP/Getty Images

As a result of the pandemic, the UK courts system and legal profession — usually a bastion of tradition and hierarchy — have been dragged into the 21st century as hearings across the country take place virtually and a handful of crown courts hold jury trials spread across two video-linked courtrooms with participants spaced apart.

Courts systems elsewhere are also adapting. In the US, numerous states, such as Delaware and Connecticut, are urging courts to undertake virtual hearings. Some in Singapore and Peru are using Zoom or Google Hangouts.

For some advocates, the virtual experience has been mixed. At the start of lockdown Oliver Kirk, a criminal barrister, used Skype from his living room to make an application at Basildon Crown Court and realised just how much he could cut down his travel time.

He was told to download Skype and contact the court. A clerk then carried the laptop through to a judge. "I realised it saved me around two and a half to three hours of travelling, getting to court and waiting around," he says. "I think we have all realised the vast amount of time we spend schlepping around the country for a five-minute hearing."

But he says for other complex cases, such as speaking to a client who is being held in prison awaiting trial, remote courts have been "far from ideal".

> 'We have all realised the vast amount of time we spend schlepping around for a five-minute hearing'

Another barrister considers the disadvantages of arguing a High Court case remotely. "Normally you head over to court, get pumped up and put on the wig and gown," he says. "It was an odd situation but you get used to it quite quickly . . . there was a period where my broadband struggled to keep up."

For an unlucky few barristers, virtual court hearings from home have been interrupted by the appearance of children or dogs. One judge recently broke off from giving a ruling to open a door for a meowing cat.

Virtual hearings have also been problematic for family courts, where concerns have been raised about the fairness of hearings involving vulnerable and distressed parents who are at home with children.

A recent report on virtual hearings by Nuffield Family Justice Observatory noted that one mother at risk of having her four children removed had to give evidence from a phone in her garden shed as there was nowhere else private to go. Another judge said he "had to speak to the parents who were sitting in a car outside the hospital where the mother had that day given birth, and I had conducted a hearing removing their newborn baby from them".

One anonymous legal adviser quoted in the report said of one case: "I could hear a strange sound. I worked out it was someone sobbing and ascertained it was the mother . . . Had she been in court, I could have noted her distress sooner and given her time to settle herself."

The upheaval caused by coronavirus has prompted questions about whether the crisis will trigger a broader rethink.

Richard Susskind, author of *Online Courts and the Future of Justice*, has helped set up Remote Courts Worldwide, a website detailing how courts are deploying technology during the pandemic. He believes the crisis has acted as a catalyst for greater use of virtual hearings and says it could also prompt a more fundamental rethink of how to solve disputes.

"What happens is that cultural obstacles disappear and we innovate," Mr Susskind says. There is also the question, what is a court? "Is it a place? Or is it delivering a service?" He suggests courts of the future may not exist as a physical place but may be an online hearing of parties arrayed like participants in a TV quiz show, or even in a 3D virtual reality recreation of a courtroom.

A recent High Court trial in a virtual courtroom gives a glimpse into what may lie ahead. The $530m case brought by the Republic of Kazakhstan and its national bank against Moldovan businessman Anatolie Stati, his son Gabriel, BNY Mellon and others was conducted via Zoom and was streamed for public view on YouTube.

Mr Susskind points out in his book that more people in the world now have access to the internet than to justice. According to the OECD, only 46 per cent of people live under the protection of the law, whereas more than 50 per cent can access the internet in some way.

For many, existing court systems do not serve them well. Mr Susskind points to "staggering backlogs" of court cases in some countries — for example 100m cases in Brazil and 30m in India. Even in countries with advanced legal systems, they "are under-resourced and the resolution of civil disputes invariably takes too long, costs too much, and the process is unintelligible to ordinary people".

He has called the shift to online courts "an unscheduled and vast experiment", which has so far worked "rather well".

Jordan Furlong, a legal market analyst who runs Law 21, a Canada-based consultancy, says the future may not involve putting video into the courts but rethinking the courts system to make it more accessible to the public, who can't always afford representation.

Some disputes have already been dealt with online — without lawyers — for a number of years. Non-court services that resolve such cases include eBay, where 60m disagreements among traders are resolved each year.

But many barristers say there will always be a need for hearings in court. Anthony Metzer QC, head of Goldsmith Chambers, says he could see more cases being done remotely. But he believes it is more difficult to see this happening "where there are jury trials which require direct connection with the jury, or in family or immigration hearings where there needs to be interaction with and reassurance for clients. You simply can't get that familiarity on Zoom."

And then for lawyers there is also the social aspect. As Mr Lidstrom says: "The type of accidental interaction you get in chambers or in law firms is lost at the moment. We all miss it."

# Dylan: myth, religion, reality

*In his footloose 39th album 'Rough and Rowdy Ways', the veteran musician roams to all points of the compass with a deft, teasing and tender touch, Ludovic Hunter-Tilney writes*

Road warrior: Bob Dylan on stage in New York. Below: the album cover
Jeffrey R. Staab/CBS via Getty Images; Ian Berry/Magnum Photos

Bob Dylan's Never Ending Tour began in 1988 and has consisted of 3,066 shows to date, an average of almost 100 a year. The road was due to stretch on this year, but one of the horsemen of the Apocalypse, Pestilence, has put a temporary check on it. Or will it prove permanent? At 79, Dylan knows that not even the most compulsive road warrior can go on forever. A person might be able to dodge Pestilence, but not his fellow horseman, Death.

That fell figure turns up on his 39th album, in a superb tragicomic lament called "Black Rider" during which Dylan sups a final drink in the "Black Horse tavern on Armageddon Street". Presumably it is Death he awaits in this last chance saloon, not Pestilence: the making of *Rough and Rowdy Ways* predates the coronavirus pandemic. Its capacious imaginary world might seem to chime with the shuttering of the real world by Covid-19. But really it anticipates the inevitable shuttering of Dylan's own world by the march of time.

The album title comes from a song by Jimmie Rodgers, "My Rough and Rowdy Ways". Released in 1929, it finds Rodgers, dubbed "the father of country music", typecasting himself as a drinker, gambler and rambler who tries to settle down with "a perfect lady" but "can't give up my good old rough and rowdy ways".

The album is similarly footloose. "Got a mind to ramble, got a mind to roam," Dylan sings on "Mother of Muses", which, like Rodgers's song, involves a perfect lady: Calliope, the muse who taught Orpheus to sing. "She's speaking to me, she's speaking with her eyes," Dylan claims. Never much of an Orpheus himself, he sandpapers his rough and rowdy voice and croons the words as tenderly as he can.

"I'm travelling light and I'm a-slow comin' home," he announces, holding the note on "home". Lightness and slowness are leitmotifs throughout *Rough and Rowdy Ways*. Songs take their time to unfold, culminating in the 17-minute epic "Murder Most Foul". Musical arrangements are mostly gentle and circular, a lightly shimmering "countrypolitan" landscape of steel and acoustic guitars, cello, accordion, rising and falling bass notes and brushed drums. In a sign that Dylan hasn't entirely mended his rowdy ways, the gnarled blues-rock groove that he settled into after 1997's *Time Out of Mind* makes a disruptive appearance on "False Prophet", "Goodbye Jimmy Reed" and "Crossing the Rubicon".

The album roams to all points of the compass. We head to Dallas at the moment of JFK's death on "Murder Most Foul". The point of no return is reached on "Crossing the Rubicon". The heavenly "Key West (Philosopher Pirate)", fit to stand among Dylan's finest, transforms the Florida island into a dreamy vision of paradise. Religion and myth are fused with real places. Dylan maps the album's cartography with the deftest touch, sometimes teasing in tone, sometimes straight. Delicately tapped cymbals rather than riddling symbols are to the fore in the devout spiritual "I've Made Up My Mind to Give Myself to You".

Numerous references to other songs appear alongside the place names, ending with "Murder Most Foul"'s encyclopedic tour through pop history. Songs are treated as markers for places, transmitted by the radio stations that Dylan also refers to at several points. Geographic charts and pop charts are blended together, a world of song that is also a world created by song. "I opened my heart to the world and the world came in," he sings. *Rough and Rowdy Ways* does not just anticipate the ending of the Never Ending Tour, it also compensates for it. ★★★★★

*'Rough and Rowdy Ways' is released on June 19 by Columbia Records*

---

FILM

## Artemis Fowl

On Disney+ now
★★★☆☆

*Danny Leigh*

The young adult publishing phenomenon *Artemis Fowl* has been tipped for so long to inherit *Harry Potter*'s place in movies, it might attract a sympathetic glance from Prince Charles. The first instalment by Irish novelist Eoin Colfer was published in 2001. Since then, two decades have passed in a development hell that would make a multi-part saga itself, spinning through potential directors (Jim Sheridan), stars (Saoirse Ronan) and producers (Robert De Niro). Meanwhile, Colfer turned out another seven books, each vastly successful.

That drawn-out back-story may be why, as Kenneth Branagh's adaptation finally reaches the Disney+ streaming platform, tension pervades. The film's To Do list is daunting. Appeal to existing fans *and* widen the audience. Make a standalone kids' action movie that can *also* be the first in a franchise. Oh, and Ken: the shareholders are watching.

For those who have neither had nor been a child in the past 20 years, there are in fact two Artemis Fowls. Our hero is the younger version, a sardonic 12-year-old prodigy, played by newcomer Ferdia Shaw. The other is his father (Colin Farrell, checking his watch), dealer in antiquities, cryptically wealthy. The household is rounded out by bodyguard Domovi Butler (Nonso Anozie).

As with the books, *Fowl* is *Potter* upside down. A fairytale world of mythic creatures exists alongside humanity, but the principal boy has no magic powers, just a coolly snotty manner and a master criminal bent inherited from his father. A tricky mix to pull off, with a plot fused together from two of Colfer's novels.

At first, the backdrop is tourist-dreamy Irish coastland. Soon, the effects team takes over, cooking up a subterranean kingdom policed by scowling fairies. Here we meet the cast who will gatecrash the human realm, led by Mulch Diggums (Josh Gad), a roguish dwarf so visually suggestive of Robbie Coltrane's Hagrid in the *Potter* films you wonder if a beard can be copyrighted. Then there is forbidding fairy commander Root, played by Judi Dench, resembling the meeting point of late-'90s David Bowie and the crime novelist Val McDermid. A troll escapes above ground; a young elf cop (Lara McDonnell) is dispatched in pursuit, colliding with anti-hero Artemis.

Age provides the best gag in the movie, the dilated lifespans of elves allowing Dench to tell the fresh-faced McDonnell: "You're 84, you've got your whole life ahead of you." Dench, in reality a year older than that, is by some way the liveliest presence in the film.

In recent years, Branagh has developed a curious side-hustle as a director of effects-heavy blockbusters. Here, the project suffers from the scale-down of an abandoned cinema release. On small screens covered with jammy fingerprints, the computer-generated dazzle will unavoidably look less *Fantastic Beasts* than children's television. Coronavirus was beyond Branagh's influence, so it doesn't explain the choppy storytelling or lack of personality. However deceptively, the best children's films look as if they were a joy to make, a holiday on a movie set. Here, much of the fun was left out of the suitcase.

Is that you, Hagrid?: Judi Dench as Commander Root and Josh Gad as Mulch Diggums in 'Artemis Fowl' — Nicola Dove

---

# About refugees, by refugees

PODCASTS

Fiona Sturges

When Abdulwahab Tahhan, a journalist and teacher, arrived in the UK from Syria at 25 and began looking for work, his first problem was dealing with the gaps in his CV. "How do I explain a couple of years of being displaced and a refugee in another country?" he asks. "Should I mention that I jumped on the back of a truck to cross the border to flee my hometown, Aleppo? Should I say that I was made redundant because the school [I worked in] was destroyed by the regime?" Eventually, following a stint as a cleaner and a job at Starbucks, he got a teaching post at a university.

The difficulties of finding work is among the issues raised in *Integrate That!*, a new five-part series launched to coincide with Refugee Week, and billed as "a podcast about refugees by refugees". Written and hosted by Tahhan, it examines the unique problems facing those who have fled their countries to start a new life elsewhere.

Along with looking for employment, themes include mental health problems — Tahhan talks about his insomnia which "keeps me thinking about a lot of things that I don't want to think about" — and the stigma of being a refugee.

This being an independently made podcast, the sound can be rough around the edges, but no matter — it is thoughtful, illuminating and deliberately lighthearted. Dark humour abounds as Tahhan opts to laugh rather than weep at the absurdity of such situations as leaving a country with just the clothes you stand up in, or being told by outsiders to "enjoy the moment" of starting a new life when your head is full of what you endured beforehand.

In each episode he also talks to friends and fellow refugees to discuss their experiences. Among them is Baraa, who is also from Aleppo, and who talks about the notion of belonging and the challenge of making friends: "You find yourself stuck in a place where nobody can relate to or understand what you're going through because [they] have never been in your shoes."

Most noticeable here is Tahhan's decision not to dwell on his life before arriving in the UK. While he drops breadcrumbs of information on the circumstances that led him to seek asylum, he prefers not to feed our curiosity with tales of past trauma. *Integrate That!* is less about the hardships of what came before than helping listeners understand what it is to leave it all behind and start again.

In "Me, the refugee", from the BBC World Service's *The Documentary Podcast*, the reporter Sahar Zand tells of being smuggled out of Iran with her mother and sister when she was 12 years old, after the regime took her father away. Particularly poignant are her conversations with her mother as they compare their memories of sadness, loss and disorientation.

Looking forward: Syrian asylum seeker Abdulwahab Tahhan hosts a podcast about the experience of being a refugee

Most countries in the region reacted swiftly to impose lockdowns. But a combination of poverty and mixed messages from government have left many fearing another lost decade and a fresh debt crisis.

*By Michael Stott and Andres Schipani*

# Poverty, populism and the pandemic

A worker digs new graves at the Xico cemetery on the outskirts of Mexico City last week. The pandemic has so far claimed more than 16,000 lives in the country, with some surveys saying the total could be higher amid criticism of the government's handling of the crisis
Edgard Garrido/ Reuters

Home to just 8 per cent of the global population, Latin America is now suffering half the world's new coronavirus deaths. Months of strict lockdowns have failed to succeed in flattening the curve of infections, as they did in Europe and east Asia, and the continent faces the worst of both worlds: a heavy human toll and crippling economic damage.

The example of Peru shows how an apparently model response failed to work as intended. President Martín Vizcarra initially won international praise for a tough, quick response, ordering the army on to the streets less than two weeks after the first Covid-19 case was detected to enforce a national lockdown and threatening to jail violators. His government also announced a $32bn package to support the economy, including a $110 one-off payment to the poorest families to help them survive.

But nearly three months on, Peru is struggling to contain the virus. Its population of 32m has recorded over 214,000 infections, more than France or Germany, and the death rate continues to climb. One of the key reasons the government's measures have failed, experts say, is the country's very large informal economy, covering around 70 per cent of the workforce.

Leonor Lavado, a chicken seller at one of the country's big public food markets, is one of those workers. She knows she should be staying at home and abiding by the national lockdown. When she turns on her mobile phone, a government voice message reminds her. But staying at home means going hungry.

"I go out to work at the market with the fear that an infected person will make me sick," says Ms Lavado, 46, breadwinner for five people. "But if I don't go to work, there are bills and things to pay and food to buy."

Her dilemma — shared by millions of other informal workers making up about half of Latin America's workforce — over whether to obey government rules has emerged as one of the key factors in the spread of the virus.

"Our region has become the epicentre of the Covid-19 pandemic," Carissa Etienne, World Health Organization director for the Americas, said on May 26. "Now is not the time for countries to ease restrictions."

Policymakers fear the pandemic — forecast to damage the region's economies more severely than those in other developing regions — could wipe out two decades of social progress, plunge tens of millions of people back into poverty and risks triggering a repeat of last year's wave of violent social protests. It could also spark new debt defaults.

"It's going to worsen the already unequal income distribution and poverty levels," says Alejandro Werner, director of the IMF's western hemisphere department. "It's very important for the political system to focus on bringing people together and uniting their countries to implement a strong policy response to the pandemic."

Covid-19 hit Latin America several weeks after Europe. The first case was reported in Brazil at the end of February, an elderly man returning from Italy. The delay in the virus's arrival and an apparently slow initial spread sparked hopes that the region might be spared the worst, because of its younger population and mostly tropical weather.

Within three weeks, most Latin American governments had ordered lockdowns, bans on flights, border closures and the shutting of all non-essential services. But cases continued to multiply, leaving weak public health systems — stunted by years of underfunding — unable to cope.

"The adherence of the population to social distancing is very different to Europe, where they don't have so many poor people and they don't have big slums," says Jarbas Barbosa, assistant director at the Pan American Health Organization. "It's very difficult to sustain these measures for a long time."

### Pressure cooker countries

The region's politics have not helped. Populist leaders in Brazil and Mexico, Latin America's two largest nations, played down the seriousness of the virus. Their leaders opposed curfews and undermined with their own behaviour the medical advice to stay at home.

Brazil, is now the world's second most infected country after the US, with more than 800,000 cases and over 42,000 deaths. And experts believe the pandemic may still be at least four weeks from its peak in the country.

> 'All countries are trying to flatten the [virus] curve, [but] the debt curve for governments and companies and families is also growing'

Far-right president Jair Bolsonaro has taken a particularly aggressive stance, dismissing coronavirus as "a little flu", and continuing to greet crowds of followers.

Mexicans have also received mixed messages. President Andrés Manuel López Obrador, a leftist nationalist, has continued to tour the country, violating health protocols on one trip to greet the mother of the country's most notorious convicted drug trafficker.

Official data confirms more than 130,000 cases and almost 17,000 deaths, but at least three independent studies suggest Mexico is grossly under-reporting the toll. One found four times more deaths attributable to the virus in Mexico City than officially reported. And levels of testing have been woeful, ranking among the lowest in the world.

Yet, the government has begun easing restrictions and Mr López Obrador insists that it has "tamed" the virus.

"It's urgent to open up the economy — people need to eat," says one senior hospital doctor in Mexico City. "But doing things inconsistently and based on flawed epidemiological forecasts makes this country a pressure cooker."

### 'Never been a crisis like this'

While Latin America's two biggest economies muddled their responses, most other nations in the region acted like Peru, locking down their populations quickly. But many of them found that the measures which had proved successful in containing the pandemic in developed nations were far less successful on a continent with a long history of weak law enforcement and scepticism of government measures.

Ecuador suffered a particularly horrific wave of infections in its business capital Guayaquil in April. As in other Latin American nations, the virus was often introduced by wealthier citizens coming home from trips to Spain and Italy. Local hospitals and morgues were overwhelmed, bodies were left uncollected for days in the tropical heat and relatives had to resort to makeshift cardboard coffins to bury their dead.

"We have had volcanic eruptions, we have had epidemics, we have had earthquakes," a haggard-looking Lenín Moreno, Ecuador's president, told the Financial Times in a video interview from Guayaquil. "But there has never been a crisis like this." The president says the budget deficit will be at least $12bn this year, around 12 per cent of GDP. To help fill the gap, his government has announced $4bn of spending cuts, including scrapping state-owned companies and asking government employees to cut their hours and pay.

There are much lower death rates in Argentina and Colombia, the region's third and fourth biggest economies, but they still do not have the virus fully under control and have been forced to extend their lockdowns, increasing the economic damage.

Only in Uruguay and Costa Rica, two of the smallest nations, can the governments claim a high degree of success and very low rates of infection. Both have good state-funded health systems and Ernesto Talvi, Uruguay's foreign minister, points to very high public compliance with the lockdown, and effective testing and tracking as other key factors.

Implicitly contrasting his country with bigger regional neighbours, he says that Uruguay's strong democratic tradition meant citizens trusted their leaders' instructions. "For me that's the big lesson of all this. The trustworthiness of institutions," says Mr Talvi.

But these have been isolated exceptions. Wall Street banks are forecasting falls in gross domestic product of between 6 per cent and 9 per cent this year across Latin America's worst affected economies, including Brazil, Mexico and Argentina, followed by a weak recovery next year. By contrast China, Taiwan and Vietnam are still forecast to grow slightly this year with India and Indonesia predicted to suffer only moderate recessions.

The pandemic has hit hardest, says Luis Alberto Moreno, head of the Inter-American Development Bank, in the most vulnerable parts of Latin American economies, pushing down oil and commodity prices, halting tourism and sharply reducing remittances.

Latin American governments have become much more indebted over the past decade with economic growth faltering as the commodities boom faded. Gross government debt was 48.9 per cent of GDP in 2009 but that figure had shot up to almost 70 per cent by 2019, according to the IMF. Over the same period the region's external debt more than doubled, from $1.1tn to $2.4tn.

"It would seem that we are in the steepest part of the growth of the pandemic," says Mr Moreno. "But although it's true that all countries are trying to flatten the curve, the debt curve for governments and companies and families is also growing . . . that leaves some very difficult consequences for the region."

### Trading blow

Murat Ulgen, global head of emerging markets research at HSBC, says Latin America's economies were already in a weak position going into the crisis. He blames the sharp fall in total factor productivity — a measure of economic efficiency — in the preceding decade as structural reforms stalled and countries deindustrialised too quickly, increasing their reliance on raw materials exports.

"This put Latin America behind other emerging markets as a starting point," he says. "Then you had falling commodity prices and collapsing oil prices which hurt the terms of trade of many Latin American countries."

It adds to the doubts over how quickly the region can recover from the pandemic. Gross government debt is set to exceed 80 per cent of GDP this year in Brazil and Argentina and approach 60 per cent in Mexico, according to Bank of America, levels almost twice as high as during the global financial crisis.

The region has low levels of savings, making it heavily dependent on external financing. This increases its vulnerability to outflows of capital as investors flee riskier nations; the Institute for International Finance predicts that foreign portfolio investors will pull $25.5bn of capital out of Latin America this year, mostly from stock markets.

"This crisis has shone light on a lot of problems which were there and which as societies we haven't resolved," says the IDB's Mr Moreno.

Preserving jobs is a top priority. Iván Duque, Colombia's president, lists a series of employment and economic stimulus measures — from helping companies pay salaries to incentives for the construction industry — that his government is rolling out, adding that the region has "a middle class in a condition of some vulnerability and we have high levels of informality and that means [the virus] hits us harder".

> 'Adherence to social distancing is very different to Europe, they don't have so many poor people and big slums'

Multilateral organisations are doing what they can. The IMF has disbursed or committed an extra $50.6bn to Latin America and the Caribbean in flexible credit lines, increases in existing programmes and emergency aid while the IDB is lending up to $15bn to the public sector, and $7bn to the private one.

Peru and Chile have joined Colombia in announcing stimulus packages but Argentina, with borrowing already approaching 90 per cent of GDP and having already defaulted on its foreign debt, has very little room to manoeuvre. In Mexico, Mr López Obrador has ruled out government help for any but the smallest businesses. While in Brazil, the ambitious free market economic reform agenda launched by finance minister Paulo Guedes has stalled.

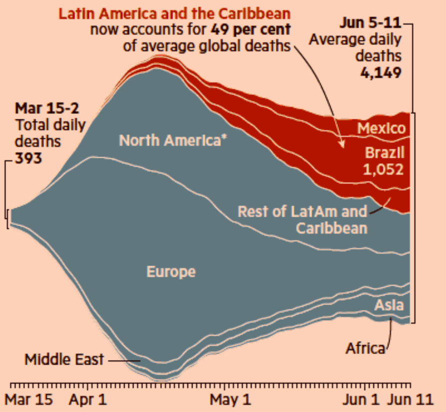
Uruguay's Mr Talvi is calling on international financial institutions to be ready to "unleash massive assistance for those countries which lose access to credit or to trade financing".

He warns that the region faces another "lost decade" like the 1980s, which crucified Latin America with falling real wages and spiralling debts until the launch in 1989 of the Brady Plan — mainly for Latin American countries, in which defaulted loans were repurposed as bonds. "We are going to come out of this pandemic up to our eyeballs in debt," says Mr Talvi. "We need an instant Brady Plan."

*Additional reporting by Jude Webber in Mexico City and Gideon Long in Bogotá*

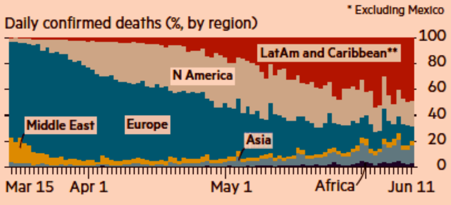
**Latin America offsets decline in Europe and US**

Daily deaths of patients diagnosed with coronavirus (seven-day rolling average)



* Excluding Mexico

Daily confirmed deaths (%, by region)

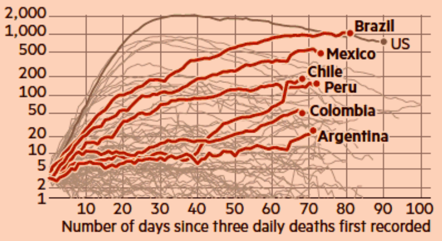


Source: FT analysis of ECDC and Covid Tracking Project data

** Including Mexico

**The region is still in the acceleration phase**

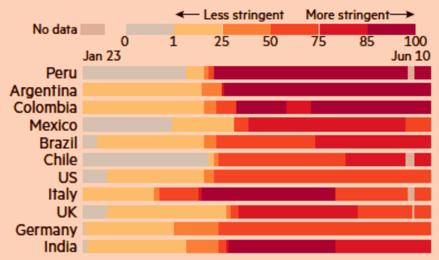
Seven-day rolling average of new deaths, by number of days since three average deaths first recorded



Source: FT analysis of data from ECDC and the Covid Tracking Project

**Global responses to the pandemic**

Composite score developed by researchers at Oxford university, to compare policy responses to the coronavirus pandemic



Source: Blavatnik School of Government, University of Oxford. Data for the most recent seven days may not yet reflect government response changes implemented during that period

FINANCIAL TIMES
'Without fear and without favour'
MONDAY 15 JUNE 2020

# Europe should speak out on Israeli annexation

*Netanyahu has all but destroyed any hope of a two-state solution*

Nine years ago, Ehud Barak, then Israel's defence minister, warned that the Jewish state faced a "diplomatic tsunami" if it did not come up with an initiative to move the Arab-Israeli peace process forward.

Under Benjamin Netanyahu's 11-year watch the opposite has happened. As the prime minister has steered Israeli politics ever further to the right, he has championed Jewish settlement in the occupied West Bank, demonised Palestinians and successfully buried mainstream Israeli debate about the concept of land for peace — for decades the internationally accepted foundation on which a lasting resolution to the conflict was supposed to be built.

It is a strategy that has all but destroyed Palestinian hopes of a two-state solution. But Mr Netanyahu brags that Israel's foreign relations have never been stronger, a factor that has helped him to woo voters as he has become Israel's longest-serving premier despite scandals and a corruption trial. His boast is a damning indictment of the feeble response of the US, Europe and others to his hardline stance on the Palestinian crisis and his disdain for international conventions. Now, emboldened by Donald Trump, he is threatening to annex the Jordan Valley, which accounts for almost 30 per cent of the West Bank, as well as the homes of more than 500,000 Jewish settlers in occupied territory.

Mr Netanyahu says the legal process for annexation will begin from July 1. It comes after the US president unveiled a "peace plan" this year that expects Palestinians — who have also been poorly served by their own leaders — to surrender key negotiating positions they have fought for over three decades. If Mr Netanyahu now moves ahead with annexation, it could edge Israelis and Palestinians closer to a single state, where the latter have limited rights and are restricted to ever smaller enclaves. Yet with Mr Trump in office, the US — long the principal broker in the Arab-Israeli conflict — is expected to greenlight the annexation. Mr Trump has already overturned decades of US policy by recognising Jerusalem as the Israeli capital and accepting Israel's claims to sovereignty over the occupied Golan Heights.

As the US president pursues a reckless Middle East policy, it is time Europe stood up. Europe is Israel's biggest trade partner and most European governments consider Israeli settlements illegal and support a two-state solution. Yet while the EU was quick to condemn Russia's 2014 annexation of Crimea and impose sanctions against Moscow, its response to Israel's creeping colonisation has been meek.

For the sake of Palestinians, the EU's credibility, and what is left of the peace process, Europe should make it clear to Mr Netanyahu that any annexation will be met with consequences. An immediate measure would be to threaten to ban imports from the settlements and to make clear that Israeli entities in occupied territory will not be treated as being part of Israel.

Mr Netanyahu should be deterred before he acts. Shouting after the fact will achieve little — it will be virtually impossible to reverse illegitimate territorial gains. Many Israelis may consider annexation a victory, but the destruction of Palestinian hopes for a just settlement with the Jewish state will store up bigger problems for the future. Young Palestinians hemmed in and under the thumb of occupation are more likely to have their heads turned by the rhetoric of extremism.

If the outside world allows Mr Netanyahu to go ahead with his plans, it will bear some of the responsibility for the consequences. It is time for a diplomatic tsunami.

# Unpaid rents pose a risk to the wider economy

*Governments must be alert to a surge in defaults even as shops reopen*

On England's high streets, non-essential shops will start to emerge from a 12-week hibernation on Monday; some countries are further ahead. As well as being a key step in reviving economies, reopening shops will provide retailers with some revenues out of which to pay their landlords. Yet a potentially nasty sting in the tail of the recovery still lurks in the form of huge volumes of unpaid commercial property rents.

In the US, nearly half of commercial rents went unpaid in May. The vacancy rate at shopping malls has hit an all-time high. In the UK, where the government has introduced a temporary ban on the eviction of tenants for non-payment of rents, many landlords have said their own income has fallen by as much as two-thirds. The shares of Hammerson and Intu, two of the biggest shopping centre owners, have collapsed. Intu, which was already heavily indebted before the crisis, received just 29 per cent of the rent it was due for the second quarter of the year.

Landlords do not usually elicit much compassion, but the predicament of the commercial real estate sector deserves attention — not least because it could very easily become a problem for the wider economy. Banks, pension funds and life insurers are among the groups holding commercial mortgages and exposed to any potential defaults. Property companies are not as leveraged as they were before the financial downturn in 2008 but concerns are rife that another crisis is looming.

There are some early warning signs in the market for bonds backed by commercial property mortgages. In the US, the percentage of commercial property loans left unpaid by borrowers more than trebled last month. The delinquency rate on loans underpinning commercial mortgage-backed securities rose from 2.3 per cent in April to 7.4 per cent in May, according to the data service Trepp. Much will depend on how quickly economies reopen. Even under the most optimistic scenarios a return to normality for shopping centres and high-street retailers is unlikely to be swift.

The reality is that landlords need viable tenants in order to be able to start collecting rent again. The pandemic should prompt a reassessment of the relationship between the two sides. Britain's "upward-only" rent reviews — which ensure tenants' rents do not dip even if the broader market does — should be consigned to the past. The industry is waiting for details of a code of practice being drawn up by government about how landlords and tenants should share the costs of the crisis.

There will also be longer-term consequences that social planners will need to consider. Social distancing means that urban areas will have to adapt. The office rental market will suffer as companies have to accept that many of their employees can — and may prefer — to work from home. Demand for office space is unlikely to be what it was before the pandemic. Many cities and local councils face the potential loss of a large chunk of their income.

In the UK many councils are particularly exposed to commercial real estate after a near-£7bn spending spree in the past three years to offset deep cuts to their budgets by central government. The Treasury is alert to the issue and has made clear it wants councils to stop investing in what it has called "speculative commercial investments".

While the new reality of the commercial property world is being resolved, regulators should heed the danger that widespread defaults pose to the wider financial system. They must be alert to the possibility that landlords and those who fund them might be at their weakest just as the sector appears to be on the verge of a return to normality.

---

# 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

## The EU must share more of the defence burden

President Donald Trump's decision to withdraw close to 10,000 US troops from Germany has produced a swarm of opposition on both sides of the Atlantic ("US diplomat confirms Trump's plan to withdraw troops from Germany," June 12).

Mr Trump should ignore the noise and proceed forthwith. The fact of the matter is that the Europe of today is not the Europe of 1965, when hundreds of thousands of US troops were stationed in Germany to protect the western half of the continent from Soviet encroachment. The US military presence in Europe is based on a 20th century reality that no longer exists.

Far from being the economically weak and vulnerable region it once was in the early 1950s and 1960s, present day Europe is one of the most wealthy and technologically sophisticated regions in the world.

The EU's gross domestic product is nearly 10 times greater than Russia's. Nato-Europe's total military expenditure is nearly five times larger than Moscow's.

European states have the resources and wherewithal to take responsibility for the continent's defence. What it doesn't have is the will to do so.

To the extent a US withdrawal from Germany incentivises Europe to find it, the decision could prove to be a much-needed change in direction and a major boon to Washington's noble objective of sharing the security burden with friends and partners.

**Daniel R DePetris**
*Fellow, Defense Priorities,*
*New York, NY, US*

## How the bloc deploys its Covid-19 money is key

EU diplomats are right to call out the European Commission for its "outdated" pandemic response ("Europe's capitals take aim at €750bn recovery plan", June 7) but wrong to continue squabbling over the size of the stimulus. A more urgent debate is needed about how to spend it.

The surest way to economic recovery after Covid-19 is through stimulus plans that simultaneously address the threat of climate change, as Nicholas Stern and Nobel laureate Joseph Stiglitz conclude in their survey of more than 700 such policies.

Yet the commission's Next Generation EU plan places no restrictions on fossil fuels projects within the next EU budget, the €1tn-plus pillar of the response. The danger is that if high carbon emissions-energy sources are not prohibited, member states will continue business as usual with climate-wrecking investments.

The unveiling of the plan was welcomed as an enthusiastic coup in Poland, where President Andrzej Duda took credit for the additional billions the country is set to receive that can eventually be used to prop up its coal industry. Poland is the state yet to sign up to the EU's goal of achieving a net-zero emissions economy by 2050 and recently joined seven other eastern European states demanding a role for fossil gas in the energy mix.

Unless the EU parliament and council can green the details before the plan becomes law, the response will surely be viewed as outdated by the next EU generation that wondered why we did not build back better.

**Mark Martin**
*Director, CEE Bankwatch Network,*
*Prague, Czech Republic*

## Churchill's Bengal 'failing' deserves a mention

Robert Shrimsley (Opinion, June 9) says "we can take a stand for Churchill" because he counts among the great historic figures whose "failings are not central to why they are honoured". Perhaps so, but in the following paragraph we're told that Robert Clive's statue should be moved because "his policies greatly exacerbated the Great Bengal Famine".

Sadly, there have been many great Bengal famines. The last, and almost certainly the worst judging by the sheer number of deaths that it caused, was in 1943; and most historians would now agree that it was greatly exacerbated by Churchill's policies. Central or not, that "failing" surely deserves a mention.

**Edward Mortimer**
*Burford, Oxfordshire, UK*

History is always in flux: Colston's statue was removed one week ago

## Aden's colonial statue made a pragmatic return

If the deeds and acts of every person sculpted over the centuries were measured against today's yardstick rather few would come out looking respectable ("Statues should fall because society is not set in stone" Opinion, June 9). But yardsticks change — perhaps the world should take a leaf out of Yemen's book. In Aden there used to be a statue of Queen Victoria, presumably from colonial days. During Yemen's fling with communism she was replaced by a statue of Lenin. On a visit to Aden a few years ago, I noticed that Lenin was gone and Queen Victoria was back up — a rather pragmatic approach to the controversy of statues.

**Thomas Ekvall**
*Santa Cruz de Tenerife, Spain*

## A quiet disappearance for the butcher's pillar in Birr

At the heart of Ireland lies County Offaly (King's County 100 years ago). At its heart is the town of Birr (Parsonstown); at the heart of Birr is Emmet Square (Duke Square); and the centre of the square is marked by a pillar.

There is nothing atop the pillar today, but a statue of the Duke of Cumberland stood there until torn down in the 1800s by a rioting Scottish regiment with Jacobite sympathies, which took exception to the "butcher Cumberland".

This history was explained in the square, but when the centre of Birr was improved at the start of this century all mention of the duke vanished. The right hand of his statue is interred in Birr's museum with a label attached.

**Martin Cassels**
*Edinburgh, UK*

## Reducing dependence on China imports is a big ask

The Covid-19 crisis has only accentuated the extent to which the US-UK-EU trade narrative has become increasingly protectionist and nationalistic. Germany's Angela Merkel and President Emmanuel Macron of France talk of China as a "systemic rival" while agreeing that the EU needs to take a strategic approach to the relationship. Jens Stoltenberg, Nato secretary-general, has highlighted China's potential security threat and called on Nato members to unite against "bullying and coercion" even though China is not, as yet, branded as an "enemy" to the alliance.

The blurred messages serve only to highlight the ambiguity around the approach to shifting spheres of influence, and particularly China's increasing power.

"Project Defend" (Report, June 11) is simply reflecting the extent to which the UK's allegiances are informed by and align with the US. The militaristic undertones of the project, which is ultimately about reshoring jobs, is redolent of "America first" but reducing the UK's dependency on Chinese imports will be a tough ask.

The UK government is, quite rightly, thinking about trade in geopolitical and strategic terms as well as economic, but we need to be realistic about what we can achieve. China is among the top three trading partners for every country in the world and even the mighty US has not managed to reduce its imports from China in any significant way since it began its campaign to bring US jobs back home.

**Dr Rebecca Harding**
*Chief Executive, Coriolis Technologies,*
*Eastbourne, East Sussex, UK*

## Proust's study of French life is lockdown favourite

In his column (FT Weekend, June 6) Janan Ganesh doubted whether many of us during the lockdown had had the heart to get on with Marcel Proust "a writer of claustrophobic introspection".

Well I did and it's certainly worth doing not least if you start your Proustian journey by getting to grips with the *dramatis personae* of George Painter's masterly two-volume biography. It is a magnificent description of all those people in French life of the period on whom Proust modelled his characters in the novel. Admittedly, it's a long read but some regard it as the sort of book that once you put it down you just can't take it up! But what an insight into the human condition.

**Alastair Conan**
*Coulsdon, Surrey, UK*

## Flirting with democracy is still the Brazilian way

In his recent letter (June 10) Brazil's ambassador to the UK, Fred Arruda, takes the FT to task for "a condescending and misleading" portrayal of Brazil's "solid" democracy. He also offers the claim that democracy in Brazil is "deeply rooted". If this were only true.

Brazil's relationship with democracy might be best described as flirtatious. To be sure, there have been democratic periods in Brazil, but repeated failed and successful coups and military governments are sprinkled over recent history. Most significantly, let us not forget the 20-year military dictatorship that ruled Brazil between 1964 and 1985.

One might also have some misgivings about the devotion to democracy of the present administration where more than half the members of the cabinet, including the minister of health, are drawn from the military. The president's son has opined about the inevitability of a military takeover and only last year the president called on the military to celebrate the 55th anniversary of the coup of 1964. Some roots!

**Randolph M Siverson**
*Distinguished Professor Emeritus and*
*Research Professor,*
*University of California, Davis,*
*El Macero, CA, US*

## Plea for real transparency in private markets

Padmesh Shukla ("Private markets compare well to the PLC circus", Letters, June 10) unwittingly but revealingly misses a key point about transparency in private markets.

Mr Shukla writes: "From my experience, on the vast majority of private market funds investors get detailed and regular updates." What he says is likely true. The key point he is missing lies in the way he uses the word "investors".

The true "investors" (the asset owners, or in economic terms the principals) in the TfL Pension Fund are not Mr Shukla. As head of investment at TfL Pension Fund, he is almost exclusively looking after other people's money: in economic terms, he is an agent. The true investors are the past, current and future members of the pension scheme (currently 86,000 members), as well as taxpayers who stand behind the pension scheme sponsor, TfL.

Typically, not one of these true end-investors in the private funds that Mr Shukla recommends to the TfL Pension Fund's trustees would be entitled to see any of the "detailed and regular updates" that Mr Shukla describes. Private equity firms fiercely restrict the disclosure of such information.

Real transparency in private markets would mean making some (by no means all) of such information publicly available, rather than just to a small number of insiders like Mr Shukla. Private equity firms' reluctance seems to have less to do with the reasons they usually cite and more to do with a desire to control the story for their own benefit. That is entirely understandable. But from a public point of view, it is undesirable because it gets in the way of holding to account the chain of people involved with private market investments.

**Peter Morris**
*London N5, UK*

---

# *The spectre of care home deaths haunts ministers*

## Notebook

by Sebastian Payne

After my father passed away, Harry Lee was the nearest man during my childhood. His fence backed on to our kitchen; his well-kept garden was always open for messing around. A retired civil servant who was married for almost seven decades, he was a warm and steady friend. Four weeks ago, Harry became one of the 13,431 people in the UK to die in a care home after testing positive for coronavirus.

The end of his life was heart-wrenching. I last saw Harry at Christmas. At 87, his mental faculties were waning. Yet he remained cheerful, with no health issues. A few weeks later, he fell at home and was briefly admitted to hospital. On May 4, after transferring to a nearby care home to recover, he was diagnosed with Covid-19 along with several others. And on May 19, Harry died.

In the final weeks, he saw his family once. The threat of the disease was so severe that a surreal farewell was permitted only through copious amounts of protective gear. As with so many who have died from coronavirus in care homes, Harry was confused by his solitude. He yearned for the certainty of home, yet the brutal disease denied it. Only his closest family attended the funeral, with other friends lining the road.

Of all of the UK's mis-steps in tackling coronavirus, the epidemic in care homes is the worst. The statistics tell the tragedy: in the UK, 30 per cent of all deaths that state coronavirus as the cause are in care homes. The excess deaths data suggests it could be worse: 26,000 more dead in care homes since the pandemic began compared to the same period last year. The story is the same across all corners of the UK: in Northern Ireland, care homes make up over half of Covid-19-related deaths. And in Scotland, 47 per cent of all Covid-19 deaths have occurred in care homes.

Health professionals already know why: care homes were under resourced and utterly ill-prepared for the crisis. As coronavirus shifted from a background threat to an all-encompassing one, Britons were warned that the NHS could be overwhelmed. Doctors faced unenviable decisions about who to treat in hospital.

Thousands of elderly patients like Harry were discharged into care homes. To lockdown sceptics, they were deemed likely to die anyway. For politicians, they are unavoidable casualties. In the hierarchy of priorities, nobody gave care workers or their clients much thought.

According to NHS England, 25,000 patients were discharged from hospitals to care homes between March 17 and April 16 — the critical period before testing was widely available. Care homes warned that they could not cope. David Oliver, a consultant physician, says the decisions "were made in good faith by local clinicians for understandable reasons in a very pressing and constrained context". But he admits "one major error" was made, the assumption "that care homes could cope with isolating patients and infection control measures in the same way a hospital could".

The UK's elderly population cannot wait until the inevitable inquiry into the government's crisis response. The UK has passed its first peak, but a second wave of infections may come later this year. The situation has improved in some parts — thanks to £3.2bn of extra funding, more protective equipment, and better levels of testing. But more is still needed to restructure elderly care for the coronavirus age.

Adam Gordon, professor of care of older people at Nottingham university, warns against "ambiguity" in the long-awaited official guidance on elderly care. "There is still a big grey area about what should happen to patients discharged from hospitals. In some instances, care homes are looking at 14-day isolation inside the facilities or creating zones . . . where Covid patients are kept separate from non-Covid residents," he says. "Clearer advice from central government" is critical.

At the top of Prime Minister Boris Johnson's government, the spectre of care homes hangs heavily. Ministers insist that they had tried to "throw a protective ring around care homes". But these words sound hollow for families who have endured elderly relatives like Harry dying alone. Not everyone could have been saved, but not everybody needed to be lost.

*sebastian.payne@ft.com*

# Opinion

## 3D printing can be a real source for optimism

**EUROPE**

### Wolfgang Münchau

In the 1960s Roy Amara, a Stanford computer scientist, observed that "we tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run".

The progress of 3D printing might be a case in point. Also known as additive manufacturing, 3D printing is a fast-evolving technology with the — as yet — unrealised potential to decentralise production. It could provide the answer to the world's addiction to supply chains, by getting rid of them.

For now 3D printing is useful for toy models and prototyping but has not reached mass adoption.

The world is littered with promising technologies that never made it. Those that did were often helped by external events. What the climate crisis has done for electric cars, the Covid-19 lockdown may do for 3D printing.

While it is clear that the lockdown has boosted food delivery services and sales of teleconferencing equipment, the less visible impact on industry could be more important over the longer term.

Supply chain managers in industrial companies will be busy right now studying alternative sources that are more local. They may trade efficiency for robustness. They may be looking at automation. Back in February, they may not have seen the need to fix what did not seem broken.

But now it is.

A recent 3D printing industry survey found that companies are looking at the technology differently, with more of them now considering using it for end production rather than just prototypes.

A German study in 2015 predicted that the economic impact of 3D printing would be to lower barriers to entry, making it easier for companies to serve different markets and cutting prices for consumers. It would constitute what economists call a positive supply shock.

We are still a long way from a situation where we will be able to detect the effects of 3D printing in official economic data.

Robert Solow, the economist, once quipped that he could see the computer age everywhere except in the statistics. The digital revolution failed to stop the secular decline in productivity growth rates of many western economies.

> It could provide the answer to the world's addiction to supply chains — by getting rid of them

There are a lot of technological innovations on the cusp of a breakthrough, but not many have the potential to reverse the decline in productivity growth. 3D printing is different — it is a productivity tool by design. It is not another gaming machine. It offers no distractions.

If 3D printing is combined with robots, its impact would be even greater. Robots are agile in three dimensions, while 3D printers can build complex things. Add the two together, and there is no reason why they should not be able to build any structure from scratch.

More localised production would also cut the cost of transport and contribute to the reduction in greenhouse gas emissions. Decentralised manufacturing would allow countries to secure critical supplies during crises such as an epidemic or a war.

Right now the technology remains slow, but in the future, if you needed to switch production to making face-masks or virus test kits, 3D printing should be able to do the job quickly and efficiently.

There are downsides. Export-led growth has been the business model of developing countries. More localised manufacturing would hurt them. Automation will improve the employment prospects of some but reduce those of others. A mechanical or chemical engineer can perhaps retrain and find niches in other high-tech areas. But this is not an environment where you want to be in the business of container shipping.

Like many technological inventions of the past, this one could also give rise to new forms of inequality. Economies with strong high-tech investment such as the US and China would do well. European countries would probably not be at the forefront — to put it mildly — but there may be niches for those with a strong technological focus, like Germany or the Nordic states. There could also be opportunities for the UK, post-Brexit.

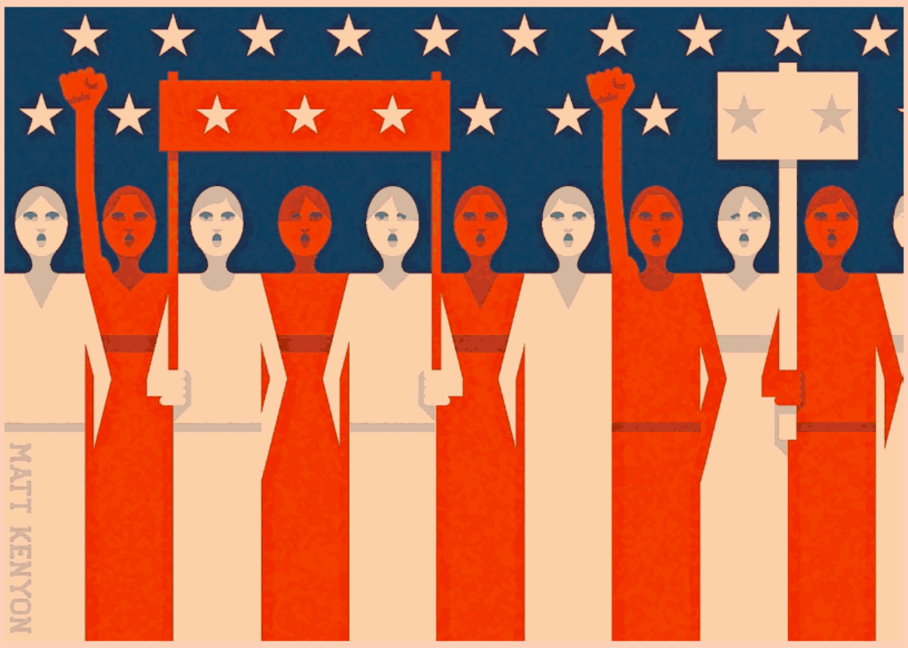
But the impact will depend on policy. Right now, many people see the lockdown as an unavoidable economic calamity. These are the dark days of the crisis.

But we might find out later that the experience may have triggered a large scale technological shift — one that is actually reflected in the data.

So if you want to be bullish about the stock market, you may want to look beyond the Federal Reserve or the latest stimulus package. A positive technology shock would constitute a truly rational reason for optimism.

*munchau@eurointelligence.com*

## US protests are about both race and class



**BUSINESS**

### Rana Foroohar

The death of George Floyd and the Black Lives Matter marches that have followed have made headlines the world over. But the longer-term political impact from these events could be more wide-ranging than anticipated — these protests over racial justice also have the potential to seed a new labour movement in the US.

Race and class are inexorably linked in the US. Hundreds of years of oppression of African Americans have led to higher levels of poverty and unemployment, as well as poorer educational outcomes. The net worth of an average white family was nearly 10 times that of a black household in 2016, according to a Brookings Institution study. This is partly because black families do not benefit from inherited wealth nearly as much as white families do.

Nearly one in five black families have debts that exceed their assets, but to the extent that they are able to accumulate wealth, it is being held in housing rather than stocks — 60 per cent of white families own equities as compared to 30 per cent of African American households. That means black families have not benefited as much from recent US Federal Reserve emergency actions that have buoyed the stock markets.

Since the Covid-19 shutdown, minority workers have fared less well than white workers by almost every metric — from the shutting of businesses owned by black people in higher numbers, to food, poverty and healthcare emergencies. The only reason pandemic-related mass unemployment has not created a larger gap between black Americans (who had a 16.8 per cent unemployment rate as of May) and white ones (at 12.4 per cent) is that minorities are over-represented in essential work such as healthcare and public transport.

The economic divide is about as stark as it was the last time the country saw this kind of social unrest, in the 1960s during the civil-rights movement. But while the marchers then were mainly black, and the organisers were civil-rights leaders from African-American communities, today's Black Lives Matter protests are much more diverse. They are happening in some overwhelmingly white communities — places like Boise, Idaho and Colorado — as well as in multicultural cities such as New York.

The current protests have focused on some race-specific issues, such as police violence against African Americans, but there are also much broader calls for economic justice involving fair wages, safer conditions for workers, inequality and student debt.

William Spriggs, chief economist for the AFL-CIO, the nation's largest union federation, says one of the reasons that the black community in particular is pushing for free college tuition is that poor black Americans are much more likely to try to complete a college degree than poor white Americans — it's one of the few ways to narrow the class and race divide. Both before and after Covid-19, the unemployment rate for white high-school dropouts has been roughly the same as for the black community as a whole.

"Black Lives Matter is bringing up things that are of specific importance to the black community," says Mr Spriggs, "but they are resonating with an entire generation of younger Americans that feels pressed by things like college expenses."

Some of the economic goals of the Black Lives Matter movement — such as reparations for slavery — are specific to the African-American community. But others — including increased spending on education and social safety nets — reflect the fact that black communities have been struggling for decades with economic insecurity that has, over the past 20 years or so, come to impact an ever broader group.

> The Black Lives Matter movement may herald a new era of justice and economic inclusiveness

That overlap may widen in the post-Covid-19 era. An OECD study released in June shows that in the US, as in most developed economies, low-paid workers and the young will be hardest hit from pandemic-related unemployment. A National Bureau of Economic Research working paper predicts that 42 per cent of US jobs lost in the coronavirus crisis will not be coming back.

As economist David Rosenberg wrote last week, we should not expect a V, or even a U or an L shaped recovery, but rather an F for "frugality".

There will be more saving, and long-term shifts in spending from both consumers and companies. "There is no renewed hiring cycle that brings the unemployment rate back down without demand," notes Mr Rosenberg. As the US Federal Reserve recently indicated, it is unlikely we will see much of that anytime soon.

That raises the chances for a Democratic sweep of the White House and Congress in elections in November, which polls and investors have judged to be more likely in recent weeks thanks to President Donald Trump's mishandling of the pandemic and the protests.

If that happens, the Black Lives Matter protests might herald a new era, not only for racial justice, but also for economic inclusiveness. The US Senate might agree to ban "right to work" laws, which make it more difficult for workers to unionise. There could also be a higher national minimum wage and corporate taxes. All of it would help address both the problems of race and class — and the persistent connections between the two.

*rana.foroohar@ft.com*

## *New social media law will ensnare citizens alongside Big Tech*

### Julia Apostle

Social media moderation and its impact on democracy is again in the spotlight following US president Donald Trump's controversial posts on Twitter and Facebook regarding the George Floyd protests. Twitter hid a particularly offensive post behind a warning label and Facebook proactively announced that it would do nothing.

The timing couldn't be better for those in the EU who want to impose more rules and tougher sanctions on online operators deemed too slow at removing illegal content from their platforms. This is especially so in France, where a highly contentious new law will take effect if it survives a last-ditch constitutional challenge.

The Loi Avia, named after the politician responsible for drafting it, Laetitia Avia, expands the scope of the existing legal regime for online content removal and imposes draconian timeframes for taking down posts. It incentivises companies to remove distressing but not necessarily illegal content, to avoid criminal prosecution and hefty administrative fines. No less than 14 categories of content-related offences are covered, ranging from the most disturbing (the dissemination of child pornography and glorifying terrorism), to offences such as disseminating pornography that could "be perceived" by a minor.

Companies that receive a takedown notice concerning allegedly illegal content will have either 60 minutes or 24 hours to remove the material. Which deadline applies depends on who has made the request, the nature of the content and whether the company is a "host", "platform" or "website publisher". The line between host and platform is very fine. Social media companies will be subject to the rules for both.

The law explicitly targets foreign companies: all platforms with more than a specified number of users located in France must comply. The threshold, yet to be determined, will undoubtedly be set to ensure that all the big players are caught. Search engines are also within the law's ambit.

The most serious flaw is the law's likely impact on free expression. French senators who have appealed to the country's Constitutional Council argue that requiring platforms to assess whether vastly different types of content are "manifestly illegal", in a short timeframe and without the possibility of extension, risks "over censorship". This is not far fetched. Just last year, the French authority empowered by the law to demand one-hour takedowns ordered Google+ to remove a post depicting the French president and his prime minister as dictators. Google refused. But with less time to evaluate context and faced with the threat of criminal prosecution, the outcome might be different.

> Over-censorship is a particular risk if operators rely more on AI to remove borderline content

Over-censorship is a particular risk if operators rely more on machine learning to remove borderline content before it becomes a liability. Companies that fail to remove content quickly enough face fines of up to €1.25m; their directors and employees can be fined and even imprisoned. Companies that breach the law's new internal compliance rules also face GDPR-like administrative fines of up to €20m, or 4 per cent of total annual global revenues.

The country's Higher Audiovisual Council also has new powers to examine "the principles and methods of conception of the algorithms and the data used by these algorithms." Exercise of this power will certainly be challenged.

Social media companies have improved their responsiveness and transparency and are developing other approaches to dealing with offensive content, such as labelling it instead of deleting it. Further regulation seems unavoidable. The European Commission is in the process of preparing its Digital Services Act, which will tackle the same issues, and more, for the entire EU. The commission, which questioned the compatibility of the French law with the EU ecommerce directive and concluded that it jeopardises the right to freedom of expression, suggested that France and other member states should hold off on adopting new laws in this area. Nevertheless, the French government pushed ahead.

Recent events in the US demonstrate why a one-remedy-fits-all approach to content moderation is bad for society: it can lead to the suppression of information crucial to assessing the health of our institutions. The French Constitutional Council should strike down the Loi Avia and the EU should take the opportunity to propose a nuanced legislative solution that addresses the complexities at play and protects all users' rights.

*The writer, a lawyer at Bredin Prat in Paris, was previously counsel for Twitter UK*

## *Drifting definitions of terrorism endanger us all*

### Raffaello Pantucci

It is tempting to ignore US president Donald Trump's tweets. But his recent declaration that he intends to proscribe antifa as a terrorist organisation will empower those around the world inclined to see any threat to their power as terrorist.

The US previously designated the Islamic Revolutionary Guard Corp as terrorists leading to the assassination of a top Iranian general. If America starts considering an anti-fascist idea to be a terrorist group, it would be leaning in a direction that can be interpreted as criminalising dissent. When America leads, others will follow.

There is a distinction to be drawn between protests and terrorism. The sometimes violent American demonstrations after Minneapolis police killed George Floyd are not terrorism. Nor are the violent acts that have been troubling Hong Kong. This does not mean that some individuals are not using the protests as a cover to try to commit terrorist acts. But the overall movements are not terrorist in the same way that al-Qaeda is. Terrorists use violence, but not all public violence is terrorism.

The distinction is confusing when we look beyond rioting. Like his predecessors, Mr Trump has explored proscribing Mexican drug cartels as terrorist organisations. Yet, they are motivated by money not ideology, and theoretically their supporters include millions of US narcotics consumers.

There is also a growing enthusiasm for proscribing online subcultures as terrorist organisations because of the ideological motivation that the individuals draw from being part of an online chatroom. Yet, there is little evidence of coherent structures, rather these are violent online subcultures that reflect the times in which we live.

> Trump's threats are giving global authoritarians carte blanche to go after groups they consider dangerous

The danger in the US letting definitions drift is that others push the boundaries in their own anti-terrorist legislation. A new law in the Philippines expands police power to detain and conduct investigations and demand data from telecoms companies, while removing punishment for wrongful investigation. Activists worry that the legislation will be used to target them.

Europe is struggling with a definitional problem around the extreme right. How you define far-right political versus extreme right terrorist varies by country. Some states have parties in or near power whose ideological pronouncements are close to those considered terrorist groups in others. This causes practical problems and also raises issues about the way different security forces categorise and respond to extreme rightwing groups.

It is difficult to define a terrorist. The old cliché that one man's terrorist is another man's freedom fighter is not useful. Some of the ideologies or individuals who emerge in terrorist garb move into the mainstream and our own definitions shift over time. The now-ruling African National Congress in South Africa is an example of the former. Afghanistan's Taliban remains a proscribed organisation committing atrocious acts of violence even though a number of states are negotiating with them to find a way to take some political power in Kabul.

Adding an inchoate idea like antifa — a loose constellation of anarchists whose only clear connecting ideology is a revulsion towards fascists — to the roster of terrorist groups whilst ignoring some of the extreme right groups active in the US further clouds this picture. But Mr Trump's threats are giving global authoritarians carte blanche to go after groups they consider dangerous.

Terrorism is useful as a legal term that describes non-state actors using violence against civilians to a coherent political goal. Using it too liberally allows it to be exploited to the detriment of not only free speech and open societies, but also those who are seeking to right genuine wrongs in the world. Violence must be prosecuted but separated from angry dissent.

*The writer is a visiting senior fellow at Singapore's S. Rajaratnam School of International Studies*

**Digital justice**
Will virtual courtrooms outlast the Covid-19 crisis?
WORK & CAREERS

# How the selfie generation will cope with a new depression

Pilita Clark
Business Life

It is hard to imagine today's workers being as resilient as their forebears — Carl Mydans/Getty

In one of the best-read stories in the Financial Times this month, six experts from around the world answered this question: are we heading into another Depression?

Not in Asia, said one. Quite probably in Latin America, said another. US predictions were cheerier but in Europe, one economist said he thought that, on balance, there would be the biggest peacetime recession in almost 100 years.

Reading his words I was struck by the fact that, just a few months ago, workers were still being told to fret about the robots coming for their jobs. Now it seems even the robots could be in trouble.

Yet if I look out the window from my London apartment, at people in £240 running shoes jabbering on £1,000 smartphones with the help of £300 headphones, it is hard to imagine today's workforce going through anything like the Great Depression.

So what might happen if it did? In many ways, the selfie generation would be far better off than those who endured the disaster that tore through the world's economies almost a century ago.

The Depression still conjures images of gaunt faces in soup kitchen queues, and lurching shifts in everyday life. "Cats keep disappearing," a man from the Austrian village of Marienthal told researchers in the 1930s who came to study the impact of unemployment. "Only a few days ago, Herr H's cat disappeared. Cat meat is very good. Dogs are also eaten."

Today, many of us have better welfare systems and a national health service. Crucially, there is far more acceptance that governments have a distinct role to play in the event of mass unemployment. "That wasn't true all over the world in the 1930s," says Professor Peter Fearon, an economic historian from the University of Leicester who has written widely on the Depression.

In the coronavirus crisis, governments of all political stripes have taken sweeping action to avert financial disaster. Yet it has not been enough to stop a chilling number of job losses and this poses threats that seem just as serious for today's workers as for those in the Depression.

> **Today's debt-fuelled workers, with their two-car driveways, are likely to be as devastated by job loss as their predecessors**

That Austrian village study is famous for what it showed about the psychological impact of long-term unemployment, starting with spiritless apathy.

People borrowed fewer library books. They ditched their political party memberships. Actors had to be badgered to perform. "Their hearts are not in it," said the village theatre club manager.

Even daily walks meandered. When researchers armed with watches covertly timed people in the street, they found a striking number of men walked at just two miles an hour and stopped at least twice on the way.

They literally seemed to lose direction.

Like it or not, we still find meaning in work. So today's debt-fuelled generation of workers, with their mortgages and two-car driveways, are likely to be as devastated by job loss as their less affluent predecessors — maybe more so if they cannot keep up monthly payments.

Yet they are also infinitely better connected, physically and digitally. Mass travel has been interrupted by Covid-19 but the internet lets this generation work and communicate like no other.

I got a sense of what that might mean in an age of mass unemployment last week from a "redundancy mentor" named Eleanor Tweddell. Her company tries to ease the shock of job loss with online tools that would have been unimaginable for the villagers of Marienthal.

She says 500 people tuned in to her recent online "festival" for the unemployed. Smaller, weekly video chats in which jobless people can swap war stories and advice are apparently popular, along with her thoughts on the best way to look for a position online.

None of this can replace effective national policies to help people back to work, or stop them falling out of it in the first place.

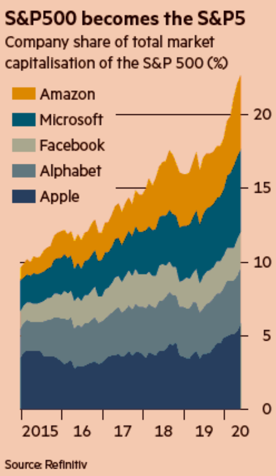
But it does mean that if the worst should happen again, we might at least know what each other is going through in a way that was never possible before.

*pilita.clark@ft.com*
*Twitter: @pilitaclark*

---

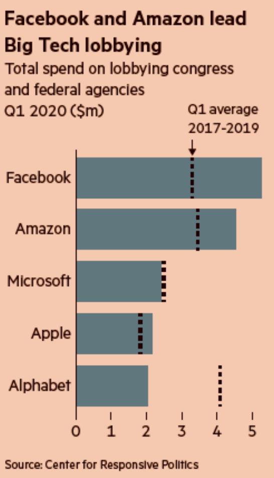
# Lex.

## Techlash: all talk



**S&P500 becomes the S&P5**
Company share of total market capitalisation of the S&P 500 (%)

Source: Refinitiv



**Facebook and Amazon lead Big Tech lobbying**
Total spend on lobbying congress and federal agencies Q1 2020 ($m)

Source: Center for Responsive Politics

For three months coronavirus pressed pause on the techlash. Then a rebound of market valuations hit the restart button. Scepticism towards US tech companies is on the rise. Expect a summer of renewed activism from privacy and antitrust campaigners.

The bigger the tech industry's combined market capitalisation, the more fuel is handed to those who argue the sector is too powerful. Last week, Apple became the first $1.5tn company — less than two years after reaching a $1tn market capitalisation milestone.

Tech stocks have helped the wider US market rise despite a downturn and protests. Five groups, Apple, Alphabet, Microsoft, Facebook and Amazon account for almost 23 per cent of the S&P 500 index. Five years ago they made up less than 10 per cent.

In the early days of the crisis, Big Tech appeared to take a leading role in the response. Apple and Google won praise for working together to produce contact-tracing technology. Demand for cloud computing, video chat apps, online delivery and ecommerce were boosted by lockdowns. By April, more than one-third of people questioned in a US Harris Poll said their view of the tech industry had grown more positive since the pandemic began.

Public goodwill is waning. Consumers are more likely to support regulatory intervention. Facebook, Alphabet, Amazon and Apple face investigations by the Federal Trade Commission or Department of Justice. The EU plans digital platform regulation.

Companies could find Europe a more hostile environment. Take Amazon. If its prices were deemed below cost its conduct could be unlawful under EU competition law, says the Brookings Institution. Yet below-cost prices would not violate US antitrust law.

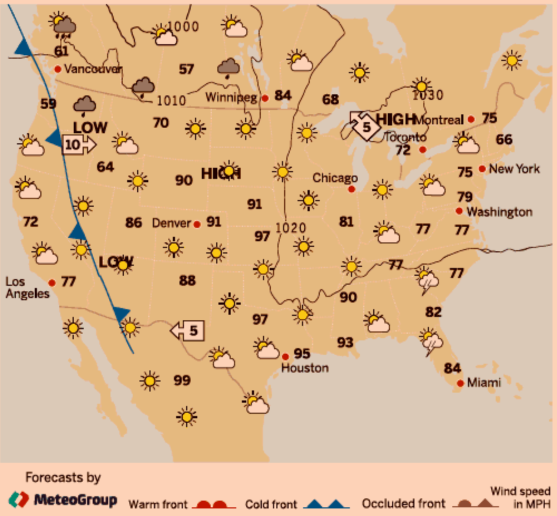
The most drastic potential outcome would be forced break-ups. Sum-of-the-parts analysis suggests investors might benefit. Needham analysts see the combined shares of Alphabet's various companies trading one-third higher than the group. Yet the odds are slim. Microsoft, ordered to break up in the late 1990s, proves that rulings do not necessarily lead to division.

It will pay for tech to keep political relations friendly. In the first quarter of the year, Facebook spent more than $5m on lobbying, according to database OpenSecrets, more than the annual average over the past three years.

Instead of antitrust legislation expect more fines, more voluntary corporate action and much more lobbying.

---

## WEATHER

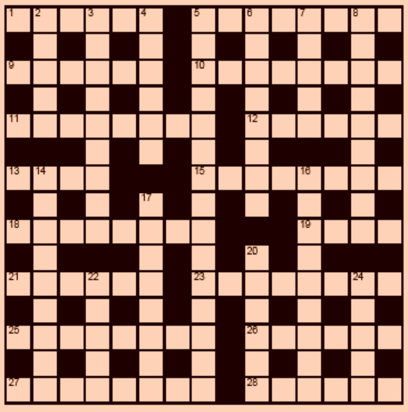


**Today's temperatures** Maximum for day °C & °F

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Amsterdam | Fair | 23 | 73 | Madrid | Sun | 28 | 82 |
| Athens | Sun | 32 | 90 | Manila | Shower | 32 | 90 |
| Atlanta | Thunder | 26 | 79 | Melbourne | Cloudy | 18 | 64 |
| Beijing | Sun | 38 | 100 | Mexico City | Sun | 26 | 79 |
| Belgrade | Thunder | 25 | 77 | Miami | Thunder | 29 | 84 |
| Berlin | Sun | 25 | 77 | Montreal | Sun | 24 | 75 |
| Bermuda | Fair | 26 | 79 | Moscow | Fair | 25 | 77 |
| Bogota | Shower | 19 | 66 | Mumbai | Thunder | 31 | 88 |
| Brussels | Fair | 24 | 75 | Nassau | Thunder | 30 | 86 |
| Buenos Aires | Fair | 15 | 59 | New York | Fair | 25 | 77 |
| Caracas | Shower | 31 | 88 | Nice | Sun | 24 | 75 |
| Chicago | Sun | 25 | 77 | Oslo | Sun | 28 | 82 |
| Copenhagen | Sun | 23 | 73 | Paris | Cloudy | 22 | 72 |
| Dallas | Sun | 36 | 97 | Prague | Shower | 23 | 73 |
| Delhi | Sun | 41 | 106 | Reykjavik | Rain | 10 | 50 |
| Doha | Sun | 44 | 111 | Rio | Cloudy | 23 | 73 |
| Dubai | Sun | 41 | 106 | Rome | Sun | 25 | 77 |
| Dublin | Fair | 19 | 66 | San Francisco | Fair | 22 | 72 |
| Edinburgh | Rain | 17 | 63 | Seoul | Sun | 27 | 81 |
| Frankfurt | Cloudy | 24 | 75 | Shanghai | Thunder | 26 | 79 |
| Geneva | Fair | 22 | 72 | Singapore | Thunder | 31 | 88 |
| Hamburg | Sun | 23 | 73 | Stockholm | Sun | 26 | 79 |
| Helsinki | Sun | 24 | 75 | Sydney | Sun | 20 | 68 |
| Hong Kong | Thunder | 30 | 86 | Taipei | Cloudy | 35 | 95 |
| Honolulu | Drizzle | 30 | 86 | Tel Aviv | Sun | 28 | 82 |
| Jakarta | Thunder | 33 | 91 | Tokyo | Fair | 31 | 88 |
| Karachi | Sun | 37 | 99 | Toronto | Sun | 21 | 70 |
| Lima | Cloudy | 19 | 66 | Vancouver | Rain | 16 | 61 |
| Lisbon | Fair | 23 | 73 | Vienna | Rain | 21 | 70 |
| London | Sun | 24 | 75 | Warsaw | Fair | 23 | 73 |
| Los Angeles | Sun | 25 | 77 | Washington | Fair | 27 | 81 |
| Luxembourg | Fair | 22 | 72 | Zurich | Cloudy | 21 | 70 |

## CROSSWORD

No. 16,503 Set by ZAMORCA



**ACROSS**
1 Uproar when spirit drink's knocked back (6)
5 Quiet diplomacy protecting international vessel (8)
9 Question a new function for non-governmental body (6)
10 Fencing's poor following river south (8)
11 Dentist's request to have extra work space going ahead (4,4)
12 The old bishop's found inside, near to the final farewell (3-3)
13 You once hid in boathouse (4)
15 Took in food and papers collecting confused gent's key (8)
18 Huge performance taking on worker in charge (8)
19 With nothing I make celebrity status (4)
21 Goods in jade sculpted with sharp edges (6)
23 Playful comedy sketch about West End is hard to follow (8)
25 French president's importing top grade Italian pasta (8)
26 Dash to get publicity round hotel by noon (6)
27 Pub landlady cooked nice eels (8)
28 Stream series available at last in the Netherlands (6)

**DOWN**
2 Union raise matter about manager behind take over (5)
3 Writer in Australia retired acquiring long strip of land out to sea (9)
4 Son informed about his heart is showing no emotion (6)
5 Lounge seating for trio's musical sequence (5-5,5)
6 Game to tease boy in lock-up (8)
7 Part of fork's secured with gardening string (5)
8 Take extraordinary umbrage about unknown trainee starting in Wasps, say (5,4)
14 Call cab in wintry weather on stretch in Great North Road (4,1,4)
16 Peter has tiny carved 'P' inside napkin holder (6,3)
17 Keen on learning in workshop with American (8)
20 Shrink uses humour on woman (6)
22 Fit windows in government lounge (5)
24 Strain when part of reprieve is held up (5)

JOTTER PAD

FT SPECIAL REPORT

# Business Education

## Financial Training

Monday June 15 2020

www.ft.com/reports | @ftreports

# Finance offers haven in a downturn

Appetite for specialised masters programmes is likely to be boosted by the coronavirus crisis, writes *Jonathan Moules*

Sometimes it pays to be obvious. The masters in finance (MiF) degree does what it says on the tin, equipping postgraduate students with skills in accounting, corporate finance and econometrics for roles in banking, insurance and any sector requiring such knowhow.

The MiF has fared better than other courses in what has been a difficult few years for graduate management education — with more US MBA programmes reporting applications declines than growth for four straight years.

Two-thirds of all business school applicants consider a specialist business masters degree, with MiF courses the most popular programme in this group, according to business school entrance exam administrator the Graduate Management Admission Council (GMAC).

However, this option has not been able to sidestep the overall drop in demand. Just over half of all MiF courses reported declining applications in 2019, driven by reduced demand from international candidates, who make up the majority of their applicant pools.

For those still intent on doing an MiF, employability is a big attraction. "There has always been this tighter coupling of what the [MiF] curriculum offers and what the outcome is in terms of jobs," says Rahul Choudaha, director of industry insights and research communications at GMAC. "These candidates become more employable than others."

This last factor will become even more important this year if, as expected, unemployment rates surge in many countries in the wake of coronavirus. MiF students will not escape the impact of what is expected to be the worst global slump in several generations.

Campus closures mean that classes for the next academic year are likely to at least begin with online-only teaching for many courses. Meanwhile travel restrictions designed to contain the pandemic are likely to affect MiF programmes' ability to attract a much higher percentage of overseas students than other postgraduate courses.

According to Mr Choudaha, international mobility is "one of the biggest

*Continued on page 3*

## Inside

# Business Education Financial Training

### Financial Times Global Masters in Finance 2020 — post-experience programmes

| | | | | | Alumni career progress | | | | | | | School diversity | | | | | | International experience & research | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rank in 2020 | Rank in 2018 | Two-year average | School name | Country | Salary today (US$) | Salary percentage increase | Value for money rank | Career progress rank | Aims achieved (%) | Careers service rank | Employed at three months (%) | Female faculty (%) | Female students (%) | Women on board (%) | International faculty (%) | International students (%) | International board (%) | International mobility rank | International course experience rank | Faculty with doctorates (%) | Extra languages* | Average course length (months)* | Company internships (%)* | Overall satisfaction* | Rank in 2020 |
| 1 | 1 | 1 | London Business School | UK | 132,445 | 110 | 3 | 1 | 87 | 2 | 88 (99) | 28 | 30 | 43 | 84 | 97 | 76 | 2 | 2 | 99 | 0 | 15 | 50 | 9.10 | 1 |
| 2 | 2 | 2 | University of Cambridge: Judge | UK | 136,080 | 74 | 1 | 2 | 86 | 1 | 89 (95) | 20 | 32 | 45 | 85 | 93 | 32 | 1 | 3 | 98 | 0 | 13 | 46 | 9.39 | 2 |
| 3 | 3 | 3 | Singapore Management University: Lee Kong Chian | Singapore | 125,057 | 91 | 2 | 3 | 76 | 3 | 60 (94) | 25 | 49 | 33 | 62 | 71 | 53 | 3 | 1 | 98 | 0 | 12 | 43 | 8.46 | 3 |

**Footnotes:**
*Data in these columns are for information only and are not used in the rankings.

### Financial Times Global Masters in Finance 2020 — pre-experience programmes
The top 55 Masters in Finance programmes

| | | | | | Alumni career progress | | | | | | | School diversity | | | | | | International experience & research | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rank in 2020 | Rank in 2018 | Two-year average | School name | Country | Salary today (US$) | Salary percentage increase | Value for money rank | Career progress rank | Aims achieved (%) | Careers service rank | Employed at three months (%) | Female faculty (%) | Female students (%) | Women on board (%) | International faculty (%) | International students (%) | International board (%) | International mobility rank | International course experience rank | Extra languages | Faculty with doctorates (%) | Average course length (months)* | Company internships (%)* | Overall satisfaction* | Rank in 2020 |
| 1 | 1 | 1 | HEC Paris | France | 149,750 | 94 | 9 | 1 | 93 | 2 | 97 (97) | 22 | 23 | 42 | 72 | 82 | 83 | 1 | 5 | 1 | 100 | 10 | 93 | 9.44 | 1 |
| 2 | 2 | 2 | ESCP Business School | FR/UK/GE/SP/IT/PL | 125,603 | 55 | 7 | 6 | 98 | 1 | 100 (95) | 38 | 20 | 67 | 83 | 54 | 78 | 2 | 1 | 0 | 100 | 13 | 100 | 9.94 | 2 |
| 3 | 4 | 4 | Skema Business School | FR/BR/CHN/SA/US | 103,789 | 84 | 11 | 5 | 93 | 3 | 100 (100) | 44 | 43 | 42 | 67 | 78 | 67 | 5 | 2 | 0 | 97 | 12 | 100 | 9.71 | 3 |
| 4 | 5 | 5 | Essec Business School | France | 114,026 | 60 | 16 | 9 | 92 | 12 | 97 (83) | 36 | 34 | 57 | 58 | 55 | 79 | 3 | 4 | 1 | 100 | 12 | 100 | 9.39 | 4 |
| 5 | 3 | 4 | Edhec Business School | France | 97,331 | 55 | 26 | 3 | 89 | 10 | 100 (93) | 32 | 38 | 43 | 62 | 71 | 87 | 6 | 3 | 1 | 98 | 12 | 100 | 9.45 | 5 |
| 6 | 6 | 6 | University of St Gallen | Switzerland | 116,256 | 58 | 3 | 8 | 90 | 11 | 100 (83) | 20 | 28 | 33 | 79 | 60 | 56 | 23 | 6 | 1 | 100 | 26 | 79 | 9.31 | 6 |
| 7 | 8 | 8 | Università Bocconi/SDA Bocconi | Italy | 114,639 | 69 | 23 | 17 | 90 | 7 | 100 (82) | 39 | 28 | 29 | 39 | 39 | 68 | 21 | 10 | 1 | 99 | 24 | 100 | 9.37 | 7 |
| 8 | 7 | 8 | MIT: Sloan | US | 142,876 | 46 | 41 | 54 | 89 | 50 | 94 (100) | 24 | 42 | 21 | 43 | 91 | 45 | 7 | 45 | 0 | 100 | 13 | 0 | 9.00 | 8 |
| 9 | 9 | 9 | Imperial College Business School | UK | 98,787 | 43 | 37 | 14 | 89 | 15 | 90 (92) | 27 | 36 | 43 | 96 | 90 | 79 | 8 | 24 | 1 | 100 | 14 | 36 | 9.07 | 9 |
| 10 | 12 | 11 | University of Oxford: Saïd | UK | 111,005 | 42 | 34 | 44 | 89 | 9 | 98 (88) | 23 | 48 | 41 | 69 | 98 | 66 | 9 | 32 | 0 | 100 | 9 | 15 | 9.30 | 10 |
| 11 | 13 | 12 | Warwick Business School | UK | 80,224 | 89 | 42 | 4 | 85 | 19 | 96 (97) | 43 | 46 | 33 | 78 | 96 | 22 | 34 | 39 | 1 | 100 | 14 | 2 | 9.14 | 11 |
| 12 | 11 | 12 | IE Business School | Spain | 93,266 | 66 | 39 | 29 | 89 | 26 | 97 (97) | 40 | 23 | 50 | 70 | 85 | 96 | 10 | 30 | 0 | 100 | 10 | 11 | 9.30 | 12 |
| 13 | 10 | 12 | Shanghai Advanced Institute of Finance at SJTU | China | 139,472 | 82 | 13 | 49 | 86 | 14 | 98 (100) | 19 | 40 | 21 | 55 | 15 | 21 | 54 | 25 | 1 | 100 | 22 | 100 | 8.77 | 13 |
| 14 | 21 | 18 | Nova School of Business and Economics | Portugal | 77,846 | 55 | 15 | 13 | 87 | 40 | 94 (100) | 35 | 39 | 62 | 30 | 70 | 92 | 16 | 7 | 2 | 100 | 18 | 68 | 9.03 | 14 |
| 15 | 15 | 15 | Tsinghua University School of Economics and Management | China | 146,562 | 52 | 10 | 37 | 86 | 17 | 100 (100) | 33 | 33 | 6 | 6 | 30 | 87 | 53 | 27 | 1 | 97 | 24 | 100 | 9.00 | 15 |
| 16 | 16 | 16 | Grenoble Ecole de Management | France | 86,778 | 68 | 28 | 31 | 85 | 38 | 78 (60) | 47 | 36 | 53 | 51 | 81 | 73 | 17 | 11 | 0 | 90 | 20 | 90 | 8.87 | 16 |
| 17 | 18 | 18 | Peking University: Guanghua | China | 131,902 | 59 | 14 | 28 | 85 | 4 | 99 (100) | 29 | 44 | 5 | 12 | 12 | 82 | 56 | 41 | 0 | 99 | 22 | 96 | 9.44 | 17 |
| 18 | 14 | 16 | Esade Business School | Spain | 93,475 | 27 | 31 | 39 | 89 | 27 | 96 (90) | 37 | 22 | 50 | 45 | 85 | 93 | 4 | 15 | 1 | 100 | 12 | 40 | 8.89 | 18 |
| 19 | 18 | 19 | Stockholm School of Economics | Sweden/Russia/Latvia | 89,786 | 51 | 4 | 47 | 90 | 35 | 90 (99) | 26 | 30 | 37 | 38 | 59 | 32 | 11 | 19 | 0 | 98 | 24 | 65 | 9.23 | 19 |
| 20 | 17 | 19 | Kozminski University | Poland | 74,946 | 72 | 21 | 15 | 87 | 25 | 94 (91) | 39 | 44 | 15 | 17 | 60 | 62 | 14 | 12 | 0 | 88 | 24 | 49 | 9.05 | 20 |
| 21 | 25 | 23 | Neoma Business School | France | 65,691 | 40 | 17 | 19 | 90 | 6 | 96 (90) | 42 | 31 | 50 | 72 | 44 | 75 | 12 | 16 | 0 | 100 | 14 | 100 | 8.92 | 21 |
| 22 | - | - | WHU – Otto Beisheim School of Management | Germany | 103,076 | 35 | 19 | 46 | 84 | 18 | 90 (94) | 27 | 37 | 12 | 36 | 63 | 12 | 24 | 9 | 0 | 100 | 21 | 100 | 9.35 | 22 |
| 23 | 26 | 25 | Vlerick Business School | Belgium | 78,289 | 43 | 12 | 23 | 88 | 8 | 96 (94) | 29 | 29 | 6 | 39 | 40 | 35 | 25 | 8 | 1 | 98 | 10 | 100 | 9.16 | 23 |
| 24 | 20 | 22 | City, University of London: Cass | UK | 72,866 | 42 | 49 | 30 | 84 | 28 | 97 (82) | 31 | 40 | 50 | 74 | 92 | 57 | 20 | 18 | 0 | 94 | 13 | 14 | 8.92 | 24 |
| 25 | 22 | 24 | Eada Business School Barcelona | Spain | 84,053 | 35 | 32 | 32 | 86 | 41 | 98 (90) | 37 | 33 | 29 | 53 | 94 | 29 | 28 | 14 | 1 | 90 | 11 | 100 | 9.32 | 25 |
| 26 | 23 | 25 | Católica Lisbon School of Business and Economics | Portugal | 71,479 | 47 | 25 | 16 | 88 | 42 | 97 (100) | 47 | 35 | 25 | 40 | 59 | 30 | 33 | 20 | 2 | 100 | 19 | 68 | 8.88 | 26 |
| 27= | 33 | 30 | EMLyon Business School | France | 82,435 | 54 | 18 | 45 | 84 | 21 | 94 (44) | 38 | 29 | 38 | 55 | 39 | 85 | 27 | 13 | 0 | 99 | 13 | 100 | 9.25 | 27= |
| 27= | - | - | Trinity College Dublin, Trinity Business School | Ireland | 58,956 | 72 | 30 | 36 | 89 | 33 | 83 (80) | 50 | 57 | 35 | 58 | 89 | 35 | 35 | 51 | 0 | 97 | 12 | 0 | 8.94 | 27= |
| 29 | 24 | 27 | Rennes School of Business | France | 66,129 | 46 | 22 | 7 | 86 | 49 | 83 (85) | 32 | 41 | 45 | 89 | 63 | 91 | 26 | 23 | 0 | 92 | 22 | 100 | 8.65 | 29 |
| 30 | 49 | 40 | CUHK Business School | China | 80,921 | 49 | 45 | 11 | 89 | 5 | 98 (94) | 31 | 60 | 15 | 51 | 7 | 65 | 55 | 26 | 0 | 99 | 12 | 50 | 9.34 | 30 |
| 31 | - | - | ISEG – Lisbon School of Economics and Management | Portugal | 53,400 | 94 | 8 | 10 | 80 | 44 | 100 (99) | 39 | 36 | 56 | 11 | 32 | 100 | 49 | 22 | 1 | 94 | 16 | 8 | 8.69 | 31 |
| 32 | 31 | 32 | Frankfurt School of Finance and Management | Germany | 92,382 | 29 | 33 | 41 | 88 | 20 | 89 (82) | 19 | 24 | 20 | 28 | 49 | 30 | 37 | 17 | 1 | 100 | 23 | 20 | 8.91 | 32 |
| 33 | - | - | University Carlos III of Madrid | Spain | 61,380 | 53 | 20 | 12 | 86 | 54 | 85 (61) | 46 | 38 | 0 | 33 | 45 | 0 | 15 | 44 | 0 | 100 | 11 | 44 | 8.73 | 33 |
| 34 | 28 | 31 | HEC Lausanne, University of Lausanne | Switzerland | 79,073 | 33 | 1 | 34 | 78 | 53 | 70 (47) | 25 | 27 | 17 | 83 | 48 | 17 | 22 | 29 | 0 | 100 | 24 | 93 | 8.85 | 34 |
| 35 | 34 | 35 | Rotterdam School of Management, Erasmus University | Netherlands | 74,128 | 39 | 6 | 38 | 85 | 51 | 89 (77) | 28 | 25 | 26 | 55 | 48 | 21 | 13 | 37 | 0 | 98 | 15 | 36 | 8.46 | 35 |
| 36 | 41 | 39 | Henley Business School | UK | 59,080 | 50 | 48 | 24 | 83 | 29 | 76 (63) | 47 | 54 | 38 | 59 | 94 | 38 | 45 | 28 | 0 | 93 | 12 | 14 | 8.81 | 36 |
| 37 | 37 | 37 | University of Edinburgh Business School | UK | 66,791 | 42 | 44 | 48 | 81 | 47 | 75 (69) | 40 | 52 | 44 | 68 | 94 | 50 | 41 | 42 | 0 | 95 | 12 | 1 | 8.51 | 37 |
| 38 | 39 | 39 | Lund University School of Economics and Management | Sweden | 60,578 | 47 | 2 | 35 | 85 | 39 | 74 (70) | 33 | 39 | 29 | 22 | 61 | 21 | 32 | 40 | 0 | 87 | 9 | 5 | 8.78 | 38 |
| 39 | 54 | 47 | University of Bath School of Management | UK | 54,084 | 61 | 47 | 22 | 77 | 30 | 79 (84) | 37 | 52 | 35 | 68 | 90 | 6 | 39 | 49 | 0 | 99 | 12 | 13 | 8.59 | 39 |
| 40 | 45 | 43 | Singapore Management University: Lee Kong Chian | Singapore | 64,225 | 54 | 52 | 25 | 81 | 32 | 60 (87) | 25 | 54 | 33 | 62 | 94 | 53 | 42 | 35 | 0 | 98 | 12 | 10 | 8.72 | 40 |
| 41 | 36 | 39 | University College Dublin: Smurfit | Ireland | 54,588 | 52 | 27 | 27 | 90 | 43 | 98 (71) | 32 | 27 | 30 | 39 | 56 | 55 | 30 | 38 | 0 | 99 | 13 | 48 | 8.82 | 41 |
| 42 | 40 | 41 | Bentley University | US | 92,539 | 50 | 40 | 53 | 89 | 37 | 100 (40) | 37 | 35 | 42 | 16 | 71 | 0 | 40 | 48 | 0 | 74 | 14 | 23 | 8.80 | 42 |
| 43 | 29 | 36 | Lancaster University Management School | UK | 56,940 | 57 | 38 | 43 | 81 | 34 | 91 (25) | 36 | 53 | 42 | 57 | 92 | 26 | 43 | 46 | 0 | 95 | 12 | 0 | 9.08 | 43 |
| 44 | 42 | 43 | University of Rochester: Simon | US | 85,500 | 49 | 53 | 18 | 85 | 56 | 76 (91) | 20 | 55 | 7 | 36 | 97 | 20 | 18 | 50 | 0 | 74 | 16 | 15 | 8.23 | 44 |
| 45 | 30 | 38 | University of Maryland: Smith | US | 76,361 | 39 | 55 | 55 | 91 | 16 | 41 (72) | 34 | 49 | 32 | 32 | 56 | 9 | 38 | 51 | 0 | 86 | 16 | 8 | 9.42 | 45 |
| 46 | 35 | 41 | Brandeis International Business School | US | 85,826 | 37 | 54 | 50 | 81 | 55 | 67 (84) | 37 | 54 | 25 | 37 | 73 | 21 | 36 | 33 | 0 | 86 | 21 | 61 | 8.13 | 46 |
| 47 | 38 | 43 | Università della Svizzera italiana | Switzerland | 61,779 | 61 | 24 | 2 | 76 | 46 | 97 (74) | 16 | 26 | 20 | 69 | 81 | 20 | 19 | 31 | 0 | 100 | 30 | 79 | 8.60 | 47 |
| 48 | 44 | 46 | University of Texas at Austin: McCombs | US | 87,500 | 24 | 36 | 56 | 90 | 23 | 82 (100) | 23 | 42 | 18 | 31 | 35 | 1 | 51 | 51 | 0 | 84 | 10 | 0 | 8.88 | 48 |
| 49 | 51 | 50 | Durham University Business School | UK | 51,316 | 45 | 51 | 26 | 84 | 22 | 94 (61) | 34 | 75 | 40 | 71 | 95 | 80 | 52 | 36 | 0 | 99 | 12 | 0 | 9.30 | 49 |
| 50 | - | - | Tilburg University, School of Economics and Management | Netherlands | 57,694 | 45 | 5 | 42 | 84 | 48 | 87 (79) | 27 | 21 | 25 | 53 | 24 | 0 | 46 | 34 | 0 | 92 | 11 | 42 | 8.44 | 50 |
| 51 | 62 | 57 | University of Exeter Business School | UK | 55,729 | 37 | 43 | 20 | 84 | 36 | 77 (94) | 40 | 40 | 19 | 48 | 76 | 29 | 50 | 21 | 0 | 70 | 12 | 41 | 8.62 | 51 |
| 52 | 55 | 54 | University of Strathclyde Business School | UK | 48,576 | 46 | 35 | 40 | 79 | 52 | 92 (71) | 35 | 48 | 33 | 42 | 97 | 25 | 29 | 51 | 0 | 81 | 12 | 9 | 8.44 | 52 |
| 53 | 53 | 53 | University of Utah: David Eccles | US | 74,375 | 41 | 29 | 51 | 87 | 24 | 89 (89) | 32 | 25 | 29 | 28 | 24 | 9 | 47 | 47 | 0 | 79 | 12 | 38 | 9.22 | 53 |
| 54 | 51 | 53 | Ohio State University: Fisher | US | 76,745 | 43 | 50 | 52 | 85 | 31 | No data | 31 | 43 | 26 | 22 | 83 | 4 | 31 | 51 | 0 | 67 | 9 | 0 | 8.53 | 54 |
| 55= | 57 | 56 | Nottingham University Business School | UK | 44,265 | 34 | 46 | 21 | 81 | 45 | 76 (38) | 39 | 66 | 57 | 56 | 96 | 14 | 44 | 51 | 0 | 100 | 14 | 0 | 8.64 | 55= |
| 55= | 58 | 57 | University of Glasgow: Adam Smith | UK | 43,544 | 38 | 56 | 33 | 81 | 13 | 85 (22) | 41 | 53 | 43 | 70 | 96 | 7 | 48 | 43 | 0 | 87 | 12 | 0 | 9.21 | 55= |

**Footnotes:**
*Data in these columns are for information only and are not used in the rankings.
Some 222 points separate the top school from the schools ranked number 55. The schools are divided into three groups, indicated by bold lines. The difference in score between schools ranked consecutively is greater within groups one and two than in group three. The top seven schools, from HEC Paris to Università Bocconi/SDA Bocconi, form the elite group of providers of masters in finance programmes. The second group spans 23 places, from MIT: Sloan to CUHK Business School. The third group of 26 schools is headed by ISEG — Lisbon School of Economics and Management.

## Key Factors in the ranking

## Methodology ft.com/mif/method

**Weights for the ranking criteria are shown below in brackets — (pre-experience) [post-experience] — as a percentage of the overall ranking.**

**Salary today US$ (20) [20]:** average alumnus salary three years after graduation, US$ purchasing power parity (PPP) equivalent.†
**Salary percentage increase (10) [20]:** average difference in alumnus salary between first post-masters job (pre-experience) or pre-masters job (post-experience) and today.†
**Value for money (5) [3]:** calculated according to alumni salaries today, course length, fees and other costs.†
**Career progress (5) [5]:** calculated according to changes in the level of seniority and the size of company alumni are working for between graduation (pre-experience) or before their masters (post-experience) and today.†
**Aims achieved (5) [3]:** the extent to which alumni fulfilled their goals.†
**Careers service (5) [3]:** effectiveness of the school careers service in terms of career counselling, personal development, networking events, internship search and recruitment, as rated by their alumni.†
**Employed at three months % (5) [3]:** percentage of the most recent graduating class that found employment within three months. The figure in brackets is the percentage of the class for which the school was able to provide data.*
**Female faculty % (5) [5]:** percentage of female faculty.
**Female students % (5) [5]:** percentage of female students on the masters.
**Women on board % (1) [1]:** percentage of women on the school advisory board.
**International faculty % (5) [5]:** calculated according to faculty diversity by citizenship and the percentage whose citizenship differs from their country of employment (published figure).
**International students % (5) [5]:** calculated according to the diversity of current students by citizenship and the percentage whose citizenship differs from their country of study.
**International board % (1) [1]:** percentage of the board whose citizenship differs from the school's home country.
**International mobility (8) [8]:** based on alumni citizenship and the countries where they worked before their masters, on graduation and three years after graduation.†
**International course experience (8) [8]:** calculated according to whether the most recent graduating masters class completed exchanges, attended short classes or study tours, or had company internships in countries other than where the school is based.*
**Extra languages (1) [n/a]:** The figure shows the number of languages required for graduation minus the number required for entry. For example, if a school requires two languages on entry and two on graduation, the figure is zero.
**Faculty with doctorates % (6) [5]:** percentage of full-time faculty with doctoral degrees.

The following are for information only and are not used in the rankings:
**Average course length:** average completion time of the programme for the latest graduating class.
**Company internships:** percentage of the most recent graduating class that completed an internship as part of the masters programme.
**Overall satisfaction:** average evaluation by alumni of the masters course, scored out of 10. After alumni answered various questions about their masters experience, including the quality of the school's careers service, they were asked to rate their overall satisfaction, on a 10-point scale.

*For gender-related criteria, schools with 50:50 male/female composition receive the highest possible score.*

† *Includes data from current and previous ranking where available*
* *Graduated between April 2019-March 2020*

# HEC Paris salary rise tightens grip on top spot

**Analysis** French schools dominate the upper reaches of the 2020 MiF ranking, writes *Leo Cremonezi*

High-flyer: HEC Paris has topped all but one of the FT's masters in finance rankings since 2011

When the FT's masters in finance ranking began, in 2011, Donald Trump was still presenting *The Apprentice* and coronaviruses were a niche interest among microbiologists. Much has changed since then — but the number-one spot in the ranking has not. This year, as in 2011, HEC Paris tops the table.

More precisely, the French business school ranks first among providers of pre-experience masters in finance (MiF) courses — that is, for students with little or no relevant professional experience. The table on the facing page sets out information on the best programmes worldwide in this area, as well as on the top three courses for people who have already worked in the finance sector. It is based on surveys of schools and of alumni who completed their masters in 2017.

HEC Paris has come top every year apart from 2017, when Edhec edged it aside, and 2019, when the ranking did not run. Its success is explained by the financial uplift that its alumni enjoy: the highest weighted average salary, at $149,750 this year, and the highest salary percentage increase three years after graduation. The school is also the best for career progress.

HEC's salary performance is not typical of European schools. Analysis of the pre-experience programmes shows that alumni of Asian schools have higher salaries and raises three years after graduation, when adjusted for purchasing power parity between countries.

Alumni from US and European schools, however, report greater success in achieving their overall aims in studying an MiF. Survey respondents say their main reasons for taking an MiF are better career opportunities and personal development, followed by improving earnings and acquiring specialised skills.

While mainland Europe is a popular place to study, with alumni from its schools representing more than 50 per cent of the cohort surveyed, UK business schools have the highest proportion of overseas graduates: nine in 10. Whether such an international intake persists after the coronavirus pandemic is a matter for future editions of the ranking.

The proportion of female students enrolled at ranked schools has grown over time but a gender pay gap remains. Male alumni from pre-experience programmes earn an average of $103,403, some 30 per cent more than their female contemporaries, whose average salary is $79,094. The gap rises to 34 per cent for post-experience courses. The average salary uplift is greater too: 60 per cent for men on pre-experience courses, compared with 48 per cent for women.

ESCP Business School is ranked second and Skema rises one place to third. With Essec fourth and Edhec fifth, French schools have taken the top five places in two successive MiF rankings. Likely reasons for this include a long history of running MiF programmes, good connections with the finance sector and relatively low fees.

Alumni rank ESCP first for its careers service and aims achieved. For the second year in a row, the school is also top for international course experience, a category that reflects students' exposure to internships, classes and exchanges in other countries.

Chinese University of Hong Kong Business School registered the best progression in the ranking, climbing 19 places to 30th. Among Chinese schools, CUHK was judged best in the career progress category, and scores highly for the proportion of female students represented.

WHU — Otto Beisheim School of Management, in Germany, is this year's highest new entrant, in 22nd place. Alumni praise its exchange programme, career events and networking opportunities.

MIT: Sloan dropped one place to eighth and is the top school in the US. Its alumni earn $142,876 on average, the highest weighted salary among US institutions in the ranking. Surveyed graduates praised MIT: Sloan for providing a thorough immersion in the subject.

Only a few schools took part in the ranking of post-experience finance courses. London Business School (LBS) remains top, ahead of the University of Cambridge: Judge and Singapore Management University: Lee Kong Chian.

LBS alumni have the highest percentage salary increase and the school is ranked number one for career progress and international students.

Cambridge: Judge scores highest for value for money, careers service and international mobility. Its alumni have the highest salary, at $136,080.

Lee Kong Chian has the highest percentage of female students and is first for international course experience.

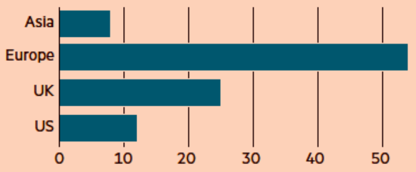
This year we asked graduates to rate their overall satisfaction with the MiF course — the first time we have put this question, which does not feed into the ranking calculation. All the schools scored above eight out of 10 on average.

The MiF ranking was suspended in 2019, owing to technical upgrades. This year's calculations include data from 2018 where applicable.

The proportion of enrolled female students has increased over time but a gender pay gap remains

**Europe's MiF courses are popular...**

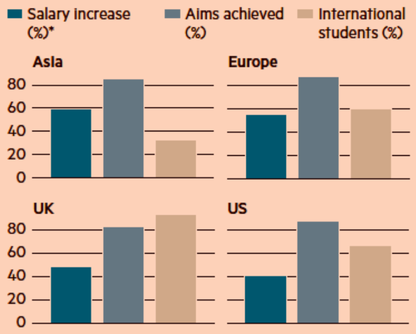
Location of school where alumni studied (%)



Includes both pre- and post-experience courses

**...but Asia's offer the biggest salary boost**

How schools compare by region



Pre-experience courses only *Adjusted for purchasing power parity

Source: FT research

---

# Finance offers haven in a downturn

*Continued from page 1*

risks and challenges for all business school programmes at this point of time."

Yet filling classes is likely to become less of a problem because of the economic crunch.

Students completing bachelor's degrees may conclude that this is a good moment to remain in full-time education, while graduates with a few years' work experience may feel the need to upgrade their credentials.

However, the new intake will be less diverse in terms of nationalities. That will make it harder for course administrators to recreate the range of views found in more multicultural classes, which catalyse the debates that are the bedrock of business school teaching.

Belgium's Vlerick Business School, which has been among the FT's top 30 MiF providers for several years, has been able to offer a record number of places for the course starting this autumn because of the volume and quality of applications it has received.

"We have been overwhelmed by applications in the weeks following the lockdown," says Wouter De Maeseneire, programme director of the school's masters in financial management course.

"Given the prospects for graduates of the masters in finance, even compared with other postgraduate courses, we are a popular choice. [Belgian] students who might have gone to Paris or London to study are now deciding to stay at home because of the travel restrictions."

But what will be lacking at Vlerick this year are large numbers of students arriving from overseas. Up to 40 per cent of the school's annual intake is usually from outside Belgium, according to Mr De Maeseneire. Next academic year it could be as little as a quarter of the class, and from countries much closer to home, he says.

"Even [among] those who have registered, we are not sure that they will get the necessary approval to travel in time," Mr De Maeseneire adds. "It is a pity because we want to be recognised as an international business school, but it might mean that we have to teach more classes online."

The shift to completely online tuition has been the challenge of recent months for MiF faculty as much as for other degree programmes, with Vlerick using Zoom for online lectures. "For me it is a bit sad that students have to end their academic year this way, but the bottom line is that it works," Mr De Maeseneire says.

Being able to teach lessons online has also been a saving grace in terms of including students from further afield, he adds.

Other schools face similar challenges, but MiF programme directors have become used to innovating in recent years because the finance sector is changing so much.

Finance can suffer from being a rather dry subject, but the digitisation of cash and economies is creating opportunities for targeted MiF programmes designed to appeal to students interested in areas such as big data and cryptocurrencies.

One of the most popular specialisms is fintech — financial technology, particularly start-ups — which demands a grasp of algorithms not historically taught on MiF courses, as well as immersion in computer modelling.

Another is computational finance, where students focus on statistical techniques and programming languages.

A third subject area, digital currencies and blockchain, has been "a shining light" even among specialist business programmes in recent years, according to Tim Mescon, executive vice-president and chief officer for Europe, the Middle East and Africa for AACSB International, the business education umbrella organisation.

"[It offers] a broad range of opportunities in what are red-hot job markets, in fact probably more so because of the disruption caused to banking by coronavirus," he says.

There is a particular opportunity for schools that can teach these disciplines online. Mr Mescon points to the University of Nicosia, whose online masters degree in digital currency has attracted students from around the world.

"Cyprus is a beautiful country but this was not a destination location for study," Mr Mescon notes. "This degree course has made it one."

'One of the biggest risks for all business school programmes at this point is international mobility'

## Contributors

**Janina Conboye**
FT journalist
**Leo Cremonezi**
Business education rankings manager
**Andrew Jack**
Global education editor
**Jonathan Moules**
Business education correspondent
**Sarah Murray**
Freelance journalist
**Seb Murray**
Freelance journalist
**Patricia Nilsson**
FT journalist

**Kishore Sengupta**
Reader in operations management, Cambridge Judge Business School

**Neville Hawcock**
Commissioning editor
**Steven Bird**
Designer
**Wai Kwen Chan**
Communities editor, business education
**Esan Swan**
Picture editor
**Jonathan McHugh**
Illustrator

For advertising details, contact:
**Gemma Taylor** (gemma.taylor@ft.com),
**Jackie King** (jackie.king@ft.com, US),
**Rachel Spence** (rachel.spence@ft.com, UK) , or your usual FT representative.

All editorial content in this report is produced by the FT. Our advertisers have no influence over or prior sight of the articles.

All FT Reports are available at: ft.com/reports
Follow us on Twitter @ftreports

**Careers** The Covid-19 pandemic has hit the economy hard – but the finance sector may be more resilient than others, *Janina Conboye* writes

# Graduates brace themselves for an uncertain market

As parts of the world slowly emerge from lockdown, Kelly Chaaya is preparing to start her internship at a global bank. But the masters in finance student at HEC Paris will not be going into Citibank's London office – instead her work will be done remotely.

Despite the unusual circumstances and economic uncertainty caused by the coronavirus pandemic, Ms Chaaya is optimistic about her prospects in the finance industry. "There will be some changes . . . but it is not going to be as impacted as other sectors, such as the media," she says.

But those completing their MiF courses now join many other graduates who will have the difficult task of developing a career during a period of global economic shock.

Sentiment about internships and job offers is mixed among business schools and students, so it is difficult to predict how the landscape for MiF graduates will shift over the coming months. Broadly, though, there is a feeling that the finance industry will hold steady.

Olivier Bossard, executive director of HEC's MiF, says the only factual observation he can make for the business school's graduates is that companies are delaying or shortening summer internships. "The big investment banks are actually playing a very fair-play game with our graduates," he says.

When it comes to job offers, those hiring from HEC are "still fully committed" to take people, Prof Bossard adds. "Only three firms so far have acknowledged that they would not be able to honour their commitments."

Overall he does not expect big changes with investment banks. He points out that the pandemic has created a crisis in the real economy. "Relative to 2008, the banks are in a much better shape: more liquidity, better capital adequacy, risks are more under control," he says. While things are alarming, "it is not, at least for now, a dramatic situation specific to banks, or the financial sector." Prof Bossard is more concerned about the consulting sector, which he believes could be hit by cost-saving measures.

Anna Purchas, head of people at professional services firm KPMG, says that at this stage it is difficult to predict how the jobs market in consulting will shift for MiF graduates. But "some areas of the business, such as restructuring, are going to be very, very hot," she says, "and that is an area where a strong analytical background and understanding of business is incredibly helpful".

The company has cancelled its summer internship scheme as it did not think it could offer its candidates the best experience, but some of those due to take part have been offered places for the 2021 graduate intake.

In the US, however, Peter Cappelli, director of the Center for Human Resources at Wharton Business School, says internships are being rescinded. He adds that, while the companies cancelling placements have not finalised decisions on job offers, "my guess is that those will be rescinded as well".

Even so, Prof Cappelli thinks the finance sector could be less affected than others "because finance and investing goes on".

Christian Dummett, head of London Business School's career centre, says the job market is always changing. In finance, asset classes and sub-sectors fall in and out of favour, while technology has disrupted traditional businesses. "Crises can accelerate this," he says. But he believes that "coronavirus is more likely to affect the way we work – from home, less travel – rather than roles per se."

**Out of office: HEC student Kelly Chaaya will work remotely for her internship**

Given that MiF graduates face uncertainty and could be competing against greater numbers of students for fewer jobs, what skills do they need to ensure a long-term career and how can they develop them while studying?

Casper Quint, an MiF student due to graduate later this year from London Business School, recommends that as soon as students begin their programme, they should start to develop an idea of what they want to do. "Investment banking has a very different recruitment process from, for example, fintech," he says.

LBS's career centre helped him plan his approach, while he also says students should "reach out to alumni".

Ms Purchas believes a core skill is showing adaptability. Graduates need to keep an eye on where the market is growing and where it is contracting, and think about how they can position themselves.

**Question time: curiosity and a familiarity with technical issues play well in interviews** Alamy

> 'Coronavirus is more likely to affect the way we work — from home, less travel — rather than roles per se'

"When I think about my career, it has been a portfolio career," she says. "I think that really is the way for people to think about their careers. There will be phases. You can learn from each [one], build on it and move across."

She adds that, while they are doing their MiF programme, students should also be networking and learning from their peers, so they can demonstrate that they can thrive among people from diverse backgrounds.

Ms Chaaya says that while no one expects MiF students to be geniuses, they do need to know a lot about the technical aspects, as well as curious – "ask questions", she advises. When interviews begin to become conversations rather than feeling like a grilling, the likelihood of success increases.

Despite the prospect of a tough period ahead, she recommends finance to anyone interested in working with numbers. There is always work, she says, "in the good times and bad times".

# ESG investing chaos masks demand for trained professionals

Sustainable investing

Differing metrics create confusion about what should be on curriculums, writes *Sarah Murray*

Finance students at NYU Stern School of Business learn about environmental, social and governance (ESG) investment with the help of hard cash as well as lectures. They invest real money through a teaching fund that is at the heart of an experiential learning course. But setting up an ESG portfolio proved to be an education for staff as well as students.

An array of ESG standards and metrics made the launch a time-consuming process. "Even once we'd started the fund and put the money in it, it took us at least a month before we bought our first stock," says Anthony Marciano, a clinical finance professor at Stern, in New York City.

Prof Marciano teaches the course based on management of the Michael Price Student Investment Fund, a family of funds with a value of about $2m. "The other funds started from the get-go. With a value fund it's easy to pick your benchmark," Prof Marciano says. "But we ran into a lot of complexities [with the ESG fund] that we wouldn't have had with the other funds."

Finance academics and students are not alone in feeling perplexed. Over the past year, investors have poured money into stocks and portfolios with an ESG focus. Evidence shows that they perform well and may even weather global crises such as the coronavirus pandemic better than other funds.

But what is often described as an "alphabet soup" of acronyms denoting the different forms of ESG evaluation and reporting – from SASB and GRI to TCFD and GIIRS – leaves companies and asset managers, as well as finance professors, scratching their heads.

"Companies are sinking in a sea of too much data," says Colin Mayer, professor of management studies at the University of Oxford's Saïd Business School. "They are confused and irritated by the amount of information that they're expected to provide."

This makes it difficult to develop courses that cover ESG evaluation, says Prof Mayer. "One can teach the most widely used and accepted approaches," he says. "But what is difficult to do in terms of designing a course at the moment is say: 'This is the standard that will emerge as the one that is going to generally be applied.' That level of clarity is not yet there."

NYU Stern: students can manage an ESG fund as part of their course – Mathieu Asselin

If the teaching of ESG investment evaluation is still evolving, so too is the inclusion of sustainable investing in core finance courses.

"There are very few finance programmes that include social responsibility, ESG and sustainability as dominant themes to be covered in all aspects of finance training," says Bruno Gerard, who teaches ESG evaluation at BI Norwegian Business School, which is developing an MSc in sustainable finance.

When sustainable finance is taught, it is often through electives. Instead, it needs to be integrated into mainstream finance programmes, says Martina Macpherson, senior vice-president, ESG, at rating agency Moody's, who in 2018 was part of a UK government-led task force on social impact reporting.

"Otherwise we are creating subject matter experts in silos," she says. "So it ultimately has to be in the core finance course."

She adds that part of the problem is that until recently publications such as academic journals seldom included research on evaluating the social and environmental impact of sustainable investments. "In finance-led journals it's changing," she says. "But it's very recent."

> 'What is difficult to do in terms of designing a course is to say: "This is the standard that will emerge"'

This has proved a challenge for Norway's BI in the development of its MSc in sustainable finance.

"When we were looking around for textbooks that we could use, we only found two or three," says Prof Gerard. "And they don't build on a very strong academic tradition."

This may start to change through the efforts of initiatives such as the Network for Sustainable Financial Markets, of which Ms Macpherson is president.

"We're looking at how to bring the next generation of sustainable finance leaders into the domain through education and through the forward-looking perspective of careers and opportunities," she says.

Some courses are emerging from outside the business school sector. In April, for example the IIX Impact Institute – part of IIX, which was created to develop the world's first listed exchange for impact investing companies – launched an online course called Measuring Impact for Sustainability.

Meanwhile, Prof Gerard believes other forces will accelerate the teaching of ESG evaluation in finance. "There is student demand for this," he says. "But also in Norway all the asset managers come to us and say: 'We have to run ESG funds, our clients want them, and we don't have people who can run them.' So there's acute demand from the employer side."

# HK dean navigates protests and pandemic

**CUHK** The Hong Kong school's head talks to *Patricia Nilsson* about his challenges after a stellar rise in the FT's ranking

Lin Zhou joined the Chinese University of Hong Kong (CUHK)'s business school with ambitions to broaden its international appeal, but seven months later the new dean has not left Hong Kong once.

Grounded by the global pandemic, which has spread across the world after erupting in mainland China, he admits: "It is difficult now, but I haven't abandoned my plans yet."

They will have been given a boost by his school's performance in this year's FT ranking of masters in finance (MiF) programmes: CUHK is the fastest climber, rising 19 places to number 30. Yet that achievement comes against a troubled backdrop, of which coronavirus is only a part.

For a while it seemed the pandemic had given the city a break from its existential political crisis, sparked last year by a stand-off between pro-democracy demonstrators and a government seen as too accommodating to China's communist rulers.

But in the past few weeks the future of Hong Kong's unique role under Beijing's so-called "one country, two systems" rule has again started to look uncertain.

Protests have resumed following China's decision to press ahead with a plan to impose national security laws on Hong Kong. In a riposte to Beijing, the US stated that it would no longer consider the territory autonomous from China, a decision that puts Hong Kong's special trade status with Washington under risk.

Speaking just before Beijing's move, Prof Zhou — who was born in mainland China but has become a US citizen — adopts a diplomatic tone when asked for his views on the situation.

"I hope that the Chinese government will continue to allow Hong Kong more freedom, including freedom of expression and the right to assemble peacefully, as long as national security is not jeopardised," he says. "It will keep Hong Kong's financial market an attractive venue to overseas investors, which is beneficial to the Chinese economy."

Before he joined CUHK, Prof Zhou spent eight years as head of Antai College of Economics and Management in Shanghai, transforming it into a world-class institution that topped the FT's most recent listing of schools in Asia-Pacific. Prior to that Prof Zhou spent 20 years in the US, holding academic positions at Yale University, Duke University and Arizona State University.

Watching relations deteriorate between the US and China, Prof Zhou argues Hong Kong's role as an investment hub in Asia could grow if businesses became less willing to invest directly in China.

"When the relationship between China and the west cools down, Hong Kong's role as an intermediary between [the two] will become even more important," he says.

For universities outside Asia, the prospect of Chinese students losing their appetite for studies in Europe and the US could become a serious problem. The pandemic has accelerated a potential crisis, with uncertain visa prospects in the wake of lockdowns and travel restrictions for Chinese students — whom institutions worldwide have come to rely on for revenue.

Furthermore, Prof Zhou argues that the struggle to control the Covid-19 outbreak in many of the world's top education destinations has left Chinese students considering whether leaving Asia will be safe. "We have actually seen recently that some Chinese students who had planned to pursue studies in the UK or US have decided not to go and applied to us," he says.

**Protesters in Hong Kong this month (above); Lin Zhou, dean of CUHK (right)**
Justin Chin/Bloomberg

'Now Hong Kong, again, is different, because the Hong Kong government still provides lots of funding'

Hong Kong's oldest business school is, however, not immune to the economic downturn and the restrictions on international travel, which are making it hard for universities to predict future demand. With academic institutions gearing up to offer online-only teaching until campuses can reopen safely, prospective students are thinking twice about investing in a course.

Prof Zhou argues that not all programmes are equally vulnerable. Those thinking of leaving a job to pursue an MBA, where interaction with professors and peers is as important as coursework, may decide to postpone the risk.

The school is, however, counting on strong demand for pre-experience masters courses, as students try to postpone entering the labour market. In line with Prof Zhou's ambitions, CUHK's masters in finance, which offers courses focused on fundraising in Chinese markets as well as week-long field studies abroad, has become more popular with foreign students, albeit from a low base. The proportion has risen from 1 per cent in 2017 to 7 per cent in this year's class.

But with many uncertainties still surrounding labour markets, the universities that supply them are bracing themselves for some hard years.

"Now Hong Kong, again, is different, because the Hong Kong government still provides lots of funding to universities in the territory," says Prof Zhou, explaining that more than 50 per cent of CUHK's finances comes from local authorities. He contrasts that with schools in the US and UK, "where funding from the state is decreasing at a faster rate".

Reflecting on the uncertain future of Hong Kong and of universities everywhere, Prof Zhou argues that the world is in for many changes, with the US becoming inward-looking and the pandemic leading governments and businesses to "reassess globalisation".

"Each country will have to decide whether it wants to do business with another country that has a very different ideological view," he says. "Can economic issues be decoupled with political issues? Each country has to decide."

---

# When a few extra letters make all the difference

**Qualifications**

Demand is high for MiF courses that give students a head start in acquiring industry certifications such as CFA, writes *Seb Murray*

When Anushka Agarwal moved from India to Singapore for a masters in finance (MiF), she canvassed advice from people in the know on how to succeed in the finance sector. Everyone issued the same guidance: earn the coveted Chartered Financial Analyst qualification by finishing the CFA programme for investment professionals.

This involves completing three stages of arduous exams, 900 hours of study and 4,000 hours of relevant work experience. Ms Agarwal, who completed Level 1 in December last year and wants the full qualification, believes the effort will be worth it. "Those three letters give you an edge over other graduates on the job market," she says.

Ms Agarwal wants to work in asset management or corporate finance. In 2019, she enrolled on the MSc in finance at Singapore Management University's Lee Kong Chian School of Business — partly to get a head start on the toughest tests in finance. The 10-year average pass rate for the CFA exams is 44 per cent.

"CFA is the global benchmark for investment professionals," says Soon Huat Chan, the director of SMU's course. More than 90 per cent of each cohort attempt the first stage in December. The MSc was designed to align with the complex CFA curriculum covering investment, financial reporting, economics and more.

The CFA Institute, the investment professionals' association that administers CFA exams, launched its global University Affiliation Programme in 2006 to meet a growing demand for its qualification from younger financiers and to raise standards of professionalism.

The programme today comprises 630 universities that embed at least 70 per cent of the Level 1 exam into their degree programmes. Gary Baker, managing director of Europe, Middle East and Africa at the CFA Institute, says affiliation helps schools keep pace with industry changes and satisfy employer demand for new skills.

"CFA is not just an academic qualification; it's heavily wedded to practitioners, who give us their input on what skills they want candidates to have coming into the workforce," Mr Baker says. "The curriculum captures the new market forces, whether fintech or ESG."

Some schools remain unpersuaded. In the US, MIT Sloan School of Management turned down such a partnership so as to maintain complete control of its curriculum. "The CFA Institute approached us several times, but I don't know what strings come attached," says Heidi Pickett, assistant dean for Sloan's programme. "We are not just training asset managers."

And the CFA is only one of many financial certifications. MiF courses can help students acquire a variety of acronyms to boost their employability. Those who obtain the finance MSc from Cass Business School in London, for example, can then skip modules in exams to become chartered accountants through the Association of Chartered Certified Accountants and the Chartered Institute of Management Accountants.

'One of the most-asked questions from prospective students is whether we incorporate CFA in the MSc'

"The trend is accelerating," says Nick Motson, Cass's associate dean for MSc programmes, of industry designations. "Schools know people are attracted to finance degrees for the quality stamps. One of the most-asked questions from prospective finance students is whether we incorporate CFA in the MSc: we do."

**CFA on the way: Anushka Agarwal**

At Ohio State University's Fisher College of Business, nearly half the MiF cohort want to work in investment management, especially with alternative assets such as hedge funds, private equity and property. In 2018, Fisher teamed up with the Chartered Alternative Investment Analyst Association. The deal means students can apply for scholarships to sit the Level I CAIA exam, the first step towards earning a CAIA charter.

"Industry certification is not something that distinguishes a business school: nowadays it's a must-have," says George Pinteris, director of Fisher's MiF. "This is really where the added value comes for our students."

Julia Knobbe, director of the MiF at Frankfurt School of Finance and Management, says industry certifications help students win jobs in niche areas of global finance. Frankfurt's course, which is accredited by the Global Association of Risk Professionals, covers some of the exam content for the Financial Risk Manager credential.

Yet Prof Knobbe insists that industry exams are no substitute for an MiF. They are mostly self-studied, whereas a degree goes deeper into some subjects and includes group work, faculty expertise and career support, plus opportunities to try theory out in the real world.

For instance, SMU's Prof Chan teaches an equity analysis course in which students value companies using real-time data and present their research report to the class. "We are not a prep school for CFA certification," he says.

Marwa Hammam, executive director of the MiF at Cambridge Judge Business School, adds that students with work experience — a requirement for her course — learn as much from each other as they do from professors. About a quarter of her students had completed at least CFA Level 1 when they enrolled.

At UNSW Business School in Sydney, students with the full CFA qualification can skip one module in the MiF programme. Associate professor Kingsley Fong, says CFA makes prospective students more attractive, as it suggests they can succeed in the classroom and in financial markets. "CFA is the gold standard of the investment profession," he says. "Paired with a masters in finance, it's a powerful combination."

Room for improvement: a student at work in a university library in Munich last month. Many business schools are still deciding how to balance face-to-face with remote learning in the next academic year — Andreas Gebert/Getty

# Schools adjust to a new economic landscape

**Coronavirus**

Both teaching practices and course content are in flux, says *Andrew Jack*

Business school deans such as Alice Guilhon are having to practise what they teach with swift managerial changes to cope with the disruption caused by coronavirus. When France entered lockdown in March, Prof Guilhon, the dean of Skema business school, was forced not only to rethink teaching practices, but also to meet new welfare needs.

"We have a lot of international students and it was important to check on them, to be with them to tackle the feeling of being isolated," she says.

Like her counterparts in finance masters' programmes and other education courses under way around the world, she scrambled to sustain, restructure and replace internships and work projects for students as employers closed their offices.

Most important, in just two days, Prof Guilhon oversaw a switch to "remote learning" — involving extensive interaction and contact, and going far beyond passive viewing of lessons shifted online because of social distancing restrictions. "Our speakers were connected to students, and we asked faculty to act as coaches," she says.

Now, finance course directors are turning their attention to the coming academic year against a continued backdrop of uncertainty.

Yet a common theme among the better courses is robust demand.

Heidi Pickett, assistant dean for the masters in finance (MiF) programme at MIT, will be among the first to see how a record intake of 140 students reacts to a revised menu when her next course's first term begin in July. "We're looking at many scenarios," she says, outlining a flexible mixture of "hybrid" learning that combines face-to-face with remote learning depending on how the pandemic evolves.

But she sees no need to cut tuition fees. "Our expectation is that we can deliver the same or a better experience," she says.

The fact that MIT is starting its next MiF online has at least one advantage: it provides breathing space. The closure of consulates around the world means there is a big backlog in the processing of visas, but the large number of MIT international students will be able to study initially from their own countries.

The Lee Kong Chian School of Business at Singapore Management University also has many foreign students, and applications for its MSc in finance in the next academic year are up more than 50 per cent, with a quarter more places being offered than usual. "Our yield has improved," says Gerry George, the dean. "About half of our offers are to Chinese [people]. Students are choosing to stay regional."

He says that this partly reflects a sense of assurance among Asian families that the region has managed the pandemic effectively, as well as a desire among students finishing undergraduate studies to remain in education during such uncertain times. "Those who are graduating are thinking if they cannot easily get a job, they might as well as do another year," Prof George says.

Chris Higson, academic director of the MiF programme at London Business School, also says demand is "in great shape" for both his course and the pre-experience masters in financial management. "Our programmes are in rude good health," he says. "Doing a masters has a countercyclical element, which we also saw after the 2008 financial crisis. If the job market is uncertain, it's a good time to spend that year studying you had always dreamt of."

He says the question of "what can finance do for the world of coronavirus" is already being embedded in the curriculum for the coming academic year.

He is actively seeking up-to-date examples to bring to his own teaching.

"I'm already feasting my eyes on examples of corporate failure, looking at the accounts. It will obviously provide rich pickings," he says.

Frank Bournois, head of ESCP, the French business school, says "we are adjusting our programmes because the financial sector is changing."

He highlights the growing importance of ethics and responsible finance, as well as the subject's social aspects. "We are navigating the biggest crisis since the second world war and so we are living through profound changes in the way investors look at risk," he says.

Just as students and employers will be seeking expertise in new skills, Marwa Hammam, executive director of the MiF programme at Cambridge Judge Business School, sees continued appetite from companies for both internships and recruitment in the months ahead.

She, too, points to positive outcomes for graduates after 2008.

"The job market hasn't been so dire. We haven't really had a single company that's said it's not interested in engaging with students," she says. "Our advice to students is to be flexible, and pivot into sectors where there is growth: corporate restructuring, distressed debt, regulation, research roles in risk management and compliance.

"Careers are never a straight line. You can take a detour."

# When business survival is at stake, it pays to have a discontinuity plan

**MASTERCLASS**

Kishore Sengupta

*An MiF can boost your salary, your connections and your career prospects — but what will you actually learn? In an occasional series, we showcase the work of teachers at top-ranked business schools.*

Standing still is not an option for any business. The world is always changing, and companies can either keep up or go under. In most circumstances, keeping pace need only involve incremental change — the company protects its business model while aiming to boost sales of existing products and services. Anything more drastic is too risky.

But the Covid-19 era is not most circumstances. Such leisurely change is no longer an option for many companies. The crisis has torpedoed whole sectors, their customer bases taken away overnight.

So for many business and industries, recovery from the coronavirus crisis will instead require "discontinuous transformation" — a change not just in the rate but also the direction of travel, and not through mere incremental moves. Such radical reassessment of capabilities, operations and even the business model itself could become a routine necessity.

The Danish energy company Orsted is a good illustration of a company that moved sharply in a new direction — reflected in its decision to change its name in 2017 from Danish Oil and Natural Gas. Beginning in 2012, it moved aggressively away from fossil fuels into offshore wind farms.

It did not merely diversify into existing wind power systems and price structures, but pursued an ambitious programme to make wind power more competitive. The company chose to embark on a new way of doing things, rather than settling for doing things the old way in a new business.

By contrast, General Electric sought at the beginning of the last decade to transform its industrial equipment business through digital technology, and created a new GE Digital unit. But pressure to deliver on short-term goals (a linear rather than discontinuous approach) distracted it from longer-term innovation goals. GE Digital's wobbles were seen as a factor in the chief executive's early departure in 2017.

Wind in its sails: an Orsted turbine

Finance plays a key role in this type of rethinking and reorientation. Traditional forecasting methods and return on investment (ROI) benchmarks may need re-evaluation. The types of linear progress that finance managers have historically sought will become obsolete at many companies because of the economic disruption caused by coronavirus.

Research that I and my colleagues have conducted at a big telecoms company facing technological disruption has yielded four important insights into discontinuous transformation. They will be relevant to businesses of all sizes as they navigate cash-strapped months and years ahead.

First, transformation can occur without large capital expenditures — indeed, new capital will not help if the approach is wrong to begin with. The trajectory of change is difficult to discern at the start, and becomes clear only as the journey unfolds.

By committing large sums up front, before the steps required are apparent, management creates a risk of significant waste; if backtracking is needed, there will be heavy capital loss as well as delay to factor in. Paradoxically, slower spending speeds up change: to borrow the US Navy Seals' saying: "slow is smooth, and smooth is fast."

> Discontinuous change is more like a gap-year backpacking adventure than a coach excursion

Second, managers need to rethink forecasting by setting new ROI rates and timings that reflect the flexibility implicit in discontinuous transformation. Conventional ROI yardsticks fail to recognise the nature of progress at such moments, and it can be a mistake to discontinue projects because they don't seem to be making "enough" headway early on.

Third, executives should not underestimate what they can do with savings in times of discontinuous transformation. Big cost reductions can flow from dismantling an existing business in favour of a new model. Liquidity will surely be a big issue for financial managers as they navigate a recovery from the economic impact of coronavirus, so such savings could be a lifeline for many companies.

Finally, and on the other side of the ledger, liquidity can also be protected by *not* prematurely dismantling existing revenue streams that can help fund the transformation. The key is to tap these sources while not allowing them to impede progress by providing a false sense of security.

Beyond changes to financial benchmarks, discontinuous change also requires a mindset adjustment. It is "emergent", more like a gap-year backpacking adventure than a strictly timetabled coach excursion. For financial managers, this can require accepting that the goal and path are not completely clear from the start — an unsettling prospect for professionals trained to cherish clarity.

This is not the only cultural shift that leaders need to assimilate. Traditional hierarchies and routines loosen during discontinuous transformation, with employees becoming empowered to think and act in new ways, and new types of collaboration across functions and teams emerging. The adaptations involved in working from home, as many have had to in recent months, will help catalyse such developments.

While hierarchy serves a valid corporate purpose, that of ensuring accountability, it can also stifle creativity if it is too rigid. As companies emerge into the new economic landscape that coronavirus has given rise to, the capacity for creativity will be more valuable than ever. In an era of discontinuity, "business as usual" is a high-risk proposition.

*Kishore Sengupta is reader in operations management at Cambridge Judge Business School*