FINANCIAL TIMES

WEDNESDAY 22 JUNE 2016 | WORLD BUSINESS NEWSPAPER | EUROPE

Martin Wolf
Why Britain must vote Remain
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‘Huge systemic failure’
How Ireland’s housing boom turned into an acute shortage — BIG READ, PAGE 7

Nearshoring
Can robots bring manufacturing back home? — SARAH O’CONNOR, PAGE 10

Cameron predicts investment surge if Britain opts to stay in EU

● Premier warns that decision is irreversible ● ‘Remain dividend’ would be immediate

LIONEL BARBER AND GEORGE PARKER — LONDON

David Cameron has predicted a “Remain dividend” with an investment surge into Britain if the country votes tomorrow to stay in the EU. But he admitted: “It’s very close, nobody knows what’s going to happen.”

More than 1,000 company bosses have signed a letter warning a Brexit vote would “put jobs at risk”, but Mr Cameron told the Financial Times he was “frustrated” that more business executives had not publicly supported EU membership in recent weeks.

Speaking ahead of a vote that could determine his own future as well as Britain’s place in the world, Mr Cameron said voters could expect to see immediate benefits if they voted Remain.

“I think on Friday that businesses, wealth creators, job creators will think: Britain has made a decision, let’s pile back into the economy and create jobs and opportunity because it’s a great place to do business,” he said.

Bookmakers continue to believe a Remain vote more likely and sterling yesterday briefly touched a high for the year, a signal that financial markets are also betting on Britons voting to stay in the EU. But the FT poll of polls gives Leave a 45-44 lead, with turnout likely to be a key determinant.

Mr Cameron urged older voters to “think about the hopes and dreams of your children and grandchildren”, in an attempt to inject an emotional element into the poll. Opinion surveys have consistently shown older voters siding with Leave while the young largely support continued EU membership.

The prime minister said there was no turning back from a Brexit vote. “If we vote to leave, this really is irreversible,” he said, adding that future generations would have to live with the result.

The Remain camp is mobilising a vast ground operation to “get out the vote”, hoping the combined efforts of nearly all mainstream UK political parties — Conservative, Labour, Liberal Democrat, SNP and Greens — and other activists can push up the turnout.

David Cameron, with In mug, in Downing Street yesterday Charlie Bibby

Despite the uncertainty, Mr Cameron insisted he was right to hold the referendum early in this parliament because there was “always going to be a Brexit chill” over the economy until the issue was settled. In a warning to his own Conservative MPs who say they will continue to fight for Brexit if Remain only wins a narrow majority, he said: “As far as I’m concerned this referendum should settle the matter.”

He said he would “rapidly” begin exit talks with the EU in the event of a Leave vote by activating Article 50 of the Lisbon Treaty, which formally begins two-year divorce proceedings, although his pro-Brexit cabinet colleague Michael Gove wants to move more slowly.

Mr Cameron believes he will win and will be boosted by a letter to The Times signed by more than 1,000 business leaders saying Brexit would “lead to economic uncertainty and would put jobs at risk”. The prime minister said he was disappointed more companies had not come forward. “It can sometimes be frustrating that organisations feel constrained and say they can’t take sides or put their heads over the parapet.”

But he praised “some real heroes and heroines” in the business world for taking a stand, singling out Carolyn McCall, the EasyJet chief executive. Ms McCall, a member of Mr Cameron’s business advisory group, has been one of the most public Remain supporters among top UK executives.

Former London mayor Boris Johnson was last night the star Leave name in the final televised debate: an event at Wembley Arena with an audience of 6,000.

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City split

Tensions are running high in the cathedral city of Worcester in the English midlands, one of the most divided areas in the country on EU membership. The Cap ’n’ Gown pub has hosted lively debates but an argument at a local bookmakers nearly turned into a fist fight a few days ago

● **Passions run high** page 4

Briefing

▸ **Brussels to step in over failed bank rules**
EU regulators are set to intervene in a split between countries over how to force losses on investors in failed banks, amid fears over the difficulty of winding down a big cross-border lender.— PAGE 13

▸ **Alarm over increase in protectionism**
The WTO has warned that the past six months have seen the introduction of protectionist measures by G20 economies at the rate of five each week, the fastest pace seen since the financial crisis.— PAGE 6

▸ **Yellen cautious before Senate committee**
Federal Reserve chair Janet Yellen has said she will tread carefully as she gauges when to lift short-term interest rates again as the central bank assesses whether the recovery remains on track.— PAGE 3

▸ **Film shows Kerviel as victim of finance**
L’Outsider, the film about rogue trader Jérôme Kerviel, whose unauthorised trading cost Société Générale €4.9bn, is released today. It shows a version of events vigorously denied by the French bank.— PAGE 5

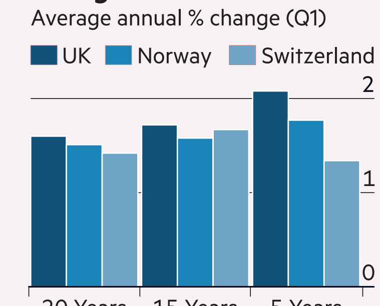
▸ **Projections fail to blunt Rajoy questions**
Spanish polls giving premier Mariano Rajoy 30 per cent of the vote in Sunday’s elections have posed the bigger question of what happens next, given the persistent debate over his political future.— PAGE 5

▸ **Modi’s FDI liberalisation faces test**
Narendra Modi has claimed his easing of foreign direct investment rules makes India “the most open economy in the world for FDI” but most of the changes are about reducing bureaucracy.— PAGE 6

▸ **China weighs offshore currency shift**
The People’s Bank of China has said it is weighing allowing onshore commercial banks access to the offshore renminbi market in a move that could bring the two currency rates closer together.— PAGE 20

Datawatch

GDP growth
Average annual % change (Q1)



Source: OECD

The average annual GDP growth in the UK was about 2 per cent in the five years to the first quarter of 2016, higher than that of Norway and Switzerland, which are not in the EU. The same is true over the past 15 and 20 years

South China Sea cruises on offer for patriots only

Cruise control ▸ PAGE 2

Departure of SoftBank chief-in-waiting raises doubts over tech group’s strategy

KANA INAGAKI — TOKYO
LESLIE HOOK AND LIONEL BARBER — LONDON

The former Google executive hand-picked to turn Japan’s SoftBank into a global internet powerhouse abruptly resigned as president yesterday, casting a shadow over the company’s acquisition-heavy strategy to take on the biggest telecoms and media groups.

Nikesh Arora was poached from Google less than two years ago and lined up to succeed chief executive Masayoshi Son, the Japanese billionaire who founded the technology and telecoms group that acquired US wireless carrier Sprint for $22bn in 2013.

But Mr Arora told the Financial Times he quit after Mr Son declared he was no longer willing to step down next year. He said Mr Son had pledged to hand over the reins when he turned 60, but has had second thoughts in recent weeks.

“I said, ‘OK, it’s better to sort this out now. There is not room for both us in the company for another five years’,” Mr Arora said.

In a statement, Mr Son said he wanted to continue as chief “for at least another five to 10 years” to strengthen Sprint and to “work on a few more crazy ideas . . . . I feel my work is not done”.

SoftBank, founded in 1981 as a tiny software distributor, is now Japan’s third-largest mobile telecoms provider. Through a series of acquisitions, including Sprint, the group has positioned itself as a global rival to heavyweights such as Vodafone and T-Mobile US.

The resignation of Mr Arora, an Indian-born veteran of US telecoms and internet groups, raises questions about the company’s succession planning and its ability to navigate cross-cultural challenges facing global media groups.

During his brief tenure Mr Arora carried out a series of investments in start-ups. But his high pay and distant management style rankled some colleagues.

SoftBank also changed its investment approach, selling $20bn in assets, including $10bn of shares in Alibaba. Yesterday, it said it was selling its $8.6bn majority stake in gaming company Supercell to Tencent, the Chinese group.

Mr Arora and Mr Son, who is 10 years his senior, worked together on a 2008 deal involving Yahoo Japan, in which SoftBank holds a stake. Asked whether the very public love affair between the two multimillionaires was over, Mr Arora said: “I am still in love. He is the nicest person I know.”

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Analysis page 15

Austria	€3.60	Macedonia	Den220
Bahrain	Din1.7	Malta	€3.50
Belgium	€3.60	Morocco	Dh43
Bulgaria	Lev7.50	Netherlands	€3.60
Croatia	Kn27.50	Nigeria	Naira715
Cyprus	€3.50	Norway	NKr34
Czech Rep	Kc100	Oman	OR1.50
Denmark	DKr32	Pakistan	Rupee 280
Egypt	E£20	Poland	Zl 18
Finland	€4.10	Portugal	€3.50
France	€3.60	Qatar	QR15
Germany	€3.60	Romania	Ron17
Gibraltar	£2.70	Russia	€5.00
Greece	€3.50	Saudi Arabia	Rls15
Hungary	Ft990	Serbia	NewD420
India	Rup195	Slovak Rep	€3.60
Italy	€3.50	Slovenia	€3.50
Kazakhstan	US$5.50	Spain	€3.50
Kenya	Kshs300	Sweden	SKr37
Kuwait	KWD1.50	Switzerland	SFr5.90
Latvia	€6.99	Tunisia	Din7.50
Lebanon	LBP7500	Turkey	TL10
Lithuania	€4.30	UAE	Dh15.00
Luxembourg	€3.60		

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World Markets

STOCK MARKETS

	Jun 21	prev	%chg
S&P 500	2087.45	2083.25	0.20
Nasdaq Composite	4836.73	4837.21	-0.01
Dow Jones Ind	17825.08	17804.87	0.11
FTSEurofirst 300	1336.10	1327.02	0.68
Euro Stoxx 50	2975.82	2942.88	1.12
FTSE 100	6226.55	6204.00	0.36
FTSE All-Share	3419.35	3409.01	0.30
CAC 40	4367.24	4340.76	0.61
Xetra Dax	10015.54	9962.02	0.54
Nikkei	16169.11	15965.30	1.28
Hang Seng	20668.44	20510.20	0.77
FTSE All World $	265.78	265.03	0.28

CURRENCIES

	Jun 21	prev		Jun 21	prev
$ per €	1.127	1.134	€ per $	0.887	0.882
$ per £	1.467	1.470	£ per $	0.682	0.681
£ per €	0.768	0.772	€ per £	1.302	1.296
¥ per $	104.535	104.410	¥ per €	117.822	118.369
¥ per £	153.374	153.436	£ index	87.238	85.344
€ index	87.117	87.310	$ index	98.219	98.863
SFr per €	1.080	1.088	SFr per £	1.406	1.410

COMMODITIES

	Jun 21	prev	%chg
Oil WTI $	49.16	49.96	-1.60
Oil Brent $	49.84	50.65	-1.60
Gold $	1281.80	1290.70	-0.69

INTEREST RATES

	price	yield	chg
US Gov 10 yr	99.45	1.69	0.01
UK Gov 10 yr	100.80	1.42	0.05
Ger Gov 10 yr	104.35	0.05	0.00
Jpn Gov 10 yr	102.57	-0.15	0.00
US Gov 30 yr	100.38	2.48	0.00
Ger Gov 2 yr	103.08	-0.58	0.00
	price	prev	chg
Fed Funds Eff	0.37	0.37	0.00
US 3m Bills	0.28	0.27	0.01
Euro Libor 3m	-0.28	-0.28	0.00
UK 3m	0.59	0.58	0.01

Prices are latest for edition | Data provided by Morningstar

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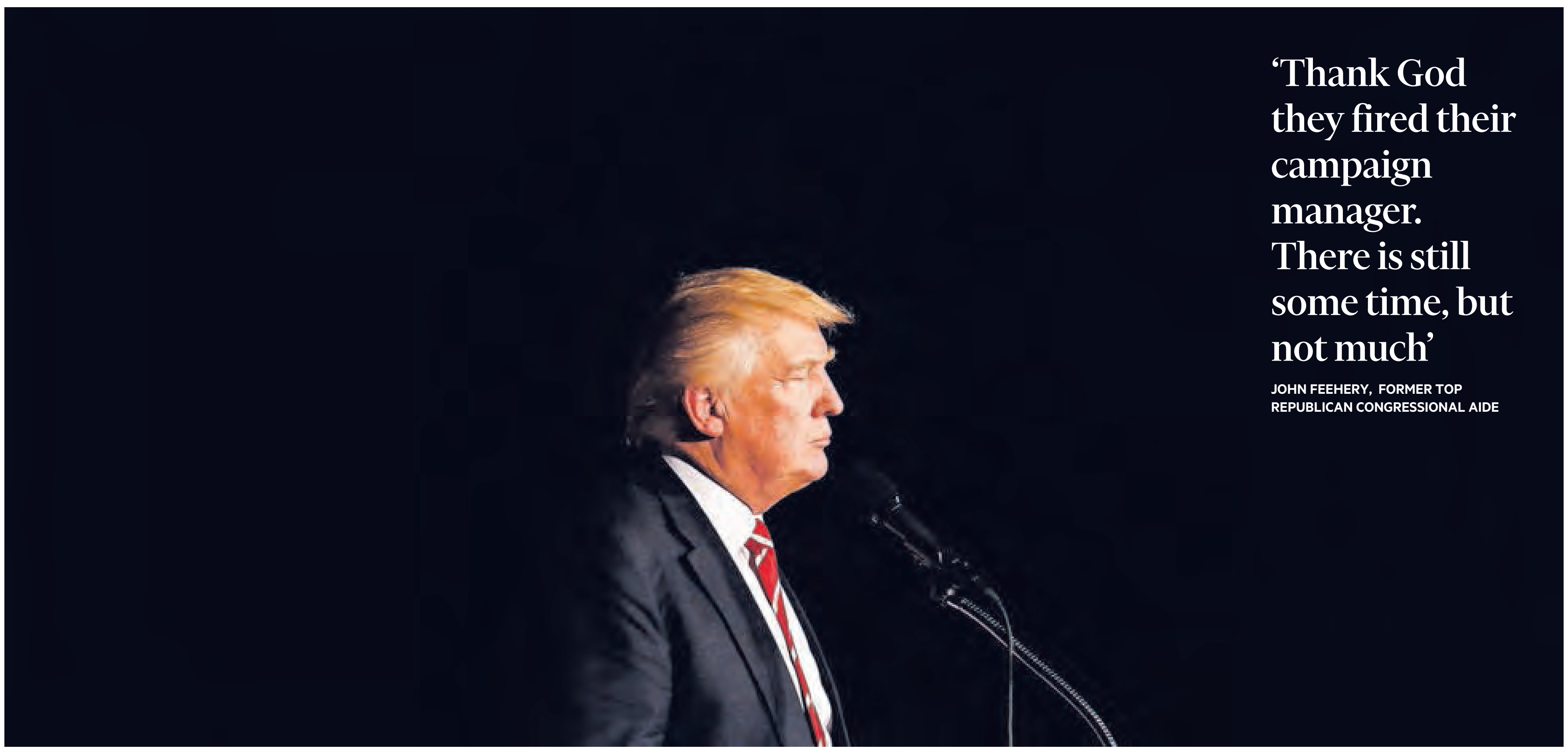
INTERNATIONAL

Trump presidential campaign falters in ‘pivot to prime time’

Fundraising statistics add to suspicion candidate underestimates effort needed to win



‘Thank God they fired their campaign manager. There is still some time, but not much’

JOHN FEEHERY, FORMER TOP REPUBLICAN CONGRESSIONAL AIDE

In the spotlight: Donald Trump addresses a rally in Atlanta, Georgia, this month
Luke Sharrett/Bloomberg

DEMETRI SEVASTOPULO — WASHINGTON

Whenever someone claimed that Donald Trump lacked the infrastructure to win November's election, his campaign manager countered that the property tycoon won a record number of primary votes with roughly one-tenth the staff of Hillary Clinton.

But Corey Lewandowski was fired on Monday. Now that lean campaign has been cast in a negative light by May campaign fundraising numbers that revealed that Mrs Clinton reeled in almost nine times the \$3.1m that the New York businessman took from donors. The Democrat ended the month with a \$42.5m bank balance compared to \$1.3m for her Republican rival.

"It's a further indication that the Trump campaign is not ready for prime time," said John Feehery, a former top Republican congressional aide. "Thank God they fired their campaign manager. There is still some time, but not much."

After several weeks of bad headlines, Mr Trump engaged in damage control yesterday, claiming his numbers in May — when he effectively won the nomination — did not reflect his recent "incredible" fundraising, and reassuring critics that the figures ultimately did not matter. "If need be, there could be unlimited cash on hand as I would put up my own money, as I have already done through the primaries, spending over \$50 million dollars," he said.

While Mr Lewandowksi was fired because of longstanding concerns among the Trump children and other staff about his abrasive manner and his reluctance to professionalise the operation by hiring more staff, Republican party elites hope that the move signals that Mr Trump has finally decided to shift towards a more traditional campaign.

The dismissal greatly enhances the power of Paul Manafort, a veteran Republican who was originally hired to prepare for a possible contested convention, but assumed more responsibility as Mr Trump realised he needed more experience.

Mr Manafort, 67, a veteran of several presidential elections, including the 1976 race where he helped Gerald Ford beat Ronald Reagan for the nomination, had been pushing to expand many aspects of the campaign. But he faced resistance from Mr Lewandowski, who had the trust of Mr Trump because of his role in engineering the massive rallies that helped the tycoon win the primaries even though the 42-year-old operative had little national experience.

Mr Trump defended Mr Lewandowski yesterday, but conceded that his campaign needed to change. "We are going in a different direction, because this is now different. The primaries, I ran them very lean, I spent very little money, I won in landslides . . . and Corey was absolutely perfect for that," the tycoon told NBC news.

Mr Manafort, a lobbyist who has known Mr Trump for years because of work his former firm did for the tycoon, has also been pushing to expand fundraising to compete with Mrs Clinton who has a formidable machine that has raised \$238m. Mr Trump has raised \$65m over the campaign, but \$56m of that has come from personal loans. And while he has vowed to use his own money if necessary, some doubt he has sufficient liquid assets to fund a national campaign.

Mr Trump dismissed the May numbers, which paled in comparison with the \$23m Mitt Romney raised in May 2012. However, they reignited concerns among Republicans that he is not moving fast enough to build the infrastructure typically needed to win an election where outreach to the one-third of the electorate who call themselves independents needs expensive grass roots operations and advertising in swing states.

His spending on data operations and other typical campaign expenditures were overshadowed by the \$350,000 he spent on his private airline and the \$423,000 paid to Mar-a-Lago, the luxury resort he owns in Florida where he has held campaign events.

During the primaries, Mr Trump castigated politicians who accept money from big donors. But after he became the de facto nominee, he reversed course and signed a joint fundraising deal with the Republican National Committee. Mr Trump yesterday said he had helped the RNC raise \$12m over the weekend at events in Texas, Arizona and Nevada. "They know they have to step up the fundraising," said one adviser to the Trump campaign who pointed out that the tycoon had recently conducted several joint fundraising events with the RNC. "That is what they have got to do . . . They are hoping for big donors. Part of that is hiring more professional staff."

While Mr Trump may not need to raise as much money as Mrs Clinton due to his ability to generate media exposure, many experts believe he has underestimated the amount of cash needed to win a general election.

"Trump . . . could spend little in the primaries, since he was a new, spectacular phenomenon, and the vote was concentrated among a similar slice of the electorate — conservative Republicans mainly — and was split 17 ways," said Larry Sabato, a politics expert at the University of Virginia.

"The general electorate will be far more diverse, and perhaps 135m will vote. He was a big fish in a small electoral pond, but now he's in the ocean, without the equipment to sustain him."

Democrats
Clinton says billionaire would ‘bankrupt America’

Hillary Clinton yesterday savaged the economic policies and business record of Donald Trump, describing her Republican rival as a ruthless and reckless billionaire who would destroy the US economy, weaken the dollar and line the pockets of Wall Street billionaires.

"We can't let him bankrupt America like we are one of his failed casinos," she told supporters in Columbus, Ohio. "Trump would take us to where we were before the crisis. He will rig the economy for Wall Street again."

A Bloomberg Politics poll last week found that voters believed Mr Trump would be better at creating US jobs than Mrs Clinton. However, the Clinton campaign believes she can win over supporters of Democratic primary opponent Bernie Sanders by linking Mr Trump to the Wall Street bankers responsible for the 2008 crash, while also winning over some fiscally conservative Republicans.

Mrs Clinton noted that Mr Trump's economic proposals had been criticised not just by stalwart progressives such as Senator Elizabeth Warren, but by leading Republicans, including Mitt Romney, the 2012 Republican nominee, and the economic adviser of John McCain, the 2008 Republican candidate.

"He'd give millionaires a \$3tn tax cut," Mrs Clinton declared. "He's giving more away to the 120,000 richest families than he would to help 120 million working Americans." She suggested Mr Trump was declining to release his taxes because he either had not paid them in full, was not as rich as he claimed, or had not given as much to charity as he asserted.

"Donald himself would get a huge tax cut from his plan. But we don't know how much because he won't release his tax returns," she said.

Mr Trump said via Twitter: "I am 'the king of debt'. That has been great for me as a businessman, but is bad for the country. I made a fortune off of debt, will fix US."

Courtney Weaver in Washington

GLOBAL INSIGHT

WASHINGTON

Edward Luce

Workforce dropout rate explains ascent of Republican tycoon

If one economic fact could explain Donald Trump's success it would be the US's declining male labour force participation rate. Fewer than one in six US men without a college degree have jobs, or are even looking for work — a picture far worse than in France and other supposedly sclerotic labour markets. Even including those with college degrees is unflattering. Almost one in eight US men have dropped out of the workforce altogether.

Nor is the picture much rosier for women. Among the club of mainly rich OECD countries, only Italy and Israel have a lower female workforce ratio. Had the labour force stayed at the same level it was before the 2008 recession, the US jobless rate would now be almost double today's rate of 4.7 per cent.

Here is the most vexing thing: almost all the trends still point in the wrong direction. Unless there is a drastic shift in US policy, the participation rate will keep falling.

Each year a higher share of baby boomers is set to retire. Prospects for boosting the intake of immigrants to the US look highly unrealistic — just ask Mr Trump, the presumptive Republican presidential candidate. Budgets for retraining deskilled US workers are stuck at nugatory levels — just a sixth of the OECD average as a share of national income. And the chances of an overhaul to the US penal system, which shuts out millions of former felons who would otherwise be capable of working, look modest.

Since the recession ended in 2009, the US labour force participation rate has fallen from 65.7 per cent to 62.4 per cent. If the economy had been functioning as it should, that number ought to have gone in the other direction, as it has in Britain. Instead, it looks set to head further south in the coming years.

> The more obvious the remedy, the less willing the political system is to adopt it

What, then, is to be done? In his diagnosis of the problem, Jason Furman, head of President Barack Obama's Council of Economic Advisors, sets out a cocktail of prescriptions. None in themselves would be enough to fix the US labour market crisis. But taken together they could make a large dent. Top of the list is a dramatically better system of worker retraining and job market assistance. US community colleges should be much more effective at giving workers relevant skills. At the moment, they suffer from horrific dropout rates. Nearly half of all enrolled students fail to complete their two-year degrees.

Likewise, the US is now a generation behind most rich countries in terms of family and childcare benefits. With just 12 weeks of unpaid leave, maternal (and paternal) rights are little better than nothing. In almost half of US states, the monthly cost of full-time childcare exceeds average housing rental costs. It is little wonder so many pregnant women drop out of work. The same applies to sick leave. The US could also boost its minimum wage, allow non-violent former felons to expunge their criminal records, and adopt a wage insurance system to tide employees through hard times.

Many of the solutions are self-explanatory. Yet there is a gargantuan flaw. As with much else in Washington, the more obvious the remedy, the less willing the political system is to adopt it.

Mr Trump's economic plan is skewed to almost every group other than his core supporters. The more you earn, the bigger the tax windfall under Mr Trump. By contrast, Hillary Clinton, the Democratic candidate, has adopted many of the items on Mr Furman's list. However, there is little in her campaign to inspire confidence that she will have better luck than Mr Obama at persuading Congress to enact them.

The US seems to be stuck in a bad feedback loop. The worse the middle class feels, the more embittered politics becomes — and the less likely it will deliver the obvious fixes. Whomever is able to sever this Gordian knot will be the genius of their age.

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Cruise control Non-subversive Chinese offered trip to Paracels

BEN BLAND — HONG KONG

Are you a Chinese patriot who enjoys cruises and has never engaged in subversion or "spread reactionary thoughts"?

If so your holiday options could be expanding. China's largest state-owned shipping company plans to launch a second cruise route to the disputed Paracel Islands, which are also claimed by Taiwan and Vietnam.

Beijing's accelerating efforts to support its hotly contested claim to almost the entire South China Sea include not just diplomatic lobbying and island building but also tourism and fishing.

Other claimants have been pushing back against this increasingly assertive approach. Vietnam has deepened its relationship with the US, while the Philippines has taken China to a UN arbitration court.

Beijing has intensified its activities around the South China Sea ahead of an expected verdict in the Philippines' case within the next few weeks.

China has refused to recognise the right of the Permanent Court of Arbitration in The Hague to hear the case. However, in recent days a senior Hong Kong lawyer, who is a member of one of the Chinese government's top advisory bodies, has made a submission to the court in the Netherlands questioning its jurisdiction.

The first cruises to the Paracel Islands were launched by a company based on the island of Hainan in 2013.

China Cosco, the nation's largest shipping company, has said it is planning to add its own service from next month on a vessel called the Dream of the South China Sea. "It is practical to stimulate the local economy through development of tourism, logistics and infrastructure facilities," Xu Lirong, Cosco chairman, was quoted as saying by the China Daily, a state-owned newspaper.

> Tourists on the small existing service are encouraged to take part in a flag-raising ceremony

Cruise holidays are increasingly popular with China's fast-growing middle class, but the Paracel route is targeted more at patriots than lovers of luxury on the high seas.

The existing boat used on the route is basic and small, with room for only 400 guests, and the trips to three tiny Chinese-controlled islets offer few activities beyond "playing volleyball, catching crabs and flying a kite".

Tourists, who must all be mainland citizens with no history of subversive activities, are encouraged to take part in a flag-raising ceremony, where they pledge their love for the motherland and the Xisha Islands, as the Paracels are known in Chinese.

Prices for the trip range from a few hundred dollars for a bunk in a dormitory to a few thousand for the best private cabin.

Cosco, which will operate its service in conjunction with a national travel agent, has yet to release schedule or pricing details.

China National Travel Service said in a statement that by launching the service it was "taking an important measure" to fulfil its responsibility as a state-owned company.

Additional reporting by Gloria Cheung

Sunset on the Paracels, known as the Xisha Islands in China — STR/AFP/Getty Images

INTERNATIONAL

Monetary policy

Yellen sounds caution over rate rise expectations

Chair of Federal Reserve proceeds cautiously amid mixed economic indicators

SAM FLEMING — WASHINGTON

Federal Reserve chair Janet Yellen says she will tread carefully as she gauges when to lift short-term interest rates as the central bank assesses whether the economic recovery remains on track and the jobs market is still improving.

In a cautious statement, Ms Yellen told a Senate Committee on Banking she saw "considerable uncertainty" about the US economic outlook, singling out weaker hiring numbers and soft investment as evidence of some of the risks that remain on the horizon.

In the short term the UK's referendum on its membership of the EU could have "significant economic repercussions", she added, while the economy faced longer-term doubts over the likely pace of productivity growth.

Speaking in Brussels, Mario Draghi, the president of the European Central Bank, also warned about fallout from a possible Brexit vote. The ECB was, he said, preparing for "all possible contingencies".

Ms Yellen's words will further damp expectations of a rate rise next month after the Fed's December increase as policymakers weigh a mixed set of economic indicators. Slower jobs growth in May and overseas hazards such as a possible UK exit from the EU prompted the Fed last week to hold policy unchanged as it trimmed back its longer-term interest-rate forecasts.

"Proceeding cautiously in raising the federal funds rate will allow us to keep the monetary support to economic growth in place while we assess whether growth is returning to a moderate pace, whether the labour market will strengthen further and whether inflation will continue to make progress toward our 2 per cent objective," Ms Yellen said in prepared testimony to the Senate Committee.

She added: "The pace of improvement in the labour market appears to have slowed more recently, suggesting that our cautious approach to adjusting monetary policy remains appropriate."

Asked about the impact of the referendum by Richard Shelby, the Republican chair of the Banking Committee, Ms Yellen told the hearing a vote to exit by the UK could usher in a "period of uncertainty" that leads to volatility in financial markets.

This could negatively affect financial conditions and the US economic outlook, although this outcome was by no means certain and that it was something the Fed would be "carefully monitoring", she added.

Ms Yellen said that most analysis suggested the economic consequences for the UK of a Brexit vote would be negative and that it could usher in a period of uncertainty not only for the UK but for European economic integration more broadly.

A slowdown in jobs growth and weak investment point to the downside risk that domestic demand might falter, says Janet Yellen — Robert Galbraith/Reuters

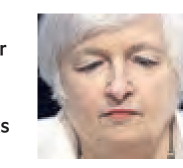
The upshot for financial markets could be a flight to safer assets that could push up the dollar and other so-called haven currencies, she said. Asked whether Brexit could send the US economy into recession, Ms Yellen said "I don't think that is the most likely case," but that the ensuing events would have to be watched carefully.

The Fed has been sending mixed signals this year as to when it might follow up the landmark quarter-point rate increase it pushed through in December. Market turmoil this year has subsided, but it has been followed by a slowdown in jobs growth. Consumer spending has picked up, as have broader growth indicators for the second quarter.

Ms Yellen said she was optimistic about US prospects overall, saying she expected to see further improvements in the jobs market and economy over the next few years. She said she believed the slowdown in jobs growth in May, when just 38,000 jobs were created, down from 123,000 the previous month, would likely prove to be transitory. In addition, there was evidence of a "noticeable step-up" in growth of gross domestic product in the second quarter.

However, given persistent uncertainties about the economy, the Fed chair suggested the central bank should maintain a supportive stance to policy for the time being.

"The latest readings on the labour market and the weak pace of investment illustrate one downside risk — that domestic demand might falter," said Ms Yellen. "Although I am optimistic about the longer-term prospects for the US economy, we cannot rule out the possibility expressed by some prominent economists that the slow productivity growth seen in recent years will continue."



Janet Yellen singled out weaker hiring numbers and soft investment as risks to the economy

The Fed also sees vulnerabilities in overseas economies, with China in particular facing challenges overhauling its growth model. Sluggish global growth means investors can suddenly alter their appetite for risk, leading to sharp swings in markets.

Constitution. Legal challenge

German court backs ECB crisis-fight tool

Programme falls within central bank's mandate to stabilise prices, says ruling

CLAIRE JONES — FRANKFURT

Mario Draghi has been vindicated by Germany's highest court, which ruled in favour of the European Central Bank's most important and controversial weapon to fight financial crises.

Analysts feared a judgment against the ECB from the Constitutional Court in Karlsruhe would have stoked market jitters two days ahead of a crucial vote on whether the UK remains in the EU. Tensions were soothed after the court said the ECB's Outright Monetary Transactions programme was in line with Germany's constitution.

Mr Draghi, ECB president, unveiled the OMT in September 2012, months after he promised the central bank would do "whatever it takes" within its mandate to save the eurozone from collapse. Germany's political and economic establishment was outraged by the OMT's design, which at its core involves a pledge to buy short-term sovereign debt of troubled eurozone economies in potentially unlimited quantities to combat a market panic.

While tensions between the central bank and its critics in Germany will remain long after yesterday's verdict, the court said OMT did not present a "constitutionally relevant threat to the German [parliament's] overall budgetary responsibility".

In a landmark judgment on how far the central bank can go to save the single currency from collapse, the court said the programme was "at least to a large extent monetary [policy]" — meaning it fell within the ECB's mandate to stabilise prices.

The decision clears the last legal hurdle to the deployment of the policy. It also weakens legal challenges against the ECB's quantitative easing programme, under which the eurozone's central bankers are buying €80bn of mostly government bonds each month in an attempt to steer inflation towards their target of just under 2 per cent. The court said the Bundesbank, Germany's central bank, could participate in the OMT programme as long as certain conditions were met. Those conditions make explicit what was implicit in a European Court of Justice decision on the programme last year.

"The Constitutional Court's judgment was quite clever," said Hendrik Haag, a partner at the German law firm Hengeler Mueller. "It's not a direct contradiction to what the ECJ said. But in explicitly binding the Bundesbank to specific conditions, the criteria for OMT is now much clearer."

He added: "There is now a clear recipe [that the ECB must follow] for OMT."

Mr Draghi has never had to use the OMT, in part because of the credibility of the ECB's commitment to buy large amounts of government debt. Eurozone sovereign borrowing costs are now at or close to record lows in many economies, including some of the weaker members of the currency union.

The handling of the case has important repercussions for European law and highlights tensions between courts responsible for upholding national constitutions and the supremacy of the ECJ.

"The entire case has not only brought German opposition against the ECB's non-standard monetary policy measures into court rooms, it has also been a nice illustration of the ongoing struggle and difficulties in Europe and the euro-

> The OMT did not present a constitutional 'threat to the German [parliament's] budgetary responsibility'

zone to delegate powers and responsibility from the national to the European level," said Carsten Brzeski, an economist at the German bank ING-DiBa.

In a first for Karlsruhe, the Constitutional Court in 2014 deferred judgment on the legality of the OMT to the ECJ. Last year, the ECJ backed Mr Draghi and said the OMT was within his central bank's mandate.

Peter Gauweiler, the claimant in the case, attacked Karlsruhe for lacking the courage to oppose the ECJ and "attempting to withdraw from the affair to save face".

"Instead of effectively protecting the European allocation of competencies, the principle of democracy and the budgetary autonomy of the German parliament, the court, while verbally maintaining its aspiration to fend off usurpations of competence by EU bodies, has in reality backed down in the first serious conflict with the ECJ," Mr Gauweiler said. "Today is not a good day for democracy in Europe."

The court did, however, criticise the ECJ's handling of the case, citing concerns over the way facts were established and the judicial review of the ECB's mandate. The ECB's independence meant there was a "notable reduction" in democratic legitimacy for its actions, the court said, adding that this should have led to "restrictive interpretation and to [a] particularly strict judicial review of the [ECB's] mandate".

"This holds all the more true if the principles of democracy and sovereignty of the people are affected — and thereby the constitutional identity of a member state, which the EU is required to respect," the court said.

All stand: judges give their decision in the Karlsruhe court yesterday

Editorial Comment page 8

Cameron: no regrets over poll that threatens premiership

PM insists he will stay on if Leave wins but many Tory MPs are sceptical

LIONEL BARBER AND GEORGE PARKER
LONDON

David Cameron does not, according to his closest friends, "do dark nights of the soul". Which is just as well, given that he has put his country's future in the EU, the unity of his Conservative party and his own career on the line in a referendum that he admits will be "very close".

"Nobody knows what's going to happen," he concedes, sipping coffee from an "In" mug in his Downing Street study. But he insists he is sleeping all right ahead of tomorrow's vote and fighting to the end. "I hope I look lively and alert," he says. "I'm working bloody hard."

Mr Cameron insists he has no regrets about calling the EU referendum back in 2013, although in reality his hand was forced by increasingly restive Tory MPs anxiously looking over their shoulder at Nigel Farage's UK Independence party.

"In the end you've got to ask and answer this question," he tells the Financial Times in an interview. "Europe has changed a lot since the 1970s. If not now, we would have to have this in the future."

Nor does the prime minister regret not delaying the vote until later in his second term. "I wanted to get on with it because there was always going to be a Brexit chill," he says, referring to economic uncertainty over the result.

Mr Cameron insists he will stay on as prime minister if he loses tomorrow although many Tory MPs share the view of Ken Clarke, former Tory chancellor, that "he wouldn't last 30 seconds" if the country voted Leave.

He says the result is "in the lap of the people" but unsurprisingly wants to focus on what happens after a Remain vote, when he hopes to quickly reassert his authority both at Westminster and in Europe.

"As far as I'm concerned this referendum should settle the matter," he says in a warning to Eurosceptic Tory MPs to accept the verdict and not to carry on fighting the same war. "I believe it will one way or another be decisive. Britain will not want to go through this again. On the other hand if we vote to leave, this really is irreversible."

In the event of a Remain vote he will try to bolster his position, shaken by months of Tory infighting on Europe, with a promise that he will be generous to the losing side. "Political parties are teams, broad churches," he says, mixing his metaphors. "You have to put your best players on the pitch, you have to bring parties together. It has been very hard and very tough. But referendums are always difficult."

He has a "life chances strategy" — a series of policies to boost social mobility — ready to roll out and is planning a vote to renew the Trident nuclear deterrent that will unite the Tory party. His message to his MPs is: "Get on with it."

Mr Cameron will also travel to Brussels next Tuesday for an EU summit to examine the referendum's entrails. He claims a Remain vote will make him a "strengthened" figure in Europe, better able to promote a British agenda.

He says he will push for new trade deals and new co-operation in fighting terrorism — Britain holds the EU presidency next year — as well as for wider economic reform.

"Reform didn't end on June 23," he says. "We are the reformers. Reform ends if we leave, not just for us but also our friends in Europe who want our voice heard in Europe."

If Mr Cameron keeps Britain in the EU, he may still be greeted warily in Brussels. Some fear that others will demand their own special deals and hold their own referendums. If he loses, the atmosphere will be glacial.

The prime minister insists a Brexit vote would not lead to the unravelling of the EU. "I don't think, if we were to leave, we'd suddenly see Denmark or the Netherlands doing the same thing," he says.

But he adds: "I think us leaving would have an enormous and bad effect on the rest of the EU."

The EU would respond by deepening integration and becoming more of a "political project", he says. "It would not only be damaging ourselves but also the kind of Europe we want."

Should the prime minister not take some blame for the fact that British voters are so unconvinced about the merits of EU membership?

There are some in Brussels who wish Mr Cameron had started countering the problem earlier. Martin Selmayr, chief of staff to the European Commission president, Jean-Claude Juncker, joked recently that Mr Cameron's speeches made him "a contender for the Charlemagne Prize". Has not his Euro-enthusiasm come a bit late in the day?

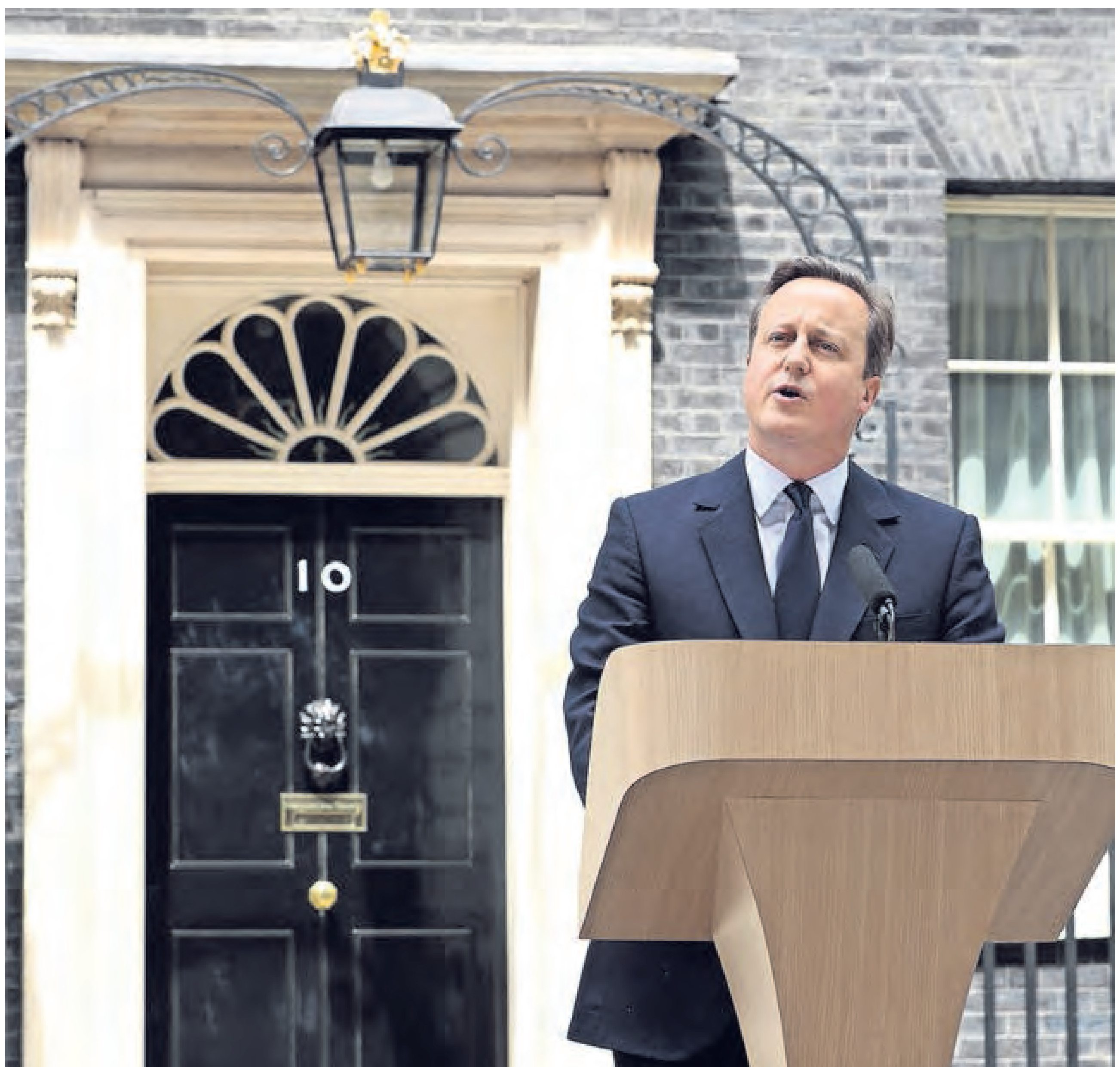
"I don't accept that," he says. "I would say that my position has been the same throughout my political life. I always said the best outcome was for Britain to remain part of a reformed European Union. There have been no deathbed conversions."

But his view of the EU has changed during his time as prime minister in one respect: he now sees that the idea of 28 countries working together — for example imposing sanctions on Russia — is an important part of Britain's security.

"Nato is the cornerstone of our security but the EU has a growing and important and worthwhile role in exchanging information on terrorism, criminals and borders," he says.

Mr Cameron's team admits to being nervous, but one ally insisted the prime minister would prevail. "His legacy will be that he pulled the economy back from the brink, kept Scotland in the union and kept Britain in the EU. Just you wait and see."

Martin Wolf/John Kay page 9



"If not now, we would have to have this [vote] in the future . . . I wanted to get on with it because there was always going to be a Brexit chill"

"We are the reformers. Reform ends if we leave, not just for us but also our friends in Europe who want our voice heard in Europe"

"I always said the best outcome was for Britain to remain part of a reformed EU. There have been no deathbed conversions"

Final plea: David Cameron puts his case for Britain remaining in the EU in an address outside No 10 in London yesterday
Dan Kitwood/Getty Images

Poll of polls
What you need to know with one day until the referendum
ft.com/brexit

West Midlands. **Division**

Cathedral city sings praises of both sides as passions run high

Worcester is split but most people say campaign has failed to shift them from their views

JIM PICKARD — LONDON

Worcester is known as "the faithful city", according to a sign outside the local museum, which also cautions "but its residents don't always know where their loyalties lie".

The West Midlands cathedral city is a bellwether, ricocheting between the Labour and Conservative parties in recent general elections. In the 1990s, it gave birth to Worcester Woman, the emblematic voter who switched to Tony Blair's Labour party.

It is also deeply divided on whether the UK's future lies inside or outside the EU ahead of tomorrow's historic In-Out referendum. According to poll research, Worcester is one of the most divided areas in the country on the issue.

But as is the case with Britain as a whole, the gulf between the two camps is a deep one. Passions run high on both sides; most people say weeks of campaigning have failed to shift them from their views. Few say they are undecided.

"It's about 50:50, inevitably people who want to leave are slightly more vocal but the overall feeling seems to be split down the middle," says Robin Walker, Conservative MP for the city, who favours remaining.

The split is largely along demographic lines. Older people on lower incomes and without a university education are more likely to vote to leave a bloc that is widely seen as costing too much money and constraining Britain's ability to govern itself. "Britain isn't Britain any more; people are telling us what to do," says June Gummery, a pensioner. "We want to take control."

By contrast, more affluent people are more favourable — if not notably enthusiastic — about the EU project and its contribution to prosperity.

Jim McCummiskey, a chemicals executive who has lived in Austria and Sweden, says: "It is to my mind better to be part of something big rather than stay outside and crap on about it."

Worcester itself is described by Mr Walker as a "real microcosm of society".

There is the prosperous city, with employers such as Bosch, Worcester university and Yamazaki Mazak, the Japanese manufacturer. Nearby is Warndon, with council housing estates from the 1940s and 1950s that support the opposition Labour party.

Then there are Warndon Villages, built in the 1990s and favoured by people who are upwardly mobile but still care about public services. Mr Walker describes such residents as "former Tories who voted for Blair in 1997 and we subsequently won back".

Outside the vast Tesco supermarket in Warndon Villages the same message is repeated time and again. People want to exit the EU. While they may have supported Prime Minister David Cameron in the past, they have few reservations about voting Leave, even if he resigns as a result.

"Everyone I'm speaking to is Out. I think we should run our own country ourselves," says Sarah Miller, a 47-year-old National Health Service worker who voted Conservative last year. Her husband has been advised by bosses at his manufacturing plant to vote In, but they are ignoring the plea.

On paper Phil Mieczynski would look like an In voter: he voted Green last summer, he used to work at Land Rover, his father was Polish. But he says: "I just don't want to be ruled by a foreign power."

Back in the city centre landlord Ted Marshall has held a series of debates at the Cap 'n' Gown pub featuring well-known politicians. He says there have been "passionate but amiable" debates to a full house. Elsewhere, however, tensions have been running high: an argument at a local bookmakers nearly turned into a fist fight a few days ago.

Philip Jarrard, a sales executive, speaks for many when he says he is sick of "scaremongering" from the ruling classes. His "gut feeling" is that Britain would be better off out.

Vote Leave's widely discredited figure for the cost of EU membership — which it puts at £350m a week — is hitting home: the number is mentioned countless times.

People living in the villages outside Worcester are particularly anxious about immigration — even though migrants are not highly visible in the area. "Immigration here is horrendous, there's nothing for the kids, it affects everyone, NHS, policing, schools," says a female charity worker in Warndon. "You haven't seen many foreigners here? You need to open your eyes."

> 'Britain isn't Britain any more; people are telling us what to do'
> June Gummery, pensioner

Many workers in the city have business ties with the rest of the EU and do not want to see the bloc fractured.

One pharmaceuticals manager argues that his business would suffer without eastern European migrants because they are the only people prepared to work bank holidays and night shifts.

Tour guide Alan Jones, who works on the continent, has misgivings about the EU but says: "We are better off trying to do something about it rather than being out." Meanwhile, residents voice overwhelming scepticism about the two campaigns and their barrage of statistics.

Tomorrow, referendum day, the cathedral is hosting a talk on Faith in the Public Sphere. However, in Worcester there is little faith in politicians: "The campaign has been absolutely terrible on both sides, it has been all about the fear factor," says Mr Jones. "Nobody is putting the positive case."

All ears: regulars at the Cap 'n' Gown pub listen to In and Out speakers

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Civil service

Brexit to pose 'all-consuming' task for Whitehall with new trade talks at risk from lack of skills

ALEX BARKER — BRUSSELS
ALAN BEATTIE — LONDON

Whitehall is preparing for the biggest bureaucratic upheaval for a generation in the event of a Leave vote, as the engine of British government is reconfigured and centralised to cope with an EU exit.

While informal planning is kept to a tight circle, officials at the top of the civil service are looking at options to create a Brexit super-ministry or dedicated trade department to manage an EU divorce and its consequences, according to aides familiar with the discussions.

Brexit poses a daunting test for Whitehall compounded by the sheer volume of work needed to review and replace EU laws and by the severe skills shortages on what would be crucially important trade negotiations.

"It is the biggest administrative and legislative challenge that government has faced that I can remember, possibly since 1945," said Sir Simon Fraser, former permanent secretary at the Foreign Office. "It would be a pretty all-consuming task for many Whitehall departments," he added.

Senior officials see untangling 40-years of EU membership as something akin to a legal "revolution" that would dominate the Queen's Speech for the next five to 10 years. This includes deciding what to keep, amend or reject from thousands of EU-related laws on the UK statute book and some 12,295 regulations that have direct effect and would cease to apply the moment the UK leaves.

Britain would at the same time be negotiating an EU divorce to end old obligations, and refounding its future trade terms with the bloc and the world. This may involve simultaneous trade talks with scores of non-EU countries to reconfirm or revise preferential access that expires after Brexit and around 100 or more mutual recognition agreements in areas such as financial services.

Most worrying for Whitehall planners is how to rebuild trade expertise, which has withered since 1973 when Britain empowered the European Commission to negotiate on its behalf. Estimates range from a dozen to 20 individuals in Whitehall with anything resembling direct experience. Roberto Azevedo, the head of the World Trade Organisation, told the FT earlier this month that in 20 years of trade negotiations he had never dealt with a UK government official.

"There is absolutely no capacity to do it and it needs to be built up," said David Claydon, a former economic adviser in the Foreign Office now at Macro Advisory Partners. "That you start all of these negotiations with capacity that is not just weak or old, but basically non-existent is like trying to bail an Olympic swimming pool with a thimble. It would be unbelievably difficult and entirely unrealistic."

Options being considered to fill the skills gap include hiring outside law firms or consultancies — as the Treasury did during the 2008 banking crisis — and seeking to recruit experienced trade negotiators from the US, Europe or Asia. Some informal approaches have already been made.

Many countries use private sector lawyers to advise them during negotiations and undertake the "legal scrub" — making sure the final agreement is watertight. But some of the best law firms might find it disadvantageous to accept the UK government and British companies as clients if they are already acting for foreign governments and businesses.

There are perhaps 100 British Eurocrats with experience of working in Brussels on trade. But most, at this stage, seem reluctant to leave Brussels, or to accept a pay cut when lucrative private sector options are available.

"They'll find some clever people in Whitehall if they have a good hunt around," said one British official with high-level experience as a trade negotiator. "But when you start cold you don't have the contacts in countries. That matters. People are amazed by how thick and important the relationships are in the trade world."

A former European trade negotiator compared the skills of current UK officials, who oversee EU trade policy rather than negotiate deals, as the difference between a football manager and a striker. "Managing a team is not the same as being able to score goals," he said.

Any Whitehall overhaul will in part depend on political direction — something that may take several months to become clear in the post-Brexit vote turmoil within the government.

Regulator precaution
Banks stockpile cash to cope with Out vote rush

High-street banks are stockpiling cash for Friday under orders of the financial regulator, in case a vote to leave the EU prompts mass withdrawals.

With the memory of customers queueing outside Northern Rock branches at the start of the financial crisis still haunting UK authorities, the Bank of England's Prudential Regulation Authority has kept in contact with the UK's largest banks, including Lloyds Banking Group and the Royal Bank of Scotland, to make sure all cash machines and banking websites are operational and that they are prepared for the aftermath of a Brexit vote in tomorrow's referendum.

Banks' IT systems and infrastructure have also come under the scrutiny of the PRA, with lenders being quizzed about how well prepared they are.

The BoE has said that uncertainty about the EU referendum is the biggest risk to the UK's short-term financial stability, and "possibly" the biggest risk to international markets. With the polls still too close to call, George Soros — who made a fortune betting against the pound in 1992 when the UK crashed out of the European Exchange Rate Mechanism — joined the chorus of financiers forecasting a plunge in sterling's value if there was a vote to leave the EU.

Making sure the UK's banks have enough cash to cope with withdrawals around the time of major events is standard practice for the PRA. It took similar steps ahead of the Scottish independence referendum in 2014.

Giles Williams, at consultancy KPMG, said that banks are being "extremely careful" about undertaking technology updates, putting off non-essential work. But RBS, which was fined £56m by the PRA and Financial Conduct Authority after an IT upgrade went wrong in 2012, is overhauling a large part of its ATM network.

Caroline Binham, Emma Dunkley, Martin Arnold and Sarah Gordon

INTERNATIONAL

Mariano Rajoy. Leadership challenge

Spain's great survivor faces post-poll test

Centre of attention: 57% of those who vote for his Popular party want Mariano Rajoy, 61, to retire if other parties demand it — Pablo Blazquez Dominguez/Getty Images

Premier is tipped to hang on to power even as most of his own side ponder succession plans

TOBIAS BUCK — MADRID

Everyone knows that Mariano Rajoy can survive defeat. The question after Sunday will be: can he survive victory?

With just four days to go until Spain's repeat general election, the veteran prime minister is about to confront an unusual challenge. Polls agree that his centre-right Popular party will again emerge as the strongest bloc in parliament, with about 30 per cent of the vote and approximately 120 seats in the 350-seat parliament.

Mr Rajoy's closest rival is likely to be the far-left Unidos Podemos alliance, with no more than 90 seats.

Yet even that margin, if it materialises on Sunday night, will not be enough to stamp out a slow-burning debate over the 61-year-old Galician's political future. The problem is clear: both his prospective coalition partners, the centre-left Socialists and the centrist Ciudadanos party, insist they will never back a government led by him.

Albert Rivera, leader of Ciudadanos, has made Mr Rajoy's retirement a plank of his campaign, calling repeatedly and openly for his dismissal, while stressing that his party could back the PP under a different leader. "Rajoy does not represent regeneration," he said last week.

"If he continues to lead the government, nothing will change. Corruption will continue and populism will grow. This country can only change for the better if it has a new prime minister."

Mr Rajoy and other PP leaders have brushed aside any suggestion that a change of leadership is on the cards. But the question is being asked all the same, both inside and outside the party.

"There is a sense [inside the PP] that it will be difficult to form a government with Rajoy. That is plain analysis, not a critique of Rajoy," says Gabriel Elorriaga, a former PP lawmaker and campaign manager who retired from parliament in January.

"People realise that other political forces don't want to support Rajoy under any circumstances."

Some are convinced that Mr Rajoy's record as a great survivor — he lost two general elections in a row before becoming prime minister in 2011 — is finally coming to an end. "Rajoy is dead. He just hasn't been buried yet," says José Antonio Zarzalejos, a columnist and author who used to edit the conservative ABC daily.

Mr Rajoy needs not just the backing of Ciudadanos but also the abstention of deputies from the Socialist party (PSOE) to become prime minister, says Mr Zarzalejos. "The PSOE will only abstain if the PP gives them something in return. And that something is Rajoy."

Worryingly for the prime minister, many PP supporters seem none too concerned by the prospect of his retirement. A poll by Metroscopia asked voters whether Mr Rajoy should make way for another leader to allow the formation of a new PP-led government. Three out of four respondents said Yes. Remarkably 57 per cent of PP voters said they wanted Mr Rajoy to retire if that was the demand made by other parties.

"Rajoy gives nothing to the PP . . . People are voting for the brand, not the candidate," says Mr Zarzalejos, pointing out that the prime minister's personal ratings have consistently been worse than the showing of the PP itself.

Any push to remove Mr Rajoy is likely to run into severe obstacles. The PP does not have a tradition of ousting its leaders, and certainly not when they have three election victories under their belt.

"The PP is a very calm, orderly and hierarchical party," says Mr Elorriaga. "It is not clear what would be the internal mechanism to produce an alternative candidate . . . This is not Westminster."

A second line of defence for Mr Rajoy is the lack of an obvious successor. The two most talked-about alternatives are Soraya Sáenz de Santamaría, deputy prime minister, and Pablo Casado, deputy party leader. Both, however, have drawbacks.

Ms Sáenz de Santamaría is not popular among the party rank-and-file, who regard her as a technocrat, not a politician. Mr Casado, in contrast, is widely seen as the PP's brightest star — clever, articulate and deeply grounded in the party. But he is only 35, lacks executive experience and may strike party leaders as too young for the top job.

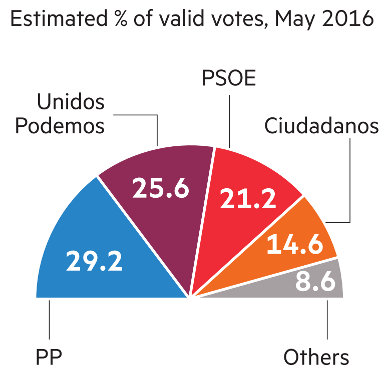
Pablo Simón, a professor of politics at Madrid's Carlos III university, says much will depend on the outcome of Sunday's poll. If the PP emerges with fewer votes and seats than it did last December, the pressure on Mr Rajoy from inside the party is certain to rise.

Even then, however, the leverage of Ciudadanos and the Socialists may be limited, if only because neither are remotely keen to back an alternative government led by the far left. "There is no real alternative," says Prof Simón. "So I would expect him to try to hang on until the end."

Mr Rajoy has made clear that he has no intention to retire from the political battlefield. He told a Spanish newspaper: "If I get 30 per cent of the vote and I am supposed to step down, what should the other [party leaders] do?"

Spain's voting intentions

Estimated % of valid votes, May 2016



Not totalling to 100% as blanks not included
Source: Centro de Investigaciones Sociológicas

Big screen

Rogue trader Kerviel recast as French folk hero

MICHAEL STOTHARD — PARIS

In one of the early scenes in *L'Outsider*, the new film about rogue trader Jérôme Kerviel which is released today, his boss is explaining to him how to game the comically lax controls at their French employer Société Générale.

Hungover after a night out with strippers, Mr Kerviel had made a mistake and lost the bank €100,000. His boss tells him to relax, and shows him a way to create false trades that will hide a risky position, enabling them to quickly win the money back. "It's a classic trick," he says.

This is the moment in the film where Mr Kerviel, whose unauthorised trading cost SocGen €4.9bn in 2008, gets a taste for forgery. And everyone is in on it. His immediate superiors teach him the technique, the ones just above turn a blind eye.

This is exactly the version of the Kerviel affair that SocGen, after eight years of legal and public relations battles, did not want to get another airing.

It is the version that has long been touted by Mr Kerviel, and vigorously denied by SocGen, which says he was a "financial terrorist" acting alone.

The film supports the view by many on the left in France that Mr Kerviel, son of a seaside hairdresser and a metalwork teacher, was simply a naive victim of big finance, enticed by a corrupt system that pushed him to break the rules.

Mr Kerviel is to many an anti-establishment folk hero, with his own song and cartoon character. Some on the left have compared him to Alfred Dreyfus, a Jewish army officer and victim of anti-Semitism who was unjustly charged with treason in the 19th century.

His support is symbolic of France's complex relationship with high finance, which even President François Hollande declared as his "enemy" in 2012. Unlike rogue traders in the UK or the US, Kerviel is seen by much of the country as the wronged party.

"The French have had a unique reaction to the Kerviel affair," says Michel Wieviorka, a French sociologist. "He is not a whistleblower, he is not a very sympathetic character, but he is seen by many as a victim of a malfunctioning financial system."

The film, directed by Christophe Barratier, comes at an unwelcome time for SocGen which, after eight years of victories in the courts against Mr Kerviel, has also seen the legal tides turn against it over the past fortnight.

First, Mr Kerviel was awarded more than €400,000 in compensation from SocGen for unfair dismissal after a Paris employment tribunal said that despite building trading positions that were nearly twice the value of the bank, he was fired "without real and serious cause".

Rubbing salt in the wound, the judge in the tribunal, Hugues Cambournac, said he supported Mr Kerviel's side of the story that his bosses knew about his fake trades and turned a blind eye. "Société Générale can't pretend it was not aware of Jérôme Kerviel's fake operations," he said.

Then last week saw similar claims made in a more significant case going through the French courts, which met to determine how much of the €4.9bn loss suffered by SocGen in 2008 should Mr Kerviel have to pay in damages.

When he was initially sentenced to three years in prison in 2010 he was ordered to repay the €4.9bn lost by SocGen. On appeal in 2014, while the courts upheld the criminal conviction, they called for another civil trial on the level of damages to be paid.

Jean-Marie d'Huy, the state assistant prosecutor in the damages case, last Friday said Mr Kerviel should not have to pay any damages because of the lax controls that were in place at the time. He said that the bank was responsible for a "voluntary slackening of the rules with a view towards short-term gain" and that this was "sufficient to wipe out their right to any damages" from Mr Kerviel.

A final ruling will be given by three judges at the Versailles court of appeals later this year.

But, in France, the opinion of the public prosecutor leading the trial carries significant weight. SocGen said it was "surprised" by the prosecutor's position. The outcome of this case could have consequences beyond public relations for SocGen. Christian Eckert, budget minister, said that losing the civil case could mean it will be asked to pay back some of the €2.2bn tax deduction won by SocGen when the losses were announced in 2008.

SocGen points out that still no state court has ruled against it. Lengthy criminal cases in 2010 and 2014 found evidence of poor controls, for which SocGen paid a €4m fine, but no conspiracy at the bank where superiors secretly knew about Mr Kerviel's unauthorised trades.

"All those who claim that the bank knew, or couldn't have 'not known', were not directly involved in the events," said SocGen on the case, which encourages people to read the court verdicts which say that Mr Kerviel acted alone.

The bank added that, regardless of the verdict in the damages trial, there is no chance that the €2.2bn tax benefit could be reviewed, as Mr Kerviel has been found guilty by the criminal courts.

Camera roll: a scene in 'L'Outsider', a film about Jérôme Kerviel

FAA rules

White House delivers clarity on commercial use of drones

BARNEY JOPSON — WASHINGTON
LESLIE HOOK — LONDON

The White House has unveiled the US's first national rules on drones as it seeks to encourage their use as cost-saving business tools while preventing them from enabling unwanted snooping.

Rules announced yesterday formalise the commercial use of drones at a time when sectors from construction to farming are yearning for guidance on how they can be deployed.

France and Canada have become drone-friendly testing grounds, and the US rules, while welcomed by industry groups, were more restrictive than many had hoped.

Manufacturers, users and the White House have championed unmanned aircraft for inspecting bridges and pipelines, monitoring crops and waterways, and even making movies.

The rules, written by the Federal Aviation Administration, will replace the current ad hoc process based on official exemptions.

A pro-drone group, the Association for Unmanned Vehicle Systems International (Auvsi), forecasts that more than 100,000 US jobs will be created and more than $82bn generated for the economy over a decade if drones are fully integrated into national airspace.

But as it unveiled the rules the White House said: "Expanded use of drones must be done responsibly, with clear rules of the road that ensure strong safety and privacy protections."

Drone operation will be banned over people and at night, with pilots required to keep unmanned aircraft in sight.

Companies welcomed the clarity and certainty. "This is a watershed moment in how advanced technology can improve lives," said Brendan Schulman, vice-president of policy and legal affairs at DJI, which makes drones.

"The [unmanned aerial system] rule allows companies, farmers, researchers and rescue services alike to explore how drones can let them do more at a lower cost and a lower risk."

In a victory for Google and Amazon, the FAA will grant waivers to companies to fly drones under the restricted conditions such as beyond visual sight or at night.

Brian Wynne, Auvsi president, said the streamlined waiver process was promising. "Just with these fairly restrictive base-level regulations, we have unlocked a tremendous amount of value," he said, citing opportunities for infrastructure inspection. "It tells the folks who've been investing that we've got a green [light] — we are good to go."

Drone operators will need to go through the same security vetting as pilots. They will also be asked to follow best practices for privacy and transparency published last month by the National Telecommunications and Information Administration.

The Consumer Technology Association expects drone sales to exceed 2.8m units this year, up 150 per cent from last year.

Stimulus

China calls on state groups to boost infrastructure spending

GABRIEL WILDAU — SHANGHAI

China's slowing investment, which hit a 16-year low in May, has forced Beijing to press the country's lumbering state groups into service, demanding they ramp up spending in an attempt to avert an economic hard landing.

The move is a setback for Beijing's efforts to make the country's 160,000 state-owned enterprises more like their private sector peers. SOEs, which account for about a fifth of economic output, trail far behind private companies in terms of profitability. Despite their inefficiency, SOEs' share of overall fixed-asset investment reached 35.4 per cent in May, the highest since 2011, official data showed last week.

"SOEs are useful at the moment but it can't go on like this forever," said Larry Hu, head of China economics at Macquarie Securities in Hong Kong. "As returns get lower . . . SOEs lose usefulness as tools of macroeconomic policy and become a burden on the state."

As recently as May 2015, investment by private companies was growing faster than at state groups. But the trends diverged in the second half of the year. With clouds gathering over the economy, private companies withdrew support. In response, the government unleashed a wave of fiscal spending and loose credit to fund SOE investment in roads, railways, sewers and slum redevelopment.

The risk is this strategy adds to SOEs' high debt load while saddling them with more low-performing assets. Industrial SOEs generated a return on assets of 2.9 per cent in 2015 compared with 10.3 per cent for private industrial enterprises.

"The role that SOEs have now been assigned . . . points to a future of higher government debt (as the implicit liabilities of SOEs are taken on by the government) and lower interest rates (to allow SOEs to continue their low-return investments)," Andrew Batson at Gavekal Dragonomics wrote on Monday.

Initial SOE reform proposals focused on improving corporate governance to make management more profit-orientated and less subject to political interference, after the so-called "Temasek model" named after Singapore's sovereign wealth fund. But if successful, state groups would become less effective as agents of economic stimulus.

That helps explain why the focus of SOE reform has shifted to megamergers of state groups. These are partly to boost competitiveness through economies of scale. But the government is also forcing stronger groups to absorb weaker rivals as an alternative to bankruptcies, lay-offs and factory closures. That leaves underlying issues of overcapacity and weak profitability unaddressed.

"A lot of infrastructure construction is done by local government investment companies. They're not sensitive to rates of returns and local government support gives them an advantage in obtaining finance," said Liang Hong, chief economist at China International Capital Corp.

10.3%	2.9%
Return on assets generated by private industrial companies in 2015	Return on assets produced by industrial state groups that year

Beijing's intention to maintain SOEs as instruments of policy also underlies the recent emphasis on strengthening Communist party control of state groups by increasing the role of internal party committees.

Despite drawbacks, use of SOEs for infrastructure investment may be the best option to prevent a sharp slowdown that China's leadership fears could spark social and financial instability.

The current approach differs from the stimulus launched in 2008 in response to the global financial crisis, which focused on credit expansion to fund construction of factories. That included an investment boom by private companies, which account for 88 per cent of all manufacturing investment, according to China International Capital Corp. By contrast, 72 per cent of infrastructure investment comes from SOEs.

"Strong state-led infrastructure investment does not aggravate overcapacity," Harrison Hu, chief China economist at Royal Bank of Scotland in Singapore, wrote last week. "By creating final demand, it helps digest the inventory of industrial goods, as well as buffering overall investment and GDP growth. "

Mr Hu believes that sliding private and manufacturing investment suggests the country has been on the right track of cutting excess capacity.

Many analysts believe the best hope for dealing with inefficient SOEs is not to change them from the inside but to shrink their relative share of the economy. That means opening up protected industries to competition from private business and reducing the advantages SOEs enjoy, especially access to finance.

Additional reporting by Ma Nan

INTERNATIONAL

Productivity doldrums

WTO warns against global rise in protectionism

G20 nations urged not to continue with tariff creep but to lower trade barriers

SHAWN DONNAN — WORLD TRADE EDITOR

The surge in antitrade rhetoric worldwide is being accompanied by a rise in the introduction of protectionist measures by leading economies, the World Trade Organisation has warned.

The WTO said in a report yesterday that between mid-October of last year and mid-May of this year G20 economies had introduced protectionist trade measures at the fastest pace seen since the 2008 financial crisis, rolling out the equivalent of five each week.

That trend coincided with a slowdown in global trade now in its fifth year. Moreover, it was contributing to the persistent slow growth in the global economy, the WTO said, and the fact it was coinciding with an increase in protectionist political rhetoric ought to be worrying.

"At this point what we don't need is the slamming of the door on trade. Quite the contrary, we need to get trade going," Roberto Azevêdo, the WTO's director-general, said.

G20 leaders pledged in the wake of the financial crisis not to repeat the mistakes of the 1930s and erect the sort of trade barriers that are now widely believed to have contributed to making the Depression worse.

That pledge has largely held. But in recent years the WTO and others have begun warning more forcefully of a creeping protectionism that some economists believe has reached a point where, though it remains far less substantial than that seen in the 1930s, is contributing to keeping the world in the economic doldrums.

In a blog post on Monday, IMF economists argued that countries needed to lower trade barriers to address stalling productivity. IMF economists said the study showed that the elimination of remaining tariffs would result in productivity gains from 0.3 per cent in Japan to 7 per cent in South Korea.

Since 2008, according to the WTO, G20 economies have introduced 1,583 trade restricting measures and removed only 387. Between mid-October of 2015 and mid-May of this year they introduced 145 protectionist measures — a monthly average of just under 21, the worst seen since the WTO began monitoring G20 economies in 2009.

Mr Azevêdo said the world was still a long way from a wave of protectionism akin to that seen in the 1930s. Then, the erection of trade barriers contributed to the wiping out of more than half of global trade, he said. The measures documented by the WTO since the 2008 crisis affect 5 per cent of global imports.

The latest trade restricting actions documented by the WTO include esoteric moves such as the introduction of checks at the border with Kazakhstan to ensure that trucks crossing use Russia's satellite navigation system rather than GPS. Also listed are export restrictions on various products and the introduction of new quotas and tariffs, such as Argentina's restoration in November of a 2 per cent duty on all imports of capital goods produced outside the Mercosur trade area.

But the vast majority of the actions — 89 of the 145 — came in the form of anti-dumping and other cases aimed at alleged unfair behaviour by trading partners. Of those, more than 40 were aimed at the trade in steel and other metals.

The global steel sector has been disrupted by a collapse in prices blamed on China and its production of more of the metal than it can use. This has led to a growing number of anti-dumping cases in the US and EU and a backlash against Beijing's attempt to be recognised as a market economy within the WTO.

Unctad alert
Prospects dim for FDI flows

Long-term cross-border investments in factories and other projects globally are set to fall 10 to 15 per cent this year as companies delay decisions because of political uncertainty, says the UN.

Foreign direct investment flows had reached $1.8tn last year, their highest since the financial crisis, the UN Conference on Trade and Development reported yesterday in its World Investment Report.

That was good news for a global economy stuck in a low-growth path that has been making policymakers anxious. But the prospects for this year had dimmed, Unctad warned. A predicted 10 to 15 per cent fall reflected "the fragility of the global economy", it said, with economists pointing to a weak start to the year.

According to figures shared with the Financial Times, the value of cross-border mergers and acquisitions fell 21 per cent in the first quarter while the value of greenfield projects was down 3.5 per cent.

The change is particularly stark in developed economies, which had a bumper 2015, with an almost doubling of flows to the US, Europe and other advanced economies, and 55 per cent of global FDI flows. But in the first four months of this year, the value of greenfield projects announced in developed economies was 23.4 per cent lower while cross-border M&A activity was down 18.6 per cent.

Unctad expects FDI flows to grow modestly in 2017 and not to surpass last year's $1.8tn global total until 2018. *Shawn Donnan*

Take off

Modi hopes investment easing will see India fly

AMY KAZMIN AND SIMON MUNDY

$55bn Amount of FDI India attracted in the year to the end of March, up from $36bn two years earlier

0 Number of Indian airports that are majority-owned by a foreign company

$5m Amount foreign companies have invested in defence since April 2000

India will now permit up to 100% foreign ownership of domestic airlines, but limits remain on stakes held by foreign airlines

Amit Dave/Reuters

Narendra Modi claims his relaxation on foreign direct investment, announced this week, makes India "the most open economy in the world for FDI".

India attracted $55bn in the year to the end of March, up from $36bn two years earlier, the final year of the previous Congress-led government, according to New Delhi. But that still trails the likes of China, which claims $127bn and $119bn respectively for the same 12-month periods.

Yet most changes announced by the prime minister and his government — in important sectors including aviation, retail, defence and pharmaceuticals — are about cutting red tape to improve process rather than substance, despite the ostensible removal of caps on foreign ownership. Here is a sector-by-sector breakdown of the changes.

Aviation

India will now permit up to 100 per cent foreign ownership of domestic airlines, up from the previous 49 per cent. But there is a crucial caveat: the previous restriction remains in place for foreign airlines. So while foreign funds, individuals and non-airline companies can invest in a domestic Indian airline already 49 per cent owned by a foreign carrier, the likes of AirAsia and Singapore Airlines are still barred from increasing stakes in their Indian arms, AirAsia India and Vistara.

Since foreign airlines are the only big investors with the appetite for the sector, take-up will probably be as paltry as it was last time India opened its aviation sector to FDI, before 2013, though sovereign wealth funds may be tempted.

Airports may be more attractive: under the new rules, foreign buyers need not seek approval to own more than 74 per cent. India has no airports majority-owned by a foreign company.

Defence

Full foreign ownership of all arms-making projects will be allowed, subject to government approval, rather than just "state of the art" ones. Enabling the likes of Boeing, which has announced a venture with Tata Advanced Systems, to make frames for aircraft.

AK Antony, former defence minister, has railed against the move, saying it means India's defence sector will be "thrown mostly into the hands of Nato-American defence manufacturers".

But the liberalisation fits with Mr Modi's drive to use defence manufacturing as a key part of his "Make in India" drive: he plans to ringfence $100bn of arms deals over the ensuing decade for locally manufactured products, while urging foreign companies to participate in the manufacturing drive. It appears to need a boost: foreign companies have invested a meagre $5m in defence since April 2000, according to India's Department of Industrial Policy & Promotion.

Pharmaceuticals

Foreign companies will now be able to buy up to 74 per cent of an existing Indian drugmaker without any government approval. That beats the current regime but is more restrictive than the period from 2008 to 2011, when dealmaking in the sector was at its peak.

New Delhi required government approval after several foreign takeovers of Indian pharma companies from 2008 to 2010. Many subsequent transactions — including Mylan's 2013 $1.6bn takeover of vaccine and injectable maker Agila — suffered long delays, as the government was torn by fierce internal debates over allowing these sales.

Single-brand retail

New Delhi rounded off its FDI announcement with an ambiguously worded sentence on retail, which has prompted conflicting claims on the implications for would-be shopkeepers.

The existing rules state that all single-brand retailers must source at least 30 per cent of their goods by value from suppliers in India, although the government might grant an exemption — with no time limit — for sellers of advanced technology. That has led to uncertainty for Apple, which has minimal inputs from India but applied in January to open retail stores. Its success hinges on whether its products are deemed "cutting edge". The government says it will "relax local sourcing norms up to three years" and introduce a "relaxed sourcing regime for another five years" for entities selling "cutting edge" products.

The wording has led to confusion. Some observers understand the initial three-year exemption from sourcing rules to apply to all companies, allowing Apple to open retail stores immediately. Others interpret it more narrowly to refer only to purveyors of cutting-edge technology, and the government is still deliberating whether Apple meets that definition. Several government officials were unable to clarify the matter.

Under any interpretation, the new regime represents a tightening of the rules on retailers of cutting-edge products, who can now be exempted from sourcing requirements only for a maximum of eight years.

Military links

Australian voters' fears over Trump weigh on US defence ties

JAMIE SMYTH — SYDNEY

Public support in Australia for its military alliance with the US has fallen to its lowest level in almost a decade amid concerns over the prospect of a Donald Trump presidency, a survey shows.

The Lowy Institute's annual poll also shows Australians are evenly divided on whether the country's most important foreign relationship is with the US or China, reflecting a surge in trade and personal connections with the Asian economic powerhouse.

Michael Fullilove, the think-tank's director, said the results were remarkable. Australian soldiers have fought alongside Americans in every major conflict during the 20th and 21st centuries.

"It says something remarkable about Donald Trump that in the event of his victory, nearly five in 10 Australians would seek to move away from Washington and nearly six in 10 say they would be less likely to support Australia taking part in military actions in concert with Washington," he said.

The results of the survey will alarm Washington, which is concerned Mr Trump's divisive language and isolationist foreign policy stance will alienate allies and undermine US influence in the world. This concern is shared by US allies in the Asia Pacific region, where China's territorial claims in the South China Sea and East China Sea have led to mounting tension.

Australia has a deep defence alliance with Washington and is part of the "five eyes" intelligence alliance, with the US, UK, New Zealand and Canada.

The proportion of Australians who say the US-Australia alliance is either very or fairly important for Australia's security has dropped nine points to 71 per cent since 2015. Public attitudes to China have warmed over recent years with the country overtaking Japan in 2015 to become Australia's best friend in Asia. Meanwhile, Australians are evenly split on whether the country's relationship with China or the US is more important, with 43 per cent apiece.

However, the survey shows Australians' attitudes towards Beijing are complex, with 79 per cent of respondents troubled by China's military activities in the region and 86 per cent concerned about its human rights record. Almost three-quarters of those polled said they favoured Canberra conducting freedom of navigation operations in the contested South China Sea.

Canberra has so far refrained from undertaking formal freedom of navigation flights within 12 nautical miles of disputed islands in the region.

Yesterday, Julie Bishop, foreign minister, signalled that a Liberal-led government would be unlikely to change its position on freedom of navigation operations.

A senior member of the opposition Labor party has suggested Canberra should undertake such a mission if the party wins the July 2 election.

Opposition to foreign investment in farmland has strengthened over the past year, rising to 87 per cent, up 6 percentage points since 2015. There have been several politically fraught agricultural deals involving Chinese buyers, including the proposed purchase of S Kidman & Co by a consortium led by Shanghai Pengxin Group. Canberra has blocked the transaction.

Terrorism. Orlando aftermath

US urges creatives to take social media battle to Isis

'Madison Valleywood' seeks to reach tech-savvy youth while not sounding like propaganda

KARA SCANNELL — NEW YORK

Social media have played a role in nearly every Isis-inspired terrorism case brought against an American citizen, just as they helped radicalise Omar Mateen, who killed 49 people and injured 53 at a gay nightclub in Orlando last week, say US authorities.

The terrorist group is using kittens, violence and western sex scandals in high-quality online videos to galvanise those seeking a sense of belonging.

James Comey, director of the Federal Bureau of Investigation, said he was "highly confident" that Mateen had been inspired in part by such material.

Barack Obama, US president, echoed this last Tuesday, saying the "unstable young man" appeared to have been influenced by "extremist information and propaganda" online. Acknowledging the challenge of battling Isis at home, the president added: "Their propaganda, their videos, their postings are pervasive and more easily accessible than we want. This individual appears to have absorbed some of it."

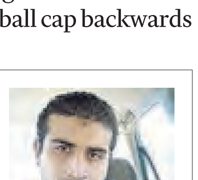
Alongside military strikes and sanctions, the administration is ramping up efforts to counter terrorists' online efforts, and enlisting Madison Avenue, Silicon Valley and Hollywood in its search for effective anti-Isis messages.

This year the US Department of Justice and other government agencies gathered advertising, film and technology executives to launch the Madison Valleywood initiative, which aims to prod the private sector to take steps against an enemy that is targeting fringe Americans with slick videos.

Another goal was to teach community leaders how to make their counter-campaigns go viral. The state department has produced and distributed videos.

Isis's recruitment efforts are well produced, with fast music, graphics and other imagery, according to Scott Talan, who teaches communication at American University in Washington DC.

"They use empathy and emotions — for example, showing a handsome soldier wearing his baseball cap backwards visiting injured people in a hospital," he said. "Isis videos are also using targeted messages to reach specific groups, such as single women, to come to the Middle East to marry fighters."



Omar Mateen, who killed 49 people at a gay nightclub, is said to have 'absorbed' Isis material online

Hackers have tried to thwart Isis propaganda, bombarding Isis tweets with images of pornography.

One attendee at the Madison Valleywood launch said implicit pressure had been put on tech companies to alter terms of service and disable accounts linked to terrorism. Since Edward Snowden's revelations about the mass collection of online data, the sector has been hesitant to work closely with government, although Twitter announced in February that it had suspended more than 125,000 Isis-related accounts.

The FBI has said it has more than 900 active investigations in all 50 US states into potential homegrown terrorists. Last year the US announced that it had charged more than 56 people over Isis-related offences, out of 88 between March 2014 and March 2016, according to George Washington University's extremism programme.

An analysis by the Center on National Security at Fordham Law School found that nearly 80 per cent of individuals charged in Isis-inspired cases in the US were American citizens. Their average age was 26 and nearly all cases included an allegation that they had been inspired by social media.

"Consistent with the fact that this is a social media-driven threat here, in over 50 per cent of the cases the defendants are 25 years or younger, and in over a third of the cases they are 21 years or younger," said John Carlin, chief of DoJ's national security division and one of the leaders of the outreach programme.

The challenge for creatives in the Madison Valleywood project is to reach this tech-savvy generation in a way that does not sound like US government propaganda — and to evolve along with Isis as it moves across platforms.

Last year Mr Comey warned lawmakers of the ease with which Isis reaches vulnerable people.

"They're pushing this through Twitter," he testified in a congressional hearing. "It's no longer the case that someone who is troubled needs to go find this propaganda and this motivation. It buzzes in their pocket.

"So there is a device, almost a devil on their shoulder all day long, saying, 'Kill, kill, kill, kill'."

The country used to build more homes than it needed. Now it is not building enough. As it continues to recover from financial collapse why is it proving so hard for the former Celtic Tiger to house its people?

By Vincent Boland

Too many houses in the wrong place

Room with a view: Shane Bradshaw looks out over Adamstown below; only 15 per cent of a planned 10,000 homes have been built in the Dublin suburb. Protests over the crisis are growing (below right) — Paulo Nunes dos Santos; Artur Widak/NurPhoto via Getty Images

Speed read

Peak property At its height in 2006 Ireland was building 90,000 houses per year. That figure is now 13,000

Blame game The housing shortage is blamed on poor planning, misguided incentives and demographic changes

On the streets The crisis has seen homelessness increase especially, but not exclusively, in urban areas

When Shane and Maria Bradshaw bought their four-bedroom house in Adamstown in the western suburbs of Dublin in 2009, they were attracted to the neighbourhood in part by an alluring sales brochure. It showed a newly planned town — the first in Ireland for 50 years — with a projected population of about 25,000, within easy commuting distance of the city and a high street lined with shops, restaurants and a cinema.

Seven years later, that glossy brochure offers a picture not so much of a suburban dream as a national nightmare. As Ireland grapples with the legacy of its financial crisis, the country's housebuilding industry, which fuelled much of the unsustainable later period of its Celtic Tiger economic boom, has ground to a halt. Only 15 per cent of Adamstown's planned 10,000 homes have been built. Its 3,000 or so residents are surrounded by fenced-off fields where houses were by now supposed to be. The train station linking the town to central Dublin is eerily underused. And the Bradshaws are still waiting for their high street.

Mr Bradshaw remains optimistic. "We're not asking for any extras, just what they promised us," says the 32-year-old financial analyst.

Adamstown is one of many housing developments that stand unfinished, or unstarted, as the Irish survey their post-crisis landscape.

A decade ago, Ireland was building many more homes than its demographic trends warranted: 90,000 a year at the peak of its building boom in 2006. Now, through a mix of policy paralysis, a broken construction industry, a scarcity of development finance, and changing home-ownership and demographic trends, it is facing the most severe housing crisis in its modern history. Last year fewer than 13,000 new homes were built, while demand is running at 25,000 a year, the majority of it in the capital Dublin.

> 'Banks want to see balance sheets before they will lend for property development, and most Irish developers do not have balance sheets'

In a twist worthy of the Irish comic writer Flann O'Brien, the enduring legacy of a financial crash caused by a debt-fuelled boom in home construction is an acute shortage of homes. Moreover, it is happening in a country that has 230,000 vacant homes. Some are in "ghost estates" in far-flung towns where few Irish people now wish to live — if they ever did. Even some of the half-finished developments can feel ghostly. As Karl Whitney, who has written a book about post-crisis Dublin, observes, though these areas are connected to the city by trains, "that makes them feel even more isolated. They have an almost frontier-town atmosphere."

Bigger than Brexit

Ireland is not the only EU country facing a housing shortage. The UK is also not building enough homes and there are shortages in cities such as Berlin. The problem in Ireland is, however, more acute and poses a major challenge to the minority centre-right government.

"It is an absolute priority for the government," says Simon Coveney, the housing minister, who describes the problem as a national emergency. So seriously do officials take the issue that, in an assessment this month of the strategic risks facing Ireland, housing was mentioned 16 times. That compares to 13 mentions for Brexit — the prospect that the UK might leave the EU after tomorrow's referendum — and three for terrorism.

The alarm is understandable: the housing shortage poses a direct threat to Ireland's strong but unevenly distributed economic recovery. Its economy has been the fastest-growing in the eurozone for the past two years; in 2015 it expanded by nearly 8 per cent. Yet there are warnings that the country's attraction for foreign direct investment, the main driver of growth, is being undermined. The fear is that the US technology companies that have made Dublin a key outpost of Silicon Valley, providing thousands of well-paid jobs, will invest elsewhere if they cannot promise their employees the high-quality accommodation that is so scarce in Irish cities but is readily available elsewhere in Europe.

The Irish have always been good at building houses. Now, their puzzling inability to put one brick on top of another has exposed longstanding flaws in Ireland's approach to construction, infrastructure, housing, planning and property ownership.

Experts agree that the housing shortage is the logical culmination of years of poor planning and perverse incentives to build in places where there was never likely to be demand. They also question the wisdom of encouraging an owner-occupier housing model that may no longer be suitable to meet the changing demands of a society that is modernising more rapidly than official Ireland appears to appreciate.

"It's a huge systemic failure," says Ronan Lyons, an academic at Dublin's Trinity College who has studied generations of Irish housing policy.

A visible consequence of the crisis is a rise in homelessness as some families find themselves unable to pay their mortgages or rent. A report by a cross-party committee of MPs last week says there are over 1,000 homeless families in Ireland today, compared with 400 at the beginning of last year.

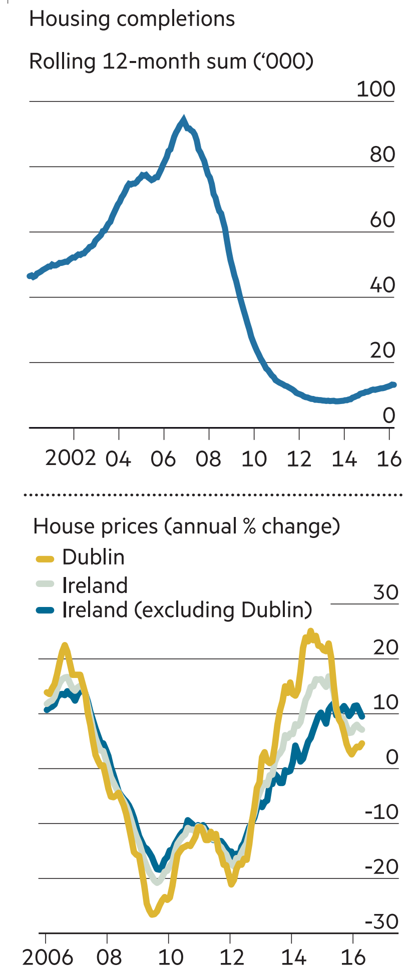
The Simon Communities, which lobby for homeless people, told parliament's housing committee that "it is impacting on every region and community across the country". Yet the diffuse nature of the problem is, if anything, making the policy response more difficult, in part because the crisis is so unexpected.

When Ireland was tumbling into recession after the 2008 collapse of its banking and construction industries, the fear was that the legacy of the bust would be the return of forced emigration: young Irish people fleeing the country, retracing the steps of hundreds of thousands of their ancestors in search of better opportunities abroad. Or it would be high long-term unemployment, as the construction and financial industries laid off tens of thousands.

These fears have not materialised. Nominal Irish gross domestic product now exceeds the highest level it reached during the Celtic Tiger era. Annual output is now a shade over €200bn. Emigration is slowing or reversing. Unemployment is also falling, from a peak of 15 per cent at the height of the crisis to 8.4 per cent now. Yet these positive developments are occurring almost in a parallel country with the housing crisis providing the greatest example of the unevenly distributed fruits of recovery.

Property matters

Housing completions



FT graphic Sources: Thomson Reuters Datastream

Housing mismatch

Addressing Ireland's housing problem will not be easy. For starters, it is not as simple as placing the estimated 90,000 families on national waiting lists for social housing into vacant homes. According to the Housing Agency, a government body created in 2010, only about a fifth of empty properties are in Dublin and many of those are uninhabitable. Yet this is where demand is greatest: Prof Lyons says the population of Dublin will rise by 100,000 households in the decade to 2020, yet only 15,000 homes have been built in the city since 2010. Much of the remainder are in sparsely populated counties such as Leitrim, 175km north-west of Dublin. The glut there is the result of tax incentives lavished on the construction industry during the mid-2000s to keep property transactions, on which tax revenues were heavily dependent, ticking over.

This mismatch between oversupply in sparsely populated areas and a lack of it in urban centres "shows how broken our housing policy is", says Conor Skehan, the Housing Agency's chairman.

Fixing it will challenge the way the Irish construction industry has operated for generations. Ireland is an expensive place to build. According to the Society of Chartered Surveyors Ireland, it costs €330,000 to provide a standard family home, a figure that appears to have changed little despite the deep recession. Construction costs account for less than half of that figure with the rest made up of fees, levies, site acquisition, finance costs, tax and profit margin.

This has created an affordability problem: following restrictions on mortgage lending introduced by the central bank last year to prick a developing price bubble, even if new housing supply was freely available it is becoming increasingly expensive, especially for first-time buyers, most of whom can borrow no more than €300,000.

It is becoming clear that Ireland may need to build a different, more affordable and higher quality product than it has offered up to now. The property industry's standard offering for generations has been a three-bedroom semi-detached house in a suburban estate.

But Mr Skehan says the greatest demand now is for one- and two-person housing units. The days of building 500-unit semi-detached estates are over.

"Only a fifth of the new demand that we will see for Irish homes will be for your standard three-bed semi, and builders haven't realised that yet," he says. "They are like Rip Van Winkle. They have woken up [post-crisis], but they haven't realised that the world has changed."

Banking on property

The industry faces two further hurdles. One is the changed relationship between banks and property developers. Irish property development has traditionally been dominated by tycoons or family enterprises using debt to finance their construction. That is no longer possible as banks nurse their crisis-era property-loan losses. Banks now demand that builders put up at least 40 per cent of the development cost in the form of equity.

"Banks want to see balance sheets now before they will lend for property development, and most Irish developers do not have balance sheets," says Brian Moran, senior managing director at Hines Real Estate Ireland, part of the US property company.

The other handicap, construction industry experts say, is that the sector's operational capacity has been badly affected by the collapse. Tom Dunne, head of the school of surveying and construction management at the Dublin Institute of Technology, says the industry has become "disestablished": its supply chain is broken and its economies of scale have vanished.

Tom Parlon, director-general of the Construction Industry Federation, does not gloss over the industry's problems. Yet he says it is recovering and employment levels are rising, though they are currently only about half the 274,000 reached at the peak in 2007. It is recruiting skilled labour back from Canada and Australia, and looking to train the 60,000 unemployed construction workers still in Ireland.

Experts say it could take a decade to resolve Ireland's housing shortage. Yet there are signs that well-capitalised developers are getting their shovels ready. In Adamstown, activity is due to resume later this year.

Michael Stanley, chief executive of Cairn Homes, which is developing 1,200 new properties in the town, says they should be ready by next year, "and they will be affordable", since much of the infrastructure is already in place.

"Ireland is a great country for housebuilding," Mr Stanley says. "We were building 25,000 new homes in the 1970s and 1980s, when the economy was a quarter of what it is now. It will take time but we can do the same again."

Mr Bradshaw says he has no regrets about moving to Adamstown, so long as it is completed. "If they finish what they promised us," he says, "Adamstown will be a great place to live."

> 'We were building 25,000 new homes in the 1970s and 1980s, when the economy was a quarter of what it is now . . . We can do it again'

Suburbs
International developers bloom in Cherrywood

It has sometimes been said, perhaps even by the writer himself, that if Dublin is ever destroyed it could be rebuilt from the pages of Ulysses, James Joyce's epic novel about 24 hours in the life of the city. In fact, if Dublin ever has to be rebuilt, it is more likely to look like Cherrywood.

For now, Cherrywood is a collection of green fields and dual carriageways in south Dublin, with a vista across to the Wicklow hills. In a few years, if everything goes right for Brian Moran, it will be Dublin's newest and arguably its most modern suburb, linked to the city on the Luas tram network.

Mr Moran runs the Irish operation of Hines, a US property development company. It is the lead developer for the 400-acre Cherrywood site, where it plans to build nearly 4,000 houses and apartments and a town centre over the next five years. Planners, politicians and residents agree that developments such as this one are essential to resolving Dublin's housing problem.

Hines is one of several international property developers who have entered the Irish market in the past few years. They have acquired prime real estate assets once owned by Irish developers who have either gone out of business or remain embedded in Nama, the bad bank created to sort out the non-performing property loans that brought down the Irish banking system.

In the process, they are transforming the way future housing supply in Ireland will be financed and delivered — with more equity and less debt. "There is a lot of institutional money coming in, and less of the debt/developer model. What needs to be built in Ireland is way beyond the capacity of Irish banks to fund it," says Mr Moran.

They have other advantages over their less well-financed Irish peers, including buying materials abroad.

FINANCIAL TIMES
'Without fear and without favour'
WEDNESDAY 22 JUNE 2016

Germany's judges give the ECB a grudging nod

The Karlsruhe court should allow flexibility in monetary policy

Mario Draghi, president of the European Central Bank, promised to do "whatever it takes" to save the euro in July 2012. He might not have anticipated that the legal arguments would still be rumbling on nearly four years later over a flagship ECB rescue programme that has never been used.

At issue is the "Outright Monetary Transactions" (OMT) facility, which gave the ECB the ability to buy government bonds to stop a sovereign debt crisis. As it happens, the very creation of the OMT had such a powerful effect on restoring confidence and compressing credit spreads in peripheral economies that it has never been activated.

The legality of the programme was nonetheless challenged by class-action lawsuits brought by German plaintiffs concerned that the ECB was exceeding its authority and in effect directly financing national budgets. Last year, the European Court of Justice rejected that argument. The German constitutional court in Karlsruhe, which had referred the case to the ECJ in the first place, yesterday agreed that the OMT did not necessarily violate EU treaties or threaten the German parliament's right to decide on its budget.

However, the matter does not end there. Those twin rulings, in particular the pointed criticisms the Karlsruhe court made of the ECJ, underline a flaw in the euro. The considerable tension between the ECB on the one side and the member states on the other is mirrored in the uneasy relationship between the ECJ, which interprets EU law, and national courts that defend their own country's constitutions.

Although Karlsruhe essentially backed the ECJ's ruling, its concurrence was grudging and conditional. It criticised the ECJ for accepting at face value the argument that the OMT was a monetary policy programme which did not transgress into fiscal policy. It also said the ECJ needed to accept a stricter standard of judicial review of programmes such as the OMT that, it argued, affect "the constitutional identity of a member state" and the principles of democracy and sovereignty.

As it turned out, the ECB ended up relying on quantitative easing (QE) rather than OMT to stimulate the economy. Though some say QE also crosses the boundary between monetary and fiscal policy, it is harder to argue that it violates EU rules.

But should the OMT ever be needed in the future — and more generally if more power is centralised in the eurozone — tension between the Karlsruhe court and the ECJ could prove a serious constraint on effective economic policy. Thus far, Karlsruhe has generally contented itself with issuing warnings about the future conduct of policy rather than attempting directly to strike down policies as contrary to the German Basic Law, or constitution. But this in itself may be enough to retard the development of a fiscal union or other forms of central governance necessary to make the single currency work in the long run.

To a large extent, the EU remains a confederation of member states rather than a single polity. In some areas such as the single market in services, where policymaking can proceed slowly and with some powers retained at national level, this system at least functions, if not brilliantly. With monetary policy, where central banks often need to move swiftly and with certainty about the tools at their disposal, dispersed judicial authority creates confusion.

No one doubts the Karlsruhe court has the right to rule about the constitutionality of EU law as it applies to Germany. But it must take into account the need for predictability and continuity in the conduct of monetary policy across the eurozone as a whole.

Bahrain crackdown fans the sectarian flames

Appeasement is no answer to the brutal suppression of civil liberties

This week's move by the authorities in Bahrain to strip the country's most prominent Shia cleric, Sheikh Isa Qassim, of his citizenship on the grounds that he was serving foreign interests is a dangerous provocation. It is certain to inflame sectarian tension in the region and spur a backlash of protest at home. It also appears to signal an end to years of half-baked gestures by the Sunni al-Khalifa dynasty towards building a freer society in which the majority Shia population would be more fairly represented and enjoy greater economic opportunity.

Bahrain, which hosts the US fifth fleet, is a decadent autocracy that Philip Hammond, Britain's foreign secretary, this year said was "travelling in the right direction" on human rights and political reforms. That was not true then. It looks even less so now.

As part of a clampdown on political adversaries launched last month, the authorities have suspended the main Shia opposition party, Al Wefaq, extended a prison term for its leader, Sheikh Ali Salman, prevented activists from attending a meeting of the UN Human Rights Council in Geneva, and forced prominent dissident, Zainab al Khawaja, into exile. Human rights champion Nabeel Rajab has also been taken back into custody, where he joins a long list of prisoners of conscience who have been silenced by arrest. Sheikh Isa Qassim is one of 250 Bahrainis to have been stripped recently of their right to citizenship.

After years of brutal suppression, opposition demands for change were actually flagging and there has been no elevated threat to the regime. So it is unclear what has prompted these latest actions, which together constitute the most significant assault on civil society and the moderate opposition since Saudi troops crossed into Bahrain in 2011 to help crush protests inspired by the Arab spring. Since then, the regime has at times launched attempts at a peaceful solution and made promises of political reform. But Bahrain's allies in London and Washington cannot with honesty speak now of progress. To do so smacks of appeasement.

It would also suggest a wider return to the status quo ante, when the west supported dictatorships in the region, wrongly assuming that they would guarantee stability. Given how readily frustration boils over into violence, this is a short-sighted approach to the Middle East today. It is also precarious, given the risk of a wider conflagration as sectarian divisions deepen and rivalry between Shia Iran and Saudi Arabia, the main supporter of the Bahrain monarchy, intensifies.

The risk of radicalising Bahrain's Shia population is evident. As the window of expression closes and opposition figures are locked up, the scope for moderation narrows.

Predictably, Iran, which Bahrain has long accused of meddling in its internal affairs, has waded in. The commander of the Revolutionary Guard has warned the royal family in Manama that they risk provoking armed resistance.

The disturbing turn of events threaten Bahrain's long-term stability. That should worry Washington and London. The UK wants to avoid jeopardising a recent deal for the expansion of an existing naval base that is being financed by the Bahraini government. American officials have also long argued that a policy of engagement tempers hardliners within the regime and encourages reform. Clearly this is not the case.

Washington should reimpose the ban on arms sales to Bahrain lifted last year. The UK should follow suit. Mere statements of concern are deeply unconvincing. The time has come for tougher measures.

Letters

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Include daytime telephone number and full address
Corrections: corrections@ft.com

Trade will suffer from a squeeze on migration

Sir, Most economists agree that one of the most profound economic impacts of a Brexit would be on trade. Nevertheless, previous reporting and analyses of the cost of a Brexit to the UK economy in terms of trade have underestimated the disruptive impact because they have overlooked the trade-reducing effect of a squeeze on migration.

A Brexit would imply looser economic integration between the UK and EU. In addition to the trade barriers that would arise from leaving the single market, and possible negative trade policy effects, reduced migration could hamper the UK's foreign trade.

In addition to the large number of immigrants residing in the UK, the number of British people living abroad amounts to approximately 5.5m. Other EU countries host a substantial share of British expatriates.

Numerous academic studies have demonstrated that migration facilitates trade. Both immigrants and emigrants contribute to building commercial bridges between their country of birth and their country of residence. They provide companies with market intelligence and access to networks.

The issue of migration in the Brexit discussion has focused on what migration means for the welfare system of the UK, security, and the overall economic influence of migration on the labour market, as well as public finances. However, a squeeze on migration could also negatively impact UK access to foreign and dynamic markets. This means that a Brexit could disrupt trade more than previously feared.

Dr Andreas Hatzigeorgiou
Research Fellow, Ratio Institute, and Chief Economist, Stockholm Chamber of Commerce, Sweden
Dr Magnus Lodefalk
Research Fellow in Economics, Örebro University School of Business, Sweden

Referendum has been good for business and unions

Sir, One of the more positive features of the referendum has been the consensus between business and unions on the case for being in the EU as a vehicle for inward investment. The UK has many niche advantages. The great clubs of central London, the famous golf courses such as Gleneagles and polo clubs like Guards and Cowdray are reasons in themselves for outsiders to put plant, equipment and money into the UK. And the being part of the EU's single market and being a policymaker in that process magnifies those advantages and hence UK sovereignty.

I hope the consensus between unions and business can be developed further after the EU referendum whatever the result. An example is the imperatives of infrastructure. The Swiss have built the Gotthard Tunnel, a vital artery between northern and southern Europe. We in the UK need a rail tunnel between both parts of our United Kingdom so that UK passengers and goods can board a train at Belfast destined directly for its continental counterparts. The Victorians had such visions. We in the 21st century need to play catch-up.

John Barstow
Pulborough, W Sussex, UK
Member, Usdaw Executive Council
(writing in a personal capacity)

Who could lead the UK post-Brexit? Sturgeon

Sir, Should the Brexit vote succeed it does not commit the British government to leaving the EU. David Cameron promised he would be guided by the outcome but it is unlikely that he would remain prime minister after a leave vote. The anti-Europe faction in the Conservative party would insist that he step down but it is by no means evident that they have support to elect one of their own, especially someone like Boris Johnson. A deadlocked Tory party could lead to an election but would not resolve the question of who would lead that party in an election. Is there any alternative?

The strategic way out of this deadlock is a short-term national government held together by the desire of coalition members to remain in the EU. It might be composed of pro-Europe Tories, most of Labour, the Lib Dems, Greens, and Scottish Nationalists. The coalition strategy would be to negotiate some further fig leaves from the EU and hold a second referendum. A No vote in the first referendum would, in all likelihood, have rapid and negative across-the-board economic consequences; only the expected drop in house prices will be welcomed by any significant segment of the population.

Within six months to a year, British public opinion may well view membership of the EU in a new light.

Who could lead such a national government? Certainly not Mr Cameron or Labour leader Jeremy Corbyn. The former is anathema to anti-Europe Tories and to members of every other party. The latter does not have the support of a majority of Labour MPs. The obvious candidate is Nicola Sturgeon. She is clearly the best and most widely respected politician in the country. She is unequivocally pro-EU, and from a region that will presumably have returned the highest pro-Europe vote. She is a Scottish Nationalist committed to independence so cannot have any pretension of leadership at Westminster in a subsequent election. She has considerable credibility in Europe, making it more likely that she will succeed in gaining the necessary concessions to justify a second referendum and bring about a positive vote. Some may think it contradictory that a Scottish Nationalist would become British prime minister but she has a ready reply, especially to Scots. It is much better for an independent Scotland within the EU to have as its neighbour a Britain also within the EU.

A vote to remain would make this scenario academic, but it is essential to think about how to respond to a Brexit victory.

Richard Ned Lebow
Professor of International Political Theory, Department of War Studies, King's College London, UK

'Trump can't even make Trump great again'

Another vehicle like Trump and Le Pen

Sir, Everything that you wrote in "Britain should vote to stay in the European Union" (editorial, June 16) is true but, in a broader sense, irrelevant. You seem to have missed the fact that Brexit has become a vehicle (like Donald Trump and Marine Le Pen) for venting the anger of people who have been left behind by the new economic order. When large numbers of people cannot answer affirmatively to the questions: "Are you better off now than you were 20 years ago?" and "Do you think your children will live better than you have?", change is destined to come.

The old liberal world order is dying because the cost-benefit ratio for the average person in the western world is now negative. Telling your readers that the vote must be Remain will do nothing to alter this calculus.

Guy Wroble
Denver, CO, US

Sir, After dispiriting weeks of EU argument, trading speculative statistics, incipient xenophobia (what will discourage migration most), and insinuations of bad faith, our politicians need to listen to a footballer.

David Beckham has said all that needs to be said on the matter of in or out of Europe: "For our children and their children we should be facing the problems of the world together and not alone." Our politicians have 24 hours to urge this truth on the electorate.

Geoffrey Lang
London WC1, UK

Sir, Gillian Tett should review the principle of elegant variation, usually judged to be a fault by good writers. If she writes "financial geeks" in one paragraph, she should not write "those financial nerds" in the next when she is clearly referring to the same group of people ("Give geeks their say on Brexit", June 17). If one means the same thing, one should use the same word.

C Earl Ramsey
Little Rock, AR, US
Emeritus Professor of English, University of Arkansas

Sir, After Brexit what will be next? Living in Houston we wouldn't be surprised if it is Texit!

Maarten van Hasselt
Houston, TX, US

Sir, For the first time in my life, as a gay man, I am "out" but I am "in"!

Mark Peaker
Hong Kong

Give workers' leaders their proper designations

Sir, A front-page teaser, headline and article about Philippe Martinez in your US edition of June 17 repeatedly describes him as a "union boss". Mr Martinez is the secretary-general of the French union Confédération Générale du Travail.

Elsewhere in this same edition, you describe the heads of the Swiss, Japanese and US central banks as "chairman", "governor," and "chair" respectively; the former head of Microsoft is a "founder"; the head of a $16.5bn Turkish conglomerate, founded by her family, is referred to as its "chairperson"; one Jorge Mario Bergoglio is referred to as "Pope Francis"; and the WPP head who received a £70m pay package is referred to as that company's "chief executive".

Of these, Mr Martinez is the only one who is democratically chosen — at least by some group of people more inclusive than a conclave — but he is the only one you refer to as a "boss".

At some point in the middle of the past century, the financial press began referring to the elected leaders of workers as "bosses", while referring to actual bosses by their proper designations. I suggest you change the practice.

John Lacny
Bloomington, IN, US

EVs will put oil majors into permanent decline

Sir, You report that Volkswagen plans to sell between 2m and 3m electric vehicles by 2025 ("Müller maps new direction for VW", June 16). You don't mention that an arithmetic consequence is that this will put the oil price below $30 a barrel and the oil majors into permanent decline.

The arithmetic is simple. Volkswagen has a 14 per cent global market share. If, as seems likely, its competitors follow its lead and all the plans come off, then electric vehicle sales will be around 18m units in 2025. If sales build linearly to this level, the electric vehicle fleet will be 90m units or about 9 per cent of the global light vehicle fleet by then. This fleet currently consumes about 50m barrels of oil a day, so by 2025 electric vehicles may displace 4.5m barrels a day and rising.

The past two years have shown the price consequences of oil supply exceeding demand. It is surely time for the large investors in the oil majors to wake up and demand management plans for dealing with the energy and technology transition that is threatening to overtake them.

Howard Covington
London SW7, UK

Higher education is where people learn how to think

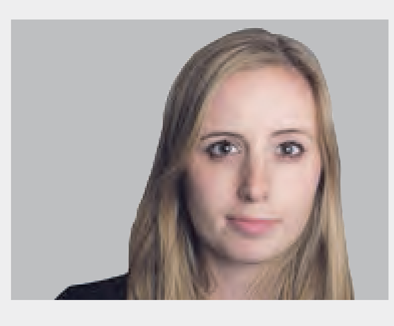
Sir, When I read that Tamara Ingram, the leader of J Walter Thompson wants to favour "talents" over high education for the sake of "diversity" I got very concerned ("Ad chief urges Madison Avenue to seek out 'street savvy' creative talent", June 20). Higher education is where people learn how to "think". What does Ms Ingram know and I don't here? If I were a client of J Walter Thompson, I would be very worried.

Serge Desprat
Prague, Czech Republic

Seven thousand anonymous words have fired up millions

Notebook

by Courtney Weaver



A young woman stands naked in a hospital room as nurses hold up rulers to measure the abrasions on her body. One by one they work to remove the pine needles from her hair — enough to fill an entire bag. Slowly the facts of the night are revealed to her: she had been found lying unconscious on the ground next to a dumpster while a stranger penetrated her, a scene that only ended when two passing cyclists called the police, tackling the perpetrator when he tried to run.

It is a scene from the most searing piece of writing to come out of the US this year — not a novel, or an essay, but the 7,000-word closing statement of the assault's survivor at the trial of her assailant, Brock Turner, a Stanford University swimmer.

The woman, who remains anonymous, shared her statement with BuzzFeed this month after Turner was given a six-month jail sentence, three months of which are likely to be probation, despite being found guilty of three charges of sexual assault — which carry a prison sentence of up to 14 years. Explaining why he had handed out a lighter than expected sentence, Judge Aaron Persky said he worried about the "severe impact" that a longer one would have on Turner's future.

Instead, Mr Persky has cast both Turner and himself further into the limelight in a case that could end up being transformative in the effort to prevent sexual assault on campus, in much the way that the campaign group Mothers Against Drunk Driving helped to reduce alcohol-related fatalities in the US.

One in five American women will be sexually assaulted in their lifetime, according to the Center for Disease Control, while a Washington Post-Kaiser Family Foundation survey this month found that 20 per cent of female undergraduates (2011-2015) had been sexually assaulted either by physical force or while incapacitated. The US Department of Justice says two in three sexual assaults go unreported.

These statistics are not new. Yet it is hard to overstate how swiftly public opinion and awareness towards sexual assault has shifted.

When I was a student at Stanford less than a decade ago, sexual assault awareness was largely limited to formal events, such as Take Back The Night marches. There were no widespread conversations about consent, and sexual assault was largely limited to a narrow textbook definition. It is hard to imagine today's Stanford rape case having the same resonance then that it has had now.

Since BuzzFeed posted the survivor's letter on June 3, her words have been read by more than 16.5m people and covered by every major US news outlet.

Thirty members of Congress have vowed to read the letter aloud on the floor of the House of Representatives, in an attempt to crack down on campus sexual assault. Joe Biden, vice-president, wrote an open letter to the survivor. "I don't know your name," he wrote, "but your words are seared on my soul." The outrage has been stoked by the jarring contrast between the young woman's letter and Turner's testimony and letters from his friends and family. Turner blamed the events on peer pressure to drink alcohol, party and be promiscuous. "One decision has the potential to change your entire life," he told the court. In character witness statements, his father lamented that his son no longer enjoyed eating steak or his favourite snacks.

For many critics of the trial's outcome, their words rang hollow — as did Judge Persky's sentence. More than 1m people have signed an online petition demanding Mr Persky be recalled; others have noted that Mr Persky was a Stanford student and star university athlete, making him more likely to sympathise with the defendant, they claim.

While many focus their anger on the judge or Turner, it is important to remember the potential for good this case could bring. Until MADD took off in the 1980s few believed an advocacy group could effect change against drunk driving. "Drunk driving was the only socially acceptable form of homicide," as Candace Lightner, MADD's founder, put it.

Ultimately, MADD's success lay in getting the American public to sympathise with the victim. One would hope the Stanford assault case could have a similar effect.

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Comment

EU referendum: a national vote with global consequences

Free British business to trade with the world

OPINION

Daniel Hannan

The central fact of our age is the rise of what we still think of as the "developing world". In the past decade the economies of countries such as China, India and Ethiopia have doubled in size, but the eurozone's gross domestic product, incredibly, has only just returned to pre-crisis levels.

Just as in the 18th century there was a gravitational shift from the Mediterranean to the Atlantic, so we are seeing a shift from the Atlantic to the Pacific. As recently as 1980, according to the International Monetary Fund, the 28 states that now make up the EU — on its membership of which Britain votes on Thursday — accounted for 30 per cent of world gross domestic product. That figure is now about 17 per cent and falling.

I recently made a jocular remark to the effect that every continent was growing except Antarctica and Europe. A Spanish friend sent me a list of statistics showing that the business of hosting cruise ships — one of Antarctica's few sources of economic activity — is in fact booming. Britain, he noted, is trapped in the world's only stagnant trade bloc.

As a merchant and maritime nation with few natural resources, Britain's prosperity depends on buying and selling. Yet the EU will not sign bilateral trade agreements with parts of the world, such as China, that are growing. Talks with India have been stalled for years. Negotiations with Australia have been threatened by a dispute involving Italian tomato growers.

I do not know whether the Italian tomato growers are right or wrong. But I do know that, outside the EU, Britain would have reached a bilateral trade deal with Australia decades ago. It would never have applied the EU's common external customs tariff and would still be buying Australia's agricultural surpluses to the benefit of both nations.

The purpose of trade is to swap on the back of differences — to purchase from abroad what you do not produce yourself. I am not sure it made sense for Britain to abandon the Commonwealth, a genuinely diverse global market system — one that brought together agrarian, commodity-based, manufacturing and service-oriented economies — in exchange for membership of a more homogenous bloc of advanced western European states. But, whether or not it made sense in the 1970s, it plainly makes no sense today.

> As a merchant nation with few natural resources, our prosperity depends on buying and selling

Back then, freight costs were high, refrigeration expensive, travel rare. Regional trade blocs looked like the future. But in an age of Skype and cheap flights, distance has never mattered less. Why should we allow accident of geography to trump ties of language and law, habit and history, culture and kinship?

Indian companies are largely English-speaking, use British accountancy systems and operate under the same common law model. Britain is the third-largest investor in India — and many UK companies that have established themselves there, such as JCB, understandably want to leave the EU. India, conversely, is the third-largest investor in the UK. Yet we cannot sign a trade deal, partly because of opposition from European textile and farming interests.

For years, probably decades, to come the EU will remain convulsed with its twin disasters: the euro crisis and the Schengen crisis. Its answer to both crises is deeper integration — more of the medicine that sickened the patient.

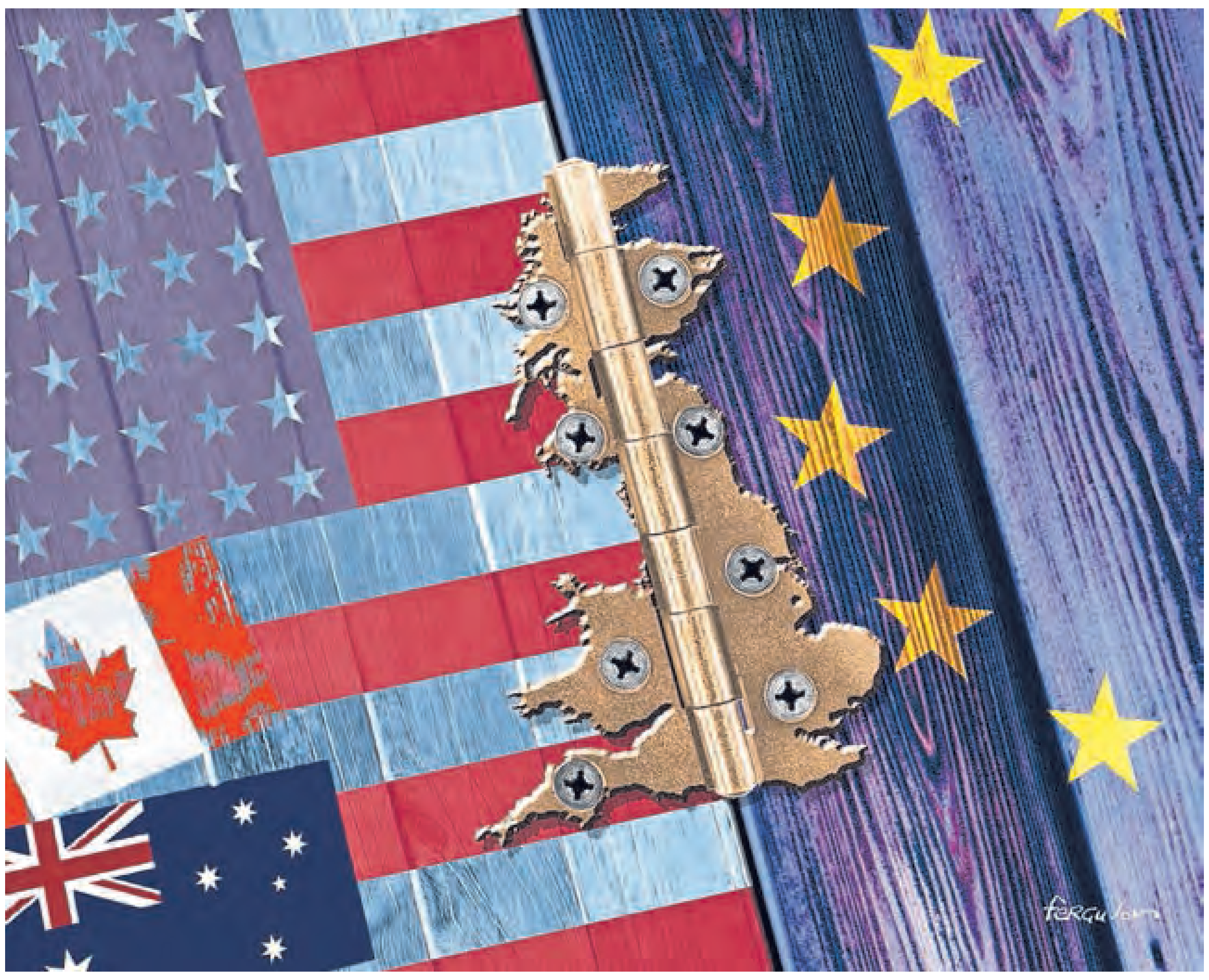
Because Britain has kept its borders and its currency, it has a choice. Should it make the euro and migration problems its own? Or should it strike a different deal with the EU, one that retains the benefits of free trade, intergovernmental collaboration and military alliance but removes the UK from Brussels' political structures, leaving eurozone states free to pursue their own vision?

As recently as 2006, the EU was taking 55 per cent of UK exports. That had fallen last year to 45 per cent. Where will it be in 2030 — or 2050? How low must it go before we stop hearing the bizarre argument that we should merge our political institutions with those of nearby states so as to have a minority voice in the setting of standards over a declining portion of our commerce?

There are more than 190 states in the world; only 28 are in the EU. Are we really unable to manage our own affairs in the same way that, say, New Zealand or Switzerland do? Have we lost our global vision, our confidence in our own democracy? Are we truly so diminished?

The writer is a Conservative MEP and author of 'Why Vote Leave'

Why I believe Britain belongs in Europe



ECONOMICS

Martin Wolf

Britain is a European country. The question confronting its people in the referendum tomorrow is only about the kind of European country it will be. Will it be on the margins of Europe or will it exercise influence appropriate to its history and size? The referendum campaign has been dismal. But that does not make it unimportant. On the contrary, a decision to leave would damage not only the UK but also Europe, the west and the world.

In making this decision, rational voters must understand the asymmetry in the decision. As a sovereign country, the UK can change a decision to remain. But it cannot change a decision to exit. Voters should exercise the option to leave if and only if they are certain they will never regret their doing so. They cannot be certain. So the decision to exercise their option now would be irrational.

Yet such cold calculations do not win hearts. Those in favour of leaving argue that their opponents do not believe sufficiently in the UK. I think we should remain because I believe in it so much. As a child of grateful refugees from Hitler, I believe that the quiet decency, democratic traditions and liberalism of the British offers something irreplaceable to Europe. The democratic Europe of today owes immeasurably to British politics, British values and British courage. Britain would lose hugely if it cut itself off from the continent. But so, too, would the latter.

Yet the arguments of those in favour of leaving are not worthless. They are rather exaggerated or incomplete.

The very fact that the UK is able to hold this referendum demonstrates that it remains sovereign. The repository of legitimate authority is and will remain a duly elected parliament. The question is rather how to exercise power effectively and democratically. Those in favour of leaving argue that this is possible if and only if all decisions that affect the British people are accountable to a democratically elected parliament. A second's thought reveals this is absurd. A huge proportion of the decisions that affect the British are made by decision makers over whom voters have no control because they are foreign. To affect such decisions, parliament must delegate powers to international bodies, in order to increase its influence on them. The EU is a particularly intrusive example. But membership makes British power more effective.

Again, the scale of immigration has been a surprise. Its benefits have been exaggerated. But so, too, have its costs. We should have agreed lengthier transitional controls and safeguard arrangements on internal migration. We could also have managed immigration far better. Nevertheless, it is crucial to note that net immigration from non-EU countries is cumulatively far bigger than that from the EU; and, in all probability, the latter will now decline. Moreover, in the long run, hard-working young people from the EU are likely to fit into the UK very well. Above all, nothing can justify the xenophobia and outright lies from Brexiters on this topic. Those liberals in the Leave camp who prate about the free market should feel ashamed of the company they keep.

Then there is the argument that the EU economy is not doing well. The extension of the euro to all its present members was indeed a huge mistake. But the idea that the UK can shield itself from the failures of the EU by leaving is also absurd. The EU will remain our biggest economic partner for decades, probably for ever, whether in or out. Outside, the UK would be voiceless, too.

> Our quiet decency and democratic traditions offer our neighbours something irreplaceable

Thus even the stronger arguments of the Leave side are feeble. In other respects, they are catastrophically so. Both long and short-term economic effects will fall somewhere between bad and disastrous. Economists on the Leave side have failed to dent the virtual unanimity of expert opinion. The response of the Leave campaign has been to denigrate the notion of expertise. That is silly enough. Far worse, it has not even pretended to have a coherent post-referendum plan. The only certainty is years of uncertainty — and not only for the UK. Why it makes sense for a country scarred by a huge financial crisis to take a leap into this abyss is beyond any sane person.

Yet it would be absurdly narrow-minded to focus only on what this means for the UK. It is far more important than that. Despicably, Boris Johnson compared the EU with Hitler's Reich. The truth is the precise opposite: the EU has played a huge role in spreading democracy across the continent. It is an attempt to entrench prosperity and cement co-operation among nations. It is imperfect. But never before has Europe been so prosperous and so peaceful. The challenge is to make it better. That is why British engagement remains so important. Without it, the effectiveness of the EU, even its survival, might come into question. Alternatively, it might unite as a single entity over which the UK would then have no influence. Either outcome would surely be a strategic nightmare for the UK.

The UK is far more than a hugely important participant in the EU. As a great European power and mother country of the English-speaking world, it is the hinge between the two. UK withdrawal would herald western weakness and global disarray. This is why all the UK's friends favour its membership. Withdrawal might mark the beginning of a dissolution into growing disorder, not only in Europe but also far beyond.

Nobody can fail to recognise the profound distrust of elites that animates the Brexit campaign. But xenophobic populism is never the right answer. At the end of this wearying campaign, the voters must realise who they are and the weight of what they must decide. Yes, the British might well survive on their own. But why should they try? Britain can be far better than that. Let it choose engagement. Let it choose Europe.

martin.wolf@ft.com

The young will be the real losers of retreat into isolation

OPINION

Martin Sorrell

If the UK votes for Brexit, there will be — as with all political experiments — a variety of unintended consequences. Many of these will fall hardest on the most vulnerable, in particular the young.

The first unintended consequence, though, will be that, paradoxically, UK-based international businesses will immediately invest more time, energy and money in western continental Europe to bolster their weakened positions. Often, this will be at the expense of their British operations.

For example, continental Europe is home to four of WPP's top 10 markets. In the event of a vote for Brexit, we would need to increase our focus on those markets in order to maintain our influence and effectiveness. So, one of the ironies of a split from Brussels is that it will mean a lot more trips to Brussels.

The UK advertising and marketing services business is emphatically for staying in. A recent poll by Campaign, the trade magazine, found that 85 per cent of people in the industry is in favour of Remain. As the prime minister said this month, the creative industries are among the UK's fastest-growing, due in no small part to their status as a global hub for talent: open-minded, outward-looking and seamlessly connected to international markets.

For our sector, as for the country as a whole, the economic case is overwhelming — across the entire spectrum of issues, from access to talent to trade and foreign direct investment. As with any merger or acquisition, the most important element is really revenue synergies. Britain in Europe will grow faster.

The Brexiters know this, which is why they are so determined to focus attention elsewhere, on the largely emotional argument over sovereignty (we will do better inside the tent) and, especially, on fears associated with immigration.

> For this highly networked, internationalist generation, borders of all kinds are increasingly notional

That tactic appears to have had some success, as heightened media coverage of this most emotive of issues coincided with Leave opening a lead in the polls.

Cool analysis shows that migrants — the large majority of whom work when they are in the UK — have made a net contribution to the public purse. According to the OECD, the economic forum, immigration accounts for about half of Britain's growth in the past 10 years. Despite widespread belief to the contrary, there is little evidence that migration increases unemployment or holds down wages for locals. This has not stopped the Out camp from encouraging and propagating these myths.

The advertising industry's positive attitude towards EU membership (and immigration) may be a product of its relative youthfulness — most of those in the industry are under 40.

Opinion polls show that younger voters favour staying in the EU. For this highly networked, instinctively internationalist generation, borders of all kinds are increasingly notional. Their future is one of connectedness not separation. A retreat into isolationism is incomprehensible to those who have grown up in the era of Google, Facebook, Snapchat and cheap flights.

Nicky Morgan, UK education secretary, has pointed out that the young stand to lose most from a Brexit. The economic shock it is likely to deliver will be felt most keenly by people at the beginning of their working lives, as the squeeze on jobs tends to hit those at entry level. Lifetime earnings are dramatically affected by no job early on.

Leaving the EU would also reduce young people's opportunities to travel, study and work outside the UK, damaging not only their individual prospects but Britain's competitiveness at a time when international experience and a global outlook is of growing importance to employers.

Not everyone who supports Brexit is looking backwards to an imperial past. But they are voting against the wishes — and interests — of those who represent Britain's future. My generation may not suffer too much, but my children's and grandchildren's generations will. Isolationism does not work, and is not the legacy we should leave them.

The writer is chief executive of WPP

Pollsters and bookies pose different questions

BUSINESS

John Kay

Anyone speculating on the result of the EU referendum can refer to either opinion polls or prediction markets. On the morning of June 20, polls put the probability that Remain will win at 52 per cent, while prediction markets estimate 75 per cent. That is a big difference.

When you toss a fair coin, the probability that it will come down heads is 50 per cent. That means that if you toss it many times, you will get either heads or tails half the time. But what do people mean when they say that the probability of Remain is 52 per cent or 75 per cent?

The referendum is a one-off event and the outcome will be either Remain or Leave. A probability for Remain of 52 per cent cannot mean that if the referendum were held 100 times, the result would be Remain on 52 occasions.

Because the mathematics of probability is powerful and well understood, people who talk about uncertainty are keen to frame their discussion in probabilistic terms. But it is not obvious that the analogy works.

The pollsters who put the probability of Remain at 52 per cent make the following calculation: they assume that the people who have given answers to the pollsters are truthful and a random sample (adjusted for differential response) of those who will actually vote tomorrow. They find that just over 50 per cent of the population will vote Remain. Then they use statistical techniques to compute the errors involved in random sampling. That calculation tells them that if Remain is slightly ahead in their population there is a 52 per cent chance that Remain is ahead in the population as a whole.

Those who use betting markets to compute probability approach the problem quite differently. They assume everyone has a "subjective probability" assessment of the result. You will bet on Remain at odds of evens if your subjective probability that Remain will win is 60 per cent, but bet on Leave if your subjective probability of Remain is only 40 per cent. The odds in the betting market reflect the amounts of money placed on each outcome. So they represent an average of everyone's subjective probability, weighted by the cash behind each assessment.

> What do people mean when they say that the probability of staying in is 52 or 75 per cent?

Which probability is right? Both 52 per cent and 75 per cent are correct answers to different questions. The pollsters' answer is based on the voting intentions of respondents and the bookies' answer on their customers' assessment of the voting intentions of other people.

But this does not resolve the question of what either statement of probability means. When the Intergovernmental Panel on Climate Change states that it is 99 per cent probable that human influence has caused global warming, what they mean by their own definition is that they think it is extremely likely that human influence has caused global warming. The number conveys no additional information whatever.

When President Barack Obama held the crucial meeting to authorise the 2011 raid on Osama bin Laden's compound in Pakistan, his advisers' estimates of the probability that bin Laden was there ranged from 10 per cent to 95 per cent. Mr Obama reportedly responded: "I'm accustomed to people offering probabilities. In this situation, what you started getting was probabilities that disguised uncertainty as opposed to providing you with more useful information." Summing up, he said: "This is 50-50. Look guys, this is a flip of the coin. I can't base the decision on the notion that we have any greater certainty than that."

The president did not mean that the probability that bin Laden was there was 0.5; still less that the most difficult decision of his presidency was based on the flip of a coin. What he meant was that, in the face of radical uncertainty, decision makers must act even when they simply do not know — without the aid of a pseudo-scientific numerical crutch.

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Robots may cut off the path to prosperity for poor countries

Sarah O'Connor

On employment

There is a gloomy view you hear in the developed world that goes something like this: first the factories went overseas, now the robots are coming for the jobs that are left. In other words, automation will sweep up the crumbs that globalisation left behind.

But the relationship between globalisation and automation is more interesting than that. Rich countries are beginning to see factories return to their shores — and they have the robots to thank.

Take Adidas. When Herbert Hainer, chief executive, joined the German sportswear company in 1987, factories were beginning to close in Germany and move to China. This month, he announced Adidas would bring some shoe production back to Germany for the first time in three decades thanks to a highly automated factory in Bavaria. "I find it almost uncanny how things have come full circle," he said.

It is important to keep some perspective. Adidas made 301m shoes last year; the two new factories (the other will be in the US) will produce about 1m. Still, you can see how this trend could take off.

Ditch the complex global supply chains and you save transport and storage costs. You are less polluting and your customers do not have to worry that your products were made in sweatshops. You are also more nimble and responsive to demand.

Spanish retailer Inditex, owner of the Zara chain, owes much of its success to its "nearshoring" strategy: it can adapt to fluctuating fashions because more than 60 per cent of its clothes are made in Spain, Portugal and other nearby countries such as Morocco and Turkey. Only wardrobe perennials, such as shirts and chinos, are made in low-cost factories in Asia. Adidas says it is moving closer to a future in which customers can have shoes made on demand, perhaps even by a robot in the corner of the shop.

Tyler Cowen, an economics professor at George Mason University in the US, believes robots and 3D printers could create a world of "radical insourcing" where developed countries no longer need to outsource production to countries where wages are low.

"Why should a wealthy nation buy from a poorer exporter when it can automate and produce similar goods at home without incurring high labour costs?" he asked in a recent paper.

This would not do much for jobs in developed countries, admittedly. The new Adidas factory will have about 160 staff, a fraction of the number required to make the same number of shoes in Asia. But set aside the rich world for a moment. What would "radical insourcing" mean for all the developing countries that saw manufacturing exports as their path to prosperity?

Industrialisation was the west's route to riches. There are strong links between manufacturing jobs and the development of a secure middle class. Exporting manufactured goods powers "catch-up growth" and technological convergence with advanced economies, so the theory goes.

> **Ditch the complex global supply chains and you save transport and storage costs**

But developing countries are displaying signs of what Harvard professor Dani Rodrik calls "premature deindustrialisation". While manufacturing jobs peaked at about 25 per cent of the US workforce and 40 per cent of Germany's, they already seem to have peaked in Brazil, India and China at less than 15 per cent.

A world of "radical insourcing" would accelerate this trend, cutting off one well-worn path to development. Poor countries with natural resources could still sell raw materials but economies that rely on commodity exports tend to be highly unequal, unless they have strong democratic institutions.

It is not all gloom. Technology may threaten the old development model but it brings cheaper renewable energy, medicines, internet and smartphones to people in poor countries. Prof Cowen foresees a developing world where phones, software, films, drugs and ideas are plentiful but many basic goods are expensive.

Technology can also create opportunities for developing countries to sell to the world. It is already delivering microfinance loans to entrepreneurs and online education to bright young people. And there is still time to find a new path: all those factory jobs making things for domestic and export markets will not disappear overnight. But nor will they be there forever. Last month a company called Kuka, which makes industrial robots, became the target of a €4.5bn takeover bid. The owner? German. The bidder? Chinese.

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Start-ups. Co-founders

'We need to talk'

When the personal relationship between founders breaks down, their business is at risk, writes Jonathan Moules

Friends again: Todd Emaus, left, and Matt Munson, co-founders of Twenty20
Ann Johansson

For an hour, on the floor of a Rocky Mountain retreat centre, Todd Emaus was made to sit back-to-back with Matt Munson, co-founder of their photo app business Twenty20. All the pair were allowed to speak about was why each of them felt their partnership was at such a low ebb.

They had paid $9,000 each for the privilege of doing this, taking four days away from their business in San Francisco for a residential retreat. It was organised by a coaching company called Reboot, in Boulder, Colorado.

That was three months ago and they say that the experience may have saved their friendship as well as making them better business partners.

"Matt and my relationship with him was in a bad place," Mr Emaus recalls, noting that the strains of expanding had meant they no longer enjoyed the personal bond they had before founding Twenty20, a tech start-up that enables people to sell personal photographs to picture agencies.

"We were best friends who went into business together because we didn't really like the jobs we had been doing," Mr Emaus says. "The problem was that we had drifted away from the way we had originally been working."

For Mr Munson, the hardest part of their time at Reboot came as soon as they arrived, along with 19 other co-founders from nine companies. Each participant was handed back his or her application for the programme, where they had written about recent challenges they had faced, and told to read out the words to the group.

"Type A founders like me don't talk about what is hard," Mr Munson says, adding that the experience of relaying his concerns to a circle of strangers was "very normalising".

It was Mr Munson who had suggested that they both try Reboot after meeting Jerry Colonna, one of four executive coaches who co-founded the boot camp business. "I loved the core premise [that relationships are essential]," Mr Munson says, noting that even the name Reboot struck a chord with a tech founder.

"There are lots of resources in the start-up world to help with the financial pieces of a business, or the legal pieces, but not many that focus on this," he adds. "Starting something is an emotional journey."

Reboot runs similar residential programmes for people joining young companies as chief executive and partners in venture capital firms. It was founded in 2013 and has offices in New York and San Francisco, but runs the residential events from close to its base in Boulder. The city is an appropriate venue for residential events because it has a critical mass of tech founders but is a world apart from the frantic pace of San Francisco and New York, says Mr Colonna, who is based in Boulder. "We tried to pick a beautiful place because after being emotionally wrung out we want you to crawl into a nice bed to sleep," he says. "People arrive on a Wednesday night, start crying and don't stop until they go home."

The need to work on your business relationship is as important as working on those in your personal life, says Mr Colonna, a professional coach and former partner in the private equity arm of JPMorgan Chase. Most failures of tech start-ups can be traced back to co-founder conflict, he says. Entrepreneurial team relationships often stumble because one party feels rejected or disappointed with how the venture is developing, he says. "A lot of the same tensions occur in professional relationships as they do in marriages. There is just no sex involved."

The main source of conflict identified by the Reboot events is money. The tension usually arises over disagreements about when and how to spend it, says Mr Colonna: "If you are talking about a start-up that is not profitable, or even pre-revenue, it is difficult to justify any spending."

Reboot is not the only organisation offering a way for founders to take time out to work on their relationships. Support and coaching, for instance, is offered by networking groups, such as the international Young Presidents Organization.

Some entrepreneurs sign up to courses at business schools, such as the business growth programme at the Cranfield School of Management in the UK. One of the mantras drilled into participants on the part-time course, with involves four overnight stays, is "work on the business, not in the business".

David Glassman, a business coach and visiting fellow at Cranfield, says trust and recognition of the founders' co-dependency is critical to making a partnership work: "Successful co-founder relationships are those where at least one of the partners realises that, while the business might develop faster if they operated alone, it will go farther if they operate together," he says.

"The ones who are even wiser recruit additional expertise at senior level to ensure that maximum advantage can be taken of opportunities outside their own ken as the business grows."

The biggest barrier to entrepreneurs signing up to Reboot is the time taken. "If you ask people to take four or five days out of their schedule it is hard," Mr Colonna says. The fact that most founders find this extremely difficult is precisely why it is key to the programme's design, he adds.

Co-founder stress is one of the most under-appreciated of all the start-up challenges, says Fred Wilson, a partner at Union Square Ventures, the New York-based VC firm. "If you don't have a co-founder, well then you have other challenges, namely having to do it all on your own. But if you do have a co-founder, or two or three, I would imagine that figuring out how to get along, stay aligned, communicate honestly and openly and not drive each other crazy is a big challenge."

Co-founders prefer not to talk about interpersonal difficulties because they fear it will freak out employees and investors, says Mr Wilson. "That is why it is among the least discussed and under-appreciated of all of the start-up challenges."

One of the techniques Mr Emaus and Mr Munson have applied as a result of Reboot is to schedule meetings outside work where the only rule is that they do not talk about the business. It has also been important to discuss why they went into business in the first place, Mr Emaus says.

"There was a lot of work about being vulnerable and being real," he says. "What actually scares me more than the business failing is the business succeeding but me not feeling good about why I was doing it."

Mr Emaus says that by reappraising his reasons for being in business he has not only revived his working relationship with his co-founder but also regained a friendship.

"We have restructured our relationship," he says.

Three rules

Successful co-founding

Tips from David Glassman of Cranfield School of Management:

Agree on disagreeing: Draw up a co-founder "constitution" to include how to disagree; how to say what you think, openly and sincerely; how to listen with an open mind, and how not to blame but to forgive and move on.

It is not just the other person: Partners soon learn about their co-founder's weak spots but they also need to recognise their own and to become accountable to themselves for their own shortcomings.

Trust is vital: Absolute trust between partners is essential, irrespective of whether the co-founders are couples who started a venture together or peers who simply teamed up to establish a business.

Dear Lucy

Work problems answered

Is an MBA the best way to future proof my career?

I'm a strategy consultant in my mid-forties and have been with my current employer for 20 years. I want to move on but I am aware of a hole on my CV — I have a degree in library science. Should I get an MBA? All the research shows that most jobs in big corporations will not exist in five to 10 years, making me fear that a business qualification may be a waste of time and money. Failing an MBA, what else can I do to future-proof myself? **Strategy consultant, female, 46**

Lucy Kellaway's answer

MBAs are dead. I have reached this conclusion only today, having read all the answers that readers of the Financial Times have submitted to me about your problem.

Not one argues unequivocally that it would be wise to go off and spend up to $160,000 on getting a qualification that may not make you any more employable at the end of it. Indeed, the only two readers who are prepared to countenance the thought of an MBA for you are either a teacher at a business school or one who is the middle of such a course himself. And both qualify their answers by saying you should only do it if you think you would love it. Judging from your message, which is all about filling holes on CVs, I don't think you would love it at all.

You place far too much importance on the education section on your CV. No employer will give a damn what subject you did a degree in 20 years ago. And if they did care they might even rather like the idea of library science. Isn't the point of that subject that you learn how to manage and order information? And isn't that precisely what we all need to do in an age where there is too much of it?

If you did that degree because you loved it, and if you are wedded to the idea of more study, can't you do more of it, or find some way of making what you learnt useful?

Otherwise, unless you have the urge to go back to university, I'm not sure there is a point in getting another degree. Instead, you need to think about your career.

Your profession as a strategy consultant seems to be getting in the way of your common sense.

Stop doing the macro strategy thing at once. Stop worrying about how to "future proof" yourself. You aren't trying to second guess the entire labour market in 20 years' time. You are simply trying to find employment for one person — you.

So the starting point for that is to ask yourself some very elementary questions. Which parts of your job do you like? Which are you good at? What sort of company do you want to work for? Do you like being a wage slave? Do you want to start something on your own?

Stop sucking your pencil. Put away your spreadsheets. Pick up the phone and go and talk to some people and see if anyone will give you a job.

Your advice

I have just been through the same thought process and chosen to do a masters degree in ancient philosophy. I am not cutting loose and indulging in it for the pleasure, though there is much to be had; I am paying for it as an investment in my future.

I think it will equip me with ideas that have stood a greater test of time than any others on the market and that will be applicable in every business setting, since all such settings are part of the human existence that Plato and Aristotle reasoned about from first principles. It might be a bit last millennium — but aren't MBAs so last century?
Male, 53

As Henry Higgins said, "Why can't a woman . . . be more like a man?" Men don't think first about what they are missing. They focus on the knowledge and skills they already have.

You have a very interesting degree, more unusual than a tedious MBA. Don't leave your job before you've found a new one, but why not test the waters without the MBA? Think how the training and knowledge you gained from your education and your experience in strategy can be combined to spark the interest of a new employer.
Anon, female

If I was your future employer or an interviewer, I would care more about your 20 years of experience in strategy consultancy — what projects and clients you have worked for and how good you have proved yourself. An MBA is no longer a passport to better pay or promotion. It doesn't really make you immune to inevitable future changes to your position in whatever company you may work for.
Female, 50, director with MBA

I have been teaching MBA courses for over eight years. There is a positive correlation between years of work experience and the quality of assignments. However, the latter applies only for people who have chosen to study something they understand and love. Choices in education should not be only about finding a better job, but developing your potential, critical thinking and life satisfaction as well.
Associate professor, female, 30s

A wise headhunter once told me an MBA is the icing on the cake. If the cake (your experience) is thin, it defines the cake, but if it is a big, fat fruitcake, it is decoration. If you feel you need another string to your bow, consider a part-time BA to fill the knowledge gap you are concerned about. An MBA is probably more expensive than it is worth to you.
Anon

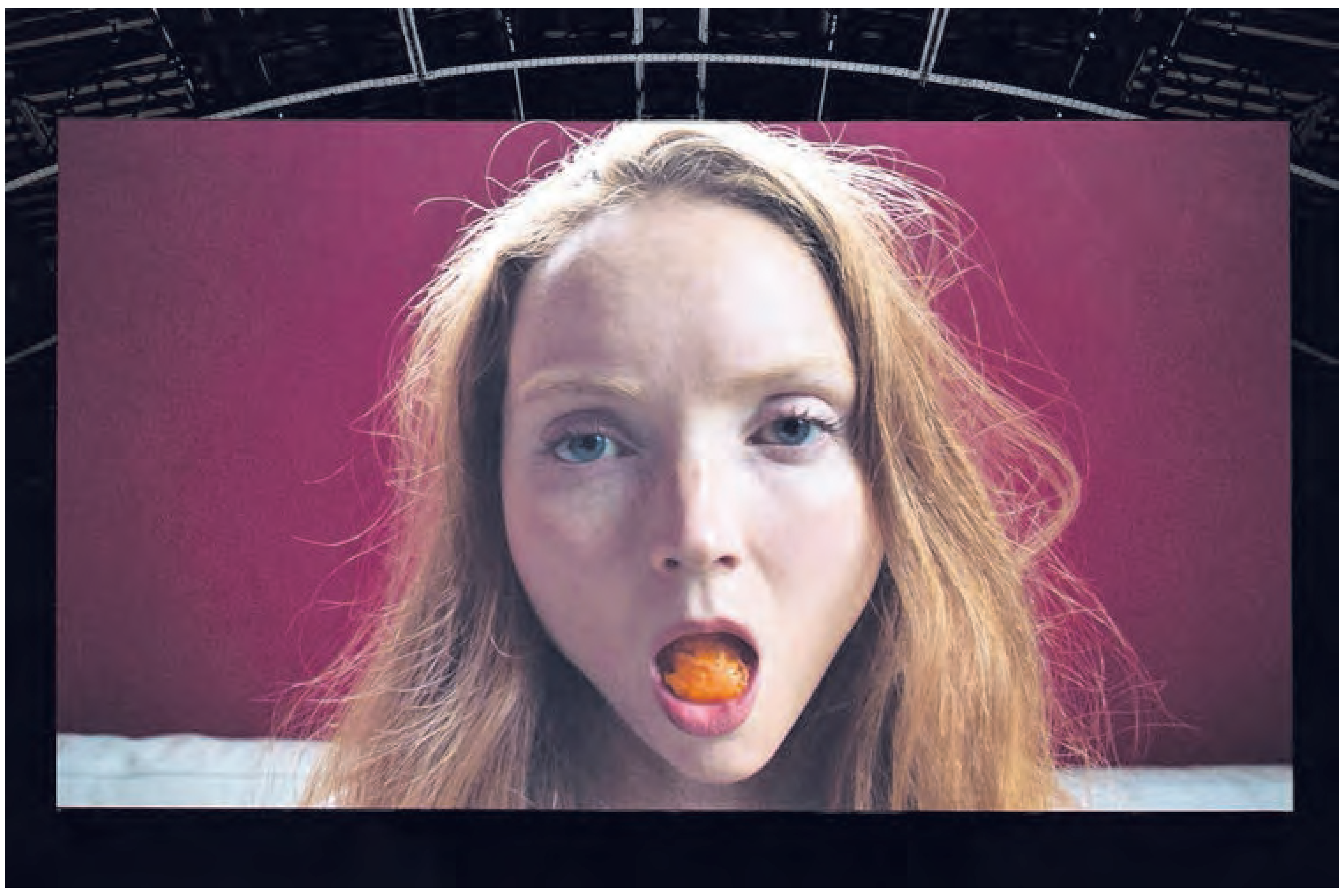
Next problem One of my work colleagues sometimes slaps the top of my head when he passes behind me (as in the Benny Hill sketches). I am bald. I find this demeaning and have asked him to stop, which he won't. I have two options. I can complain to my manager, but it will go down on my records and I will be seen by the rest of my colleagues as a whinger. I could threaten him or hit him, but I might be dismissed. What would you do? **Male worker**

Please send answers and new problems to problems@ft.com. This column appears fortnightly

ARTS

Endless regurgitation of shallow gestures

Martin Creed deploys chewed food, insults and urine in a New York show that revels in its cheerful hostility. By Ariella Budick



I recently watched a video at the Park Avenue Armory of three people vomiting — not, I'm sorry to say, the first time I've encountered that particular effusion there. In 2013 the Armory hosted Paul McCarthy's circus of perversion, *WS*, where mystery fluids stained the walls and rot perfumed the air. Now the whole building — the drill hall, the long string of cubicles off to the side, and the opulent reception rooms — has been turned over to Martin Creed's *The Back Door*, another gut-roiler from the Hauser & Wirth gallery's line-up. This is the kind of event that threatens to tip the Armory from an adventure-seeking venue into a bastion of sensationalistic vacuity.

Creed is an impish maestro of yuckiness, deploying chewed food, urine and faeces in a spirit of cheerful hostility. Sure his work is "stupid", he agrees, as if that were a noble virtue. Confident in the role of the tongue-tied clod, he makes pieces so simple-minded, nauseating and dull that they practically challenge viewers to dismiss them out of hand. Creed's cry might be: "Emmerdez les bourgeois!"

In the darkened drill hall, a gargantuan screen hangs from the ceiling, bisecting the space. Creed projects on to it a sequence of women who appear in well-appointed surroundings — a cosy living room, a pretty park. Each time, the camera zooms inexorably towards her expressionless face, reaching a too-intimate close-up. That's when the woman opens her hugely magnified mouth to reveal oozing chunks of food. The screen goes black, and at the far end of the room the loading dock gate rises and clangs shut, as if something has just been admitted or expelled.

Then the ritual begins again, this time with a different woman. "It's all about my mum," Creed announced at a press preview, and indeed his mother, Gisela Creed, appears among the masticating ladies. The artist didn't elaborate, thank goodness, but the piece implies that all women harbour horrible, repulsive feelings that are constantly trying to force their way out into the open.

Working on an epic scale, Creed expresses the feral joy of the child grossing out adults, and at the same time finds a creative outlet for his anger. Rage is his métier, and he plies every shade from pique to fury. In "Sick Film", people walk in front of the camera, throw up and walk away from the mess. The soundtrack alone is heave-worthy. "Plenty of people found it difficult to watch," he has said. "It made them feel sick. I found it difficult to watch when I made it, especially the sound. I couldn't edit it at first because it was too disturbing, but then I got used to it."

I suppose I too could eventually become inured to Creed's deadpan aggressiveness, but I'd rather not. In one video a man approaches a flowerpot and kicks it. In another a woman squats and pees, leaving a puddle on the floor. In a third a voice screams a common but unprintable insult over and over, while

> In Creed's 'Sick Film', people walk in front of the camera, throw up and walk away from the mess

we stare at a black rectangle of screen. Creed shows these films in cramped bunkers, turning art into aversion therapy. It pains me to write such bilious criticism, not because I'm being unfair, but because this is exactly the reaction he hopes to provoke.

He's a virtuoso of irritation. The piece that won him the Turner Prize in 2001, "The Lights Going on and Off" (in which lights go on and off), so infuriated one Tate Britain visitor (an artist herself) that she smuggled a carton of eggs into the gallery and hurled them at the walls. Creed had discovered the trick of coaxing visceral responses from banal ideas, spinning a career out of shallow gestures.

That makes him the heir to a fine tradition. "The beginnings of Dada were not the beginnings of art, but of disgust," the poet Tristan Tzara wrote nearly a century ago, and Creed is still splashing in that same mud pit of nihilistic ire. He continues to worry the dead-end question that Marcel Duchamp addressed generations ago with his urinals and bicycle wheels: "What is art?"

"I would not disagree with me not being an artist, because I don't know what art is," Creed has said, mimicking Duchamp's self-deprecatory stance. "I'm not making art, because art would seem to me to be in the eye of the beholder."

The mystery is that some of those beholders shower him with prizes anyway, as if he were brushing scales from their eyes instead of recycling ancient insights, clumsily. Duchamp pushed the boundaries of art by forcing his audience to doubt its sacredness. He performed his sleight-of-hand without pretension, and took credit for seeing, not creating, the elegance in humble objects. (Creed's contribution to that act of transfiguration: a crumpled ball of paper.)

Dada and, later, the Fluxus movement propelled that spirit of discovery into wickedly open-ended performances. Creed's updates on this heritage have a tinge of violent desperation. He has the lid on a grand piano lift silently, then slam shut, over and over again. Each time, I half expected a spiteful cackle to emerge from its innards.

My churlishness lifted briefly as I was wading through a roomful of white balloons in "Half the Air in a Given Space" and I was momentarily in tune with his toddler humour. Then, as I battled my way towards the exit, I came upon a knot of claustrophobic fellow-sufferers, wincing at each loud pop! Why, I wondered, did Creed seem so intent on curdling joy into misery? The answer arrived in the form of a small ensemble of musicians who wander from room to room. I heard the singer warble what should really be the exhibition's tag line: "Everybody needs someone to hate. It's never too late." Creed may be doing his visitors a service by focusing their free-floating odium on to himself.

To August 7, armoryonpark.org

In your face: installation from 'Martin Creed: The Back Door'. Below right: Tim Garland performs at Kings Place
James Ewing
Roger Thomas

Far left: 'Half the Air in a Given Space'. Left: Martin Creed
James Ewing
Hugo Glendinning

JAZZ

Tim Garland
Kings Place, London
★★★★☆

Mike Hobart

Tim Garland is one of Britain's leading saxophonists, his international reputation cemented by a five-year stint with Bill Bruford and ongoing work with Chick Corea. Here he was presenting music from the album *One*, a beautifully crafted set of new compositions that reflect on his formative influences.

Garland grew up in Canterbury, the Kent forging house of 1970s prog-rock, and the evening was dominated by the lyrical melodies, fragments of scale and rock-inflected rhythms of classic fusion jazz. Solos stretched out, built to a peak and ended with fast unison lines or a series of percussive stabs. But Garland gives these tropes a contemporary twist by dropping the bass and replacing the whining synth with the folkish textures of acoustic guitar. Delivered with passion by a tight working band, the gig was more forward-looking celebration than retrospective stock-taking.

The evening opened with the chirpy "Bright New Year". Ant Law strummed urgently on 12-string guitar and Jason Rebello delivered the first of several fluid, fluent and rhythmically robust solos on concert grand. The eerie "Colours of the Night" followed, with Rebello now playing Fender Rhodes. Garland's angular lines and rabble-rousing riffs were fuelled by Rebello's percussive grit and punchy low notes from Law's eight-string guitar.

Highlights included "Tyne Song", an evocation of ships looming out of a fog-bound working river, and "Foretold", featuring electronically harmonised sax, Arabic inflections and a cracking Sirkis drum solo. Garland's days with Corea were marked by a sparkling cover of "Windows", featuring the leader on bass clarinet. And there were two repertory pieces: "Yes to This", played as an encore, and "Rosa Ballerina", written 17 years ago to celebrate the birth of Garland's daughter, who was pivotal to the creation of this affectionate piece: "The first thing she did was scream a perfect F sharp."

timgarland.com

CLASSICAL MUSIC

Dragon String Quartet
National Centre for the Performing Arts, Beijing
★★★☆☆

Ken Smith

Like most things in China, classical music generally veers between a larger-than-life central figure and the great masses — preferably both. Chamber music, with its emphasis on subtlety and emotional depth, has taken longer to catch on and is still often a tough sell.

If the US-based Shanghai Quartet, the first full-time ensemble to emerge from China, took more than a decade to cultivate audiences large enough to fill a standard concert hall, one can perhaps overlook last Sunday's half-full venue for the Dragon String Quartet. For one thing, the Dragon is much younger, having come together only in 2012. For another, its members still keep their day jobs, with first violinist Ning Feng and cellist Qin Liwei maintaining international solo careers while second violinist Wang Xiaomao serves as concertmaster of the China National Ballet Orchestra and Zheng Wenxiao is principal violist of the Bavarian Radio Symphony Orchestra.

If the Dragon lacks the Shanghai Quartet's full-time dedication as an ensemble, its members compensate with a heightened energy whenever they do appear. Each booking is a friendly reunion, and something of a musical event, even when the repertory is as standard as Beethoven and Schubert.

Opening with Beethoven's String Quartet in A minor, the Dragon's hushed intensity unfolded into a haunting modal sound-world straddling Classical and Romantic styles. Continuing after the interval with Schubert's *Death and the Maiden* Quartet, the players put a similar approach — sparing use of vibrato, rock-solid rhythmic precision — to more lyrical use.

Despite periodic reminders that we were in Beijing — an occasional dropped cellphone, a few hacking coughs, a general propensity to clap after every movement — the audience paid palpable, knowledgeable attention to the playing that would be the envy of classical music presenters anywhere.

The evening's sole downside was the unadventurous repertory. One eagerly awaits a future where these musicians, having staked their claims in the classics, readily depart from the usual path.

Hushed intensity: the Dragon Quartet

chnpca.org

Lex.

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SoftBank: still crazy after just two years

Take a moment to appreciate it. Yesterday SoftBank announced the departure of its heir apparent after less than two years with the group. Unusually among press releases disclosing facts this awkward, it did not seethe with malarky. Number two man Nikesh Arora will leave because number one man Masayoshi Son has decided he wants to be boss for another five to 10 years. Mr Arora has better things to do than hang around. This may not be the whole story, but it is as plain and plausible a story as one is likely to get.

The less straightforward bit is how this should affect shareholders' views of the group. Mr Arora had particular responsibility for the company's investment unit, which funnels cash flows from its telecoms business into long-term bets on emerging technology.

Might the departure of the former Google executive signal a dialling-down of risk appetite?

The company has been taking uncharacteristically staid actions lately. It has announced a $4.4bn share repurchase. It agreed to sell $10bn of its Alibaba stake, with the goal of reducing its $90bn net debt position, and followed this up this week with the announcement of the $8.6bn sale of its stake in game developer Supercell. And it has been chiselling away diligently at the operational problems at US subsidiary Sprint. Having failed to merge it with T-Mobile, Mr Son wants to turn it into a "cash cow".

And, with the earnings contribution from Sprint creeping up, SoftBank is trading at just 11 times this year's earnings. Is it turning into stock to buy for its earnings power, rather than as a bet on Mr Son's vision of the future?

Nope. Consult that press release again, the bit where Mr Son talks about having "a few more crazy ideas," and take him at his word. It was only a few years ago he bet boldly and badly on a US telecoms mega-merger. The company's pace of strategic investment has not slowed, even if it has sold a few winners. If SoftBank is undertaking financial consolidation, it is to maximise future investment power at a time when (as one of its presentations pointed out) the valuations of private technology assets are high but starting to wobble. Mr Son probably has a few huge bets left in him. Those who have investment horizons measured in years rather than decades, or modest risk appetites, or limited faith in Mr Son, should invest their money elsewhere.

Walmart/JD.com: size is everything

Even in the virtual world, the small find it hard to survive. Walmart, the world's largest retailer, is still too small in China — especially online — so it has found an ally to help it to beef up.

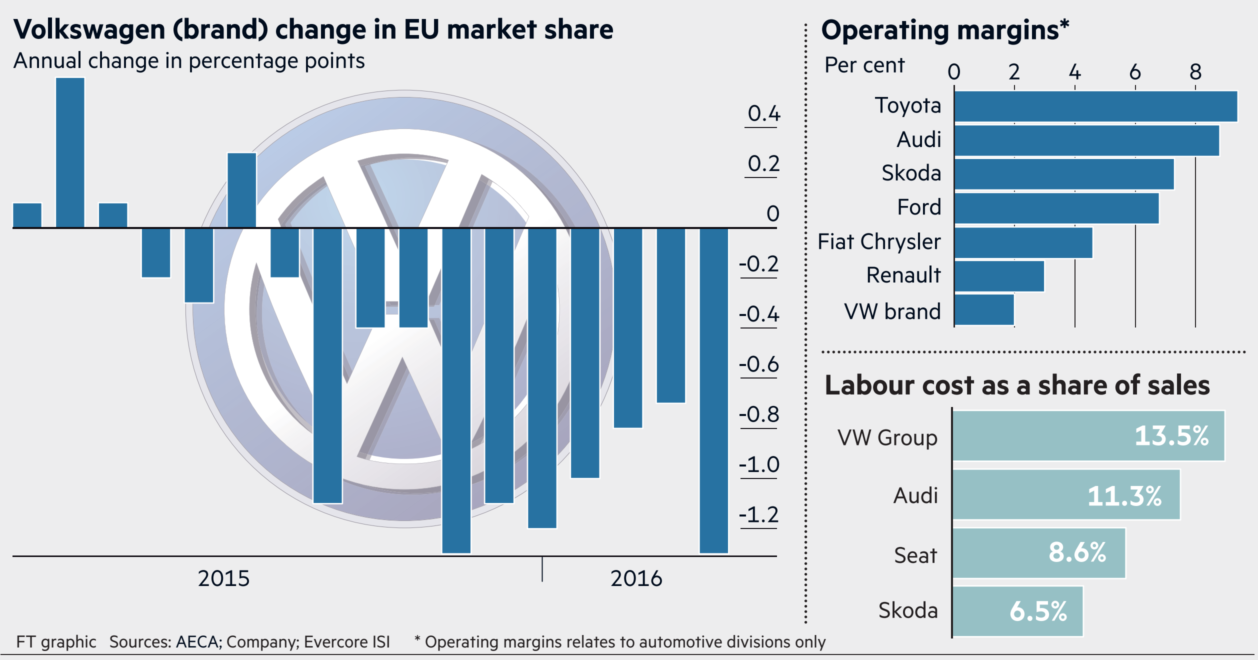
Yesterday the company said it would sell Yihaodian, the Chinese website it took over last year, to JD.com, China's second largest online business-to-consumer retailer by market share. As payment, JD will issue new shares worth $1.5bn to Walmart, which will own 5 per cent of the enlarged company. In addition, Walmart's membership discounter, Sam's Club, will open a store on JD.com, and Walmart shops will be promoted by JD.

The deal makes sense, as Walmart has been struggling in China. The country's bricks and mortar groceries market is highly competitive; over the years, foreign entrants such as Tesco have admitted defeat. In the two decades that Walmart has been in the country it has had issues with finding a format to appeal to the domestic market. The company does not disclose China revenues but, since 2011, store numbers there have grown more slowly than the international aggregate. Walmart's China shops account for just 4 per cent of its worldwide total — although last year the retailer said it planned to boost its China stores by one-quarter by 2018.

Compounding matters for vendors, China's shoppers have been shifting their buying online. In 2015, China's retail sales grew one-tenth year on year. Sales transacted over the internet grew more than 3 times as fast, according to iResearch, to account for 13 per cent of the total, or $580bn. Businesses selling direct to the consumer were half of this. Yet within this big market, Yihaodian is tiny, with just a 1.3 per cent share against JD's one-quarter. Tying up gives advantages of increased scale to both. And the two complement each other geographically, as well as by product offering. In admitting that it is too puny, Walmart has gained strength.

Home truths

The Volkswagen brand has lost market share in Europe while its margins are lower than those of peers, possibly because of higher labour costs at its German factories



FT graphic Sources: AECA; Company; Evercore ISI * Operating margins relates to automotive divisions only

Today looks set to be an uncomfortable day for senior Volkswagen executives. At the automotive group's annual meeting in Hannover, its managers will feel the full force of shareholder ire over the "dieselgate" saga, excessive pay (executive remuneration of €63m compares unfavourably with total payouts to shareholders of €68m) and corporate governance structures that date back to the 1960s.

Ditching the special voting rights accorded to the state of Lower Saxony — which, in effect, tilt the composition of the supervisory board in favour of labour and away from capital — would probably prompt more of a re-rating in the shares than the "Together 2025" plan announced last week. But it will not happen today; it will take time and relentless pressure from other shareholders. One thing that may help the process along is more transparency close to home.

Disclosure about the core Volkswagen operation in particular is less than adequate. What is clear is that its operating margins are lower than those of global rivals or even subsidiaries within the group.

The group has pledged to trim research and development costs and selling, general and administrative expenses. But that does not directly address the high cost of bolting Volkswagens together. Group labour costs are over 13 per cent of revenue. At subsidiaries Skoda and Seat, they are comfortably below 10 per cent.

Clearly, German workers are more expensive than Czech or Spanish ones — but even Audi manages 11 per cent. This suggests that bloated manufacturing costs in Lower Saxony inflate the total, although it is also the case that spending on research, development and component manufacture are disproportionately carried by the group, but without more transparency, it is impossible to know.

That is why the proposed creation of a standalone components business is a welcome step. More detail on exactly how Volkswagen plans to reduce costs and improve efficiency at its core business would make next year's annual meeting a less discomfiting affair.

Oi: call for help

It is bailout time in Brazil. The Rio de Janeiro Olympics start in early August. Last week, the state governor declared a state of financial emergency. On Monday Oi, which runs Rio's phone system, filed for bankruptcy protection. The federal government must step in.

Oi's financials have been wobbly for years. Operating cash flow has withered; last year it turned negative. Interest costs from debt of R$51.6bn ($15.2bn) were nearly double 2015 operating income. An informal restructuring process began, then stopped. The next step is asking the courts for protection and, in the worst case, liquidation.

It need not have come to this. More than once potential investors or merger partners — most recently Mikhail Fridman's LetterOne — have had a look at Oi and run away. Why? High leverage is only one issue.

There are concerns about the obligations that come with Oi's right to operate its fixed line system. These include expensive requirements to provide a telephone service in unprofitable rural areas and installing pay phones throughout its vast territory. When rules are breached heavy penalties follow. Oi is already negotiating down its accumulation of fines. Yes, Telefónica Brasil, the other fixed line system, has coped, but its franchise covers only the richest state, São Paulo.

With bonds coming due from July, some sort of debt-for-equity swap is necessary. Yet that discussion has ended, for reasons that remain unclear. Two-thirds of bondholders are foreign, and voting shareholders, including Brazil's development bank BNDES, would suffer severe dilution. Although debt-equity swaps are not unusual in situations like this, Oi is not able to make one work and cannot raise the equity it desperately needs.

The government ought to relax the strictures on Oi to make its equity attractive. If not, the big decisions will be made by liquidators.

Elliott Management: shape shifting

To be an activist, you do have to put some money where your mouth is. But the wallet can be a lot smaller than the mouth. Take a position, create noise, force a sale or split or buyback; let someone else pony up the cash. Elliott Management is one of the best at the game. It is somewhat surprising, then, that the hedge fund is morphing into a private equity firm, teaming up with Francisco Partners to acquire Dell's software arm. A much bigger outlay comes with more risk. Money gets tied up for years. The control premium that Elliott has always managed to avoid is an essential part of the business.

At least the first deal suggests the opportunism Elliott shows in its other businesses. It is buying for about $2bn a software division, which Dell paid about $4bn to assemble. Dell is busy shedding non-core assets as it looks to slim to afford its acquisition of EMC.

Part of the attraction of shifting shape is that activism has become crowded. Now when Elliott turns up with a stake, boards will find it even harder to resist. The firepower is limited but substantial. Rather than raising funds, the private equity arm will have to draw from Elliott's main fund, of about $28bn of assets under management. Its arrival makes it harder for rival private equity firms and targets to emerge triumphant.

The competitive field looks crowded in private equity too. Many firms have plenty of money to put to work and some, such as Silver Lake, have their own tech expertise. There have been a lot of recent tech private equity deals.

Yet it is notable how many of these involved Elliott as an activist. That was the case in Qlik Technologies, sold to Thoma Bravo for $3bn this month. Compuware, Riverbed Technology, Blue Coat Systems and Informatica all went to private equity buyers after Elliott urged a sale.

In a maturing tech industry, the list of potential targets is growing. Elliott's prowess as a private owner is unproven but its screening process is already battle-tested.

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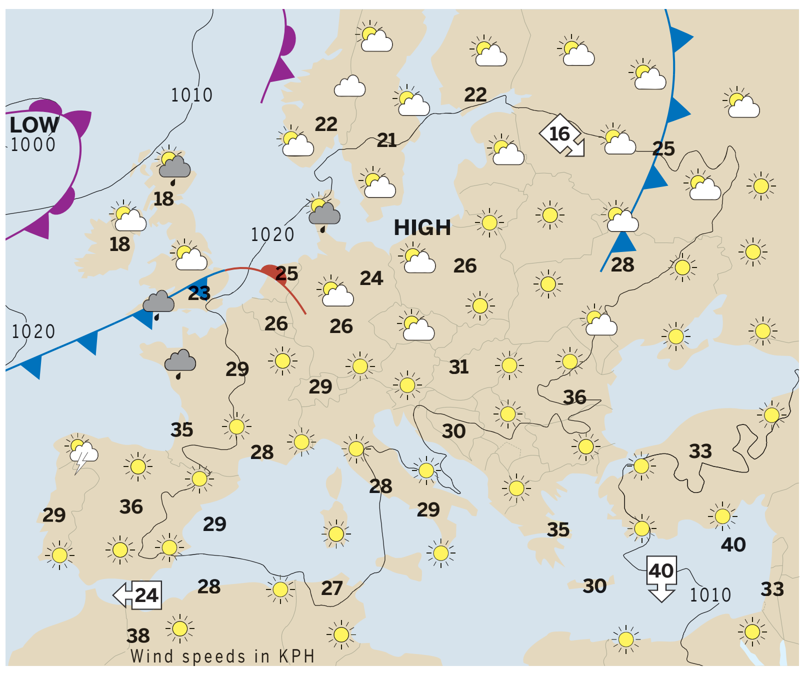
WEATHER



Forecasts by MeteoGroup
Warm front · Cold front · Occluded front · Wind speed in KPH

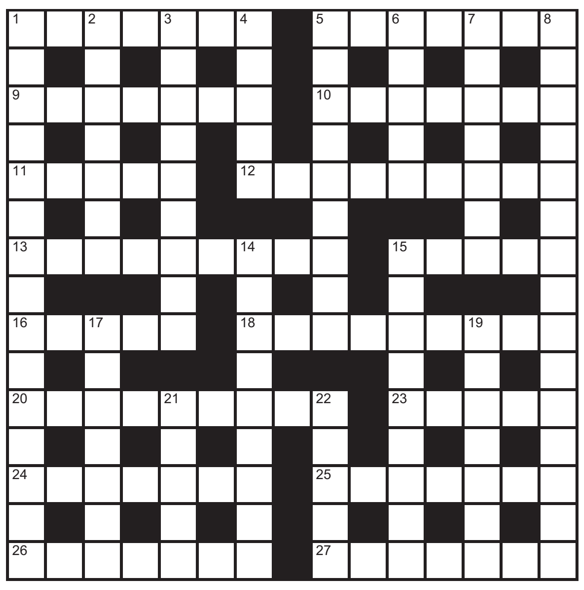
Today's temperatures

Maximum for day °C

Abu Dhabi	Sun	42	Malta	Sun	27
Amsterdam	Cloudy	25	Manila	Thunder	33
Ankara	Sun	33	Miami	Thunder	31
Athens	Sun	35	Milan	Sun	31
Bahrain	Sun	39	Montreal	Fair	23
Barcelona	Sun	26	Moscow	Fair	25
Beijing	Fair	35	Mumbai	Thunder	31
Belfast	Shower	18	Munich	Fair	27
Belgrade	Fair	31	Naples	Fair	29
Berlin	Cloudy	24	New York	Sun	32
Brussels	Cloudy	27	Nice	Sun	25
Budapest	Sun	31	Nicosia	Sun	40
Cairo	Sun	38	Oslo	Fair	22
Cardiff	Rain	19	Paris	Fair	29
Chicago	Thunder	26	Prague	Fair	26
Cologne	Fair	27	Reykjavik	Fair	15
Copenhagen	Fair	22	Riga	Cloudy	22
Delhi	Fair	39	Rio	Fair	23
Dubai	Sun	43	Rome	Sun	28
Dublin	Fair	18	San Francisco	Fair	20
Edinburgh	Shower	19	Singapore	Fair	32
Frankfurt	Fair	28	Stockholm	Fair	24
Geneva	Sun	27	Strasbourg	Sun	29
Hamburg	Cloudy	24	Sydney	Sun	19
Helsinki	Fair	22	Tokyo	Drizzle	25
Hong Kong	Sun	33	Toronto	Sun	25
Istanbul	Sun	31	Vancouver	Cloudy	19
Lisbon	Sun	29	Vienna	Sun	29
London	Cloudy	23	Warsaw	Sun	26
Los Angeles	Sun	26	Washington	Fair	31
Luxembourg	Fair	26	Zagreb	Fair	30
Madrid	Sun	36	Zurich	Sun	29

CROSSWORD

No. 15,273 Set by MONK

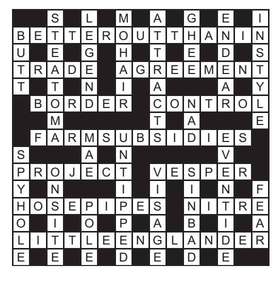


JOTTER PAD

ACROSS
1 High-flier finally trading in gold to cut deal (7)
5 Death came back, area wiped out by a single plague (7)
9 Author of the 1 across spoken language, only half finished (7)
10 One contributing to cutting, ironic works about head of state (7)
11 Plus fours finally donned by a clique (5)
12 Mainly question ladies and gents about new and old money (9)
13 Free record mostly difficult, say, to turn (9)
15 Material essential to *Sudden Impact* (5)
16 Beware of reported laid explosives (5)
18 Bring nuts buried by pigs for a lark or two? (9)
20 Company contained, not getting one over (9)
23 Noble Italian ignoring prisoner's former account (5)
24 Chap against pursuing a place in France (7)
25 Animated tirade on origins of violence inside borstals (7)
26 Indefinitely adjourned by English following inside manoeuvring (4,3)
27 Classical father arranged authentic backing (7)

DOWN
1 Sarcastic old model ruined party? (6,9)
2 Sterility of clot injected with unlimited enzyme (7)
3 Released single (9)
4 Dwelt, as it happens, with daughter (5)
5 Gourmet's timeless photo following European article (9)
6 Transfer 25% of cash in transaction (5)
7 Fail to connect using crude jingoism that's no good (7)
8 What might be best cultivated around the present time? (9,6)
14 Possibly flat surface in new unopened screen (9)
15 Contentious society girl presently dining in Paris? (9)
17 Babushka eager for fabric (7)
19 Resume method following break (7)
21 Secured position in Oxford? (5)
22 Was about to season highly and cook (5)

Solution 15,272



Companies & Markets

FINANCIAL TIMES

Steel trap Australia feels the pain of overcapacity
HENNY SENDER, PAGE 14

Daiichi Sankyo	Las Vegas Sands	Orange	Dollar/yen	Gold	Nikkei 225	German 10yr Bund	Brent oil
7.92%	1.37%	1.60%	0.6%	$21	1.3%	1bp	1.5%
¥2,576	$44.92	€14.44	¥104.58	$1,268	16,169	0.05%	$49.88

Brussels to step in over bank losses

Commission looks at outlining 'common approach' to insolvency rankings of creditors

JIM BRUNSDEN — BRUSSELS
THOMAS HALE — LONDON

EU regulators are set to intervene in a split between countries over how to force losses on investors in failed banks, amid concerns that a patchwork of different approaches would make it harder to wind down a big cross-border lender.

New rules agreed on last year by the Group of 20 are designed to prevent the kind of bailouts that occurred during the financial crisis. They force banks to have a certain amount of special "loss-absorbing" debt. EU-wide regulations to implement the agreement are being launched by Brussels.

But problems have arisen as Germany, France and Italy have sought to change their national rules so that their banks' senior debt — such as bonds — will count towards the new international requirements.

The moves centre on making sure senior bondholders take losses ahead of depositors and other senior creditors such as counterparties on derivatives.

Germany has changed its law to make it easier to impose losses on all senior bondholders, while France has instead proposed a new class of bank debt. The Italian plan focuses on giving depositors preferential treatment ahead of bond holders.

The European Commission believes the different approaches could "impede the resolution of cross-border banks and provide uncertainty for issuers and investors alike", according to a document obtained by the Financial Times.

Brussels also has a broader concern about possible disruptions to the debt market, as differing treatment of senior debt could spur "competitive distortions" between countries.

The commission is looking at solving the matter by setting a "common approach towards the insolvency ranking of certain banks' creditors", according to the document, which is set to be discussed at a meeting of national officials in Brussels tomorrow.

A German government official said that Berlin welcomed the commission's intention to act.

> Problems have arisen as Germany, France and Italy have sought to change their national rules

"The discussion is at a very early stage," the official said. "We are confident a solution will be found that is acceptable to all."

There are indications that the commission is leaning more towards the Italian and French approaches rather than the German one, which could raise some national hackles.

The document highlights several "negative consequences" of the German approach mooted by the financial services industry, including that it may push up bank funding costs more than the other alternatives in the medium to long term.

Precious moment
Miner finds 121 carat white diamond

Petra Diamonds' Cullinan mine in South Africa has yielded another large rough stone — a 121.26 carat white diamond, right, that the miner said was of "exceptional colour and clarity", **writes James Wilson**.

UK-listed Petra is among a group of smaller diamond miners for whom rare large stones are an important source of revenues. Next week the 1,111 carat Lesedi La Rona rough stone found by Lucara Diamond in Botswana will be sold in London. Sotheby's, the auction house, says the stone — the largest found for more than a century — could fetch more than $70m.

Diamond miners have expressed cautious optimism that the sector is recovering after suffering headwinds last year caused by overstocking in the industry and an economic slowdown.

Petra said the Cullinan diamond and other high-quality stones would be included in its tender sale in Johannesburg this month and "deliver an improved product mix" from the mine in the final quarter of its financial year.

Cullinan was the source of the largest rough diamond, a 3,105 carat stone found in 1905 and cut to adorn pieces of Britain's Crown Jewels.

Short View
Katie Martin

It's not just Friday this week that will test sterling traders' nerves. Tomorrow could also feel like feeding time at the zoo.

Friday, as the results of the UK's referendum on EU membership roll in, is when the main action will happen. George Soros has warned that a Leave vote could lop 15 per cent off sterling, and who can argue with the great man? The options market certainly is not.

Would-be dip buyers are itching to pounce. But timing is everything.

The global ripples are a concern. A vote to leave would not be a black swan, given how long the vote has been coming, but if, as seems likely, it morphed into a global shock to markets, do not be surprised to see the yen rocket into intervention territory. Disorderly market conditions would provide the perfect cover for the Bank of Japan to fight back against a rise. Brace, brace.

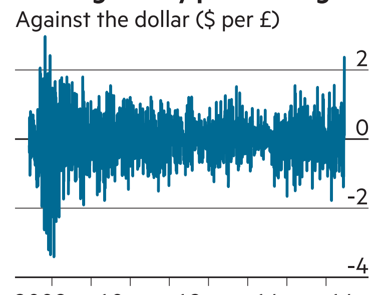
On the flip side, sterling's storming rally last Friday and Monday, when opinion polls showed more momentum shifting to Remain, suggests that the currency is a coiled spring. If Brits vote to stay in the EU, a rapid rally into rates of $1.50 to the pound or more seems plausible.

But first: Thursday. The sensible thing is to nip to the polling station and then go for a long walk. In real life, though, news that some hedge funds have commissioned their own exit polls to try to get a lead on the result will mean that any flicker of action in the pound that day will be taken as a sign that someone, somewhere "knows something". The usual polling day tumbleweed may not apply.

Resist the temptation to join in, says David Bloom at HSBC. Liquidity will be painfully thin. Any transaction, no matter how small, could have the capacity to hit the market disproportionately hard. Some speculative accounts could even try to fire up suspicions that Harry Hedge Fund has an early lead. And others may just take a punt.

"There may also be traders who have no conviction about the final result but simply believe that a skittish market is likely to panic at some point during the day. If they were to rationally sell in expectation of this, it might become a self-fulfilling prophecy," says Mr Bloom. Good luck.

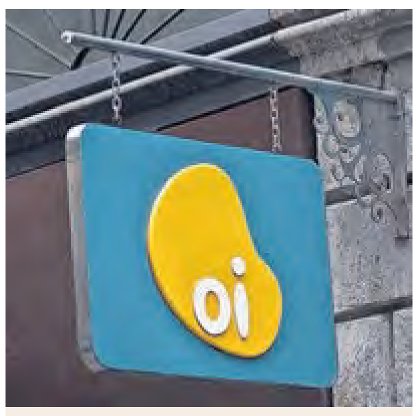
Sterling – daily price change
Against the dollar ($ per £)



Source: Thomson Reuters Datastream

Sterling's rally while opinion polls showed momentum shifting to Remain suggests it is a coiled spring

katie.martin@ft.com



Brazil's biggest bankruptcy request as creditors cut line

Oi, the fixed-line telecoms operator, filed Brazil's biggest bankruptcy protection request, hit by $19.2bn of debt and a flagging economy. The move followed the failure of restructuring talks with creditors.

Lex ▸ PAGE 12
Nightmare scenario ▸ PAGE 14

Oil majors urge Washington to leave door open for drilling north of Alaska

ED CROOKS — NEW YORK

Oil groups have written to the US administration urging it to keep open the prospect of drilling in the seas north of Alaska in the next decade.

Oil exploration in the US Arctic has ground to a halt as a result of the crude crash and Royal Dutch Shell's failure to find significant reserves with a well it drilled in the region last year.

Companies have given up all the US Arctic drilling rights, with the exception of one lease retained by Shell.

But producers including Shell, ExxonMobil, Chevron and ConocoPhillips have written to the Bureau of Ocean Energy Management, which controls US offshore drilling rights, calling for it to stick to its plan to sell leases off the coast of Alaska between 2020 and 2022.

The proposed sales have been criticised by environmental groups, who say the spill risks are unacceptable. But the companies say developing the region's resources is vital for the US economy.

Their interest in the lease sale programme shows that, though Arctic oil does not look viable with crude at less than $50, the industry hopes it could be developed.

The industry has cut spending on new projects and exploration for additional resources sharply in response to the slump in oil prices, weakening its future production prospects, but still sees the Arctic as an important potential source of growth.

The consultation period for the BOEM lease sale proposals ended last week, and most large western oil companies submitted opinions that have been published by the US government.

Shell wrote that in spite of its failures, "we continue to believe offshore Alaska and the broader Arctic have strong exploration potential, and that these areas could ultimately be important sources of energy". It backed a suggestion from Alaska's governor that a planned lease sale in the Beaufort Sea should be brought forward to 2019.

Exxon argues that the Chukchi Sea, north-west of Alaska, offers "greater resource potential than any other currently undeveloped energy basin in the US".

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Automobiles

BaFin seeks probe of former VW board

German regulator wants investigation into possible market manipulation

GUY CHAZAN — BERLIN

Germany's financial regulator has called on prosecutors to investigate the entire former management board of Volkswagen on suspicion of possible market manipulation.

The move comes with VW facing a wave of accusations from investors that it took too long to disclose to the markets that diesel vehicles had been equipped to cheat in emissions tests.

VW publicly revealed last September that it had used software-based "defeat devices" in up to 11m of its diesel vehicles, which served to understate emissions of hazardous nitrogen oxides in official laboratory tests. But on Monday, prosecutors in the northern German city of Braunschweig, near VW's Wolfsburg headquarters, said there was evidence to suggest that VW could have disclosed the potential damage arising from the emissions cheating earlier.

On that basis, they said they had launched an investigation into Martin Winterkorn, VW's former boss, and an unidentified second executive, into whether they had manipulated markets — by delaying the release of information about the company's deception.

Yesterday, it emerged that BaFin, Germany's financial watchdog, had called on the Braunschweig prosecutors to investigate the entire former management board.

A person with knowledge of the matter said BaFin believed it should be investigated whether the whole board should be held collectively responsible for how the cheating was communicated to markets. BaFin and VW declined to comment.

The news could prove embarrassing for VW chairman Hans Dieter Pötsch and its current chief executive Matthias Mueller, who were both members of the board when the diesel emissions scandal broke on September 18.

The affair triggered the biggest loss in VW's 79-year history, and its shares have fallen more than 20 per cent.

News of BaFin's intervention comes as VW prepares for its annual meeting today, when investors are expected to vent their anger over the emissions scandal. Several proxy advisers have recommended shareholders oppose a vote of confidence in VW's supervisory and management boards.

This week law firm Quinn Emanuel said it had filed a lawsuit against VW on behalf of the California State Teachers' Retirement System and other institutional investors over losses resulting from the slump in VW's share price after the emissions scandal was disclosed.

"Companies must be held accountable when they engage in such widespread deliberate deceit which destroys shareholder value, damages their reputation and harms the public," said Brian Bartow, general counsel for the Californian pension fund. He added the action did not only seek to recover economic losses, but "ultimately, to implement much needed corporate governance reforms going forward at Volkswagen".

Other investors have questioned whether VW's supervisory board has sufficient independence and authority to hold management to account.

See Lex

11m
Diesel vehicles in which VW publicly admitted using software-based 'defeat devices'

20%
Amount the company's shares have fallen since the scandal was revealed

Telecoms. Debt burden

Oi bankruptcy spotlights Brazilian 'nightmare'

Former national champion's shares suspended after move to freeze payments

JOE LEAHY AND SAMANTHA PEARSON
SÃO PAULO

Oi has filed for 'judicial recuperation', similar to US Chapter 11 bankruptcy protection
Bloomberg

Shares in Brazil's biggest fixed-line telecoms operator Oi were temporarily suspended yesterday, one day after the former national champion filed the country's largest ever request for bankruptcy protection.

Oi's move to freeze payments on R$65bn ($19bn) of debt comes at a particularly sensitive time for Latin America's largest economy. A series of heavily leveraged groups are seeking to restructure their loans amid what is expected to be Brazil's deepest recession in a century.

"It's a nightmare scenario driven by macroeconomic factors and it is pushing our Brazil corporate portfolio into non-investment grade," said Daniel Kastholm, Fitch Ratings regional group head for Latin America corporate finance.

Brazil's economy has been beset by a perfect storm. The end of a commodities supercycle and the falling oil price have coincided with what critics say was mismanagement by leftwing President Dilma Rousseff that has deterred investors and led to a fiscal crisis.

The downturn, in which gross domestic product contracted nearly 4 per cent last year and is expected to do so again in 2016, has been compounded by political uncertainty, with Ms Rousseff suspended while she is being impeached by the senate.

The slowdown has hit the most vulnerable Brazilian companies particularly hard. Among those struggling are groups that loaded up on debt during the boom and those that have become involved in a corruption scandal affecting state-owned oil company, Petrobras.

The country's second-largest airline, Gol Linhas Aéreas Inteligentes, is trying to negotiate a $780m debt swap with creditors while steelmaker Usinas Siderurgicas de Minas Gerais, known as Usiminas, is also seeking a restructuring.

Others, such as Petrobras, the world's largest emerging market corporate debtor with R$450bn in gross debt, are balancing on the edge, with analysts divided on whether it will need recapitalisation.

Analysts said the situation was more difficult than Brazil's last liquidity crunch during the global financial crisis.

"The scenario was also similarly difficult in 2008 but the difference is that then the [Brazilian] government and banks were offering credit, providing liquidity," says Ricardo Carvalho, an analyst at Fitch Ratings.

Oi, which is also the country's fourth-biggest mobile operator, on Monday filed for "judicial recuperation", Brazil's version of the Chapter 11 procedure of the US, after earlier restructuring talks with creditors failed.

The company had previously entered talks with LetterOne, an investment fund owned by Russian billionaire Mikhail Fridman, to merge with rival Tim, Telecom Italia's Brazilian subsidiary. L1 Technology, a LetterOne business unit, had offered $4bn to support the merger but abandoned talks after it said Tim had said it was not interested.

Oi said yesterday its shares had been suspended during morning trade and withdrawn from stock market indices on São Paulo's BM&FBovespa market.

Most of Oi's financial creditors are foreign bondholders, with 66 per cent of its debt, while state banks and export credit agencies hold 19 per cent, commercial banks 7 per cent and local bondholders 8 per cent.

The company's problems stem from debt accrued from mergers and acquisitions as well as the heavy capital expenditure required to meet mandatory goals for the expansion of its fixed-line network.

Credit Suisse calculated that the only way the company would be able to turn its free cash flow positive by next year is if it achieved a 65 per cent reduction in its gross debt through a combined haircut and debt-to-equity swap.

"Given the uncertain political scenario, large debt renegotiations have become extremely complex because such agreements need to be based on mid and long-term macroeconomic forecasts," says Bruno Caraciolo at De Faro Caraciolo Advogados law firm in São Paulo. "As such, it's reasonable to expect that we'll see more requests for bankruptcy protection from large debtors over the next few months, especially those that are more dependent on the public sector."

Fitch's Mr Kastholm said the downgrading of Brazil sovereign rating to non-investment grade was pushing much of the corporate portfolio into junk status. But individual companies and industries had their own issues, he added, characterising different sectors as the "good, the bad and the ugly".

Included in his "ugly" list are airlines, which have suffered a fall in passengers and some steel companies. Usiminas, for example, which supplies flat steel for automakers and home appliances, has struggled with rising steel imports and a collapse in demand for cars.

Mr Kastholm's "bad" list includes oil and construction companies affected by the Petrobras investigation, while the "good" include pulp and paper companies that are benefiting from greater exports with the weakening of the real.

"It's a cash flow crisis. Companies have responded like you would expect. They have cut capital expenditure, cut fat. The issue now is it's starting to get down to the bone," said Mr Kastholm.

See Lex

INSIDE BUSINESS
ASIA

Henny Sender

Scrap among creditors corrodes prospects for Australian steelmaker

As the effects of China's flagging demand for steel are felt across the globe, Australia has become the latest battleground. It was among the biggest beneficiaries of China's building boom and finds itself a victim of the decline. And all of this can be seen in a struggle over a South Australia steel company, Arrium.

In April the company was put into administration along with its principal unit, the Whyalla steelworks. But the story is playing out on multiple levels, not all of them visible, as Australians prepare to go to the polls on July 2. The state's Labor government plans to inject A$50m ($37m) into Arrium, with Malcolm Turnbull, the Liberal prime minister, agreeing to contribute almost the same to keep the plant going.

"It is essential we retain our sovereign steelmaking capability," South Australia's premier, Jay Weatherill, told parliament this month.

Like other producers in the sector, from ArcelorMittal to Tata Steel in Europe and Nippon Steel in Japan, Arrium and Whyalla have been wounded by slowing demand. They have also been hit hard by cash-strapped state-owned steelworks on the Chinese mainland that are less sensitive to any threat to profits than they are to the need to support jobs.

Overcapacity has triggered social divisions and political pressure well beyond China's borders, fuelling protectionism and friction with trading partners. At the same time the troubles of commodity producers, whether of iron and steel or oil and gas, have left banks and other lenders with bad loans — especially for those careless enough to not take collateral. Falling commodity prices too have triggered fierce disputes among creditors, as is the case at Arrium.

Arrium owes the big four Australian banks A$1bn, but has total debts to other lenders — including noteholders in the US, trade creditors and its own workers — of A$3bn. It directly employs 8,300 staff, of whom 1,600 are in Whyalla itself while several thousand depend on the steelworks indirectly.

At the end of last year, potential buyers led by international private equity and alternative asset firms, including Blackstone, Brookfield, Carlyle and KKR, took a look at Whyalla. But their offers and the process were suspended, according to several potential buyers.

> Blackstone came in after careless banks declined to extend Arrium more money

Most of these groups were attracted not to the steel operations but to Arrium's Moly-Cop metal-grinding unit, bought in 2010, which could be worth A$1.5bn.

This year the mood among various creditors turned ugly after Blackstone's credit arm came in with $100m in rescue financing and a proposal — launched jointly with Blackstone's private equity arm — to give Arrium $750m in new debt and commit to underwrite a $250m rights offer. However, the plan would have given Blackstone control of the company, with the support of management, and require the banks to accept losses of 50 cents on every dollar lent.

In the end management was unable to persuade the lenders to accept such massive losses. Instead the banks supported putting Arrium into administration.

To critics Blackstone represented the ugly face of American capitalism: it extended a struggling company expensive funding and took rich fees in the process. But people close to the company say Blackstone came in at the request of management, only after the banks declined to extend more money. They argue that the problem was more the banks' failure to demand collateral for their loans, and their decision to force the company into administration.

Administrators are entertaining proposals for Arrium that could mean breaking it in two or listing Moly-Cop. In an echo of the fight over Tata's UK empire, some would-be buyers are hesitating to take on Arrium's steel assets given the political opposition to any drastic restructuring involving lay-offs.

South Australia's provincial government insists that shutting Whyalla is not an option. "It is so politically charged that it will be a hornet's nest," says one potential bidder.

"The Blackstone plan was an outcome at least as good as what they are trying to do now," says one person who was sympathetic to the US asset manager's bid.

Whether that is accurate will be determined after Arrium's fate becomes clear.

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Media

Instagram doubles users to 500m over 2 years

HANNAH KUCHLER — SAN FRANCISCO

Instagram has more than doubled its userbase in just two years with 500m people logging on each month to the app known for its filters, fashion and food.

The Facebook-owned app said it had added 100m monthly active users since last September — a faster rate than it took to acquire the 100m users before that. More than 80 per cent of users now live outside the US.

Instagram said 300m people used the app every day — flicking through photos and curating their own — as social media platforms move towards measuring daily rather than monthly users.

Facebook has almost 1.1bn daily active users, while Snapchat has at least 100m people using the chat app every day. Twitter, which has been struggling with user growth, does not report daily active users but has 310m logging on to the messaging platform every month.

Some 200,000 advertisers now buy slots on Instagram, according to figures given in Facebook's most recent earnings briefing. While Facebook does not break out advertising revenue for the app, analysts are increasingly excited about the contribution it could make.

Credit Suisse estimated this year that Instagram could contribute $3.2bn in revenue for 2016. E-Marketer, a research firm, said it expected Instagram to contribute 15 per cent of Facebook revenues in the US this year, and 8 per cent worldwide.

To woo advertisers, Instagram has created new formats including longer video ads and a "carousel", which marketers can use to put a buy button on individual products. Instagram ads can also be targeted using Facebook data.

Facebook bought Instagram for $1bn in 2012, just before Facebook's initial public offering, amid anxiety that the main social app could lose users, particularly a younger audience, to newer rivals. But Facebook's main app has continued to grow, to a monthly active user-base of 1.6bn, at the same time it has pursued a "family of apps" strategy.

Since then, it has added SMS-replacement app WhatsApp, which passed 1bn monthly active users this year, and spun out some of its own functions, most prominently Facebook Messenger, which now has 900m monthly active users. People spend an average of 50 minutes a day using Facebook, Facebook Messenger and Instagram.

Financial services

Former Visium fund manager found dead

LINDSAY FORTADO
HEDGE FUND CORRESPONDENT

Sanjay Valvani, a former portfolio manager at a New York hedge fund who was charged last week with netting about $25m in profits from insider trading, has been found dead in an apparent suicide.

The 44-year-old partner at Visium Asset Management, who lived in Brooklyn, was found dead at his home, New York Police Department said. They are "preliminarily" treating it as a suicide.

"This is a horrible tragedy that is difficult to comprehend," said Valvani's lawyers at Kramer Levin, Barry Berke and Eric Tirschwell.

"Sanjay Valvani was a loving father, husband, son and brother and committed friend, colleague and mentor. We hope for the sake of his family and his memory that it will not be forgotten that the charges against him were only unproven accusations and he had always maintained his innocence."

Valvani had been charged by the US Attorney for the Southern District of New York, Preet Bharara, with trading on tips on planned generic drug approvals from a former US Food and Drug Administration official over six years for Visium's pharmaceuticals portfolio.

The portfolio manager was facing five counts of fraud, four of which carried maximum sentences of 20 years in prison, and a fine of twice the gross gain from the offence. He had pleaded not guilty.

After he was charged last week, Mr Berke said that his client was "an innocent man whose investment decisions were always based on rigorous and entirely appropriate research and analysis, consistent with his high integrity."

Visium, a once-$7.8bn hedge fund, has begun winding down since the charges. It managed to sell one small fund to AllianceBernstein, the asset manager.

Another former Visium manager, Stefan Lumiere, was charged at the same time as Valvani last week over alleged mismarking in the credit fund. Two other co-defendants are co-operating with the authorities and agreed to plead guilty. Both men — Gordon Johnston, a political intelligence consultant and former FDA official, who was working for Visium, and Christopher Plaford, a former Visium portfolio manager who executed trades based on the information — had worked with Valvani.

Tensions marked run-up to SoftBank departure

Exit of Japanese group's president followed frictions within the company and with its founder

LEO LEWIS AND KANA INAGAKI — TOKYO

In January this year, the board of SoftBank received a letter from a US law firm known for its investigations, which said it was representing a group of anonymous investors.

The document cited a "series of questionable transactions" over the previous 18 months and focused heavily on a $13bn spree of global acquisitions led by Nikesh Arora, SoftBank's president and, until his abrupt resignation yesterday, the expected heir to one of Japan's most successful 21st century businesses.

SoftBank's public response to the letter was calm and it called the claims "unsubstantiated" and Mr Arora denied every allegation.

But according to people close to the company, the mood internally was more fraught. Masayoshi Son, the founder, has sought to emulate US investor Warren Buffett, and Mr Arora boasted that he was helping to turn the Japanese technology and telecoms group into the "Berkshire Hathaway of tech". Within the business, however, some thought he was moving too fast.

They say that resentment had been building already: Mr Arora had a reputation for a distant management style; his record-breaking remuneration — he was the country's highest paid executive over the past two fiscal years, earning ¥25bn ($239m), compared with ¥261m paid to SoftBank founder Mr Son; and his anointment in May 2015, less than a year after he joined the company, as the heir apparent to Mr Son.

'It is tough to be a non-Japanese at the top of a company. We have seen that on several occasions'

In April, the SoftBank founder declared his "1,000 per cent confidence" in Mr Arora and expressing certainty that the former Google executive would continue to do great things for the company.

Mr Arora's record over 18 months, a SoftBank spokesman added, was not long enough to evaluate the success of his investment strategy. And on Monday, the company announced that the law firm's allegations against him did not merit an investigation.

But some investors say the damage to Mr Arora's standing within the company had been done.

"The allegations in that letter looked marginal," says one investor whose fund has held a substantial position in SoftBank for more than a year. "But they may have added to a climate that was already becoming difficult."

Another investor says being a foreigner is always awkward at Japanese companies, citing the experience of Nissan's Carlos Ghosn and Sony's former president, Sir Howard Stringer.

"It is tough to be a non-Japanese at the top of a company," he says. "We have seen that on several high-profile occasions now. It is hard to get the buy-in from key Japanese executives."

In Mr Arora's case, it was doubly difficult because he was president at a company where the founder retained ultimate control.

The California-based Mr Arora told the Financial Times that the first signs of trouble emerged four to six weeks ago when he had dinner at Mr Son's home in Atherton, south of San Francisco.

Mr Son had pledged to hand over the reins when he turned 60, but Mr Arora says that over the course of several conversations, the SoftBank founder began to have second thoughts. He was increasingly unsure whether he was ready to begin the transition or what he would do after stepping down.

"It's his company," says Mr Arora. "He is the founder. This has been his baby for 40 years."

Analysts also say that the pair's relationship had become so cozy that it alienated other executives. In May 2015, when Mr Arora was tapped to become president, Mr Son described their relationship as "so close it's a bit crazy". The pair became inseparable and two Japanese executives who had previously worked closely with Mr Son were effectively demoted the following month.

Mana Nakazora, chief credit analyst at BNP Paribas, who spoke to the FT before Mr Arora's resignation was announced, says: "Mr Son introduced Mr Arora to analysts as someone he could trust the most and he said that in front of people who had been working hard in Japan. I thought that would cause tensions."

SoftBank employees in Japan say that Mr Arora was both admired and feared, criticising the fact that his global team was completely detached from other businesses within the group. "We had no idea what Nikesh was up to," one says, adding Mr Arora made no visible attempt to engage with colleagues handling domestic operations.

The internal tensions intensified at a time when differences between the investment strategies of Mr Son and Mr Arora emerged.

Under Mr Arora's stewardship, SoftBank had gone on a $13bn acquisition spree including a $1bn investment in South Korean online retailer Coupang and $627m injection in India's Snapdeal, according to Dealogic.

Most recently, the Japanese group took part in a $4.5bn round of investment in Didi Chuxing, the Chinese car-hailing service, alongside Apple and Chinese internet groups Tencent and Alibaba. It also made a big bet in financial technology sector, investing $1bn in Social Finance (SoFi), a start-up online lender known for charging lower rates than most traditional banks.

But in a divergence from Mr Son's strategy of placing long-term bets in the companies he backed, Mr Arora also shed investments of which the Japanese billionaire was supremely proud. These include the decision to offload $10bn of Alibaba shares and the $8.6bn sale of SoftBank's majority stake in gaming group Supercell announced yesterday.

"These were decisions that were never made in the past, and there was a clash of opinion," says one person who has worked with Mr Son for many years.

In the end the Japanese billionaire simply was not ready to give up control — at least not to Mr Arora.

Additional reporting by James Fontanella-Khan in New York and Lionel Barber in London

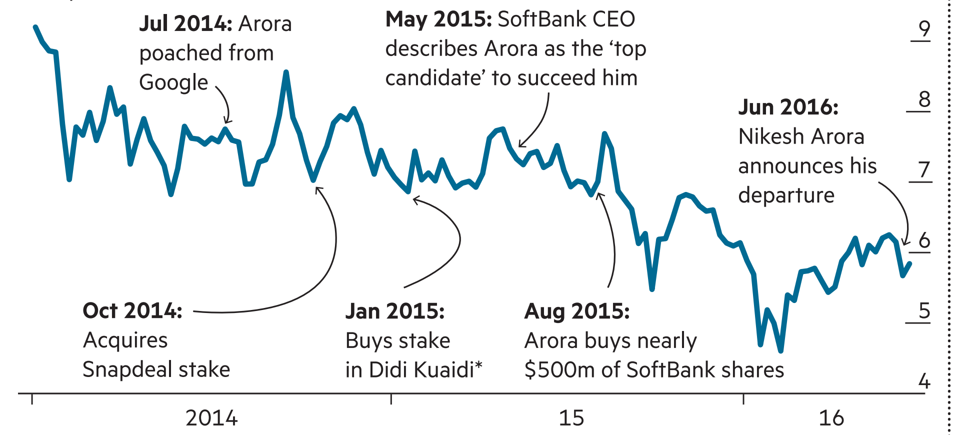
See Lex

Change at the top

Nikesh Arora, SoftBank's president, left, and founder Masayoshi Son at a lecture in Tokyo last year Kazuhiro Nogi/AFP/Getty Images

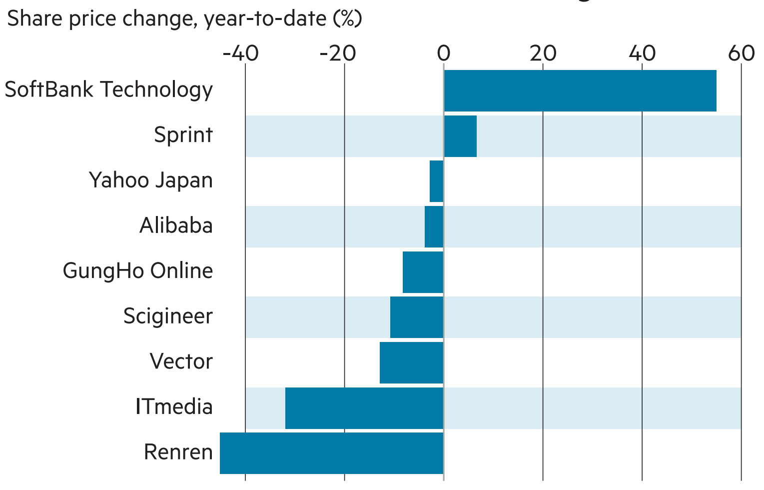
SoftBank under Arora

Share price (¥ '000)



Performance of SoftBank's main listed holdings

Share price change, year-to-date (%)



FT graphic Sources: Thomson Reuters Datastream; company; Bloomberg * Renamed Didi Chuxing

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No role in second act for the man in waiting

COMMENTARY
Richard Waters

A tech fortune dating from the dotcom boom. A multi-billionaire founder trying to work out his company's next act. An ambitious manager waiting in the wings. Nikesh Arora, who has just stepped down as president of SoftBank and heir apparent to the legendary Masayoshi Son, must feel as though he's seen it all before.

Before decamping to the Japanese company two years ago, the former telecom executive spent a decade at Google, rising to become its chief business officer. He faced much the same situation there: two massively wealthy founders were grappling with the question of how to find a new lease of life for one of the great internet empires, and showing no inclination to hand over the reins.

But while there are parallels, Google and SoftBank have come up with very different answers to the question that befalls all successful tech companies in the end: how do you come up with a second act? It is Mr Arora's misfortune to figure in neither.

Google showed its hand last summer. By transforming itself into tech holding group Alphabet, it became in some ways much more like SoftBank, most of whose value lies in its investments. But while Mr Son at SoftBank is trying to reprise his early Japanese success, looking for the next great internet start-ups around world, Google co-founder Larry Page is betting that the next fortunes in technology will come from fields like biotech and driverless cars.

A second big difference lies in their views about the type of talent needed to succeed in a world where technology holds sway. At Google, it has never been in doubt that engineers run the show. A year after Mr Arora left the company, Mr Page, though still only 42, handed over control of the internet division that accounts for all but 1 per cent of Alphabet's revenues to an engineer, in the shape of Sundar Pichai.

Mr Son, meanwhile, had a different plan. In picking Mr Arora as his expected successor, he showed a preference for a business-minded executive and dealmaker who could build a global portfolio of internet assets — not an engineer who would roll his sleeves up and help to devise the next big thing.

The reversal on that succession will inevitably leave questions. Did Mr Son and Mr Arora clash over Softbank's future? Was shareholder unhappiness with Mr Arora's high pay a sign of deeper resistance to him? More than anything, however, the resignation will put the spotlight back on one of the great tech investors. If SoftBank is to have a next act then, for better or worse, it is up to Mr Son to write it.

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Interview. Mauro Moretti

Leonardo-Finmeccanica chief prepares for acquisitions trail

Italian industrial group eager to expand its helicopters and defence electronics divisions

PEGGY HOLLINGER — INDUSTRY EDITOR

Mauro Moretti is in expansion mode. Barely two years after arriving to shake up and streamline the top 10 global defence company Finmeccanica, the chief executive of the newly rebranded Leonardo-Finmeccanica is talking about acquisitions.

"We are ready to buy or exchange businesses," he says in an interview with the Financial Times. "We want to grow in our core areas, particularly in helicopters and defence electronics."

Mr Moretti indicated that Leonardo could even be willing to swap part of the Italian industrial champion's 25 per cent stake in European missile maker MBDA.

Airbus should take note. Europe's leading aerospace and defence group has long coveted control of the missile company in which it and BAE Systems each have a 37.5 per cent stake.

Mr Moretti's eye, meanwhile, is on winning control of ATR, the regional aircraft maker that it jointly owns with Airbus.

DRS Technologies, the US electronics business put up for sale by Leonardo last year and then withdrawn after a stronger than expected turnround, could also be a swap candidate, although the Italian company intends to retain control, says Mr Moretti.

The former trade union official — who was handpicked by Italy's prime minister to revive the partially state-owned company — is feeling so flush after reporting a sharp rise in net profits, from €20m in 2014 to €527m in 2015, that he is even considering restarting dividend payments next year.

Leonardo has not paid a dividend since 2010.

But not everything is quite as rosy as Mr Moretti would wish. A British vote this week to quit the EU would pose a real threat, not just to Leonardo, which has significant interests in the UK, but to the country's entire defence industry, he says.

"Europe is moving towards . . . common defence projects," Mr Moretti says. "Obviously if [Britain] exits from Europe it is quite difficult to have the same opportunities in future." He adds that on its own, Britain or any other European country would not be able to fund development of the cutting- edge technologies that are necessary to compete against richer defence budgets in China or the US.

Leonardo's UK businesses — AgustaWestland, the helicopter maker, and Selex, a leading maker of radars and sensors — would be handicapped by a Leave vote, says Mr Moretti. Eventually, he adds, Leonardo could be forced to review its investments in Britain.

A vote to leave would make life more difficult, he says, just as the outlook for Leonardo begins to improve.

The company, once a ragbag of industrial interests struck by serial allegations of corruption, has in the past year shed its rail and bus businesses to focus on aerospace, defence electronics and security.

But rebuilding Leonardo's reputation after high-profile corruption scandals will take time. This month a former chief executive, Giuseppe Orsi, saw his acquittal reversed by an appeals court for his role in alleged kickbacks in an Indian helicopter contract.

Reports have resurfaced in the Indian media that the Indian government has blacklisted Leonardo as a result, although Mr Moretti says the company has not been informed of any such move.

He admits that there has been an issue with corporate culture at Leonardo but says this is changing. He challenged Indian authorities to come in and scrutinise the company's practices.

Mr Moretti has sought to clean up Leonardo's image, along with the chairman, Giovanni de Gennaro, a former chief of police who led investigations into the mafia.

Mr Moretti says that he has replaced all executives who were tainted by corruption allegations.

His efforts at changing perceptions appeared to be paying off last year, with Leonardo's shares reaching a seven-year high in November.

However, the stock has fallen by a third since the beginning of this year and the company still retains its junk credit rating.

Leonardo's recovery still needs to prove itself, say analysts, even if good progress has been made. Uncertainty clouds the outlook for the company's helicopter division — badly hit by the sharp downturn in its key market of oil and gas exploration.

Mr Moretti promises that these questions will be answered. As far as the oil and gas sector is concerned, this will be the trough year, he believes. The oil price has passed $50 a barrel, strengthening his conviction that the helicopter sector is on the brink of recovery.

"By the end of 2016 we will have a positive trend," he says.

Leonardo has come a long way in the nearly two years since Mr Moretti arrived, but there is still some way to go.

Just over a year ago he said he would be in a new job within two years. Now, his timeline has stretched a bit. Mr Moretti says he will not be looking for a new challenge before 2020. "I would like to complete this mission," he adds.

UK helicopter maker AgustaWestland is part of the group — Paul Thomas/Bloomberg

Banks

Jefferies cautions on lending sector rebound

Boutique's results raise questions about strength of Wall Street's recovery

ALISTAIR GRAY AND ERIC PLATT
NEW YORK

The investment bank Jefferies has returned to profitability but cautioned about pressure in some areas, raising fresh questions about the strength of the recovery on Wall Street from a bleak first quarter.

The New York boutique, whose November-year end means it releases results before larger rivals, swung back to the black with $54m of net earnings between March and May.

That was a tenth lower than the $60m it produced in the same period a year ago, however, and Rich Handler, chairman and chief executive, described the trading environment as "merely stable versus robust".

While net revenues of $719m marked a rebound from the $299m it produced in the first quarter, they were down 9 per cent from the comparative 2015 period. Sales and trading revenues rose from $382m a year ago to $462m, driven by fixed income, but investment banking revenues dropped from $404m to $253m.

Results from Jefferies, which is privately owned by Leucadia, are watched for what they say about the wider sector.

The bank was among the hardest hit in the industry by the markets meltdown at the start of the year and made a $167m loss between December and February.

Those results presaged downbeat figures from its larger rivals including Goldman Sachs and Morgan Stanley, whose first-quarter earnings collapsed by more than half.

Investors, analysts and executives are expecting a rebound in investment banks' performance as markets have since stabilised.

JPMorgan Chase said earlier this month it was on track to produce a "mid-teens" percentage increase in markets revenue in the second quarter from a year ago and Bank of America pointed to an improvement in the "mid-single digits".

Mr Handler said Jefferies' overall quarterly results were at a "more normal level, reflecting better equity and fixed income secondary trading conditions".

Still, he said leveraged finance — lending to companies that are highly indebted, which is one of Jefferies' main business lines — as well as new issues activity continued to be "slow".

Prices of lowly rated corporate debt slid sharply in January and February as fears grew about a US recession, the performance of the Chinese economy and a collapse in the crude price.

However, in the subsequent markets recovery such bonds outperformed those issued by blue-chip groups.

Brian Kleinhanzl, analyst at Keefe, Bruyette & Woods, cautioned against reading too much into the results from Jefferies, whose business mix is different from larger rivals.

"March, April and May were better than Jan and Feb. That was already known. The big question still is what's going to happen in June," he said.

Travel & leisure. Gambling

Singapore's casinos bet on mass-market success

Asian hub adapts to loss of VIP custom in wake of China's slowdown and anti-graft push

JEEVAN VASAGAR — SINGAPORE
BEN BLAND — HONG KONG

Singapore's Resorts World is cutting staff in an attempt to 'stay relevant in this challenging market' — Charles Pertwee/Bloomberg

The newly opened restaurant at Singapore's Resorts World, the complex best known for its 15,000 sq m casino, is billed as Asia's first Michelin chef showcase. Every few weeks a new Michelin-starred chef takes charge of the kitchen at Curate, serving up a limited-edition tasting menu in a haute cuisine twist on pop-up dining.

The move is part of efforts to attract new customers and shore up sagging profits as Asia's second-biggest gambling hub feels the pain of China's anti-corruption drive and economic slowdown.

That decline was underlined this month when Resorts World announced it was cutting staff in its gaming business — a move necessary to "stay relevant in this challenging market", it said in a statement.

Big-betting Chinese gamblers drive earnings at casinos across the region but they have scaled down their activity over the past two years in light of President Xi Jinping's crackdown on graft and extravagance, as well as the impact of slowing mainland economic growth.

> Big-betting Chinese gamblers have scaled down their activity in the past two years

Gross gaming revenue in Macau, the Chinese territory that is the world's biggest casino centre by revenue, dropped 10 per cent in May to $2.3bn from the same period a year earlier, dwindling for a 25th successive month.

Crown Resorts, the Australian gambling group controlled by billionaire James Packer, is spinning off its international investments into a separate company, partly to insulate its domestic business from the Macau slowdown.

Industry analysts have been debating whether the China clampdown will drive business to casinos elsewhere in Asia or simply shrink the size of the Chinese VIP betting market across the region.

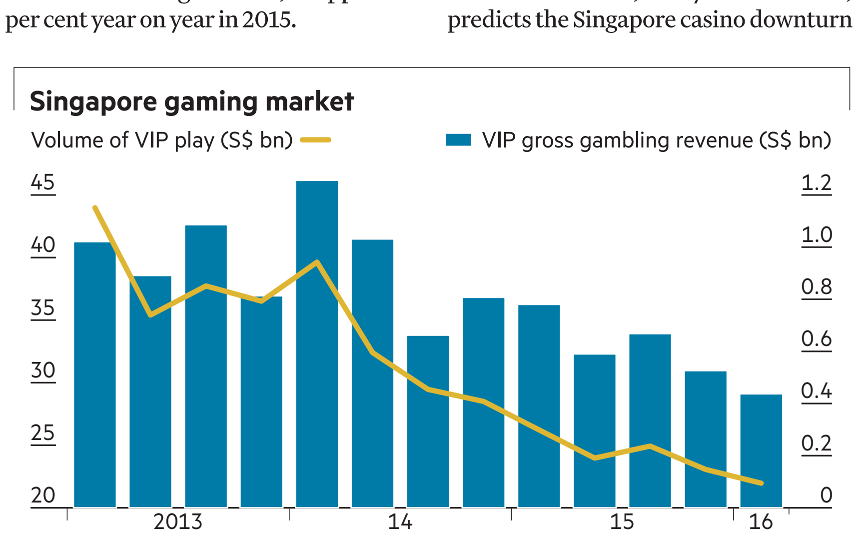
The pressures on Singapore's casino add to suggestions that, for now, other markets are suffering the fallout from the China slowdown.

Net profit at Resorts World's owner Genting Singapore, which is controlled by Malaysia's Lim family, fell 70 per cent last year to S$193m ($144m), the smallest profit since the casino opened in 2010.

The business, like rival Marina Bay Sands, has been squeezed by the anti-corruption crackdown and a surge in bad debt as unlucky gamblers leave without paying up. Casino revenue at Marina Bay Sands, owned by Sheldon Adelson's Las Vegas Sands, dropped 10 per cent year on year in 2015.

The debt burden on Singapore casinos — Genting Singapore took a S$270m loss on trade receivables last year, up from S$262m the year before — contrasts with Macau, where casinos are more insulated from their gamblers' misfortunes by using middlemen known as junket operators who provide credit to customers and collect debt.

Tushar Mohata, analyst at Nomura, predicts the Singapore casino downturn is bottoming out, citing data showing the volume of VIP play at Genting stabilising at S$8.5bn per quarter following a sharp drop after the launch of China's anti-corruption crackdown in 2014.



Non-gaming revenues at Genting's Resorts World remain healthy, down only marginally from S$653m in 2014 to S$650m in 2015. Resorts World, based on the island of Sentosa off Singapore, also operates the Universal Studios theme park, an aquarium, hotels and restaurants.

Mr Mohata says: "Genting is doing quite well in non-gaming revenue. Marina Bay Sands hasn't added any capacity since its hotel opened, but last year Genting opened a new hotel in Jurong — it's a little further away from Sentosa, but the average room rate is lower and it appeals to the budget conscious traveller."

Jessalynn Chen, analyst at CIMB, says Resorts World is attempting to shift away from the VIP business to focus more on mass-market gamblers. That mirrors moves in Macau, where the casino operators have also closed VIP rooms and opened new hotels and tourist attractions in an attempt to attract a wider customer base. "They have been redeploying [staff] who used to work in the VIP business, to the mass-market segment," Ms Chen says. "They're also trying to bring in new customers with promotions such as bringing in Michelin-starred chefs."

Compared with the VIP sector, the mass market has not been as squeezed by the anti-graft drive as these travellers tend to be from other South-east Asian countries, analysts say — though the weakening of regional currencies including the Malaysian ringgit will make it more expensive for tourists from neighbouring countries to visit Singapore.

Singapore's casinos will probably continue to face pressure from international competition for high-spending Chinese tourists. Hong-Kong-listed Imperial Pacific has opened a casino in Saipan, a US-administered Pacific island, while casino businesses are expanding in South Korea and Vietnam.

Grant Govertsen, head of Asia equity research at Union Gaming, says: "There's plenty of supply coming on. The pie is not going to get much bigger and it's going to be cut into more slices."

Telecoms

Altice deal for Cablevision closed after leadership shake-up

ANNA NICOLAOU — NEW YORK
ADAM THOMSON — PARIS

Altice, the acquisition-hungry telecoms group, has closed its $17.7bn deal for New York-based Cablevision a day after it shook up its leadership in a move to better integrate purchases across the globe.

The Amsterdam-listed group, which is controlled by billionaire Patrick Drahi, has no further big deals planned this year but intends to become "larger and larger" in the US over time, said Dexter Goei, who will leave his position as chief executive of Altice to become chairman and chief executive of Altice USA. "We haven't ever been shy about our ambitions to grow through acquisitions."

Mr Goei will face the challenging task of integrating Cablevision and Suddenlink, the US midwest cable operator the company bought for $9.1bn. Combined, the deals will catapult Altice to become the country's fourth largest cable provider with 4.6m customers.

Mr Drahi said the US, the world's largest cable market by sales, represented "huge development opportunities".

Michel Combes will step up from chief operating officer to become chief executive with immediate effect.

The reshuffle comes as Altice has finally signalled a change of gear after a frenetic shopping spree saw it swoop on assets across Europe and in the US. The dealmaking saw the group emerge from relative obscurity to become one of the continent's most active telecoms and media groups.

> 'We haven't ever been shy about our ambitions to grow through acquisitions'
> Dexter Goei, Altice

But it also swelled Altice's debt, which is forecast to rise to just over €50bn by the end of this year from €1.7bn in 2012.

New York regulators had flagged concerns over the Cablevision deal, which Mr Drahi projected would yield $900m in annual savings within three to five years. Altice has agreed to retain customer-facing jobs in New York for four years and pledged to make improvements, such as increasing broadband speeds to pass savings on to customers.

"We are sometimes perceived as cost cutting for the sake of cost cutting . . . but we cut costs in places we think it is natural in order to invest back in the business," said Mr Goei.

But performance at SFR, the French mobile operator that Altice acquired in 2015, has raised questions about its ability to realise its ambitions.

Critics argued the company had failed to adequately invest in its network while the French telecom users' association said that complaints at SFR increased 54 per cent between 2014 and 2015.

Cablevision has seen its revenues hit as customers watch television over the internet. The company, which has more than 3m subscribers across New York, New Jersey and Connecticut, also faces fierce competition from Verizon.

Analysts have questioned the value in buying Cablevision at $34.90 a share in cash, a 66 per cent premium to its undisturbed share price.

Mr Goei said that despite the "very large" challenges in the market, Altice had "the experience to compete". The group aims to apply its European model, in which it has had success in trimming costs and boosting operating margins from its acquisitions.

Industrials

MHI weighs up its future in cruise ships after $1.8bn write-off

ROBERT WRIGHT — NEW YORK

Mitsubishi Heavy Industries, Japan's fourth-largest shipbuilder, is reviewing its future in the cruise ship business after a rare order for two vessels resulted in cost overruns and a $1.8bn write-off.

In 2011, MHI's success in landing a $1.3bn order from cruise operator Carnival was initially hailed as evidence that Asian shipyards could become a significant force in the sector. South Korea, China and Japan are the three biggest shipbuilding nations but their yards have struggled to break the dominance of European yards in winning passenger ship orders.

But, speaking to the Financial Times, Shunichi Miyanaga, MHI's chief executive, said the group was studying how to handle cruise ship business in future.

In February, MHI announced a write-off of at least ¥187bn ($1.8bn) for cost and time overruns on two vessels it was building for the Aida brand of Carnival, the world's biggest cruise operator.

MHI delivered the first of the vessels, the AIDAprima, in March — a year late and after spending far more than expected to complete the work. Its second vessel, which had been due to be delivered early this year, is expected to be delivered next year.

Mr Miyanaga said: "We have been having difficulty finding an appropriate supply chain for Asia, especially in Japan, for some of the specifics, for some of the equipment and some of the systems for cruise ships."

As a result, MHI has been discussing its future involvement in cruise shipping with its customers, Mr Miyanaga explained. He pointed out that there was expected to be significant demand for cruise ships from Chinese companies, once the country's economy improved. "We would like to explore the best way forward in the cruise ship business as a systems supplier and an engineering supplier," Mr Miyanaga said.

European shipyards had some significant advantages generally and as suppliers of vessel subsystems, Mr Miyanaga said. But he believed MHI would be able to overcome its disadvantages.

Mr Miyanaga was speaking in the US, where MHI is pushing to build its market position. It is aiming to increase its US turnover, which stood at $7.5bn in 2015, by 20 per cent in the next two years. To do so, it is mainly targeting the energy sector with its power generation equipment. It is also developing its Mitsubishi regional jet aircraft, which is expected to enter service in 2018.

At one time, shipbuilding accounted for more than 30 per cent of the company's turnover. But it contributed only about 5 per cent of MHI's ¥4.1tn sales in the year to March 31. Several years ago, it decided to stop building crude oil tankers, dry bulk carriers and container ships, in the face of competition.

But, Mr Miyanaga said it was probably necessary to maintain the shipbuilding unit — which specialises in liquefied natural gas and liquefied petroleum gas carriers — at around its current level.

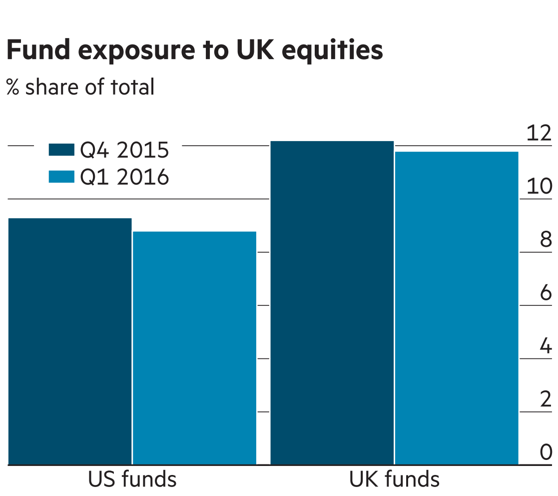
COMPANIES

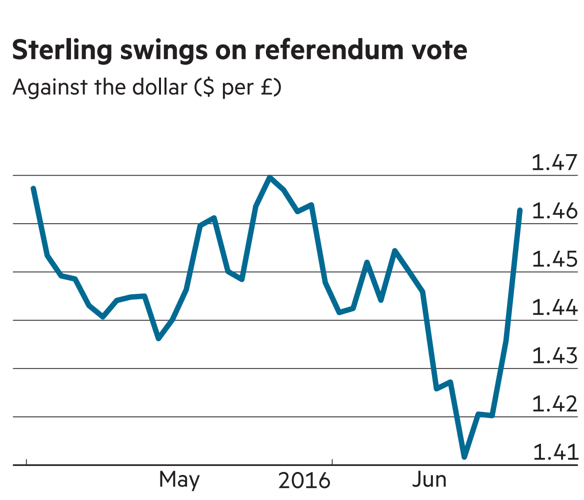
US investors shedding London stocks in run-up to Brexit poll

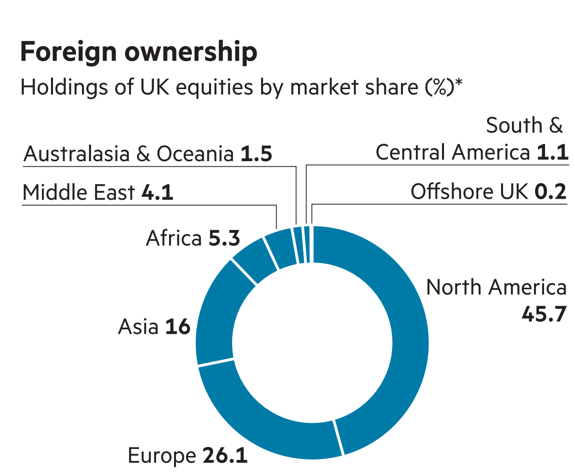
Exposure hits 4-year low as Transatlantic divide widens in fund management

Deep water

Flag-flying: some UK groups say it is harder to engage with US funds, while British investors claim US rivals 'slavishly' follow advisory groups — Chris Ratcliffe/Bloomberg







Sources: Morningstar; Thomson Reuters Datastream; ONS

* Excludes UK shareholders

DAVID OAKLEY, STEPHEN FOLEY AND MICHAEL POOLER

US-based equity investors have pulled out of the UK at a faster pace than their British-based rivals in a sign that the threat of Brexit is driving a shift in ownership of the UK stock market.

Global US mutual funds cut their exposure to UK stocks in the first quarter of the year to the lowest level in four years, according to Morningstar. They reduced their holdings by 0.51 percentage points compared with the previous quarter, to 8.79 per cent.

UK-based global mutual funds also cut their exposure to UK stocks by 0.33 percentage points to 11.84 per cent in the same quarter. However, their exposure is still higher now than a year ago.

The faster pace of US withdrawals — which some say is due to uncertainty surrounding tomorrow's vote on the UK's membership of the EU — comes at a fraught time in the relations between British and American investors.

Tensions have risen over pay, governance and trading philosophies. Some UK fund managers have accused their US rivals of creating market volatility by trading too frequently, and not being sufficiently engaged in big decisions such as on executive remuneration.

"There is a more short-term culture in the US," says Matthew Beesley, head of global equities at UK-based investment manager Henderson Global Investors. "This short-term approach hasn't been helped by Brexit."

The behaviour of US mutual funds matters, as the US owns around a quarter of the UK stock market, more than any other country with the exception of Britain itself, which holds 46 per cent.

US companies, such as the world's biggest investment group BlackRock, and Vanguard, which is primarily a passive investor, dominate the shareholder lists of the FTSE 100's biggest companies, including Royal Dutch Shell, HSBC, GlaxoSmithKline and British American Tobacco.

These US managers are doubly exposed to the risk of turbulence if the UK votes to leave the EU. A mutual fund whose investment portfolio is valued in dollars would lose money on its British holdings if sterling drops sharply, as well as suffering if share prices fall.

Analysts say this might explain the bigger US withdrawals from the UK in recent months.

Vincent Montemaggiore, a portfolio manager at the $5bn Fidelity Overseas fund in the US, says he has scaled back his overweight position in UK stocks in the run-up to the EU referendum.

"I do not like to focus on the macro," he says, "and 99 per cent of my time is spent on bottom-up analysis, but sometimes you have to step away from the stocks for a second."

Recent opinion polls show a shift towards Britons voting to remain in the EU. But assets in the UK fund industry have fallen by almost a fifth during the past 12 months, according to Lipper data — a reduction blamed on investor jitters ahead of the referendum.

The FTSE All-Share index has fallen 7 per cent in the past year, compared with a 1.3 per cent drop for the S&P 500.

A Bank of America Merrill Lynch survey of 213 fund managers, released last week, showed international investors had increased their cash holdings to their highest levels since 2001. "It is more difficult to evaluate uncertainty the further away you are from it," says John Roe, head of multi-asset funds at Legal & General Investment Management.

"This is why some US-based and foreign investors can be more nervous about things such as Brexit."

The US withdrawals come after a recent flare-up of tensions between UK and US investors.

Some UK companies have complained that it is harder to engage with US fund managers, while British investors say their US rivals are more likely to outsource decisions — such as on executive pay — to shareholder advisory groups. They have warned this undermines shareholder rights and sours relations with company executives.

"It is appalling the way some US groups simply outsource their vote[s] on pay and other issues," says the head of sustainability at a UK institution. "The vote is the key lever of influence, yet it is treated like a commodity."

The chairman of a FTSE group, who suffered a significant pay rebellion this year, adds: "It was disappointing because we tried to engage with the shareholders and the advisory bodies, but there was no dialogue."

The issue of pay has proved a particular flashpoint between UK and US fund managers this year.

During a fiery shareholder annual meeting season, British companies including BP, Anglo American and Shire suffered big rebellions over executive remuneration.

Groups such as Los Angeles-based Capital Group and Boston-based Wellington Management Company were singled out by UK executives as being difficult to engage with on the subject.

The UK critics have said these groups "slavishly" follow the recommendations of shareholder advisory groups, such as Institutional Shareholder Services and Glass Lewis, which represent about 30 per cent of investors in the FTSE 100 and FTSE 250 indices.

Michael Cohen, chairman of Capital International, which is part of Capital Group, says: "The number of UK companies that we engage with on remuneration and governance matters has increased significantly over the past several years."

ISS and Glass Lewis stress they are used as filters and not as rubber stamps. Wellington declined to comment.

Other investors say it is unfair to accuse US groups of short-termism as some of the biggest US fund managers, such as BlackRock, are noted for their long-term outlook.

Meanwhile, business leaders and investors agree that cross ownership from the US is a force for good and a natural part of globalisation.

"Americanisation of executive pay, with too rigid a following of advisory groups, is not a good thing," says Simon Walker, director-general of the Institute of Directors.

"But I would not dream of arguing that we should block US firms from owning the UK stock market, even if there is more volatility in the run-up to events such as the Brexit vote."

Background

Foreign investors own majority of stock market

The British stock market has been majority owned by overseas investors since 2012 as big US investment groups and sovereign wealth funds from Europe, the Middle East and Asia have increased their allocations to UK equities.

Overseas groups now own 54 per cent of the UK stock market, with British groups holding 46 per cent.

US groups own about a quarter today compared with about 5 per cent in the 1990s, according to the Office for National Statistics. Some FTSE 100 companies have a larger number of US investment groups among their top 10 biggest shareholders than UK groups.

Other foreign investment group — such as the Norwegian sovereign wealth fund and China's State Administration of Foreign Exchange, Safe — also feature among the 10 biggest investors in a number of the FTSE's largest companies.

Continental European groups own about 14 per cent of the UK stock market, while Asian companies own about 8 per cent.

In contrast, UK pension funds only own 3 per cent of UK stocks compared with 32.4 per cent at their peak in 1992.

Over the past decade, pension funds have switched out of equities into the bond markets as they have sought to reduce risk through investing in safer securities in fixed income.

UK insurance groups have also declined sharply as owners. These groups own 5.9 per cent of the UK market compared with 23.6 per cent in 1997.

David Oakley

Banks

Biggest lenders face switch out of €1.7tn sovereign debt

MARTIN ARNOLD — BANKING EDITOR

Europe's 50 biggest banks would have to redeploy €1.7tn of sovereign debt if regulators were to choose the toughest option for breaking the "doom loop" tying lenders to their governments, according to new research.

Because a shift of that scale could destabilise financial markets, it is likely to be introduced over a long transitional period of almost a decade, Standard & Poor's, the credit rating agency, said in its report entitled "Undoing the doom loop".

"I think it will be a long adaptation programme," said Nicolas Malaterre, primary credit analyst at S&P. "In some areas it has already started in a small way, like in Italy and Spain, as their economies are picking up and their banks are redeploying some money into the real economy."

He added that because EU policymakers were likely to act cautiously, any new rules may not be in place before the deadline for completing the eurozone banking union arrives in 2024.

Since the 2011 European debt crisis laid bare the risks of banks holding large amounts of debt issued by their governments, top eurozone regulators have repeatedly warned of the need to break this link.

The European Commission and European Central Bank have both said they are considering ways to introduce a capital charge for banks holding sovereign debt, which has been historically seen as risk-free.

The proposals are controversial, and some eurozone leaders, such as Italy's Matteo Renzi, have warned they would block any attempt to cap the amount of government debt that banks can hold.

Some countries, such as Germany, have been pushing for a cap on banks' holdings of sovereign debt as a condition for agreeing to the introduction of a common eurozone deposit guarantee scheme — a key pillar of banking union.

European finance ministers are now waiting for the Basel Committee to complete its review of the topic, which is expected to produce a proposal by the end of this year.

S&P said that an extreme outcome would be a rule capping banks' exposure to government bonds at 25 per cent of their own capital, which would force them to redeploy up to €1.7tn of EU sovereign debt. Banks are already subjected to a 25 per cent cap on exposure to single clients or groups of connected counterparties.

The banks with the highest exposures to their domestic government bonds are in Hungary, Romania, Poland, Slovakia, Slovenia, the Czech Republic and Italy, which have between 10 and 20 per cent of total assets in the bonds of their home state.

Technology

Ride-hail app Heetch accused of breaching French taxi laws

ADAM THOMSON — PARIS

French car-hailing service Heetch goes on trial today charged with running an illegal service in what some claim is a test of whether local and international start-ups are treated equally under French law.

Heetch and two of its founders are accused of "misleading commercial practices" and "complicity in the illegal exercise of the taxi profession" — the same charges US-based Uber was found guilty of earlier this month.

That was the first criminal ruling targeting managers of the Californian car-hailing app, which has upended traditional taxi services around the world. Uber was fined €800,000 after the court decided its Uber Pop service, which used drivers without a professional licence, was illegal.

But Teddy Pellerin, one of Heetch's founders and a defendant in the case, insists his company will not be treated any differently because it is French.

"We are facing a judge and justice is independent," he recently told the Financial Times. "Justice shouldn't care if you are French, American or whatever so I don't think we will have a special treatment because we are French."

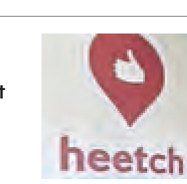
Heetch, which only operates at night, has grown quickly since it was launched in 2013, and now books more than 50,000 rides a week. It has 350,000 active members using its app. But it has also passed largely unnoticed compared with US-based Uber, whose Uber Pop service sparked violent protests by traditional taxi drivers last year — as well as government demands to shut down.

Mr Pellerin insists that his company does not have a privileged relationship with France's socialist government, instead describing relations as "nothing special". But he is confident that the court case will go Heetch's way. "We think we will win this case because our defence is different and because our service is different," he said.

One of those differences from the now-defunct Uber Pop, he argues, is that Heetch limits the amount a driver can make to €6,000 a year — the company's estimate for the average cost of owning and running a car in France.

"Our drivers do not make money; they are not professional drivers," he said. "They are just paying their car costs back." Heetch also only suggests an appropriate price or "donation" for a ride, leaving it up to the passenger to decide how much to give.

On the defence: Heetch faces the same charges that US-based Uber was found guilty of this month



Telecoms

Telefónica opens talks with banks on UK float plans for O2

DANIEL THOMAS
TELECOMS CORRESPONDENT

Telefónica has begun to draw up plans for a flotation of O2 in the UK as the Spanish telecoms company moves forward with plans to raise money from the business.

The telecoms group has opened talks with banks about advising on an IPO process, with current thinking leaning towards a flotation in London, according to two people briefed on the situation. The move could allow Telefónica to retain a stake in the business.

One person cautioned that no decision had been made, however, and added that the group would continue to look at all options for O2 including a sale to private equity.

Telefónica has been considering options about the future of O2 UK since a sale to CK Hutchison was blocked by Brussels antitrust regulators in May.

Telefónica asked CK Hutchison to end their exclusivity pact over the acquisition of O2 a month early in order to start working on other strategic options for the business.

The company wants to raise money from a sale or partial sale of the business, which is the second largest mobile operator in the UK behind BT-owned rival EE, to reduce balance sheet debt.

The Spanish group is also talking with private equity groups interested in acquiring the business, according to one person briefed on the company's plans, although it could still seek to bring financial investors into the flotation or pursue an outright sale.

A flotation is also understood to be favoured by O2 chief executive Ronan Dunne, who is overseeing the process in the UK for the Spanish company. Mr Dunne could remain as chief executive of a listed O2 having been close to leaving the business should it have been sold to Hutchison.

Analysts at Macquarie said Telefónica had options for its UK business, pointing to a "dual track process of a potential IPO and a trade sale".

According to the bank, which values O2 UK at £10.3bn, the IPO process could set a valuation of the business, which could be the base for any private equity or trade sale discussion.

Those briefed on Telefónica's plans said that separately from O2, the group was concentrating on floating a stake in a division set up to hold its mobile infrastructure and subsea cables. The company hopes to float a large minority of the division, he said, which is expected to have an enterprise value of more than €4bn, although it is likely to continue to retain control of the business.

MARKET DATA

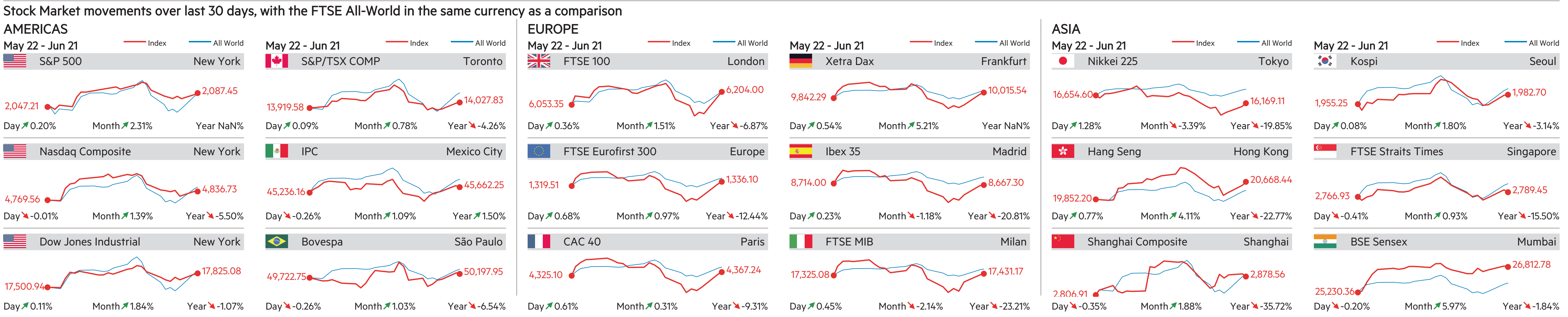
WORLD MARKETS AT A GLANCE

FT.COM/MARKETSDATA

Change during previous day's trading (%)

S&P 500	Nasdaq Composite	Dow Jones Ind	FTSE 100	FTSE Eurofirst 300	Nikkei	Hang Seng	FTSE All World $	$ per €	$ per £	¥ per $	£ per €	Oil Brent $ Sep	Gold $
0.20%	-0.01%	0.11%	0.36%	0.68%	1.28%	0.77%	0.28%	-0.617%	-0.204%	0.120%	-0.518%	-1.00%	-0.69%

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



Country	Index	Latest	Previous
Argentina	Merval	13563.26	13073.38
Australia	All Ordinaries	5353.30	5335.60
	S&P/ASX 200	5274.40	5256.80
	S&P/ASX 200 Res	2734.10	2758.90
Austria	ATX	2200.52	2192.90
Belgium	BEL 20	3452.78	3432.18
	BEL Mid	5849.23	5855.94
Brazil	Bovespa	50197.95	50329.36
Canada	S&P/TSX 60	816.51	814.92
	S&P/TSX Comp	14027.83	14015.14
	S&P/TSX Met & Min	571.87	582.89
Chile	IGPA Gen	19613.19	19668.44
China	FTSE A200	7857.43	7869.76
	FTSE B35	9086.42	9104.37
	Shanghai A	3013.08	3023.65
	Shanghai B	340.24	340.48
	Shanghai Comp	2878.56	2888.62
	Shenzhen A	1976.95	1997.33
	Shenzhen B	1068.18	1069.16
Colombia	COLCAP	1316.20	1308.41
Croatia	CROBEX	1682.35	1683.25
Cyprus	CSE M&P Gen	69.29	68.78
Czech Republic	PX	842.31	838.94
Denmark	OMXC Copenahgen 20	990.99	996.35
Egypt	EGX 30	7337.97	7414.81
Estonia	OMX Tallinn	964.48	963.55
Finland	OMX Helsinki General	7979.72	8001.14
France	CAC 40	4367.24	4340.76
	SBF 120	3454.50	3436.44
Germany	M-DAX	20404.73	20343.58
	TecDAX	1614.40	1618.46
	XETRA Dax	10015.54	9962.02
Greece	Athens Gen	608.29	586.55
	FTSE/ASE 20	1666.93	159.18
Hong Kong	Hang Seng	20668.44	20510.20
	HS China Enterprise	8704.40	8609.84
	HSCC Red Chip	3545.24	3517.65
Hungary	Bux	26811.37	26563.59
India	BSE Sensex	26812.78	26866.92
	S&P CNX 500	6627.95	6634.30
Indonesia	Jakarta Comp	4878.71	4863.53
Ireland	ISEQ Overall	6253.80	6263.94
Israel	Tel Aviv 100	12.26	12.22
Italy	FTSE Italia All-Share	19085.92	19007.53
	FTSE Italia Mid Cap	30657.04	30603.77
	FTSE MIB	17431.17	17353.45
Japan	2nd Section	4219.72	4195.89
	Nikkei 225	16169.11	15965.30
	S&P Topix 150	1057.22	1043.47
	Topix	1293.90	1279.19
Jordan	Amman SE	2110.32	2108.07
Kenya	NSE 20	3767.20	3784.32
Kuwait	KSX Market Index	5431.68	5457.51
Latvia	OMX Riga	634.97	634.32
Lithuania	OMX Vilnius	509.71	509.53
Luxembourg	LuxX	1461.81	1477.40
Malaysia	FTSE Bursa KLCI	1637.69	1634.23
Mexico	IPC	45662.25	45779.66
Morocco	MASI	9649.60	9637.60
Netherlands	AEX	440.39	436.50
	AEX All Share	675.84	671.13
New Zealand	NZX 50	6839.40	6869.54
Nigeria	SE All Share	29247.27	28489.89
Norway	Oslo All Share	663.11	665.18
Pakistan	KSE 100	38415.31	38415.31
Philippines	Manila Comp	7767.23	7665.33
Poland	Wig	45679.02	45344.03
Portugal	PSI 20	4631.56	4665.36
	PSI General	2433.40	2440.91
Romania	BET Index	6503.22	6466.28
Russia	Micex Index	1897.74	1902.70
	RTX	931.84	935.04
Saudi-Arabia	TADAWUL All Share Index	6558.92	6542.64
Singapore	FTSE Straits Times	2789.45	2800.87
Slovakia	SAX	308.30	308.52
Slovenia	SBI TOP	687.47	680.78
South Africa	FTSE/JSE All Share	52955.18	53032.14
	FTSE/JSE Res 20	30013.47	30391.10
	FTSE/JSE Top 40	46912.03	47015.52
South Korea	Kospi	1982.70	1981.12
	Kospi 200	245.34	245.17
Spain	IBEX 35	8667.30	8647.10
Sri Lanka	CSE All Share	6446.88	6461.12
Sweden	OMX Stockholm 30	1345.44	1359.14
	OMX Stockholm AS	480.68	485.01
Switzerland	SMI Index	7935.75	7900.22
Taiwan	Weighted Pr	8684.85	8625.92
Thailand	Bangkok SET	1430.80	1421.99
Turkey	BIST 100	77523.09	77523.09
UAE	Abu Dhabi General Index	4481.04	4524.41
UK	FT 30	2806.80	2799.90
	FTSE 100	6226.55	6204.00
	FTSE 4Good UK	5600.41	5581.89
	FTSE All Share	3419.35	3409.01
	FTSE techMARK 100	3761.26	3773.02
USA	DJ Composite	6269.79	6263.05
	DJ Industrial	17825.08	17804.87
	DJ Transport	7653.59	7672.62
	DJ Utilities	685.69	682.52
	Nasdaq 100	4410.04	4400.16
	Nasdaq Cmp	4836.73	4837.21
	NYSE Comp	10479.45	10450.03
	S&P 500	2087.45	2083.25
	Wilshire 5000	21224.32	21238.05
Venezuela	IBC	14107.63	14118.99
Vietnam	VNI	628.00	626.46
Cross-Border	DJ Global Titans ($)	236.17	235.06
	Euro Stoxx 50 (Eur)	2975.82	2942.88
	Euronext 100 ID	863.24	857.36
	FTSE 4Good Global ($)	5255.93	5234.65
	FTSE All World	265.78	265.03
	FTSE E300	1336.10	1327.02
	FTSE Eurotop 100	2626.67	2606.38
	FTSE Global 100 ($)	1306.25	1300.67
	FTSE Gold Min ($)	1709.29	1710.49
	FTSE Latibex Top (Eur)	2451.90	2471.80
	FTSE Multinationals ($)	1493.43	1466.96
	FTSE World ($)	471.53	470.23
	FTSEurofirst 100 (Eur)	3767.01	3740.38
	FTSEurofirst 80 (Eur)	4034.45	4005.04
	MSCI ACWI Fr ($)	401.00	394.12
	MSCI All World ($)	1664.14	1635.78
	MSCI Europe (Eur)	1323.99	1285.00
	MSCI Pacific ($)	2230.05	2180.90
	S&P Euro (Eur)	1348.59	1340.99
	S&P Europe 350 (Eur)	1373.33	1363.87
	S&P Global 1200 ($)	1847.27	1842.38
	Stoxx 50 (Eur)	2859.10	2822.91

(c) Closed. (u) Unavailable. † 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
Apple	15.7	96.28	1.18
Facebook	12.5	114.58	1.21
Hospira	11.8	89.95	-0.01
Netflix	6.9	91.20	-2.60
Microsoft	6.4	51.15	1.08
Amazon.com	5.8	714.89	0.88
Alphabet	4.6	707.48	1.35
Bank Of America	4.5	13.54	0.00
Celgene	3.7	97.11	-2.18
Exxon Mobil	3.3	91.36	0.24

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Micron Technology	12.70	0.38	3.08
Kinder Morgan	18.63	0.53	2.95
Alaska Air	61.05	1.57	2.64
Microsoft	51.15	1.08	2.15
Delta Air Lines	38.86	0.77	2.02
Downs			
Liberty Global	31.30	-3.57	-10.24
Liberty Global	30.79	-3.47	-10.13
Endo Int	15.04	-1.03	-6.41
Williams Companies	21.37	-0.95	-4.26
Borgwarner	33.31	-1.42	-4.09

Based on the constituents of the S&P500 and the Nasdaq 100 index

LONDON

ACTIVE STOCKS	stock traded m's	close price	Day's change
Hsbc Holdings	174.0	439.80	1.79
Lloyds Banking	144.7	70.33	0.29
Glaxosmithkline	139.9	1416.50	-9.10
Bp	122.9	382.30	3.35
Vodafone	122.1	214.55	-1.60
British American Tobacco	113.6	4247.50	14.22
Shire	111.3	3976.00	-5.37
Sabmiller	110.6	4286.50	-7.80
Royal Dutch Shell	103.2	1808.50	14.50
Royal Dutch Shell	94.4	1835.00	16.48

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Circassia Pharmaceuticals	97.00	9.24	10.15
Evraz	129.10	6.12	4.98
Hansteen Holdings	107.00	4.50	4.39
Icap	430.10	15.60	3.76
Mediclinic Int	923.00	30.50	3.42
Downs			
Sky	875.50	-327.50	-36.90
Senior	196.50	-28.83	-12.79
Cairn Energy	189.70	-10.10	-5.06
Ophir Energy	68.75	-3.40	-4.70
Kaz Minerals	134.50	-5.14	-3.68

Based on the constituents of the FTSE 350 index

EURO MARKETS

ACTIVE STOCKS	stock traded m's	close price	Day's change
Santander	362.1	4.03	0.07
Ericsson, Telefonab. L M Ser. B	327.0	7.00	0.03
Bbva	316.7	5.58	0.03
Nestle N	309.6	65.87	0.00
Novartis N	286.5	70.31	0.00
Iberdrola	255.5	5.97	-0.04
Total	249.6	43.02	0.30
Roche Gs	247.8	227.55	0.00
Bayer Ag Na	232.3	90.42	0.00
Royal Dutch Shell A	229.2	23.71	0.29

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Deutsche Wohnen Ag	28.23	1.12	4.15
Rwe Ag	8.83	0.24	2.81
Pandora A/s	130.53	3.02	2.37
Delhaize Sa	94.30	1.88	2.03
Safran	60.42	1.17	1.97
Downs			
Grifols Sa	14.99	-14.40	-48.99
Bayerische Motoren Werke Ag	64.40	-4.15	-6.05
Industrivarden Ab	16.14	-0.82	-4.81
Arcelormittal	4.56	-0.20	-4.20
Svenska Handelsbanken Ab	11.40	-0.50	-4.18

Based on the constituents of the FTSEurofirst 300 Eurozone index

TOKYO

ACTIVE STOCKS	stock traded m's	close price	Day's change
Toyota Motor	632.2	5637.00	69.00
Mitsubishi Ufj Fin.	304.4	506.00	6.20
Softbank	282.2	5842.00	81.00
Sony	228.8	3060.00	72.50
Sumitomo Mitsui Fin.	228.1	3241.00	56.00
Nippon Telegraph And Telephone	213.6	4500.00	53.00
Mizuho Fin.	200.0	161.20	0.50
Kddi	191.5	3115.00	81.00
Astellas Pharma	173.6	1605.00	59.00
Toshiba	164.8	297.40	2.60

BIGGEST MOVERS	Close price	Day's change	Day's chng%
Ups			
Daiichi Sankyo ,	2576.00	189.00	7.92
Kao	6044.00	223.00	3.83
Astellas Pharma .	1605.00	59.00	3.82
Nippon Express Co.,	463.00	15.00	3.35
Tokuyama	298.00	9.00	3.11
Downs			
Thb Japan Steel Works,	464.00	-26.00	-5.31
Kobe Steel,	90.00	-2.00	-2.17
Dowa Holdings Co.,	588.00	-13.00	-2.16
Taiheiyo Cement	246.00	-5.00	-1.99
Comsys Holdings	1680.00	-32.00	-1.87

Based on the constituents of the Nikkei 225 index

UK MARKET WINNERS AND LOSERS

FTSE 100	Jun 21 price(p)	%Chg week	%Chg ytd
Winners			
Glencore	146.10	14.7	62.4
Royal Bank Of Scotland	241.80	13.2	-20.6
Lloyds Banking	70.33	13.0	-3.8
Barclays	180.35	12.7	-17.6
Tesco	164.15	11.1	9.5
Standard Chartered	554.90	10.8	-3.2
Hargreaves Lansdown	1327.00	10.7	-12.0
Standard Life	331.40	10.1	-15.0
Anglo American	658.30	9.8	119.8
Antofagasta	433.00	9.8	-7.7
Pearson	864.50	9.7	17.5
St. James's Place	887.50	9.6	-11.9
Losers			
Randgold Resources Ltd	6465.00	-0.3	56.0
Rexam	626.00	-0.2	3.7
Shire	3976.00	-0.1	-14.8
Paddy Power Betfair	9015.00	0.5	-1.6
Sabmiller	4286.50	0.6	5.3
Glaxosmithkline	1416.50	1.0	2.5
Sage	616.50	1.2	1.3
Intertek	3150.00	1.6	13.9
Astrazeneca	3872.50	1.7	-16.9
Severn Trent	2236.00	1.7	2.7
Fresnillo	1218.00	2.0	72.0
Smith & Nephew	1151.00	2.0	-5.5

FTSE 250	Jun 21 price(p)	%Chg week	%Chg ytd
Winners			
Shawbrook	282.20	22.0	-19.4
Aberdeen Asset Management	292.00	17.9	0.9
Atkins (ws)	1380.00	15.0	-15.1
Sports Direct Int	384.30	14.9	-33.4
Jimmy Choo	110.00	14.6	-22.2
Vedanta Resources	425.70	14.1	54.7
Virgin Money Holdings (uk)	343.40	14.0	-9.8
Henderson	264.50	14.0	-14.6
Safestore Holdings	358.10	13.4	8.6
Thomas Cook	68.90	12.9	-43.1
Ocado	245.40	12.7	-19.3
Onesavings Bank	323.60	12.7	-8.5
Losers			
Circassia Pharmaceuticals	97.00	-62.3	-68.6
Aveva	1661.00	-10.4	2.7
Firstgroup	98.00	-10.4	-8.7
Senior	196.50	-5.6	-14.5
Centamin	106.30	-2.8	65.1
Woodford Patient Capital Trust	91.00	-1.7	-12.4
Clarkson	2205.00	-1.6	-2.0
The Renewables Infrastructure	96.30	-1.3	-5.5
Jpmorgan American Investment Trust	289.90	-1.3	3.3
Acacia Mining	333.60	-1.1	85.3
Worldwide Healthcare Trust	1795.00	-1.1	-8.4
Kaz Minerals	134.50	-1.1	31.6

FTSE SmallCap	Jun 21 price(p)	%Chg week	%Chg ytd
Winners			
Findel	156.00	20.0	-22.0
Severfield	56.75	19.5	-12.7
Tyman	269.00	18.1	-11.1
Foxtons	169.50	15.4	-9.6
Exillon Energy	91.00	14.5	-15.0
Sepura	74.75	13.3	-59.2
Oxford Instruments	734.00	11.2	-4.3
Low & Bonar	63.00	10.6	-5.8
Arrow Global	263.50	10.0	-0.1
Hss Hire	90.00	9.8	25.0
Dialight	573.00	9.0	27.3
Raven Russia Ltd	36.25	9.0	-10.5
Losers			
Servelec	243.00	-31.6	-30.2
Game Digital	79.00	-16.8	-34.7
Chemring	115.25	-12.4	-39.3
Xaar	425.00	-9.8	-1.0
St. Ives	87.25	-9.1	-60.8
Macau Property Opportunities Fund	102.25	-8.8	-34.4
Petra Diamonds	101.50	-8.1	16.0
Nostrum Oil & Gas	275.25	-7.3	-32.0
Fdm (holdings)	568.00	-7.2	8.7
Photo-me Int	132.25	-6.8	-11.8
Anglo-eastern Plantations	412.00	-6.6	-22.0
S & U	2440.00	-6.5	-0.7

Industry Sectors	Jun 21 price(p)	%Chg week	%Chg ytd
Winners			
Industrial Metals	1271.47	9.9	77.1
Food & Drug Retailers	2638.27	9.6	5.7
Life Insurance	6848.54	9.2	-12.1
Banks	3304.55	8.6	-13.2
Mining	9398.00	8.2	28.5
General Financial	8795.71	7.8	-6.8
Fixed Line Telecommunication	4843.93	7.7	-8.5
Oil Equipment & Services	13316.55	6.9	2.6
Electronic & Electrical Equip.	4542.65	6.8	2.6
Automobiles & Parts	6647.12	6.8	-7.2
Electricity	9063.11	6.3	3.3
Nonlife Insurance	2527.96	6.2	2.9
Losers			
Software & Computer Services	1674.53	0.9	1.4
Pharmaceuticals & Biotech.	11961.47	1.6	-7.0
Equity Investment Instruments	7342.16	2.3	-1.9
General Industrials	4645.36	2.8	5.9
Beverages	15572.97	2.8	1.3
Food Producers	8064.14	2.9	-8.7
Construction & Materials	5201.56	3.1	0.8
Mobile Telecommunications	4827.14	3.1	-5.0
Chemicals	10926.76	3.1	1.7
Gas Water & Multiutilities	6099.16	3.6	2.9
Personal Goods	27312.66	3.9	6.0
Health Care Equip.& Services	7159.11	4.1	-1.1

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

CURRENCIES

Jun 21	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	13.8600	-0.0410	15.6217	-0.1379	20.3354	-0.0928
Australia	Australian Dollar	1.3409	0.0014	1.5114	-0.0072	1.9674	-0.0010
Bahrain	Bahrainin Dinar	0.3772	0.0000	0.4251	-0.0024	0.5534	-0.0008
Bolivia	Bolivian Boliviano	6.8850	-	7.7601	-0.0454	10.1017	-0.0162
Brazil	Brazilian Real	3.4003	0.0196	3.8325	-0.0002	4.9889	0.0208
Canada	Canadian Dollar	1.2813	0.0020	1.4442	-0.0062	1.8799	-0.0001
Chile	Chilean Peso	675.9150	-3.4100	761.8262	-8.3225	991.7030	-6.5997
China	Chinese Yuan	6.5788	-0.0005	7.4150	-0.0439	9.6524	-0.0162
Colombia	Colombian Peso	2980.1500	11.7000	3358.9374	-6.3856	4372.4793	10.1893
Costa Rica	Costa Rican Colon	544.8000	2.6600	614.0460	-0.5765	799.3310	2.6286
Czech Republic	Czech Koruna	24.0187	0.1562	27.0716	0.0187	35.2403	0.1730
Denmark	Danish Krone	6.5975	0.0387	7.4360	0.0004	9.6798	0.0414
Egypt	Egyptian Pound	8.8837	0.0251	10.0128	-0.0302	13.0341	0.0159
Hong Kong	Hong Kong Dollar	7.7588	-0.0018	8.7450	-0.0533	11.3837	-0.0210
Hungary	Hungarian Forint	279.3896	3.5847	314.9010	2.2218	409.9206	4.6113
India	Indian Rupee	67.5200	0.1400	76.1020	-0.2865	99.0654	0.0471
Indonesia	Indonesian Rupiah	13262.5000	-2.5000	14948.2194	-90.2792	19458.7737	-34.8217
Israel	Israeli Shekel	3.8556	-0.0013	4.3456	-0.0268	5.6569	-0.0109
Japan	Japanese Yen	104.5350	0.1250	117.8218	-0.5475	153.3738	-0.0620
..One Month		104.5348	0.1247	117.8217	-0.5476	153.3736	-0.0623
..Three Month		104.5347	0.1243	117.8218	-0.5475	153.3734	-0.0628
..One Year		104.5334	0.1218	117.8216	-0.5478	153.3736	-0.0640
Kenya	Kenyan Shilling	101.2000	-0.0500	114.0629	-0.7239	148.4807	-0.3113
Kuwait	Kuwaiti Dinar	0.3011	0.0002	0.3393	-0.0018	0.4417	-0.0005
Malaysia	Malaysian Ringgit	4.0340	-0.0290	4.5467	-0.0595	5.9187	-0.0521
Mexico	Mexican Peson	18.6545	0.0175	21.0256	-0.1032	27.3699	-0.0182
New Zealand	New Zealand Dollar	1.4029	-0.0032	1.5812	-0.0128	2.0584	-0.0079
Nigeria	Nigerian Naira	282.0000	21.5000	317.8432	22.5151	413.7506	30.9326
Norway	Norwegian Krone	8.3079	0.0550	9.3638	0.0076	12.1893	0.0613
Pakistan	Pakistani Rupee	104.6900	-0.0400	117.9965	-0.7356	153.6012	-0.3048
Peru	Peruvian Nuevo Sol	3.2880	-0.0024	3.7059	-0.0243	4.8242	-0.0112
Philippines	Philippine Peso	46.3700	0.0450	52.2638	-0.2547	68.0341	-0.0428
Poland	Polish Zloty	3.9094	0.0426	4.4062	0.0225	5.7358	0.0534
Romania	Romanian Leu	4.0283	0.0312	4.5403	0.0088	5.9103	0.0364
Russia	Russian Ruble	64.1313	0.1712	72.2826	-0.2287	94.0934	0.1009
Saudi Arabia	Saudi Riyal	3.7504	-	4.2270	-0.0247	5.5025	-0.0088
Singapore	Singapore Dollar	1.3421	-0.0005	1.5127	-0.0095	1.9691	-0.0040
South Africa	South African Rand	14.7324	-0.0514	16.6049	-0.1554	21.6154	-0.1101
South Korea	South Korean Won	1156.7000	-4.1000	1303.7206	-12.2747	1697.1111	-8.7436
Sweden	Swedish Krona	8.2497	0.0086	9.2983	-0.0447	12.1040	-0.0068
Switzerland	Swiss Franc	0.9584	-0.0010	1.0802	-0.0075	1.4062	-0.0037
Taiwan	New Taiwan Dollar	32.2520	-0.0025	36.3513	-0.2155	47.3202	-0.0795
Thailand	Thai Baht	35.1800	-0.0400	39.6515	-0.2773	51.6161	-0.1415
Tunisia	Tunisian Dinar	2.1593	0.0105	2.4337	-0.0023	3.1681	0.0104
Turkey	Turkish Lira	2.9048	0.0053	3.2740	-0.0132	4.2619	0.0009
United Arab Emirates	UAE Dirham	3.6729	0.0002	4.1397	-0.0240	5.3889	-0.0083
United Kingdom	Pound Sterling	0.6816	0.0011	0.7682	-0.0033	-	-
..One Month		0.6816	0.0011	0.7681	-0.0033	-	-
..Three Month		0.6816	0.0011	0.7680	-0.0033	-	-
..One Year		0.6820	0.0010	0.7673	-0.0033	-	-
United States	United States Dollar	-	-	1.1271	-0.0066	1.4672	-0.0024
..One Month		-	-	1.1270	-0.3425	1.4672	-0.0024
..Three Month		-	-	1.1267	-0.3425	1.4673	-0.0024
..One Year		-	-	1.1255	-0.3424	1.4676	-0.0024
Venezuela	Venezuelan Bolivar Fuerte	9.9900	0.0100	11.2598	-0.0545	14.6573	-0.0088
Vietnam	Vietnamese Dong	22300.5000	0.5000	25134.9748	-146.4709	32719.4082	-51.6825
European Union	Euro	0.8872	0.0052	-	-	1.3017	0.0055
..One Month		0.8871	0.0051	-	-	1.3017	0.0055
..Three Month		0.8869	0.0052	-	-	1.3015	0.0055
..One Year		0.8856	0.0052	-	-	1.3009	0.0055

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

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	£ Strlg Jun 21	Day's chge%	Euro Index	£ Strlg Jun 20	£ Strlg Jun 17	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	6226.55	0.36	6316.17	6204.00	6021.09	6825.67	3.99	0.71	35.26	136.28	4988.68
FTSE 250 (250)	16980.31	0.12	17224.72	16959.11	16422.04	17906.29	2.71	2.02	18.29	233.94	11984.01
FTSE 250 ex Inv Co (209)	18438.07	0.07	18703.46	18424.78	17793.85	19508.58	2.72	2.16	17.02	253.54	13268.50
FTSE 350 (350)	3471.23	0.32	3521.19	3460.09	3356.77	3779.68	3.77	0.87	30.35	71.08	5597.47
FTSE 350 ex Investment Trusts (309)	3447.81	0.32	3497.44	3436.87	3333.01	3758.63	3.80	0.87	30.25	71.14	2863.11
FTSE 350 Higher Yield (125)	3212.89	0.41	3259.14	3199.76	3114.01	3546.06	5.33	0.42	44.80	92.73	5360.58
FTSE 350 Lower Yield (225)	3395.89	0.23	3444.77	3388.26	3275.73	3643.97	2.06	2.17	22.43	38.22	3635.34
FTSE SmallCap (283)	4529.54	-0.21	4594.73	4538.86	4485.91	4750.74	3.01	1.41	23.54	63.93	6298.51
FTSE SmallCap ex Inv Co (148)	4112.30	-0.60	4171.49	4137.22	4078.60	4270.79	3.06	1.82	17.93	60.70	6008.01
FTSE All-Share (633)	3419.35	0.30	3468.57	3409.01	3309.39	3718.18	3.74	0.89	30.05	69.27	5576.49
FTSE All-Share ex Inv Co (457)	3382.35	0.30	3431.04	3372.23	3271.38	3683.70	3.78	0.89	29.85	69.41	2854.91
FTSE All-Share ex Multinationals (568)	1133.47	0.27	952.96	1130.41	1087.62	1257.58	3.07	1.42	22.87	18.47	1964.05
FTSE Fledgling (104)	7614.47	-0.16	7724.08	7626.70	7575.24	8003.07	2.78	1.52	23.73	84.11	13874.15
FTSE Fledgling ex Inv Co (53)	10251.59	-0.41	10399.15	10293.69	10216.32	10847.87	3.06	1.93	16.96	118.42	18175.27
FTSE All-Small (387)	3141.40	-0.20	3186.62	3147.80	3111.89	3295.13	3.00	1.41	23.55	43.85	5607.90
FTSE All-Small ex Inv Co Index (201)	3066.89	-0.59	3111.04	3085.22	3042.39	3186.83	3.06	1.83	17.88	44.90	5676.42
FTSE AIM All-Share Index (829)	721.12	-0.12	731.50	722.00	713.89	769.73	1.77	0.56	100.49	5.08	781.62
FTSE Sector Indices											
Oil & Gas (16)	**6972.44**	**0.77**	**7072.80**	**6919.08**	**6799.71**	**7362.14**	**6.38**	**-0.68**	**-23.00**	**228.12**	**6053.81**
Oil & Gas Producers (9)	6659.42	0.79	6755.28	6607.45	6496.05	6969.13	6.43	-0.70	-22.08	218.77	5980.20
Oil Equipment Services & Distribution (7)	13882.35	0.30	14082.17	13840.41	13436.22	18858.00	4.61	0.26	84.32	394.46	10498.25
Basic Materials (27)	**3374.51**	**-0.49**	**3423.08**	**3391.08**	**3308.21**	**4560.70**	**4.07**	**0.21**	**115.01**	**52.87**	**3367.15**
Chemicals (7)	11688.69	0.23	11856.93	11661.38	11386.01	12339.58	2.54	2.06	19.13	239.20	10259.51
Forestry & Paper (1)	15679.21	0.30	15904.89	15632.20	15150.30	16784.04	2.98	2.97	11.29	347.94	16651.46
Industrial Metals & Mining (2)	1269.88	4.50	1288.16	1215.18	1086.07	1532.21	0.45	2.79	79.53	0.00	1108.21
Mining (17)	9066.72	-0.68	9197.23	9128.87	8913.59	12904.96	4.40	-0.06	-377.60	132.94	4734.78
Industrials (119)	**4417.05**	**-0.11**	**4480.63**	**4421.73**	**4288.81**	**4743.94**	**2.57**	**1.43**	**27.25**	**57.24**	**4447.12**
Construction & Materials (15)	5365.13	-0.71	5442.35	5403.43	5232.11	5261.74	2.36	0.06	730.21	85.50	5573.58
Aerospace & Defense (9)	4221.89	-0.73	4282.66	4253.06	4117.08	5017.14	2.80	1.51	23.73	71.61	4436.17
General Industrials (7)	3785.28	-0.18	3839.76	3792.12	3725.64	3635.59	3.02	1.24	26.60	48.86	4175.12
Electronic & Electrical Equipment (10)	5654.74	0.58	5736.13	5622.34	5431.71	5703.77	2.18	1.99	22.99	50.68	5054.92
Industrial Engineering (13)	8787.68	-1.15	8914.17	8889.59	8617.39	9486.92	3.07	1.33	24.58	163.97	10499.38
Industrial Transportation (8)	4552.21	0.25	4617.74	4541.05	4395.33	4546.48	3.65	1.06	25.88	46.92	3872.89
Support Services (57)	6610.74	0.29	6705.89	6591.33	6388.01	7128.15	2.34	1.77	24.21	71.44	6706.73
Consumer Goods (39)	**18990.49**	**0.20**	**19263.83**	**18953.32**	**18463.68**	**17467.56**	**2.86**	**1.79**	**19.57**	**264.08**	**13585.61**
Automobiles & Parts (1)	6681.18	-1.18	6777.35	6761.08	6462.63	8380.27	3.06	1.81	18.04	136.30	6272.89
Beverages (6)	15598.09	0.22	15822.60	15563.40	15303.30	14598.05	2.48	1.61	25.07	102.47	10694.45
Food Producers (8)	8126.97	0.08	8243.95	8120.11	7849.43	8186.21	2.03	1.84	26.83	33.34	6827.90
Household Goods & Home Construction (15)	14109.43	-0.19	14312.52	14135.96	13607.38	12958.52	2.20	2.66	17.13	153.86	9705.32
Leisure Goods (1)	4411.85	-17.34	4475.36	5337.59	5104.07	4804.36	3.87	1.50	17.27	129.52	3824.34
Personal Goods (6)	23778.70	1.07	24120.97	23525.84	23108.30	23201.21	2.87	2.94	11.86	316.89	15551.31
Tobacco (2)	50279.10	0.20	51002.81	50178.90	48832.40	43151.10	3.71	1.19	22.74	1163.34	31379.15
Health Care (19)	**8849.65**	**0.07**	**8977.03**	**8843.48**	**8694.22**	**9324.84**	**3.77**	**0.55**	**47.90**	**211.12**	**6605.66**
Health Care Equipment & Services (8)	7237.66	0.82	7341.83	7178.68	6940.11	6642.55	1.52	1.93	34.03	64.89	6192.03
Pharmaceuticals & Biotechnology (11)	11872.95	-0.01	12043.85	11874.31	11694.85	12688.97	4.01	0.50	50.13	303.96	7884.90
Consumer Services (94)	**4643.11**	**0.04**	**4709.94**	**4641.04**	**4481.68**	**5029.51**	**2.55**	**1.83**	**21.44**	**68.36**	**4252.53**
Food & Drug Retailers (7)	2751.18	1.28	2790.78	2716.53	2592.44	3249.48	1.50	2.47	26.99	29.93	3180.38
General Retailers (32)	2680.58	-0.06	2719.16	2682.08	2582.67	3151.93	2.76	2.15	16.85	30.75	2972.01
Media (21)	7220.40	0.07	7324.33	7215.15	6999.57	7468.35	2.95	1.34	25.24	135.19	4341.37
Travel & Leisure (34)	8159.74	-0.27	8277.19	8181.60	7907.94	8525.39	2.38	2.03	20.68	115.83	7543.19
Telecommunications (6)	**3721.76**	**-0.64**	**3775.33**	**3745.70**	**3620.48**	**4147.62**	**4.49**	**-0.27**	**-81.99**	**81.83**	**3983.95**
Fixed Line Telecommunications (4)	4921.47	-0.66	4992.31	4954.11	4706.47	5396.51	3.19	1.80	17.48	0.00	4268.16
Mobile Telecommunications (2)	4819.83	-0.63	4889.21	4850.23	4738.67	5426.67	5.30	-1.05	-17.89	172.86	4664.07
Utilities (7)	**8631.63**	**0.31**	**8755.87**	**8604.76**	**8327.17**	**8630.77**	**4.69**	**1.53**	**13.93**	**207.43**	**9420.10**
Electricity (2)	9042.53	0.46	9172.69	9001.04	8626.03	9656.47	5.44	1.26	14.64	146.48	12255.04
Gas Water & Multiutilities (5)	8060.66	0.27	8176.68	8038.70	7799.26	7915.05	4.49	1.62	13.76	211.04	8847.98
Financials (288)	**4152.73**	**0.92**	**4212.51**	**4114.78**	**3958.04**	**4966.31**	**4.03**	**1.51**	**16.44**	**101.39**	**3718.08**
Banks (11)	3262.91	0.75	3309.88	3238.65	3105.71	4526.86	5.05	0.85	23.19	101.66	2322.13
Nonlife Insurance (10)	2907.71	1.24	2949.56	2872.17	2780.84	2442.22	2.84	2.30	15.35	53.63	4980.47
Life Insurance/Assurance (10)	6948.90	1.60	7048.92	6839.70	6504.46	8262.62	4.25	1.53	15.42	201.97	6562.10
Index- Real Estate Investment & Services (20)	2727.98	0.90	2767.25	2703.56	2596.62	3126.13	2.43	5.40	7.61	36.68	7109.33
Real Estate Investment Trusts (28)	2875.82	1.39	2917.21	2836.49	2713.66	2961.31	3.20	4.82	6.47	47.46	3457.63
General Financial (33)	7524.22	0.71	7632.52	7471.32	7133.25	8265.76	3.45	1.89	15.31	156.57	8340.85
Equity Investment Instruments (176)	7552.93	0.38	7661.64	7524.34	7432.30	7888.25	2.76	1.01	36.02	103.80	4027.95
Non Financials (345)	**4075.58**	**0.11**	**4134.24**	**4071.27**	**3963.82**	**4290.59**	**3.65**	**0.67**	**40.95**	**77.13**	**5818.67**
Technology (18)	**1423.42**	**0.24**	**1443.91**	**1420.08**	**1370.83**	**1434.66**	**1.53**	**1.66**	**39.40**	**13.78**	**1798.04**
Software & Computer Services (12)	1857.23	0.13	1883.96	1854.82	1795.38	1657.05	1.99	1.54	32.51	24.03	2467.99
Technology Hardware & Equipment (6)	1543.63	0.33	1565.85	1538.50	1481.40	1717.42	1.10	1.86	49.02	10.68	1784.68

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	6161.37	6198.18	6193.25	6188.42	6208.16	6215.00	6197.59	6194.93	6235.35	6249.36	6161.37
FTSE 250	16922.41	16915.86	16900.11	16884.17	16932.93	16937.47	16886.20	16866.09	16933.42	16981.77	16860.07
FTSE SmallCap	4539.20	4520.91	4528.78	4524.01	4526.76	4527.57	4526.59	4524.94	4523.57	4539.23	4515.04
FTSE All-Share	3389.12	3404.53	3402.05	3399.27	3409.63	3412.80	3403.42	3401.53	3421.46	3429.23	3388.08

Time of FTSE 100 Day's high:15:28:00 Day's Low07:03:00 FTSE 100 2010/11 High: 6410.26(20/04/2016) Low: 5536.97(11/02/2016)
Time of FTSE All-Share Day's high:15:28:00 Day's Low07:11:00 FTSE 100 2010/11 High: 3504.16(20/04/2016) Low: 3046.53(11/02/2016)

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FT 30 INDEX

	Jun 21	Jun 20	Jun 17	Jun 16	Jun 15	Yr Ago	High	Low
FT 30	2806.80	2799.90	2698.30	2659.90	2674.80	0.00	2876.90	2547.10
FT 30 Div Yield	1.73	1.74	1.79	1.81	1.80	0.00	3.93	2.74
P/E Ratio net	25.73	25.64	24.88	24.68	24.77	0.00	19.44	14.26

FT 30 since compilation: 4198.4 high: 19/07/1999; low49.4 26/06/1940Base Date: 1/7/35

FT 30 hourly changes

8	9	10	11	12	13	14	15	16	High	Low
2799.9	2800.4	2797.9	2796.4	2804.5	2806.8	2794.7	2792.4	2809	2815	2782.9

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

FX: EFFECTIVE INDICES

	Jun 20	Jun 17	Mnth Ago		Jun 21	Jun 20	Mnth Ago
Australia	89.23	88.74	88.20	Sweden	79.09	78.87	79.10
Canada	90.86	90.44	88.85	Switzerland	158.82	159.86	155.99
Denmark	106.66	106.87	106.80	UK	87.24	85.34	87.61
Japan	145.29	146.19	138.98	USA	98.22	98.86	100.99
New Zealand	114.33	114.14	111.12	Euro	87.12	87.31	87.50
Norway	85.93	85.29	85.72				

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 SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

Industrial Metals &	48.47	Household Goods & Ho	-1.28	Media	-6.84
Mining	26.46	Oil Equipment & Serv	-1.56	Tech Hardware & Eq	-6.91
Basic Materials	20.64	Industrials	-1.75	Mobile Telecomms	-7.08
Oil & Gas Producers	14.07	Electricity	-1.85	Real Est Invest & Tr	-8.13
Oil & Gas	13.53	Nonlife Insurance	-1.90	Health Care	-8.37
Industrial Eng	12.71	Construct & Material	-2.65	Pharmace & Biotech	-8.65
Industrial Transport	11.67	Software & Comp Serv	-2.75	Consumer Services	-8.80
Tobacco	6.06	FTSE SmallCap Index	-3.21	Telecommunications	-9.45
Personal Goods	2.74	Forestry & Paper	-3.37	Travel & Leisure	-10.62
Electronic & Elec Eq	1.07	FTSE 100 Index	-3.54	Automobiles & Parts	-10.83
Consumer Goods	0.89	Equity Invest Instr	-3.56	Financial Services	-11.76
NON FINANCIALS Index	-0.49	FTSE All{HY-}Share Index	-3.92	Food Producers	-11.98
Gas Water & Multi	-0.62	Support Services	-4.23	General Retailers	-12.19
Food & Drug Retailer	-0.65	Aerospace & Defense	-4.44	Fixed Line Telecomms	-12.94
Beverages	-0.81	Technology	-4.91	Financials	-13.44
Utilities	-0.86	FTSE 250 Index	-5.78	Real Est Invest & Se	-15.81
Chemicals	-1.11	Health Care Eq & Srv	-5.90	Banks	-17.62
		Leisure Goods	-6.83	Life Insurance	-18.08

FTSE GLOBAL EQUITY INDEX SERIES

Jun 21 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	7729	454.57	1.8	1.9	0.8	630.69	2.2	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	1424	398.60	1.7	1.7	0.0	566.31	1.5	2.8
FTSE Global Mid Cap	1644	619.75	2.1	2.3	3.0	819.12	4.2	2.2
FTSE Global Small Cap	4661	646.73	1.8	2.8	3.1	828.70	4.2	2.1
FTSE All-World	3068	265.03	1.8	1.8	0.5	388.14	2.0	2.7
FTSE World	2544	470.23	1.8	1.7	0.6	924.74	2.0	2.7
FTSE Global All Cap ex UNITED KINGDOM In	7402	467.84	1.5	1.9	0.9	639.77	2.3	2.5
FTSE Global All Cap ex USA	5775	414.37	3.0	2.1	-0.7	612.51	1.2	3.2
FTSE Global All Cap ex JAPAN	6464	465.17	1.7	2.0	1.4	651.30	2.8	2.6
FTSE Global All Cap ex Eurozone	7082	470.31	1.5	2.1	1.4	640.20	2.7	2.5
FTSE Developed	2097	427.32	1.8	1.5	0.1	597.80	1.6	2.6
FTSE Developed All Cap	5696	449.62	1.8	1.7	0.5	621.89	1.9	2.6
FTSE Developed Large Cap	899	393.26	1.7	1.4	-0.4	557.98	1.2	2.8
FTSE Developed Europe Large Cap	223	317.33	4.3	1.2	-3.9	514.33	-1.1	3.9
FTSE Developed Europe Mid Cap	309	505.82	4.8	0.9	-1.3	739.57	0.7	2.8
FTSE Dev Europe Small Cap	707	713.14	4.5	0.7	-2.5	1012.75	-0.8	2.7
FTSE North America Large Cap	291	444.53	0.6	1.4	1.8	591.74	3.0	2.3
FTSE North America Mid Cap	395	675.41	1.0	2.9	5.5	841.00	6.4	1.8
FTSE North America Small Cap	1484	677.68	1.2	3.4	5.6	820.60	6.5	1.7
FTSE North America	686	298.58	0.6	1.6	2.5	407.15	3.6	2.2
FTSE Developed ex North America	1411	219.31	3.6	1.4	-3.3	348.74	-1.2	3.3
FTSE Japan Large Cap	176	306.70	2.2	0.9	-6.4	387.64	-5.4	2.4
FTSE Japan Mid Cap	307	481.36	2.1	0.7	-2.1	586.89	-1.2	2.0
FTSE Global wi JAPAN Small Cap	782	523.60	2.2	1.1	-0.5	660.17	0.6	2.2
FTSE Japan	483	128.81	2.2	0.8	-5.5	182.88	-4.6	2.3
FTSE Asia Pacific Large Cap ex Japan	548	542.81	1.8	4.0	0.3	822.59	1.6	3.3
FTSE Asia Pacific Mid Cap ex Japan	420	751.02	1.4	4.2	0.6	1095.62	1.7	3.1
FTSE Asia Pacific Small Cap ex Japan	1443	497.87	1.0	3.8	-0.3	714.97	0.6	2.8
FTSE Asia Pacific Ex Japan	968	430.92	1.7	4.1	0.4	693.95	1.7	3.3
FTSE Emerging All Cap	2033	594.72	1.6	4.9	4.1	857.44	5.3	3.1
FTSE Emerging Large Cap	525	560.64	1.7	5.0	4.1	813.35	5.2	3.2
FTSE Emerging Mid Cap	446	759.07	1.8	4.7	6.9	1090.04	8.2	2.9
FTSE Emerging Small Cap	1062	622.40	0.8	4.7	1.1	863.51	2.0	3.0
FTSE Emerging Europe	112	304.34	3.1	2.3	14.0	452.39	15.3	4.2
FTSE Latin America All Cap	238	705.69	2.5	3.8	17.9	1055.82	19.4	3.2
FTSE Middle East and Africa All Cap	219	650.50	3.0	6.4	5.2	985.66	6.9	3.0
FTSE Global wi UNITED KINGDOM All Cap In	327	325.45	6.0	2.0	-1.1	525.29	1.0	3.8
FTSE Global wi USA All Cap	1954	511.90	0.7	1.8	2.1	662.73	3.2	2.1
FTSE Europe All Cap	1426	370.50	4.4	1.1	-2.8	580.73	-0.3	3.6
FTSE Eurozone All Cap	647	343.17	4.0	0.4	-4.3	544.78	-1.7	3.5
FTSE RAFI All World 3000	3049	5485.38	2.3	2.2	1.1	7031.33	2.9	3.4
FTSE RAFI US 1000	1004	9171.62	0.7	2.1	3.7	11736.62	5.0	2.5
FTSE EDHEC-Risk Efficient All-World	3068	323.16	1.7	2.1	2.4	439.79	3.7	2.3
FTSE EDHEC-Risk Efficient Developed Europe	532	275.26	4.4	0.7	-1.4	409.77	0.5	2.8

Jun 21 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil & Gas	152	342.27	1.9	1.9	12.2	533.00	14.4	3.7
Oil & Gas Producers	110	321.08	2.2	2.2	12.5	509.12	14.7	3.8
Oil Equipment & Services	32	312.02	0.6	0.6	12.4	442.48	14.3	3.2
Basic Materials	256	377.49	2.4	2.4	7.4	562.00	9.1	3.0
Chemicals	125	583.41	2.0	2.0	-1.4	872.72	0.4	2.8
Forestry & Paper	16	199.95	3.4	3.4	2.0	329.38	4.6	3.8
Industrial Metals & Mining	62	299.14	3.1	3.1	16.3	443.83	17.1	2.7
Mining	53	443.28	2.8	2.8	37.0	658.57	38.9	3.5
Industrials	536	312.07	2.1	2.1	4.3	439.57	5.7	2.3
Construction & Materials	111	445.81	3.0	3.0	6.4	658.13	8.0	2.2
Aerospace & Defense	26	518.05	1.9	1.9	2.3	723.23	3.6	2.4
General Industrials	55	226.96	1.7	1.7	4.6	344.41	6.4	2.6
Electronic & Electrical Equipment	69	315.28	2.4	2.4	-0.4	408.00	0.6	2.0
Industrial Engineering	104	576.62	2.5	2.5	7.6	799.14	9.0	2.5
Industrial Transportation	96	522.13	1.7	1.7	5.5	733.98	6.9	2.5
Support Services	75	285.69	2.0	2.0	3.6	385.94	4.7	2.0
Consumer Goods	423	424.61	2.0	2.0	1.9	612.09	3.3	2.5
Automobiles & Parts	104	341.20	2.7	2.7	-10.6	474.16	-9.1	3.2
Beverages	48	594.11	1.7	1.7	3.9	866.87	5.1	2.5
Food Producers	103	587.79	1.4	1.4	5.2	874.09	6.9	2.2
Household Goods & Home Construction	47	421.88	1.9	1.9	5.1	603.98	6.4	2.3
Leisure Goods	31	142.53	1.7	1.7	8.1	184.28	8.6	1.4
Personal Goods	79	610.55	2.3	2.3	2.2	836.52	3.3	2.1
Tobacco	11	1359.57	2.4	2.4	11.7	2699.26	13.5	3.6
Health Care	177	441.15	1.3	1.3	-3.7	622.35	-2.5	2.1
Health Care Equipment & Services	63	700.87	1.2	1.2	7.9	807.63	8.4	1.0
Pharmaceuticals & Biotechnology	114	321.97	1.3	1.3	-7.5	473.23	-6.0	2.4
Consumer Services	392	388.18	1.6	1.6	-0.4	509.25	0.6	1.8
Food & Drug Retailers	54	294.19	1.1	1.1	-1.9	401.85	-0.8	1.9
General Retailers	122	530.38	1.4	1.4	-0.5	678.26	0.4	1.6
Media	86	294.45	1.9	1.9	1.8	387.30	2.8	2.0
Travel & Leisure	130	374.41	1.8	1.8	-1.9	496.27	-0.8	1.9
Telecommunication	91	166.22	1.8	1.8	5.5	298.53	7.8	4.1
Fixed Line Telecommuniations	42	144.16	1.3	1.3	8.7	283.38	11.1	4.4
Mobile Telecommunications	49	166.56	2.5	2.5	1.1	270.92	3.1	3.6
Utilities	165	259.96	1.3	1.3	9.6	486.29	11.9	3.7
Electricity	112	283.01	0.7	0.7	9.3	523.30	11.5	3.6
Gas Water & Multiutilities	53	277.00	2.2	2.2	10.0	532.25	12.5	3.9
Financials	691	189.32	2.1	2.1	-5.7	299.59	-3.9	3.4
Banks	246	162.10	2.6	2.6	-9.2	274.15	-7.2	4.0
Nonlife Insurance	68	210.24	1.8	1.8	-2.0	298.41	0.0	2.6
Life Insurance	51	178.62	3.2	3.2	-9.9	276.39	-8.1	3.5
Financial Services	153	211.65	1.6	1.6	-4.8	285.17	-3.7	2.2
Technology	185	172.80	0.9	0.9	-0.8	207.96	0.0	1.9
Software & Computer Services	89	309.02	0.9	0.9	-0.4	356.89	0.3	1.1
Technology Hardware & Equipment	96	124.66	0.8	0.8	-1.4	154.76	-0.2	2.8
Alternative Energy	10	98.15	2.4	2.4	-5.1	131.00	-4.3	1.3
Real Estate Investment & Services	102	274.36	2.2	2.2	-3.0	445.20	-1.3	2.7

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 100 SUMMARY

FTSE 100	Closing Price	Day's Change	FTSE 100	Closing Price	Day's Change
3I Group PLC	546.50	-2.50	Legal & General Group PLC	229.80	3.60
Admiral Group PLC	1970	35.00	Lloyds Banking Group PLC	70.33	0.33
Anglo American PLC	658.30	-11.70	London Stock Exchange Group PLC	2619	24.00
Antofagasta PLC	433.00	-0.90	Marks And Spencer Group PLC	364.00	-3.10
Arm Holdings PLC	1013	4.00	Mediclinic International PLC	923.00	30.50
Ashtead Group PLC	1037	14.00	Merlin Entertainments PLC	424.60	-2.70
Associated British Foods PLC	2901	7.00	Mondi PLC	1334	4.00
Astrazeneca PLC	3872.5	24.50	Morrison (Wm) Supermarkets PLC	187.30	1.50
Aviva PLC	433.70	4.30	National Grid PLC	981.70	6.10
Babcock International Group PLC	1002	1.00	Next PLC	5465	-5.00
Bae Systems PLC	496.00	1.20	Old Mutual PLC	187.80	4.00
Barclays PLC	180.35	3.50	Paddy Power Betfair PLC	9015	15.00
Barratt Developments PLC	562.00	-5.50	Pearson PLC	864.50	9.00
Berkeley Group Holdings (The) PLC	3202	-43.00	Persimmon PLC	2046	-10.00
Bhp Billiton PLC	847.70	-4.60	Provident Financial PLC	2765	-1.00
BP PLC	382.30	3.35	Prudential PLC	1309.5	21.50
British American Tobacco PLC	4247.5	12.50	Randgold Resources LD	6465	-50.00
British Land Company PLC	748.00	6.50	Reckitt Benckiser Group PLC	6821	22.00
Bt Group PLC	426.25	-2.85	RELX PLC	1231	4.00
Bunzl PLC	2018	2.00	Rexam PLC	626.00	-
Burberry Group PLC	1124	7.00	Rio Tinto PLC	2031.5	-9.00
Capita PLC	1067	21.00	Rolls-Royce Holdings PLC	631.00	-3.00
Carnival PLC	3461	34.00	Royal Bank Of Scotland Group PLC	241.80	4.10
Centrica PLC	213.70	-1.80	Royal Dutch Shell PLC	1808.5	14.50
Coca-Cola Hbc AG	1423	-	Royal Dutch Shell PLC	1835	16.00
Compass Group PLC	1306	-9.00	Royal Mail PLC	530.50	-1.00
Crh PLC	2036	-25.00	Rsa Insurance Group PLC	474.20	8.80
Dcc PLC	6445	30.00	Sabmiller PLC	4286.5	-6.50
Diageo PLC	1823	11.00	Sage Group PLC	616.50	4.50
Direct Line Insurance Group PLC	363.80	6.10	Sainsbury (J) PLC	245.50	1.00
Dixons Carphone PLC	418.60	-2.00	Schroders PLC	2598	11.00
Easyjet PLC	1520	-2.00	Severn Trent PLC	2236	15.00
Experian PLC	1294	12.00	Shire PLC	3976	-34.00
Fresnillo PLC	1218	-6.00	Sky PLC	875.50	-12.00
Gkn PLC	284.30	-3.40	Smith & Nephew PLC	1151	1.00
Glaxosmithkline PLC	1416.5	-0.50	Sse PLC	1547	8.00
Glencore PLC	146.10	-0.25	St. James's Place PLC	887.50	9.50
Hammerson PLC	579.50	9.00	Standard Chartered PLC	554.90	3.20
Hargreaves Lansdown PLC	1327	2.00	Standard Life PLC	331.40	8.10
HSBC Holdings PLC	439.80	2.45	Taylor Wimpey PLC	185.60	-2.40
Imperial Brands PLC	3666.5	-0.50	Tesco PLC	164.15	2.70
Informa PLC	658.50	-13.50	Travis Perkins PLC	1869	5.00
Inmarsat PLC	737.00	10.00	Tui AG	1015	-14.00
Intercontinental Hotels Group PLC	2650	-9.00	Unilever PLC	3155	38.50
International Consolidated Airlines Group S.A.	504.00	-3.00	United Utilities Group PLC	954.50	-4.50
Intertek Group PLC	3150	-3.00	Vodafone Group PLC	214.55	-1.60
Intu Properties PLC	308.30	9.80	Whitbread PLC	4108	67.00
Itv PLC	210.90	-1.80	Wolseley PLC	3780	5.00
Johnson Matthey PLC	2932	-1.00	Worldpay Group PLC	287.50	0.30
Kingfisher PLC	365.50	2.60	WPP PLC	1559	14.00
Land Securities Group PLC	1185	18.00			

UK STOCK MARKET TRADING DATA

	Jun 21	Jun 20	Jun 17	Jun 16	Jun 15	Yr Ago
SEAQ Bargains	3072.00	3514.00	3514.00	3514.00	3684.00	4189.00
Order Book Turnover (m)	73.90	171.51	171.51	171.51	298.20	267.75
Order Book Bargains	889360.00	1104996.00	1104996.00	1104996.00	884176.00	910039.00
Order Book Shares Traded (m)	1326.00	2470.00	2470.00	2470.00	1463.00	1467.00
Total Equity Turnover (£m)	2296.07	3282.87	3282.87	3282.87	2411.26	2471.20
Total Mkt Bargains	961225.00	1200378.00	1200378.00	1200378.00	969162.00	1004580.00
Total Shares Traded (m)	3001.00	4701.00	4701.00	4701.00	3874.00	4459.00

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

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	
Blue Star Capital	Int	-	0.055L	0.068L	0.149L	0.01L	0.03L	-	-	-	-	-
Brown (N) Group	Pre	866.2	837.2	72.2	78.3	19.23	18.15	8.56	8.56	Jul 29	14.23	14.23
Calculus VCT	Pre	0.054	0.064	0.073L	0.057L	1.5L	1.2L	-	5.25	-	-	5.25
Chemring Group	Int	180.1	161.7	16.8L	15.1L	5.3L	4.9L	-	2.10227	-	-	3.591
Henderson Opportunities Trust	Int			1.972L	12.641	10.26	10.17	5.5	5	Sep 23	18.429	13.8
Photo-Me International	Pre	183.994	177.202	40.106	38.496	7.78	7.49	3.285	2.54	Nov 10	5.86	4.88

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)
06/21	50.00			Comptoir Group PLC	-	-	-	-	-
06/15	300.00	AIM	GROW	Draper Esprit PLC	306.50	2.95	312.00	304.00	12466.6
06/15	3.30	AIM	MKA	Mkango Resources Ltd	5.25	0.43	5.89	3.25	373.0
06/09	221.00	AIM	MPH	Mereo BioPharma Group PLC	292.00	-3.00	303.00	240.00	18787.5
05/27	75.00	AIM	DCTA	Directa Plus PLC	146.00	11.00	215.25	83.00	6455.1
05/26	160.00	AIM	JOUL	Joules Group PLC	189.50	-2.50	199.00	160.00	16581.2
05/18	130.00	AIM	ONC	Oncimmune Holdings PLC	125.50	-1.50	140.00	124.00	6403.6
05/13	200.00		MOTR	Motorpoint Group PLC	227.00	-2.25	245.50	200.00	22700.0
05/12	9.00	AIM	GSH	Green & Smart Holdings PLC	10.38	0.00	11.00	10.00	2870.4

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

MARKET DATA

FT500: THE WORLD'S LARGEST COMPANIES

Stock	Price	Day Chg	52 Week High	Low	Yld	P/E	MCap m
Alphabet	707.48	1.35	810.35	539.54	-	29.18	207769.3
Altria♦	66.49	0.61	66.75	47.41	3.40	23.49	130087.97
Amazon	714.89	0.88	731.50	425.57	-	288.90	337307.36
AmerAir	30.11	0.40	47.09	28.85	1.36	2.64	17408.75
AmerExpr	61.95	-0.35	81.92	50.27	1.91	12.13	58916.5
AmerIntGrp♦	53.90	0.17	64.93	50.20	1.90	-161.84	60314.73
AmerTower♦	109.08	1.66	109.80	83.07	1.69	69.26	46318.07
Amgen	148.91	-1.74	181.81	130.09	2.31	15.43	111863.74
Anadarko♦	55.07	0.22	82.69	28.16	1.59	-6.16	28109.19
Anthem♦	132.84	0.12	173.59	115.63	1.94	14.64	34930.68
Aon Cp	107.89	0.51	110.04	83.83	1.14	21.60	28582.41
Apple	96.28	1.18	132.97	89.47	2.21	10.51	527366.48
ArcherDan	41.98	-0.47	52.42	29.86	2.77	15.83	24666.7
Illumina	138.44	-1.66	242.37	127.10	-	48.75	20378.37
Intcntl Exch	251.94	-0.26	271.95	220.28	1.26	21.19	29992.36
Intel	32.24	0.07	35.59	24.87	3.10	13.44	152065.43
Intuit	107.77	0.42	108.95	79.63	1.07	39.08	27575.25
John&John	116.37	-0.17	117.74	81.79	2.63	20.79	320092.48
JohnsonCn♦	44.29	-0.14	52.18	33.62	2.54	66.52	28716.51
JPMrgnCh	62.45	0.08	70.61	50.07	2.88	10.36	228358.35
Kimb-Clark♦	133.51	0.63	138.76	103.04	2.72	43.82	48080.67
KinderM	18.63	0.53	40.28	11.20	8.79	545.76	41581.03
Kraft Heinz♦	85.81	0.31	86.66	61.42	2.71	156.71	104341.12
Kroger	34.54	-0.17	42.75	27.32	1.18	16.05	32943.79
L Brands	68.05	0.23	101.11	60.00	3.09	17.38	19564.54
LasVegasSd♦	45.02	0.71	57.77	34.88	6.05	19.80	35778.24
LibertyGbl	31.30	-3.57	57.87	30.60	-	-28.13	7926.21
Yum!Brnds	84.14	0.09	93.28	64.58	2.11	27.25	34282.07
Venezuela (VEF)							
Bco de Vnzla	110.00	-	143.95	85.00	-	-	668.37
Bco Provncl	3250	-	4400	2200	-	0.46	580.08
Mrcntl Srvcs	5100	-	6200	4300	0.28	16.26	501.46

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

FT 500: TOP 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
RBS	241.80	237.70	4.10	1.72	29.80	14.1	3.51
Glencore	146.10	146.35	-0.25	-0.17	17.95	14.0	14.23
LloydsBkg	70.33	70.00	0.33	0.47	8.15	13.1	-0.85
Unicred	2.49	2.49	0.00	0.00	0.28	12.9	-16.18
StandCh	554.90	551.70	3.20	0.58	62.60	12.7	3.69
Barclays	180.35	176.85	3.50	1.98	20.30	12.7	2.57
Petrobras	11.73	11.73	0.00	0.00	1.25	11.9	3.35
GuosenSec	17.10	16.80	0.30	1.79	1.79	11.7	16.64
Tesco	164.15	161.45	2.70	1.67	16.80	11.4	-0.36
SocGen	34.17	33.80	0.37	1.08	3.42	11.1	-1.47
BcoSantdr	4.03	3.96	0.07	1.74	0.40	11.0	-3.25
BBVA	5.58	5.56	0.03	0.47	0.54	10.8	-2.34
Deut Bank	14.48	14.48	0.00	0.00	1.32	10.0	12.46
EDF	11.51	11.50	0.02	0.13	1.04	9.9	0.46
IntSPaolo	2.10	2.10	0.00	0.00	0.19	9.9	-6.91
CredSuisse	12.49	12.49	0.00	0.00	1.10	9.7	-7.46
UBS	14.60	14.60	0.00	0.00	1.28	9.6	-24.10
BNP Parib	46.07	45.58	0.49	1.08	4.03	9.6	0.78
Prudential	1309.50	1288.00	21.50	1.67	113.00	9.4	-1.84
Cred Agr	8.47	8.35	0.12	1.40	0.71	9.1	-4.21

Based on the FT Global 500 companies in local currency

FT 500: BOTTOM 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
PngAnBnk	8.61	8.60	0.01	0.12	-1.72	-16.7	0.31
[illegible]	96.75	96.75	-1.01	-1.04	-12.39	-11.5	1.98
LibertyGbl	31.30	34.87	-3.57	-10.24	-3.51	-10.1	-14.03
VertexPharm	83.89	86.72	-2.83	-3.26	-7.48	-8.2	-1.00
[illegible]	28.77	28.77	0.00	0.00	-2.20	-7.1	-23.14
NovoB	341.00	341.00	0.00	0.00	-22.20	-6.1	-4.15
Regen Pharm	345.70	352.66	-6.96	-1.97	-20.79	-5.7	-10.42
Alexion	123.93	123.96	-0.04	-0.03	-7.30	-5.6	-13.07
Allegran	230.89	235.26	-4.37	-1.86	-13.21	-5.4	0.68
CSL	108.89	108.09	0.80	0.74	-6.18	-5.4	-4.37
China Vanke	17.00	17.00	0.00	0.00	-0.94	-5.2	-3.19
Bk China	3.03	3.00	0.03	1.00	-0.16	-5.0	0.66
MmcNrlskNckl	8300.00	8300.00	0.00	0.00	-396.00	-4.6	-8.28
LasVegasSd	45.02	44.31	0.71	1.60	-1.88	-4.0	-0.03
Celgene	97.11	99.29	-2.18	-2.20	-3.92	-3.9	-4.33
Alphabet	707.48	706.13	1.35	0.19	-25.77	-3.5	-1.97
Kroger	34.54	34.71	-0.17	-0.49	-1.22	-3.4	-0.26
BOE Tech	1.81	1.87	-0.06	-3.21	-0.06	-3.2	-15.14
BrisMySq	70.81	70.96	-0.15	-0.21	-2.29	-3.1	0.11
Netflix	91.20	93.80	-2.60	-2.77	-2.92	-3.1	-1.32

Based on the FT Global 500 companies in local currency

INTEREST RATES: OFFICIAL

Jun 21	Rate	Current	Since	Last	Mnth Ago	Year Ago
US	Fed Funds	0.25-0.50	16-12-2015	1.00	0.25-0.50	0.00-0.25
US	Prime	3.50	16-12-2008	3.50	3.50	3.50
US	Discount	0.75	16-12-2015	0.75	1.00	0.75
Euro	Repo	0.00	10-09-2014	0.05	0.05	0.05
UK	Repo	0.50	05-03-2009	0.50	0.50	0.50
Japan	O'night Call	0.00-0.00	05-10-2010	0.00	0.00-0.10	0.00-0.10
Switzerland	Libor Target	0.00-0.25	15-01-2015	0.00-0.75	-1.25--0.25	0-0.25

INTEREST RATES: MARKET

Jun 21 (Libor: Jun 20)	Over night	Change Day	Week	Month	One month	Three month	Six month	One year
US$ Libor	0.39010	0.004	0.004	0.000	0.44805	0.64650	0.93065	1.25150
Euro Libor	-0.39429	0.001	0.001	0.001	-0.35843	-0.28357	-0.16600	-0.03571
£ Libor	0.48250	0.001	0.001	0.006	0.51344	0.58625	0.72881	0.98181
Swiss Fr Libor				0.008	-0.82460	-0.76660	-0.67860	-0.55760
Yen Libor				0.001	-0.07471	-0.03086	-0.00971	0.08471
Euro Euribor				-0.002	-0.35800	-0.26600	-0.15900	-0.02800
Sterling CDs				0.000	0.50000	0.60000	0.75500	
US$ CDs				0.000	0.46000	0.62000	0.88000	
Euro CDs				0.000	-0.39500	-0.30500	-0.20500	

Jun 21	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	-0.45	-0.35	-0.45	-0.35	-0.47	-0.32	-0.38	-0.23	-0.28	-0.13	-0.10	0.05
Sterling			0.45	0.55	0.45	0.55	0.55	0.65	0.68	0.83	0.88	1.03
Swiss Franc	-	-	-	-	-	-	-	-	-	-	-	-
Canadian Dollar	-	-	-	-	-	-	-	-	-	-	-	-
US Dollar	0.35	0.45	0.35	0.45	0.40	0.50	0.55	0.65	0.90	1.00	1.20	1.30
Japanese Yen	-0.30	-0.10	-0.70	-0.30	-0.70	-0.40	-0.45	-0.20	-0.20	0.00	-0.10	0.10

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†	Jul	49.27	-0.50	Corn♦	Jul	414.25	-6.50
Brent Crude Oil‡		49.84	-0.55	Wheat♦	Jul	470.00	-4.00
RBOB Gasoline†	Jun	1.56	-0.01	Soybeans♦	Jul	1138.25	-9.75
Heating Oil†	Jun	1.50	-0.01	Soybeans Meal♦	Jul	399.90	-4.60
Natural Gas†	Jun	2.73	-0.01	Cocoa (ICE Liffe)✠	Jul	2265.00	6.00
Ethanol♦		-	-	Cocoa (ICE US)♥	Jul	3169.00	0.00
Uranium†	Jun	25.75	-0.90	Coffee(Robusta)✠	Jul	1690.00	22.00
Carbon Emissions‡		-	-	Coffee (Arabica)♥	Jul	137.15	-2.65
Diesel†		-	-	White Sugar✠		530.90	-5.30
Unleaded (95R)		-	-	Sugar 11♥		19.29	-0.44
Base Metals (♠ LME 3 Months)				Cotton♥	Jul	63.10	-1.41
Aluminium		1631.00	-2.00	Orange Juice♥	Jul	166.60	-0.60
Aluminium Alloy		1565.00	5.00	Palm Oil♣		-	-
Copper		4626.50	-10.00	Live Cattle♣	Jun	114.53	-2.03
Lead		1703.50	-22.00	Feeder Cattle♣	Aug	136.73	-0.45
Nickel		9150.00	-65.00	Lean Hogs♣	Jul	86.45	0.00
Tin		17000.00	-60.00				
Zinc		2000.00	-17.50		Jun 20	% Chg Month	% Chg Year
Precious Metals (PM London Fix)							
Gold		1281.80	-8.90	S&P GSCI Spt	377.51	2.74	-12.56
Silver (US cents)		1736.00	2.50	DJ UBS Spot	88.39	4.10	-11.51
Platinum		978.00	10.00	R/J CRB TR	192.99	4.32	-13.35
Palladium		543.00	12.00	Rogers RICIX TR	2283.01	-	-
Bulk Commodities				M Lynch MLCX Ex. Rtn	231.14	-9.84	-33.05
Iron Ore (Platts)		51.00	0.00	UBS Bberg CMCI TR	13.68	4.04	-11.28
Iron Ore (The Steel Index)		50.70	0.10	LEBA EUA Carbon	5.83	0.00	-22.37
GlobalCOAL RB Index		62.65	3.65	LEBA CER Carbon	0.39	-2.50	0.00
Baltic Dry Index		580.00	-2.00	LEBA UK Power	3750.00	109.26	-6.83

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

BOND INDICES

	Index	Day's change	Month's change	Year change	Return 1 month	Return 1 year
Markit IBoxx						
ABF Pan-Asia unhedged	183.21	0.39	2.11	5.73	1.69	2.79
Corporates(£)	312.23	-0.59	0.88	5.78	1.62	6.79
Corporates($)	264.59	-0.21	1.04	6.06	1.04	6.06
Corporates(€)	218.96	-0.04	0.54	3.63	0.84	4.42
Eurozone Sov(€)	234.44	0.09	0.71	4.06	1.13	7.04
Gilts(£)	308.10	-1.11	1.54	7.41	2.42	9.61
Global Inflation-Lkd	253.23	0.10	1.82	6.25	1.31	1.98
Markit iBoxx £ Non-Gilts	311.68	-0.65	0.95	5.68	1.59	6.62
Overall ($)	236.48	-0.24	1.27	5.09	1.27	5.09
Overall(£)	306.38	-0.98	1.37	6.90	2.17	8.71
Overall(€)	228.81	0.03	0.61	3.68	0.94	5.87
Treasuries ($)	227.21	-0.29	1.47	4.80	1.47	4.80
FTSE						
Sterling Corporate (£)	113.45	-0.26	-	-	1.22	1.98
Euro Corporate (€)	109.06	0.04	-	-	1.11	1.99
Euro Emerging Mkts (€)	889.94	7.38	-	-	3.30	-1.46
Eurozone Govt Bond	116.69	-0.06	-	-	1.00	4.50

CREDIT INDICES	Index	Day's change	Week's change	Month's change	Series high	Series low
Markit iTraxx						
Crossover 5Y	369.26	-12.07	35.21	40.34	390.04	288.69
Europe 5Y	85.00	-1.98	7.21	7.01	90.43	67.59
Japan 5Y	70.05	-2.51	2.21	-0.87	93.03	64.22
Senior Financials 5Y	111.86	-3.89	10.86	12.50	121.66	80.36
Markit CDX						
Emerging Markets 5Y	288.07	-12.12	-13.09	-25.26	313.33	271.25
Nth Amer High Yld 5Y	437.70	-14.32	-8.93	-18.66	463.54	415.17
Nth Amer Inv Grade 5Y	80.21	-2.57	-1.50	-3.31	85.25	72.99

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

BONDS: INDEX-LINKED

	Price Jun 20	Yield Jun 20	Prev	Month return	Value stock	Market	No of stocks
Can 4.25%' 21	126.07	-0.471	-0.521	0.11	5.18	73376.42	7
Fr 2.25%' 20	113.61	-0.992	-0.943	-0.24	20.31	228309.55	15
Swe 0.25%' 22	112.12	-1.439	-1.462	0.09	29.70	237690.03	8
UK 2.5%' 20	360.33	-1.550	-1.623	0.29	6.58	531362.14	27
UK 2.5%' 24	345.61	-1.152	-1.222	1.25	6.82	531362.14	27
UK 2%' 35	237.85	-0.957	-1.018	2.06	9.08	531362.14	27
US 0.625%' 21	104.73	-0.301	-0.340	0.98	35.84	1166893.25	37
US 3.625%' 28	136.36	0.460	-0.340	0.61	16.78	1166893.25	37

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

BONDS: TEN YEAR GOVT SPREADS

	Bid Yield	Spread vs Bund	Spread vs T-Bonds		Bid Yield	Spread vs Bund	Spread vs T-Bonds
Australia	2.28	2.22	0.59	Italy	1.44	1.39	-0.24
Austria	0.38	0.33	-1.31	Japan	-0.15	-0.21	-1.84
Belgium	0.45	0.39	-1.24	Netherlands	0.15	0.10	-1.53
Canada	1.22	1.17	-0.47	Norway	1.13	1.08	-0.55
Denmark	0.23	0.18	-1.45	Portugal	3.16	3.11	1.47
Finland	0.33	0.28	-1.36	Spain	1.51	1.46	-0.17
France	0.42	0.37	-1.27	Switzerland	-0.46	-0.51	-2.15
Germany	0.05	0.00	-1.63	United Kingdom	1.42	1.37	-0.27
Greece	7.82	7.76	6.13	United States	1.69	1.63	0.00
Ireland	0.78	0.73	-0.91				

Data provided by SIX Financial Information & Tullett Prebon Information

BONDS: HIGH YIELD & EMERGING MARKET

Jun 21	Red date	Coupon	Ratings S*	M*	F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
High Yield US$										
Navient Corporation	06/18	8.45	BB-	Ba3	BB	107.23	4.64	0.00	0.18	3.89
High Yield Euro										
Kazkommerts Intl BV	02/17	6.88	B	Caa1	B	97.50	-	0.00	0.00	-
Emerging US$										
Mexico	09/16	11.40	BBB+	A3	BBB+	106.80	1.49	0.03	0.01	0.44
Brazil	01/18	8.00	BB	Ba2	BB	104.74	4.83	-0.12	0.14	4.09
Russia	07/18	11.00	BB+	Ba1	BBB-	117.77	2.24	0.00	-0.36	1.49
Peru	03/19	7.13	BBB+	A3	BBB+	128.75	1.95	0.00	0.00	1.20
Peru	03/19	7.13	BBB+	A3	BBB+	114.01	2.60	0.00	0.20	0.84
Colombia	07/21	4.38	BBB	Baa2	BBB	104.98	3.32	0.00	-0.33	2.15
Brazil	01/22	12.50	BB	Ba2	BB	104.60	11.37	-0.09	0.49	10.19
Poland	03/22	5.00	BBB+	A2	A-	117.38	2.80	0.00	0.00	1.62
Turkey	09/22	6.25	-	Baa3	BBB-	112.08	4.08	0.00	-0.40	2.91
Turkey	10/26	4.88	-	Baa3	BBB-	103.36	4.51	0.00	-0.41	2.83
Emerging Euro										
Brazil	02/15	7.38	BBB-	Baa2	BBB	111.75	0.73	0.00	0.00	0.09
Mexico	07/17	4.25	BBB+	A3	BBB+	111.13	1.50	0.00	0.00	0.75
Mexico	02/20	5.50	BBB+	A3	BBB+	121.63	2.06	0.00	0.00	0.88
Bulgaria	09/25	5.75	BB+	-	BBB-	118.57	3.43	0.00	-0.11	1.74

Data provided by SIX Financial Information & Tullett Prebon Information. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

VOLATILITY INDICES

	Jun 21	Day Chng	Prev	52 wk high	52 wk low
VIX	18.40	0.03	18.37	53.29	10.88
VXD	17.00	0.21	16.79	56.32	8.09
VXN	19.44	0.13	19.31	46.72	12.06
VDAX	27.12	0.09	27.03	-	-

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

BONDS: BENCHMARK GOVERNMENT

	Red Date	Coupon	Bid Price	Bid Yield	Day chg yield	Wk chg yield	Month chg yld	Year chg yld
Australia	10/18	3.25	103.57	1.68	0.02	0.06	0.03	-0.38
	11/27	2.75	104.74	2.28	0.01	0.11	-0.17	0.00
Austria	10/19	0.25	99.98	0.26	0.00	0.00	0.00	0.00
	10/26	0.75	103.75	0.38	0.00	0.00	0.00	0.00
Belgium	06/18	0.75	101.48	-0.01	0.00	0.00	0.00	0.00
	06/26	1.00	105.41	0.45	-0.01	-0.01	-0.10	0.00
Canada	08/18	0.50	99.79	0.60	0.01	0.08	-0.05	0.00
	06/26	1.50	102.64	1.22	0.01	0.10	-0.15	0.00
Denmark	11/18	0.25	101.95	-0.56	0.00	0.00	0.00	0.00
	11/25	1.75	114.10	0.23	0.00	0.01	-0.19	-0.87
Finland	05/18	1.00	100.07	0.97	0.00	0.02	-0.20	-0.22
	04/26	0.50	101.64	0.33	0.00	0.00	0.00	0.00
France	05/19	1.00	104.15	-0.41	0.00	0.00	0.00	0.00
	11/20	0.25	102.40	-0.29	0.00	0.00	0.00	0.00
	05/26	0.50	100.79	0.42	-0.01	-0.01	-0.08	0.00
	05/45	3.25	148.96	1.23	-0.01	0.01	-0.24	-0.92
Germany	04/19	0.50	103.06	-0.58	0.00	0.00	0.00	0.00
	10/20	0.25	103.37	-0.52	0.00	0.00	0.00	0.00
	02/26	0.50	104.31	0.05	0.00	0.05	-0.13	0.00
	08/46	2.50	150.75	0.64	0.01	0.09	-0.26	-0.97
Greece	07/17	3.38	94.96	8.52	0.95	-2.56	0.75	-14.82
	02/26	3.00	72.25	7.82	0.11	-0.26	0.69	-3.03
Ireland	10/17	5.50	107.79	-0.37	0.00	0.00	0.00	0.00
	05/26	1.00	102.10	0.78	-0.03	-0.05	-0.04	0.00
Italy	04/19	0.10	100.03	0.09	-0.01	-0.10	0.01	0.00
	06/21	0.45	100.18	0.41	-0.01	-0.11	-0.07	0.00
	06/26	1.60	101.49	1.44	0.01	-0.07	-0.06	0.00
	03/47	2.70	103.70	2.54	0.01	-0.04	-0.10	0.00
Japan	06/18	0.10	100.54	-0.17	0.00	0.00	0.00	0.00
	06/21	0.05	101.39	-0.23	0.00	0.00	0.00	0.00
	03/26	0.10	102.52	-0.15	0.00	0.00	0.00	0.00
	03/46	0.80	115.03	0.26	0.00	0.04	-0.08	0.00
Netherlands	01/19	1.25	104.59	-0.52	0.00	0.00	0.00	0.00
	07/25	0.25	100.86	0.15	-0.01	0.02	-0.10	-0.96
New Zealand	03/19	5.00	107.55	2.13	-0.01	0.07	-0.06	-0.83
	04/27	4.50	118.50	2.53	0.01	0.07	-0.18	-1.16
Norway	05/19	4.50	111.46	0.53	-0.01	0.02	-0.10	-0.48
	02/26	1.50	103.33	1.13	0.00	0.04	-0.28	0.00
Portugal	06/19	4.75	109.95	1.32	0.03	-0.07	0.30	0.25
	07/26	2.88	97.59	3.16	0.02	-0.22	0.14	0.00
Spain	01/19	0.25	100.42	0.09	0.01	-0.02	0.08	0.00
	04/26	1.95	103.97	1.51	0.03	-0.03	-0.03	0.00
Sweden	10/18	1.00	100.05	0.98	0.00	0.02	-0.22	0.00
	05/25	2.50	118.87	0.34	0.00	0.11	-0.20	-0.72
Switzerland	05/19	3.00	111.75	-0.99	0.00	0.00	0.00	0.00
	05/26	1.25	117.41	-0.46	0.00	0.00	0.00	0.00
United Kingdom	07/18	1.25	101.54	0.51	0.04	0.16	0.02	-0.53
	01/21	1.50	102.96	0.84	0.05	0.16	-0.10	0.00
	07/26	1.50	100.76	1.42	0.05	0.14	-0.19	0.00
	12/46	4.25	147.88	2.11	0.04	0.15	-0.18	-0.69
United States	05/18	0.88	100.24	0.75	0.02	0.02	0.00	0.00
	05/21	1.38	100.95	1.18	0.01	0.04	0.00	0.00
	05/26	1.63	99.45	1.69	0.01	0.07	-0.18	0.00
	05/46	2.50	100.37	2.48	0.00	0.06	-0.16	0.00

Data provided by SIX Financial Information & Tullett Prebon Information

BONDS: GLOBAL INVESTMENT GRADE

Jun 21	Red date	Coupon	Ratings S*	M*	F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
US$										
Cummins Inc.	02/27	6.75	A+	A2	A	126.74	3.72	0.00	-0.23	2.04
Halliburton Company	02/27	6.75	A-	Baa1	A-	119.40	4.49	0.00	0.47	2.80
Korea Electric Power Corporation	08/27	6.75	AA-	Aa2	AA-	104.18	6.32	0.00	-0.18	4.63
Archer Daniels Midland Company	12/27	6.75	A	A2	A	125.73	3.98	0.00	-0.13	2.29
FleetBoston Financial Corp.	01/28	6.88	BBB	Baa3	A-	124.70	4.20	0.00	-0.22	-
SunTrust Banks, Inc.	01/28	6.00	BBB+	Baa1	A-	118.49	4.03	0.00	-0.18	-
Euro										
Credit Agricole S.A.	03/27	2.63	BBB	Baa3	A-	99.71	2.66	0.00	0.01	0.97
Electricite de France (EDF)	03/27	4.13	A	A2	A-	122.21	1.91	0.00	0.00	0.22
Poland	05/27	0.88	BBB+	A2	A	93.95	1.48	0.00	-0.08	-0.21
BHP Billiton Fin Ltd	09/27	3.25	A	A3	A+	117.77	1.52	0.00	-0.28	-0.17
Yen										
Wal-Mart Stores, Inc.	07/15	0.94	NR	WR	NR	100.00	0.31	0.00	0.00	-
£ Sterling										
IPIC GMTN Limited	03/26	6.88	AA	Aa2	AA	122.65	4.11	0.06	0.12	1.82
B.A.T. Intl Fin plc (Re - British American Tobacco)	09/26	4.00	A-	A3	A-	104.67	3.47	0.06	0.29	1.18

Data provided by SIX Financial Information. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

GILTS: UK CASH MARKET

Jun 21	Price £	Red Yield	Change in Yield Day	Week	Month	Year	52 Week High	Low	Amnt £m
Tr 4pc '16	100.75	0.41	0.00	2.50	0.00	-16.33	102.23	100.00	0.35
Tr 1.75pc '17	100.76	0.44	-2.22	15.79	7.32	-22.81	101.94	100.76	0.29
Tr 5pc '18	107.86	0.38	5.56	58.33	26.67	-50.65	111.41	107.86	0.35
Tr 4.5pc '19	110.95	0.43	10.26	59.26	2.38	-59.43	112.71	110.95	0.36
Tr 4.75pc '20	115.10	0.63	6.78	40.00	-1.56	-52.63	117.12	114.45	0.33
Tr 1.5pc '21	103.03	0.82	3.80	24.24	-4.65	-46.75	137.29	99.91	0.29
Tr 4pc '22	117.65	0.83	3.75	22.06	-8.79	-49.70	119.14	113.65	0.38
Tr 5pc '25	131.58	1.17	2.63	14.71	-10.69	-41.50	133.40	124.47	0.35
Tr 4.25pc '27	129.36	1.46	2.82	12.31	-9.32	-34.82	131.66	119.79	0.31
Tr 4.25pc '32	132.93	1.86	2.20	10.06	-6.06	-25.90	136.24	121.93	0.35
Tr 4.25pc '36	136.07	2.02	1.51	8.60	-6.48	-23.19	140.04	123.52	0.29
Tr 4.5pc '42	148.51	2.10	1.45	8.25	-7.08	-22.22	153.78	132.20	0.26
Tr 3.75pc '52	145.26	1.99	1.53	8.74	-9.13	-26.02	152.16	121.95	0.23
Tr 4pc '60	161.60	1.91	1.06	9.14	-10.33	-27.92	170.58	131.72	0.22

xd Ex dividend. Closing mid-prices are shown in pounds per £ 100 nominal of stock. Red yield: Gross redemption yield. This table shows the gilts benchmarks & the non-rump undated stocks.

GILTS: UK FTSE ACTUARIES INDICES

Price Indices Fixed Coupon	Jun 21	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
1 Up to 5 Years	98.34	-0.08	2400.36	0.11	2.37	0.62
2 5 - 10 Years	184.19	-0.23	3386.71	0.98	7.36	1.07
3 10 - 15 Years	213.54	-0.36	4043.24	1.80	10.74	1.58
4 5 - 15 Years	191.19	-0.27	3546.49	1.23	8.22	1.30
5 Over 15 Years	322.56	-0.52	4751.76	3.83	17.20	2.01
7 All stocks	179.44	-0.31	3415.88	1.92	9.73	1.77

Index Linked	Jun 21	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	309.15	-0.06	0.09	-0.96	2383.29	0.09	0.83
2 Over 5 years	600.76	-0.53	3.52	9.13	4448.79	3.52	9.87
3 5-15 years	440.16	-0.30	1.40	3.06	3364.54	1.40	4.16
4 Over 15 years	748.25	-0.61	4.35	11.50	5433.05	4.35	12.09
5 All stocks	552.33	-0.46	3.04	7.59	4146.05	3.04	8.50

Yield Indices	Jun 21	Jun 20	Yr ago		Jun 21	Jun 20	Yr ago
5 Yrs	0.70	0.66	1.46	20 Yrs	2.10	2.07	2.74
10 Yrs	1.41	1.38	2.20	45 Yrs	1.93	1.90	2.75
15 Yrs	1.91	1.87	2.57				

Real yield	inflation 0% Jun 21	Dur yrs	Previous	Yr ago	inflation 5% Jun 21	Dur yrs	Previous	Yr ago
Up to 5 yrs	-1.21	1.92	-1.24	-0.88	-1.84	1.92	-1.87	-1.58
Over 5 yrs	-1.01	23.74	-1.03	-0.63	-1.04	23.84	-1.06	-0.67
5-15 yrs	-0.99	9.21	-1.02	-0.65	-1.12	9.22	-1.15	-0.75
Over 15 yrs	-1.01	29.24	-1.03	-0.63	-1.03	29.29	-1.05	-0.66
All stocks	-1.01	20.81	-1.03	-0.63	-1.05	20.94	-1.07	-0.69

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

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

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MANAGED FUNDS SERVICE

ACPI Global UCITS Funds Plc (IRL)
www.acpishard.com
Regulated

Fund	Bid	Offer	D+/-	Yield
ACPI Emerging Mkts FI Fund USD A	$ 116.10	-	1.31	0.00
ACPI Global Credit UCITS Funds USD A	$ 14.39	-	0.03	0.00
ACPI Global Fixed Income UCITS Fund USD A	$ 156.79	-	0.06	0.00
ACPI India Fixed Income UCITS Fund USD A	$ 10.19	-	-0.04	0.00
ACPI India Fixed Income UCITS Fund USD Acc	$ 86.89	-	-0.37	0.00
ACPI International Bond UCITS Fund USD A	$ 18.67	-	0.01	0.00

ACPI Select UCITS Funds Plc (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
ACPI Balanced UCITS Fund USD Retail	$ 14.14	-	0.13	0.00
ACPI Balanced UCITS Fund EUR Retail	€ 10.60	-	0.10	0.00
ACPI Balanced UCITS Fund GBP Retail	£ 10.77	-	0.11	0.00
ACPI Balanced UCITS Fund USD Institutional	$ 10.00	-	-	-
ACPI Balanced UCITS Fund EUR Institutional	€ 10.00	-	-	-
ACPI Balanced UCITS Fund GBP Institutional	£ 10.00	-	-	-
ACPI Horizon UCITS Fund	$ 12.68	-	0.07	0.00

Algebris INVESTMENTS

Algebris Investments (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Algebris Financial Credit Fund - Class I EUR	€ 135.10	-	1.66	0.00
Algebris Financial Income Fund - Class I EUR	€ 112.03	-	1.39	0.00
Algebris Financial Equity Fund - Class B EUR	€ 89.79	-	0.80	0.00
Algebris Asset Allocation Fund - Class B EUR	€ 95.79	-	0.66	-

Amundi Funds (LUX)
5 Allee Scheffer L-2520 Luxembourg + 44 (0)20 7074 9332
www.amundi-funds.com
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Bd. Euro Corporate AE Class - R - EUR	€ 18.94	-	0.03	0.00
Bd. Global AU Class - R - USD	$ 27.24	-	0.16	0.00
Eq. Emerging Europe AE Class - R - EUR	€ 26.83	-	-0.24	0.00
Eq. Emerging World AU Class - R - USD	$ 82.42	-	1.36	0.00
Eq. Greater China AU Class - R - USD	$ 534.53	-	6.81	0.00
Eq. Latin America AU Class - R - USD	$ 338.82	-	7.24	0.00
Gl. Macro Bds & Curr Low Vol AHG - GBP	£ 98.45	-	0.01	0.00

The Antares European Fund Limited
Other International

Fund	Bid	Offer	D+/-	Yield
AEF Ltd Usd (Est)	$ 617.28	-	-11.68	-
AEF Ltd Eur (Est)	€ 619.85	-	-11.71	0.00

Arisaig Partners
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Arisaig Africa Consumer Fund Limited	$ 12.87	-	-0.61	0.00
Arisaig Asia Consumer Fund Limited	$ 63.59	-	0.21	0.00
Arisaig Global Emerging Markets Consumer Fund	$ 10.12	-	0.08	0.00
Arisaig Global Emerging Markets Consumer UCITS	€ 11.58	-	0.00	0.00
Arisaig Global Emerging Markets Consumer UCITS STG	£ 11.40	-	-0.23	0.00
Arisaig Latin America Consumer Fund	$ 22.77	-	0.33	0.00

Artisan Partners Global Funds PLC (IRL)
Beaux Lane House, Mercer Street Lower, Dublin 2, Ireland
Tel: 44 (0) 207 766 7130
FCA Recognised
Artisan Partners Global Funds plc

Fund	Bid	Offer	D+/-	Yield
Artisan Global Equity Fund Class I USD Acc	$ 14.32	-	0.18	0.00
Artisan Global Opportunities I USD Acc	$ 12.47	-	0.17	0.00
Artisan Global Value Fund Class I USD Acc	$ 16.15	-	0.30	0.00
Artisan US Value Equity Fund Class I USD Acc	$ 11.73	-	0.13	0.00
Artisan Global Opportunities Class I EUR Acc	€ 16.58	-	0.20	0.00

Ashmore Sicav (LUX)
2 rue Albert Borschette L-1246 Luxembourg
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Ashmore SICAV Emerging Market Debt Fund	$ 96.52	-	0.65	8.67
Ashmore SICAV Emerging Market Frontier Equity Fund	$ 147.52	-	2.02	1.17
Ashmore SICAV Emerging Market Total Return Fund	$ 84.22	-	0.86	6.47
Ashmore SICAV Global Small Cap Equity Fund	$ 125.88	-	1.95	0.00
EM Mkts Corp.Debt USD F	$ 86.77	-	0.49	9.03
EM Mkts Loc.Ccy Bd USD F	$ 82.17	-	1.35	3.71

aspect capital

Aspect Capital Ltd (UK)
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Aspect Diversified USD	$ 404.66	-	-7.31	0.00
Aspect Diversified EUR	€ 242.16	-	-4.71	0.00
Aspect Diversified GBP	£ 124.82	-	-2.29	0.00
Aspect Diversified CHF	SFr 115.20	-	-2.32	0.00
Aspect Diversified Trends USD	$ 121.39	-	-0.93	0.00
Aspect Diversified Trends EUR	€ 121.08	-	-0.94	0.00
Aspect Diversified Trends GBP	£ 126.46	-	-1.00	0.00

Atlantas Sicav (LUX)
Regulated

Fund	Bid	Offer	D+/-	Yield
American Dynamic	$ 3488.06	-	1.78	0.00
American One	$ 3292.15	-	-47.33	0.00
Bond Global	€ 1400.52	-	-4.70	0.00
Eurocroissance	€ 870.76	-	21.95	0.00
Far East	$ 675.26	-	13.61	0.00

Atlantis Investment Management Ltd (IRL)
2nd Floor, 13 St Swithin's Lane, London EC4N 8AL
www.atlantis-investment.com, Tel: 0207 877 3377
Regulated

Fund	Bid	Offer	D+/-	Yield
Atlantis China Fund	$ 6.44	-	0.00	0.00
Atlantis China Healthcare Fund	$ 1.88	-	0.01	0.00
Atlantis Japan Opportunities Fund	$ 3.02	-	0.01	0.00
Atlantis Asian Fund	$ 6.18	-	0.02	0.00

BLME Asset Management (LUX)
BLME Sharia'a Umbrella Fund SICAV SIF
Regulated

Fund	Bid	Offer	D+/-	Yield
Income Fund - Share Class A Acc	$ 1141.39	-	-0.15	0.00
Income Fund - Share Class G Acc	£ 1082.77	-	-0.21	0.00
Gl Sukuk Fund - Share Class A Acc	$ 1256.84	-	0.61	0.00
Gl Sukuk Fund - Share class B Acc	€ 1121.94	1121.94	0.47	0.00

Bank of America Cap Mgmt (Ireland) Ltd (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Global Liquidity USD	$ 1.00	-	0.00	0.61

Barclays Investment Funds (CI) Ltd (JER)
39/41 Broad Street, St. Helier, Jersey, JE2 3RR Channel Islands 01534 812800
FCA Recognised
Bond Funds

Fund	Bid	Offer	D+/-	Yield
Sterling Bond F	£ 0.47	-	0.00	3.21

Barings (Luxembourg) (LUX)
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Russia A GBP Inc F	£ 30.38	-	-0.09	0.00

BlackRock (JER)
Regulated

Fund	Bid	Offer	D+/-	Yield
BlackRock UK Property	£ 41.80	-	0.02	3.35
Blackrock UK Long Lease	£ 1078.90	-	-0.21	0.00
BLK Intl Gold & General	$ 6.66	7.02	0.04	0.00

BLI - Banque de Luxembourg Investments S.A.
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
BL-Equities Europe B	€ 5962.87	-	160.58	0.00
BL-Equities America B	$ 5692.63	-	37.85	0.00
BL-Equities Japan B	¥ 14878.00	-	187.00	0.00
BL-Emerging Markets B	€ 155.91	-	0.66	0.00
BL-Global Equities B	€ 738.85	-	6.32	0.00
BL-Global 30 B	€ 1416.04	-	-0.62	0.00
BL-Global 50 B	€ 1689.53	-	3.68	0.00
BL-Global 75 B	€ 2270.82	-	13.73	0.00
BL-Global Flexible EUR B	€ 148.53	-	0.04	0.00

BONHOTE
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Bonhôte Alternative - Multi-Arbitrage (USD) Classe (EUR)	€ 6457.00	-	38.00	1.95
Bonhôte Alternative - Multi-Performance (USD) Classe (EUR)	€ 9546.00	-	7.00	0.84

Braemar Group PCC Limited (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
UK Agricultural Class A	£ 1.23	-	-0.01	0.00
UK Agricultural Class B	£ 1.36	-	0.00	0.00
Student Accom Class B	£ 0.55	-	-0.17	0.00

CG Asset Management Limited (IRL)
Northern Trust, George's Court, 54-62 Townsend Street, Dublin 2, Rep of Ireland 00 353 1 434 5098
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Capital Gearing Portfolio Fund Plc	£ 27814.05	27814.05	-71.82	0.60
CG Portfolio Fund Plc				
Real Return Cls A	£ 183.01	183.01	-0.21	1.65
Dollar Fund Cls D	£ 137.84	137.84	-4.08	1.55
Capital Value Fund Cls V	£ 134.94	134.94	-0.35	0.26

Cedar Rock Capital Limited (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Cedar Rock Capital Fd Plc	$ 370.00	-	-12.64	0.00
Cedar Rock Capital Fd Plc	€ 411.62	-	-1.13	0.00
Cedar Rock Capital Fd Plc	£ 343.61	-	-14.21	0.00

Charles Schwab Worldwide Funds Plc (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Schwab USD Liquid Assets Fd	$ 1.00	-	0.00	0.01

Chartered Asset Management Pte Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
CAM-GTF Limited	$ 284815.89	284815.89	-230.90	0.00
CAM GTi Limited	$ 673.40	-	-52.06	0.00
Raffles-Asia Investment Company	$ 1.54	1.54	-0.07	5.59

Cheyne Capital

Cheyne Capital Management (UK) LLP (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Cheyne Convertibles Absolute Return Fund	€ 1305.35	-	4.11	0.00
Cheyne Global Credit Fund	€ 120.43	-	0.82	0.00
Cheyne European Mid Cap Fund	€ 1099.56	-	-4.93	0.00

Cheyne Capital Management (UK) LLP
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Cheyne Pan European Event Driven Fund	€ 131.03	-	0.53	0.00
Cheyne Real Estate Credit Holdings Fund	£ 166.60	-	1.13	0.00
Cheyne Real Estate Credit Holdings Fund III	£ 109.71	-	0.68	0.00
Cheyne Real Estate Debt Fund Class A1	£ 131.56	-	0.31	0.00
Cheyne Total Return Credit Fund - December 2017 Class	$ 186.74	-	14.87	0.00

Cohen & Steers SICAV (LUX)
Regulated

Fund	Bid	Offer	D+/-	Yield
European Real Estate Securities	€ 23.5985	-	0.9474	1.73
Europ.RealEstate Sec. IX	€ 31.6490	-	1.2707	0.00
Gbl Listed Infrastructure I	$ 10.6874	-	0.1383	-
Gbl Listed Infrastructure IX	$ 10.7338	-	0.1389	-
Gbl RealEstate Sec. I	$ 11.3008	-	0.1823	1.61
Gbl RealEstate Sec. IX	$ 13.4556	-	0.2171	0.00

Crèdit Andorrà Asset Management

Crèdit Andorrà Asset Management (LUX)
www.creditandorra.com
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Crediinvest SICAV Money Market Eur I	€ 11.21	-	0.00	0.00
Crediinvest SICAV Money Market Usd A	$ 10.07	-	0.00	0.00
Crediinvest SICAV Fixed Income Eur	€ 10.77	-	0.02	0.00
Crediinvest SICAV Fixed Income Usd	$ 10.73	-	0.01	0.00
Crediinvest SICAV Spanish Value	€ 241.37	-	5.44	0.00
Crediinvest SICAV International Value	€ 228.94	-	4.18	0.00
Crediinvest SICAV Big Cap Value	€ 15.04	-	0.46	0.00
Crediinvest SICAV US American Value	$ 18.32	-	0.08	0.00
Crediinvest SICAV Sustainability	€ 14.87	-	0.11	0.00

DAVIS Funds SICAV (LUX)
Regulated

Fund	Bid	Offer	D+/-	Yield
Davis Value A	$ 39.74	-	0.37	0.00
Davis Global A	$ 28.53	-	0.53	0.00

DODGE & COX WORLDWIDE FUNDS

Dodge & Cox Worldwide Funds (IRL)
6 Duke Street,St.James,London SW1Y 6BN
www.dodgeandcox.worldwide.com 020 3713 7664
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Dodge & Cox Worldwide Funds plc - Global Bond Fund				
EUR Accumulating Class	€ 11.83	-	0.01	0.00
EUR Accumulating Class (H)	€ 9.51	-	0.03	0.00
EUR Distributing Class	€ 11.08	-	0.00	3.98
EUR Distributing Class (H)	€ 8.91	-	0.03	3.98
GBP Distributing Class	£ 10.38	-	-0.21	3.83
GBP Distributing Class (H)	£ 9.02	-	0.02	4.00
USD Accumulating Class	$ 9.64	-	0.02	0.00
Dodge & Cox Worldwide Funds plc-Global Stock Fund				
USD Accumulating Share Class	$ 15.62	-	0.25	0.00
GBP Accumulating Share Class	£ 17.50	-	-0.11	0.00
GBP Distributing Share class	£ 12.70	-	-0.08	0.85
EUR Accumulating Share Class	€ 20.75	-	0.28	0.00
Dodge & Cox Worldwide Funds plc-International Stock Fund				
USD Accumulating Share Class	$ 13.02	-	0.34	0.00
EUR Accumulating Share Class	€ 13.56	-	0.32	0.00
Dodge & Cox Worldwide Funds plc-U.S. Stock Fund				
USD Accumulating Share Class	$ 18.11	-	0.13	0.00
GBP Accumulating Share Class	£ 19.18	-	-0.30	0.00
GBP Distributing Share Class	£ 12.16	-	-0.20	0.63
EUR Accumulating Share Class	€ 20.77	-	0.09	0.00

DRAGON CAPITAL

Dragon Capital Group
1501 Me Linh Point, 2 Ngo Duc Ke, District 1, Ho Chi Minh City, Vietnam
Fund information, dealing and administration: funds@dragoncapital.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Vietnam Property Fund (VPF) NAV	$ 0.91	-	0.00	0.00
Vietnam Enterprise Inv. (VEIL) NAV	$ 3.96	-	0.00	0.00

DSM Capital Partners Funds (LUX)
www.dsmsicav.com
Regulated

Fund	Bid	Offer	D+/-	Yield
Global Growth I2 Acc	€ 129.15	-	1.20	0.00
Global Growth I1 Eur	€ 96.52	-	0.90	-

Edinburgh Partners Limited (IRL)
27-31 Melville Street, Edinburgh EH3 7JF
Tel: +353 1 434 5143 Dealing - Fax +353 1 434 5230
FCA Recognised
Edinburgh Partners Opportunities Fund PLC

Fund	Bid	Offer	D+/-	Yield
Emerging Opportunities I USD $	$ 1.06	-	0.01	0.97
European Opportunities I EUR	€ 2.19	-	0.05	1.57
European Opportunities I GBP	£ 1.72	-	0.04	1.69
European Opportunities I USD	$ 2.48	-	0.09	1.69
European Opportunities A EUR	€ 2.15	-	0.06	1.02
Global Opportunities I USD	$ 1.50	-	0.01	1.25
Global Opportunities I GBP	£ 1.05	-	-0.01	1.45
Global Opportunities A GBP	£ 0.99	-	-0.01	0.87
Pan European Opportunities I EUR	€ 1.32	-	0.03	-

EFG HERMES المجموعة المالية هيرميس

EFG Hermes
DIFC, The Gate Building, West Wing Level 6, PO BOX 30727, Dubai UAE
Contact: Telephone + 971 4 363 4029 Email AMsales@EFG-HERMES.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
The EFG-Hermes Egypt Fund	$ 29.93	-	-	0.00
EFG-Hermes MENA Equity UCITS Fund Class A	$ 987.08	-	7.01	-
Middle East & Developing Africa Fund (Final)	$ 19.81	-	-	0.00
Saudi Arabia Equity Fund	SR 12.19	-	0.07	0.00

ENISO Partners AG
Clairdenstrasse 34, Postfach CH-8022 Zurich
Tel: +41 (0)44 286 17 17
www.eniso-partners.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
ENISO Forte CH SMI Expanded	SFr 143.82	-	3.06	0.00
ENISO Forte E	€ 111.61	116.07	2.80	-
ENISO Forte G (CHF)	SFr 130.90	-	2.02	0.51
ENISO Forte G (CHF)	€ 120.00	-	1.16	0.81
ENISO Systematic Risk Class 1	€ 96.25	-	-0.15	-

Ennismore Smaller Cos Plc (IRL)
5 Kensington Church St, London W8 4LD 020 7368 4220
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Ennismore European Smlr Cos NAV	£ 106.99	-	-0.54	0.00
Ennismore European Smlr Cos NAV	€ 138.69	-	2.04	0.00

Ennismore European Smlr Cos Hedge Fd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
NAV	€ 499.40	-	-3.22	0.00

Equinox Fund Mgmt (Guernsey) Limited (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
Equinox Russian Opportunities Fund Limited	$ 116.66	-	5.99	0.00

Euronova Asset Management UK LLP (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
Smaller Cos Cls One Shares	€ 34.98	-	-0.63	0.00
Smaller Cos Cls Two Shares	€ 24.41	-	-0.40	0.00
Smaller Cos Cls Three Shares	€ 12.21	-	-0.24	0.00
Smaller Cos Cls Four Shares	€ 15.80	-	-0.26	0.00

Eurobank FMC-LUX

Eurobank Fund Management Company (Luxembourg) S.A.
Regulated

Fund	Bid	Offer	D+/-	Yield
(LF) Absolute Return	€ 1.31	-	0.00	0.00
(LF) Eq Emerging Europe	€ 0.73	-	0.02	0.00
(LF) Eq Flexi Style Greece	€ 0.94	-	-0.05	0.00
(LF) Eq Mena Fund	€ 12.39	-	0.07	0.00
(LF) Greek Government Bond	€ 19.10	-	0.24	-
(LF) Greek Corporate Bond	€ 12.41	-	0.05	-
(LF) FOF Dynamic Fixed Inc	€ 11.74	-	-0.07	0.00
(LF) FOF Real Estate	€ 16.71	-	-0.10	0.00

FIL Investment Services (UK) Limited (1200)F (UK)
130, Tonbridge Rd, Tonbridge TN11 9DZ
Callfree: Private Clients 0800 414161
Broker Dealings: 0800 414 181

Fund	Bid	Offer	D+/-	Yield
OEIC Funds				
Target 2020 A-ACC-GBP	£ 0.57	-	0.00	0.52
Target 2025 A-ACC-GBP	£ 1.32	-	0.00	0.32
Target 2030 A-ACC-GBP	£ 1.42	-	0.01	0.40
Institutional OEIC Funds				
Europe (ex-UK) Fund ACC-GBP	£ 3.96	-	-0.02	1.58
Reduced Duration UK Corp Bond Gross	£ 10.74	-	0.03	3.21
Reduced Duration UK Corp Bond Inc	£ 9.74	-	0.03	3.21
Reduced Dur UK Corp Bond Gross Inc	£ 9.75	-	0.02	3.21
UK Gilt Fund Inc	£ 1.34	-	0.00	1.95
UK Long Corporate Bond - Gross Inc	£ 11.51	-	-0.03	4.19

Findlay Park Funds Plc (IRL)
30 Herbert Street, Dublin 2, Ireland Tel: 020 7968 4900
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
American Fund USD Class	$ 83.59	-	0.50	0.00
American Fund GBP Hedged	£ 45.48	-	0.27	0.00
American Fund GBP Unhedged	£ 56.76	-	-0.18	0.00
Latin American Fund USD Class	$ 13.34	-	0.20	0.00
Latin American Fund GBP Unhedged	£ 9.19	-	0.06	0.00

The First Investor QSCC
5th Floor, Barwa Bank Building, Grand Hamad Street
, P.O. Box 16034, Doha, State of Qatar
+ 974 4459 6111
http://www.tfi.com.qa/
Other International Funds

Fund	Bid	Offer	D+/-	Yield
TFI GCC Equity Opportunities Fund (Q)	QAR 1245.70	-	11.19	0.00

Foord Asset Management
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Foord International Trust	$ 34.84	-	0.56	0.00
Foord Global Equity Fund_Class B	$ 12.31	-	0.20	0.00

Franklin Templeton International Services Sarl (IRL)
JPMorgan House - International Financial Services Centre,Dublin 1, Ireland
Other International Funds
Franklin Emerging Market Debt Opportunities Fund Plc

Fund	Bid	Offer	D+/-	Yield
Franklin Emg Mkts Debt Opp CHFSFr	16.87	-	-0.17	9.07
Franklin Emg Mkts Debt Opp EUR	€ 11.90	-	0.01	6.99
Franklin Emg Mkts Debt Opp GBP	£ 10.11	-	-0.04	7.01
Franklin Emg Mkts Debt Opp SGD S$	22.01	-	-0.20	5.46
Franklin Emg Mkts Debt Opp USD	$ 17.00	-	-0.15	6.98

Frontier Capital (Bermuda) Limited
Other International

Fund	Bid	Offer	D+/-	Yield
Commercial Property-GBP Class	£ 71.42	-	-0.53	-
Global Real Estate-GBP C Class	£ 45.26	-	-0.50	-

GYS Investment Management Ltd (GSY)
Regulated

Generali Worldwide
PO Box 613, Generali House, Hirzel Street, St.Peter Port, Guernsey, GY1 4PA 01481 714108
International Insurances

Fund	Bid	Offer	D+/-	Yield
Global Multi-Strategy Managed	$ 4.66	5.02	-0.14	0.00
UK Multi-Strategy Managed	£ 4.70	5.07	-0.16	0.00
EU Multi-Strategy Managed	€ 2.84	3.06	-0.11	0.00
Global Bond USD	$ 3.53	3.81	-0.02	0.00

Genesis Asset Managers LLP
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Emerging Mkts NAV	£ 5.61	-	-0.09	0.00

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

Fund	Bid	Offer	D+/-	Yield
Holiday Property Bond Ser 1	£ 0.51	-	-0.01	0.00
Holiday Property Bond Ser 2	£ 0.61	-	-0.01	0.00

Haussmann
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Haussmann Cls A	$ 2552.18	-	-8.04	0.00
Haussmann Cls C	€ 2217.06	-	-8.46	0.00
Haussmann Cls D	SFr 1169.34	-	-4.44	0.00

Heartwood Wealth Management Limited (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Heartwood Caut Multi Asset B Acc	139.55	-	0.30	0.00

HERMES INVESTMENT MANAGEMENT

Hermes Investment Funds Plc (IRL)
Hermes Investment Management Limited, 1 Portsoken Street, London E1 8HZ +44 (0) 207 680 2121
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Hermes Abs Return Credit Fund Class F Acc	£ 1.04	1.04	-0.03	0.00
Hermes Abs Return Credit Fund Class R Acc	€ 1.93	1.93	-0.02	0.00
Hermes Active UK Inflation Fund Class F Acc	£ 1.31	1.31	0.01	0.00
Hermes Asia Ex-Japan Equity Fund Class F Acc	£ 1.59	1.59	-0.02	0.00
Hermes Asia Ex-Japan Equity Fund Class R Acc	€ 3.29	3.29	0.01	0.00
Hermes Global Emerging Markets Fund Class F Acc	£ 1.20	1.20	0.00	0.00
Hermes Global Emerging Markets Fund Class R Acc	€ 2.89	2.89	0.03	0.00
Hermes Global Equity Fund Class F Acc	£ 1.56	1.56	0.00	0.00
Hermes Global Equity Fund Class R Acc	€ 3.88	3.88	0.03	0.00
Hermes Global ESG Equity Fund Class F Acc	£ 1.18	1.18	0.00	0.00
Hermes Global High Yield Bond Fund Class F Acc	£ 1.16	1.16	-0.02	0.00
Hermes Global High Yield Bond Fund Class R Acc	€ 2.85	2.85	0.01	0.00
Hermes Global Small Cap Fund Class F Acc	£ 1.06	1.06	0.00	0.00
Hermes Global Small Cap Fund Class R Acc	€ 1.98	1.98	0.02	0.00
Hermes Multi Asset Inflation Fund Class F GBP Acc	£ 1.00	1.00	0.01	0.00
Hermes Multi Strategy Credit Fund Class F Acc Hed	£ 1.06	1.06	0.01	0.00
Hermes Sourcecap EU Alpha Fund Class F Acc	£ 1.31	1.31	-0.01	0.00
Hermes Sourcecap EU Alpha Fund Class F Dis	£ 1.27	1.27	-0.01	1.30
Hermes Sourcecap EU Alpha Fund Class R Acc	€ 3.01	3.01	0.01	0.00
Hermes Sourcecap EX UK Fund Class F Acc	£ 1.38	1.38	-0.01	0.00
Hermes Sourcecap EX UK Fund Class R Acc	€ 3.09	3.09	0.01	0.00
Hermes UK Small & Mid Cap Fund Class F Acc	£ 1.52	1.52	0.03	0.00
Hermes UK Small & Mid Cap Fund Class R Acc	€ 4.30	4.30	0.08	0.00
Hermes US All Cap Equity Class F Stg £ Acc	£ 1.04	1.04	0.00	0.00
Hermes US All Cap Equity Class R € Acc	€ 1.93	1.93	0.02	0.00
Hermes US SMID Equity Fund Class F Acc	£ 1.77	1.77	0.00	0.00
Hermes US SMID Equity Fund Class R Acc	€ 3.60	3.60	0.04	0.00

INDIA VALUE INVESTMENTS LIMITED (INVIL)
www.invil.mu
Other International Funds

Fund	Bid	Offer	D+/-	Yield
NAV	£ 7.76	-	-0.28	0.00

Intercapital Asset Management Ltd (HRV)
Masarykova ul. 1, 10000, Zagreb, Croatia
www.icam.hr, Tel; +385 1 4825 868
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Capital One Bond Fund (Ex-YU)	HRK 209.41	-	0.07	-
Capital Two Equity Fund (Ex-YU)	HRK 92.21	-	0.47	-

Intrinsic Value Investors (IVI) LLP (IRL)
1 Hat & Mitre Court, 88 St John Street, London EC1M 4EL +44 (0)20 7566 1210
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
IVI European Fund EUR	€ 17.95	-	0.52	0.00
IVI European Fund GBP	£ 18.66	-	0.19	0.62

Invesco

Invesco (LUX)
Dublin 00 353 1 439 8100 Hong Kong 00852 3191 8282
FCA Recognised
Invesco Management SA

Fund	Bid	Offer	D+/-	Yield
Invesco Active Multi-Sector Credit Fund A	€ 2.93	-	-0.01	0.00
Invesco Asia Balanced A dist	$ 13.86	-	0.05	3.73
Invesco Asia Consumer Demand Fund A income	$ 12.19	-	0.08	0.25
Invesco Asia Infrastructure (A)	$ 12.41	-	0.05	0.77
Invesco Asia Opportunities Equity A	$ 104.54	-	0.90	0.00
Invesco Balanced Risk Allocation Fund A	€ 15.58	-	-0.01	0.00
Invesco Emerging Europe Equity Fund A	$ 8.37	-	0.04	0.00
Invesco Emerging Local Currencies Debt A Inc	$ 7.03	-	0.04	6.47
Invesco Emerging Mkt Quant.Eq. A	$ 9.46	-	0.11	0.00
Invesco Energy A	$ 18.66	-	0.06	0.00
Invesco Euro Corporate Bond Fund (A)	€ 17.34	-	0.01	0.00
Invesco Euro Reserve A	€ 322.31	-	-0.01	0.00
Invesco Euro Bond A	€ 7.26	-	0.01	0.00
Invesco European Growth Equity A	€ 23.82	-	0.12	0.00
Invesco Global Absolute Return Fund A Class	€ 11.17	-	-0.01	0.00
Invesco Global Bond A Inc	$ 5.55	-	0.01	0.60
Invesco Global Conservative Fund 90 (EUR) A	€ 11.69	-	0.00	0.00
Invesco Global Equity Income Fund A	$ 58.42	-	0.05	0.00
Invesco Global Inc Real Estate Sec A dist	$ 9.52	-	0.03	2.24
Invesco Global Inv Grd Corp Bond A Dist	$ 11.96	-	0.01	3.10
Invesco Global Leisure A	$ 36.95	-	-0.09	0.00
Invesco Global Smaller Comp Eq Fd A	$ 58.67	-	0.29	0.00
Invesco Global Structured Equity A	$ 44.45	-	-0.18	1.17
Invesco Global Total Ret.(EUR) Bond Fund A	€ 13.27	-	0.05	0.00
Invesco Gold & Precious Metals A	$ 6.12	-	0.03	0.00
Invesco Greater China Equity A	$ 44.75	-	0.49	0.00
Invesco India Equity A	$ 51.91	-	-0.02	0.00
Invesco Japanese Equity Adv Fd A	¥ 3434.00	-	44.00	0.00
Invesco Japanese Value Eq Fd A	¥ 1114.00	-	11.00	0.00
Invesco Latin American Equity A	$ 6.21	-	0.10	0.00
Invesco Nippon Small/Mid Cap Equity A	¥ 1169.00	-	-1.00	0.00
Invesco Pan European Equity A EUR Cap NAV	€ 17.34	-	0.15	0.00
Invesco Pan European High Income Fd A	€ 13.63	-	0.04	2.60
Invesco Pan European Small Cap Equity A	€ 20.84	-	0.14	0.00
Invesco Pan European Structured Equity A	€ 16.70	-	0.07	0.00
Invesco UK Eqty Income A	£ 30.60	-	-0.05	0.00
Invesco UK Investment Grade Bond A	£ 1.02	-	0.00	2.64
Invesco US Structured Equity A	$ 22.05	-	-0.18	0.00
Invesco US Value Eq Fd A	$ 30.48	-	-0.07	0.00
Invesco USD Reserve A	$ 87.07	-	0.00	0.00

Invesco Global Asset Management Ltd (IRL)
Dublin 00 353 1 439 8100 Hong Kong 00 852 2842 7200
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Invesco Stlg Bd A QD F	£ 2.61	-	0.00	3.37
Invesco Asian Equity A	$ 6.29	-	0.04	0.00
Invesco ASEAN Equity A	$ 94.43	-	0.52	0.28
Invesco Bond A	$ 28.04	-	0.01	1.91
Invesco Continental Europ Small Cap Equity A	$ 201.91	-	1.35	0.00
Invesco Emerging Markets Equity A	$ 36.37	-	0.38	0.00
Invesco Emerging Markets Bond A	$ 21.12	-	0.07	4.44
Invesco Continental European Equity A	€ 7.90	-	0.03	1.17
Invesco Gilt A	£ 15.74	-	-0.08	1.30
Invesco Global Small Cap Equity A NAV	$ 120.17	-	0.35	0.00
Invesco Global High Income A NAV	$ 11.96	-	0.06	5.77
Invesco Gbl R/Est Secs A GBP F F	£ 8.34	-	-0.03	0.93
Invesco Global Health Care A	$ 114.61	-	-0.45	0.00
Invesco Global Select Equity A	$ 12.44	-	0.02	0.07
Invesco Jap Eqty Core A	$ 1.78	-	0.01	0.09
Invesco Japanese Equity A	$ 18.93	-	0.17	0.00
Invesco Korean Equity A	$ 31.37	-	0.41	0.00
Invesco PRC Equity A	$ 48.54	-	0.41	0.00
Invesco Pacific Equity A	$ 47.30	-	0.33	0.07
Invesco Global Technology A	$ 14.65	-	-0.09	0.00
Invesco UK Eqty A	£ 7.66	-	0.02	1.52

Invest AD
Client services: +971 2 692 6101 clientservices@InvestAD.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Invest AD - Emerging Africa Fund	$ 969.70	-	8.33	0.00
Invest AD - GCC Focus Fund	$ 1406.38	-	6.60	0.00

Julius Bär Funds

GAM
funds@gam.com, www.jbfundnet.com
Regulated

Fund	Bid	Offer	D+/-	Yield
Ms EF Special Val. EUR/A	€ 138.33	-	1.93	1.11
Strategy Balanced-CHF/B	SFr 147.93	-	0.85	0.00
Strategy Balanced-EUR	€ 153.27	-	0.89	0.00
Strategy Balanced-USD/B	$ 129.95	-	0.84	0.00
Strategy Growth-CHF/B	SFr 90.36	-	0.77	0.00
Strategy Growth-EUR	€ 113.54	-	0.96	0.00
Strategy Inc-CHF/B	SFr 118.83	-	0.27	0.00
Strategy Inc-EUR/B	€ 159.54	-	0.43	0.00
Strategy Inc-USD/B	$ 148.25	-	0.44	0.00

KAMES CAPITAL

Kames Capital VCIC (IRL)
1 North Wall Quay, Dublin 1, Ireland +35 3162 24493
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Absolute Return Bond B GBP Acc	1089.12	-	0.28	1.64
Eq Market Neutral B Acc	1002.98	-	-0.82	-
Eq Market Neutral Plus B Acc	990.79	-	3.53	-
High Yield Global Bond A GBP Inc	519.85	-	2.91	4.07
High Yield Global Bond B GBP Inc	1083.12	-	6.08	4.57
Investment Grade Global Bd A GBP Inc	573.00	-	1.10	2.35
Kames Global Equity Income B GBP Acc	1220.88	-	-0.86	-
Kames Global Equity Income B GBP Inc	1144.64	-	-0.81	-
Strategic Global Bond A GBP Inc	1107.07	-	-1.67	0.58
Strategic Global Bond B GBP Inc	628.20	-	-0.96	1.08

Lloyds Investment Fund Managers Limited (1000)F (JER)
PO Box 311, 11-12 Esplanade, St Helier, Jersey, JE4 8ZU 01534 845555
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Lloydstrust Gilt	£ 12.6600	-	-0.0600	2.00
Lloyds Investment Funds Limited				
Euro High Income	€ 1.6480	-	0.0000	2.74
European	£ 7.5430	-	-0.0390	1.20
High Income	£ 0.8711xd	-	-0.0014	4.96
International	£ 4.1640	-	0.0000	0.69
North American	£ 16.2600	-	0.0000	0.05
Sterling Bond	£ 1.4960	-	-0.0040	3.54
UK	£ 6.5170	-	0.0030	1.56
Lloyds Gilt Fund Limited				
Lloyds Gilt Fund Quarterly Share	£ 1.3200	-	-0.0060	1.49
Monthly Share	£ 1.2680xd	-	-0.0050	1.49
Lloyds Money Fund Limited				
Sterling Class	£ 52.6440	-	0.0000	0.17
Lloyds Multi Strategy Fund Limited				
Conservative Strategy	£ 1.1130xd	-	-0.0010	1.67
Growth Strategy	£ 1.4930xd	-	0.0090	1.22
Aggressive Strategy	£ 1.8270xd	-	0.0090	0.00
Global USD Growth Strategy	$ 1.3800	-	0.0270	0.00

Dealing Daily

M & G Securities (1200)F (UK)
PO Box 9039, Chelmsford, CM99 2XG
www.mandg.co.uk Enq: 0800 390 390, Dealing: 0800 328 3196
Authorised Inv Funds

Fund	Bid	Offer	D+/-	Yield
M&G Episode Growth A Inc	48.17	-	0.08	2.24
M&G Global High Yield Bond A Inc	48.86	-	0.24	4.47
M&G Global High Yield Bond A Acc	117.70	-	0.58	4.38
M&G Managed Growth A Inc	76.89	-	-0.49	0.44

M & G (Guernsey) Ltd (GSY)
Regulated
The M&G Offshore Fund Range

Fund	Bid	Offer	D+/-	Yield
Corporate Bond A	1341.62	1383.12	-2.33	2.98
Global Basics X	2461.28	2537.40	-20.86	0.26
Global Dividend A	118.22	123.15	-1.33	3.67
Global Leaders A	3385.25	3526.30	-25.54	1.08
Global High Yield Bond X	960.89	990.61	4.91	4.26
Global Macro Bond A	11719.38	12081.84	-89.70	1.45
North American Dividend A	164.69	171.55	-2.47	2.15
Optimal Income A	141.57	145.95	0.42	2.47
Recovery A	9844.63	10254.82	11.02	0.53
Strategic Corproate Bond A	134.44	140.04	-0.11	2.76
UK Inf Lkd Corp Bd A Inc	106.56	109.85	0.41	0.00
UK Select A	1428.24	1487.75	-7.23	1.23

MFS Investment Funds (LUX)
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Blend.Research Gb.Eq.Fd.	€ 98.66	-	0.91	0.00
Blend.Research Gb.Eq.Fd.	£ 102.26	-	-1.08	0.00
Blend.Research Gb.Eq.Fd.	$ 98.74	-	1.67	0.00
Blend.Research U.S.Core Eq.Fd.	€ 101.17	-	-0.23	-
Blend.Research U.S.Core Eq.Fd.	£ 99.93	-	-2.23	-
Blend.Research U.S.Core Eq.Fd.	¥ 8934.00	-	60.00	0.00
Blend.Research U.S.Core Eq.Fd.	$ 101.35	-	0.56	-
Em.Mk.Eq.Fund Euro	€ 108.74	-	0.58	0.00
Em.Mk.Eq.Fund Sterling	£ 98.65	-	-1.43	0.00
Em.Mk.Eq.Fd.US Dollar	$ 94.15	-	1.23	0.00
Gb.Conc.Eq.Fd.Euro	€ 279.48	-	2.99	0.00
Gb.Conc.Eq.Fd.Sterl.UK T	£ 180.36	-	-1.64	0.00
Gb.Conc.Eq.Fd.Sterling	£ 273.00	-	-2.48	0.00
Gb.Conc.Eq.Fd.US	$ 200.61	-	3.70	0.00
Gb.Eq.Hdg Fd.Euro IRE T	€ 183.62	-	2.61	0.00
Gb.Eq.Euro Hdg Fd.	€ 260.19	-	3.71	0.00
Gb.Eq.Fund Euro	€ 280.66	-	3.29	0.00
Gb.Eq. Fd Euro IRE T	€ 177.59	-	2.09	0.00
Gb.Eq.Fd.Sterling UK T	£ 219.06	-	-1.76	0.00
Gb.Eq.Fd.US Dollar	$ 318.06	-	6.19	0.00
Gb.Eq.Fund Sterling	£ 216.57	-	-1.75	0.00
Gb.Val.Ex-Jap.Fd.USD	$ 122.96	-	2.05	0.00
Gb.Val.Ex-Japan Fd.Yen	¥ 12624.00	-	225.00	0.00
Gb.Val.Fd. Euro	€ 134.31	-	1.07	0.00
Gb.Val.Fd.Sterling	£ 125.94	-	-1.49	0.00
Gb.Val.Fd.USD	$ 109.54	-	1.72	0.00
Low Volatility Gb.Eq.Fd.Euro	€ 107.03	-	0.37	0.00
Low Volatility Gb.Eq.Fd.Sterl	£ 110.98	-	-1.83	0.00
Low Volatility Gb.Eq.Fd.USD	$ 107.20	-	1.20	0.00
Low Volatility Gb.Eq.Fd.Yen	¥ 8729.00	-	108.00	-

MMIP Investment Management Limited (GSY)
Regulated
Multi-Manager Investment Programmes PCC Limited

Fund	Bid	Offer	D+/-	Yield
UK Equity Fd Cl A Series 01	£ 2343.33	2371.79	38.10	0.00
Diversified Absolute Rtn Fd USD Cl AF2	$ 1543.14	-	12.12	0.00
Diversified Absolute Return Stlg Cell AF2	£ 1561.36	-	12.06	0.00
Global Equity Fund A Lead Series	£ 1054.79	1058.47	7.76	-

Marlborough International Management Limited (GSY)
Tudor House, Le Bordage, St Peter Port, Guernsey, CI, GY1 1DB +44 1481 71520
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Marlborough North American Fund Ltd	£ 34.80	37.08	0.31	0.00
Marlborough Tiger Fund Ltd F	£ 25.79	27.48	0.59	0.00

Marwyn Asset Management Limited (CYM)
Regulated

Meridian Fund Managers Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Global Gold & Resources Fund	$ 224.00	-	-10.18	-
Global Energy & Resources Fund	$ 31.95	-	-2.63	-

Mirabaud Asset Management (LUX)
www.mirabaud.com, marketing@mirabaud.com
Regulated

Fund	Bid	Offer	D+/-	Yield
Mir. - Conv. Bds Eur A EUR	€ 131.45	-	1.02	0.00
Mir. - Conv. Bds Glb A USD	$ 110.41	-	0.57	0.00
Mir. - Eq Asia ex Jap A	$ 168.45	-	1.93	0.00
Mir.- EqEurope ExUK Sm&Mid	£ 110.03	-	1.29	-
Mir. - Eq Glb Emrg Mkt A USD	$ 88.55	-	0.68	0.00
Mir. - Eq Global Focus A USD	$ 94.87	-	1.34	0.00
Mir. - EqPanEuropeSm&Mid	€ 114.57	-	4.11	0.00
Mir. - Eq Spain A	€ 23.79	-	0.55	0.00
Mir. - Eq Swiss Sm/Mid A	SFr 336.76	-	8.14	0.00
Mir. - Glb High Yield Bds A	$ 110.78	-	0.47	-
Mir. - Glb Eq High Income A USD	$ 97.62	-	1.50	0.00
Mir. - Glb Inv Grade Bds A	€ 103.39	-	0.10	-
Mir. - Glb Strat. Bd A USD	$ 107.13	-	0.09	0.00
Mir. - US Shrt Term Credit Fd	$ 101.53	-	0.12	-

MW Japan Fund Plc (IRL)
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
MW Japan Fund PLC A	$ 23.84	-	0.14	0.00
MW Japan Fund PLC B	$ 23.97	-	0.14	0.00
MW Japan Fund PLC C	$ 79.59	-	0.50	0.00

Morant Wright Funds (Ireland) PLC (IRL)
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Morant Wright Fuji Yield EUR Acc Hedged	€ 9.93	-	0.04	-
Morant Wright Fuji Yield EUR Dist Hedged	€ 8.94	-	0.04	2.62
Morant Wright Fuji Yield GBP Acc Hedged	£ 9.38	-	0.04	0.00
Morant Wright Fuji Yield GBP Dist Hedged	£ 8.62	-	0.04	6.56
Morant Wright Fuji Yield USD Acc Hedged	$ 9.15	-	0.04	0.00
Morant Wright Fuji Yield USD Dist Hedged	$ 9.05	-	0.04	2.57
Morant Wright Fuji Yield YEN Acc	¥ 952.61	-	4.27	0.00
Morant Wright Fuji Yield B YEN Acc	¥ 841.48	-	3.77	0.00
Morant Wright Fuji Yield YEN Dist	¥ 918.95	-	4.11	2.60
Morant Wright Sakura Fund Sterling Acc Hedged	£ 11.28	-	0.07	0.00
Morant Wright Sakura Fund Euro Acc Hedged	€ 11.29	-	0.07	0.00
Morant Wright Sakura Fund Yen Acc Unhedged	¥ 1163.88	-	7.00	0.00
Morant Wright Sakura Fund Dollar Acc Hedged	$ 11.24	-	0.07	0.00
Morant Wright Sakura Fund Swiss Franc Acc Hedged	SFr 11.16	-	0.07	0.00

Morgan Stanley

Morgan Stanley Investment Funds (LUX)
6b Route de Trèves L-2633 Senningerberg Luxembourg (352) 34 64 61
www.morganstanleyinvestmentfunds.com
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
US Advantage A F	$ 58.18	-	-0.01	0.00
Asian Equity A F	$ 40.54	-	0.22	0.00
Asian Property A F	$ 18.00	-	0.08	0.00
Diversified Alpha Plus A F	€ 28.04	-	0.06	0.00
Emerg Europ, Mid-East & Africa Eq A F	€ 66.41	-	0.55	0.00
Emerging Markets Debt A F	$ 80.09	-	0.36	0.00
Emerging Markets Domestic Debt AX F	£ 11.16	-	0.00	4.34
Emerging Markets Equity A F	$ 33.83	-	0.10	0.00
Euro Bond A F	€ 16.24	-	0.01	0.00
Euro Corporate Bond AX F	£ 23.31	-	-0.18	1.44
Euro Strategic Bond A F	€ 44.68	-	0.04	0.00
European Currencies High Yield Bd A F	€ 22.10	-	-0.06	0.00
European Equity Alpha A F	€ 40.52	-	0.27	0.00
European Property A F	€ 35.02	-	0.39	0.00
Eurozone Equity Alpha A F	€ 10.84	-	0.05	0.00
Global Bond A F	$ 40.75	-	-0.07	0.00
Global Brands A F	$ 103.03	-	0.08	0.00
Global Convertible Bond A F	$ 41.01	-	0.11	0.00
Global Property A F	$ 28.60	-	0.01	0.00
Indian Equity A F	$ 35.39	-	-0.06	0.00
Latin American Equity A F	$ 42.15	-	-0.15	0.00
Short Maturity Euro Bond A F	€ 20.36	-	0.00	0.00
US Dollar Liquidity A F	$ 13.03	-	0.00	0.00
US Growth A F	$ 66.70	-	0.09	0.00
US Growth AH F	€ 46.02	-	0.07	0.00
US Growth AX F	£ 45.47	-	0.01	0.00
US Property A F	$ 73.02	-	-0.45	0.00

Morgens Waterfall Vintiadis.co Inc
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Phaeton Intl (BVI) Ltd (Est)	$ 373.09	-	-2.32	0.00

NATIXIS GLOBAL ASSET MANAGEMENT

Natixis International Funds (Lux) I SICAV (LUX)
Cannon Bridge House, 25 Dowgate Hill, London, EC4R 2YA 0044 20 3216 9000
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Harris Global Equity R/A (USD)	$ 239.97	239.97	6.57	0.00
Harris US Equity Fund R/A (USD)	$ 204.36	204.36	1.60	0.00
Harris Concentrated US Equity R/A (USD)	$ 153.49	153.49	1.39	0.00

MANAGED FUNDS SERVICE

Natixis International Funds (Dublin) I plc (IRL)
Cannon Bridge House, 25 Dowgate Hill, London, EC4R 2YA +44 (0)20 3216 9000
Regulated

Fund	Bid	Offer	D+/-	Yield
Loomis Sayles Global Opportunistic Bond R/D (USD)	$ 13.13	13.13	0.02	1.23
Loomis Sayles High Income R/D (USD)	$ 8.29	8.29	0.05	11.13
Loomis Sayles Multisector Income R/D (GBP)	$ 12.26	12.26	0.05	5.60

New Capital Fund Management Ltd (IRL)
Leconfield House, Curzon Street, London, W1J 5JB
FCA Recognised
New Capital UCITS Funds

Fund	Bid	Offer	D+/-	Yield
Asia Pac Bd USD Inst Inc	$ 94.73	-	0.01	3.31
Asia Pac Bd USD Ord Inc	$ 96.53	-	0.00	2.61
Asia Pac Eq EUR Ord Inc	€ 84.28	-	0.31	3.17
Asia Pac Eq GBP Ord Inc	£ 87.53	-	0.33	3.71
Asia Pac Eq USD Ord Inc	$ 88.64	-	0.32	3.15
Asia Pac Eq USD Inst Acc	$ 95.66	-	0.35	0.00
Asia Pac Eq USD Inst Inc	$ 99.05	-	0.37	3.82
Dyn Europ Eq EUR Ord Inc	€ 161.89	-	2.40	0.69
Dyn Europ Eq GBP Ord Inc	£ 171.85	-	2.55	1.04
Dyn Europ Eq USD Ord Inc	$ 161.82	-	2.43	0.69
China Equity EUR Ord Acc	€ 111.55	-	0.52	0.00
China Equity GBP Ord Acc	£ 116.60	-	0.56	0.00
China Equity USD Ord Acc	$ 114.05	-	0.54	0.00
China Equity USD Inst Acc	$ 117.75	-	0.56	0.00
Europ. Equity Fd EUR	€ 96.74	-	1.43	-
Europ. Equity Fd GBP	£ 95.23	-	1.42	-
Europ. Equity Fd USD	$ 95.73	-	1.44	-
Global Val.Cr.Fd GBP Ord Inc	£ 112.04	-	0.21	3.53
Global Val.Cr.Fd USD Inst Acc	$ 126.37	-	0.25	0.00
Global Val.Cr.Fd GBP Ord Acc	£ 181.67	-	0.35	0.00
Global Val.Cr.Fd USD Ord Acc	£ 170.62	-	0.34	0.00
Global Val.Cr.Fd EUR Ord Acc	€ 157.98	-	0.29	0.00
Swiss Select Equity Inst Acc	SFr 114.12	-	1.41	0.00
Swiss Select Equity Ord Acc	SFr 112.45	-	1.39	0.00
US Growth USD Ord Acc	$ 192.69	-	-1.21	0.00
US Growth EUR Ord Acc	€ 183.39	-	-1.15	0.00
US Growth GBP Ord Acc	£ 193.38	-	-1.18	0.00
US Growth USD Inst Acc	$ 178.68	-	-1.11	0.00
Wealthy Nat Bd EUR Inst Inc	€ 111.79	-	0.03	3.60
Wealthy Nat Bd GBP Inst Inc	£ 116.67	-	0.03	3.55
Wealthy Nat Bd EUR Ord Inc	€ 110.98	-	0.02	3.35
Wealthy Nat Bd GBP Ord Inc	£ 117.24	-	0.05	3.29
Wealthy Nat Bd USD Ord Inc	$ 114.50	-	0.05	3.27
New Capital Alternative Strategies				
All Weather Fd USD Cls	$ 114.53	-	0.00	0.00
All Weather Fd EUR Cls	€ 102.47	-	0.49	0.00
All Weather Fd GBP Cls	£ 110.45	-	0.64	0.00
Tactical Opps USD Cls	$ 126.31	-	-3.06	0.00
Tactical Opps EUR Cls	€ 105.63	-	-2.60	0.00
Tactical Opps GBP Cls	£ 118.14	-	-2.87	0.00

Northwest Investment Management (HK) Ltd
11th Floor, Kinwick Centre, 32, Hollywood Road, Central Hong Kong +852 9084 4373
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Northwest $ class	$ 2238.86	-	-41.88	0.00

Oasis Crescent Management Company Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Oasis Crescent Equity Fund	R 10.16	-	0.02	0.00

Oasis Global Mgmt Co (Ireland) Ltd (IRL)
Regulated
Oasis Global Investment (Ireland) Plc

Fund	Bid	Offer	D+/-	Yield
Oasis Crescent Global Short Term Income Fund	$ 0.99	-	0.00	1.03
Oasis Global Equity	$ 27.62	-	0.41	0.34
Oasis Crescent Global Investment Fund (Ireland) plc				
Oasis Crescent Global Equity Fund	$ 28.36	-	0.42	0.11
Oasis Crescent Variable Balanced Fund	£ 10.40	-	0.09	0.84
OasisCresGl Income Class A	$ 10.90	-	0.05	2.51
OasisCresGl LowBal D ($) Dist	$ 11.91	-	0.13	0.00
OasisCresGl Med Eq Bal A ($) Dist	$ 12.15	-	0.16	0.53
Oasis Crescent Gbl Property Eqty	$ 10.00	-	0.19	1.74

Odey Asset Management LLP (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
OEI Mac Inc GBP A	£ 271.38	-	24.45	0.00
OEI Mac Inc GBP B	£ 155.60	-	16.72	0.00
OEI MAC Inc USD	$ 1436.61	-	126.78	0.00
Odey European Inc EUR	€ 638.09	-	61.79	0.00
Odey European Inc GBP A	£ 249.15	-	25.02	0.00
Odey European Inc USD	$ 296.66	-	29.14	0.00
Giano Capital EUR Inc	€ 4458.07	-	45.64	0.00

Odey Asset Management LLP (IRL)
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Odey Pan European EUR R	€ 291.42	-	5.40	0.00
Odey Absolute Return Focus Fund	$ 94.38	-	4.08	-
Odey Allegra European EUR O	€ 249.56	-	5.93	0.00
Odey Allegra International EUR O	€ 155.85	-	1.99	0.00
Odey Allegra Developed Markets USD I	$ 125.82	-	2.61	0.00
Odey European Focus Fund	€ 16.76	-	0.42	0.00
Odey Giano European Fund EUR R	€ 114.58	-	-2.41	0.00
Odey Naver Fund EUR I	€ 113.05	-	-0.35	0.00
Odey Odyssey USD I	$ 128.87	-	-3.11	0.00
Odey Swan Fund EUR I	€ 68.67	-	-2.80	0.00
Odey European Absolute Return GBP S	£ 89.37	-	-0.45	0.00

Odey Wealth Management (CI) Ltd (IRL)
www.odey.com/prices
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Odey Opportunity EUR I	€ 211.77	-	0.67	0.00

Omnia Fund Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Estimated NAV	$ 846.06	-	0.30	0.00

Optima Fund Management
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Cuttyhunk Fund II Limited	$ 1361.40	-	-12.02	0.00
JENOP Global Healthcare Fund Ltd	$ 12.93	-	-0.05	0.00
OPTIKA Fund Limited - Cl A	$ 90.38	-	-1.93	0.00
Optima Fd NAV	$ 83.76	-	0.04	0.00
Optima Discretionary Macro Fund Limited	$ 84.17	-	0.27	0.00
The Dorset Energy Fd Ltd NAV	$ 33.76	-	-0.07	0.00
Platinum Fd Ltd	$ 10.52	-	-0.50	0.00
Platinum Fd Ltd EUR	€ 15.84	-	-0.10	0.00
Platinum Japan Fd Ltd	$ 53.37	-	0.11	0.00
Optima Partners Global Fd	$ 13.65	-	-0.03	0.00
Optima Partners Focus Fund A	$ 14.68	-	-0.03	0.00

Oryx International Growth Fund Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
NAV (Fully Diluted)	£ 6.99	-	-0.01	0.00

Permal Investment Mgmt Svcs Ltd
www.permal.com
Other International Funds
Offshore Fund Class A US $ Shares

Fund	Bid	Offer	D+/-	Yield
Investment Holdings N.V.	$ 5054.96	-	17.32	0.00
Macro Holdings Ltd	$ 4094.60	-	-48.44	0.00
Fixed Income Holdings N.V.	$ 339.26	-	2.85	-
Permal Absolute Return Fund	$ 153.10	-	-0.04	0.00

Pictet Asset Management (Europe) SA (LUX)
15, Avenue J.F. Kennedy L-1855 Luxembourg
Tel: 0041 58 323 3000
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Pictet-Absl Rtn Fix Inc-HI EUR	€ 107.31	-	-0.04	0.00
Pictet-Agriculture-I EUR F	€ 182.89	-	0.73	0.00
Pictet-Asian Equities Ex Japan-I USD F	$ 204.13	-	0.99	0.00
Pictet-Asian Local Currency Debt-I USD F	$ 160.90	-	0.54	0.00
Pictet-Biotech-I USD F	$ 637.65	-	5.68	0.00
Pictet-CHF Bonds I CHF	SFr 513.58	-	-0.96	0.00
Pictet-China Index I USD	$ 96.61	-	1.41	0.00
Pictet-Clean Energy-I USD F	$ 78.14	-	1.57	0.00
Pictet-Digital Communication-I USD F	$ 266.51	-	3.19	0.00
Pictet-Em Lcl Ccy Dbt-I USD F	$ 168.68	-	2.49	0.00
Pictet-Emerging Europe-I EUR F	€ 289.77	-	8.58	0.00
Pictet-Emerging Markets-I USD F	$ 489.64	-	6.46	0.00
Pictet-Emerging Markets Index-I USD F	$ 214.73	-	3.99	0.00
Pictet-Emerging Corporate Bonds I USD	$ 113.27	-	0.33	0.00
Pictet-Emerging Markets High Dividend I USD	$ 94.97	-	1.14	0.00
Pictet-Emerging Markets Sust Eq I USD	$ 86.76	-	1.47	0.00
Pictet-EUR Bonds-I F	€ 577.28	-	-0.31	0.00
Pictet-EUR Corporate Bonds Ex Fin I EUR	€ 148.70	-	-0.12	0.00
Pictet-EUR Corporate Bonds-I F	€ 205.72	-	-0.05	0.00
Pictet-EUR Government Bonds I EUR	€ 164.10	-	-0.12	0.00
Pictet-EUR High Yield-I F	€ 247.79	-	0.11	0.00
Pictet-EUR Short Mid-Term Bonds-I F	€ 137.23	-	0.05	0.00
Pictet-EUR Short Term HY I EUR	€ 122.73	-	0.25	0.00
Pictet-EUR Sov.Sht.Mon.Mkt EUR I	€ 102.74	-	0.00	0.00
Pictet-Euroland Index IS EUR	€ 119.39	-	3.94	0.00
Pictet-Europe Index-I EUR F	€ 160.42	-	5.58	0.00
Pictet-European Equity Selection-I EUR F	€ 588.21	-	18.37	0.00
Pictet-European Sust Eq-I EUR F	€ 235.79	-	7.87	0.00
Pictet-Global Bds Fundamental I USD	$ 126.24	-	0.78	0.00
Pictet-Global Bonds-I EUR	€ 174.74	-	-0.96	0.00
Pictet-Global Emerging Currencies-I USD F	$ 100.82	-	0.86	0.00
Pictet-Global Emerging Debt-I USD F	$ 380.36	-	1.70	0.00
Pictet-Global Env.Opport-I EUR	€ 160.21	-	1.93	0.00
Pictet-Global Megatrend Selection-I USD F	$ 222.36	-	3.93	0.00
Pictet-Greater China-I USD F	$ 423.29	-	3.49	0.00
Pictet-Health-I USD	$ 256.36	-	2.26	0.00
Pictet-High Dividend Sel I EUR F	€ 156.21	-	1.79	0.00
Pictet-India Index I USD	$ 96.93	-	0.58	0.00
Pictet-Indian Equities-I USD F	$ 447.82	-	0.86	0.00
Pictet-Japan Index-I JPY F	¥ 13669.76	-	165.82	0.00
Pictet-Japanese Equities Opp-I JPY F	¥ 8139.97	-	83.91	0.00
Pictet-Japanese Equity Selection-I JPY F	¥ 11860.66	-	124.99	0.00
Pictet-LATAM Lc Ccy Dbt-I USD F	$ 121.16	-	1.79	0.00
Pictet-Multi Asset Global Opportunities-I EUR	€ 115.96	-	0.26	0.00
Pictet-Pacific Ex Japan Index-I USD F	$ 336.52	-	8.08	0.00
Pictet-Premium Brands-I EUR F	€ 138.48	-	3.16	0.00
Pictet-Quality Global Equities I USD	$ 140.14	-	2.07	0.00
Pictet-Russia Index I USD	$ 54.68	-	1.56	0.00
Pictet-Russian Equities-I USD F	$ 51.44	-	1.18	0.00
Pictet-Security-I USD F	$ 205.91	-	3.37	0.00
Pictet-Select-Callisto I EUR	€ 102.90	-	-0.73	0.00
Pictet-Small Cap Europe-I EUR F	€ 1103.46	-	36.43	0.00
Pictet-ST.MoneyMkt-I	€ 140.32	-	0.00	0.00
Pictet-ST.MoneyMkt JPY I USD	¥ 101405.43	-	-0.55	0.00
Pictet-ST.MoneyMkt-ICHF	SFr 123.76	-	-0.02	0.00
Pictet-ST.MoneyMkt-IUSD	$ 135.79	-	0.01	0.00
Pictet-Timber-I USD F	$ 143.76	-	3.09	0.00
Pictet Total Ret-Agora I EUR	€ 113.93	-	-0.09	0.00
Pictet Total Ret-Corto Europe I EUR	€ 133.33	-	0.39	0.00
Pictet Total Ret-Divers Alpha I EUR	€ 104.69	-	-0.10	0.00
Pictet Total Ret-Kosmos I EUR	€ 109.95	-	-0.04	0.00
Pictet Total Ret-Mandarin I USD	$ 113.17	-	0.10	0.00
Pictet-US Equity Selection-I USD F	$ 187.75	-	1.39	0.00
Pictet-US High Yield-I USD F	$ 147.44	-	1.05	0.00
Pictet-USA Index-I USD F	$ 185.29	-	1.07	0.00
Pictet-USD Government Bonds-I F	$ 661.88	-	-1.88	0.00
Pictet-USD Short Mid-Term Bonds-I F	$ 131.35	-	-0.07	0.00
Pictet-USD Sov.ST.Mon.Mkt-I	$ 102.90	-	0.01	0.00
Pictet-Water-I EUR F	€ 290.98	-	4.20	0.00

Pimco Fds: Global Investors Series Plc (IRL)
PIMCO Europe Ltd,11 Baker Street,London W1U 3AH
http://gisnav.pimco-funds.com/
Dealing: +44 20 3640 1000
PIMCO Funds: +44 (0)20 3640 1407
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Capital Securities Inst Acc	$ 14.97	-	0.15	0.00
Commodity Real Return Fund Inst Acc	$ 6.59	-	0.05	0.00
Credit Absolute Return Fund Inst Acc	$ 11.16	-	0.01	0.00
Diversified Income - Inst Acc	$ 20.44	-	0.05	0.00
Diversified Income Duration Hdg Fund Inst Acc	$ 11.52	-	0.07	0.00
Emerging Asia Bond Fund Inst Acc	$ 10.24	-	-0.01	0.00
Emerging Local Bond - Inst Acc	$ 11.72	-	0.17	0.00
Emerging Markets Bond - Inst Acc	$ 40.83	-	0.18	0.00
Emerging Markets Corp Bd Fund Inst Acc F	$ 13.35	-	0.04	0.00
Emerging Markets Short-Term Local Currency Fund	$ 12.33	-	0.12	0.00
Euro Bond - Inst Acc	€ 23.30	-	0.01	0.00
Euro Credit - Inst Acc	€ 15.23	-	0.00	0.00
Euro Income Bond - Inst Acc F	€ 13.36	-	0.04	0.00
Euro Long Average Duration - Inst Acc	€ 24.48	-	-0.16	0.00
Euro Low Duration Fund Inst Acc	€ 11.33	-	0.01	0.00
Euro Real Return - Inst Acc	€ 13.69	-	0.04	0.00
Euro Short-Term Inst Acc	€ 12.25	-	0.00	0.00
Euro Ultra Long Duration - Inst Acc	€ 32.88	-	-0.41	0.00
Global Advantage - Inst Acc	$ 12.69	-	0.06	0.00
Global Advantage Real Return Fund Inst Acc	$ 8.82	-	0.07	0.00
Global Bond - Inst Acc	$ 28.96	-	-0.03	0.00
Global Bond Ex-US - Inst Acc	$ 20.41	-	-0.03	0.00
Global High Yield Bond - Inst Acc	$ 20.76	-	0.15	0.00
Global Investment Grade Credit - Inst Income	$ 12.49	-	0.01	3.78
Global Investment Grade Credit - Inst Acc	$ 11.99	-	-0.05	0.00
Global Investment Grade Credit Fund Inst Acc	$ 17.43	-	0.01	0.00
Global Multi-Asset - Inst Acc	$ 14.30	-	0.15	0.00
Global Real Return - Inst Acc	$ 18.65	-	-0.07	0.00
Income Fund Inst Acc	$ 12.74	-	0.03	0.00
Inflation Strategy Fund Inst Acc	$ 9.25	-	0.07	0.00
Low Average Duration - Inst Acc	$ 14.96	-	0.00	0.00
PIMCO RAE Fundam PLUS Em Mkts Inst Acc	$ 8.82	-	0.20	0.00
PIMCO RAE Fundam PLUS Gl Dev Inst Acc	$ 11.01	-	0.21	0.00
PIMCO RAE Fundam PLUS US Inst Acc	$ 12.66	-	0.15	0.00
Socially Resp Emerg Mkts Bd Fd Inst Acc F	$ 13.48	-	0.05	0.00
StocksPLUS(TM) - Inst Acc	$ 23.76	-	0.15	0.00
Total Return Bond - Inst Acc	$ 27.97	-	-0.01	0.00
UK Corporate Bond - Inst Acc	£ 18.05	-	-0.12	0.00
UK Long Term Corp. Bnd Inst Acc	£ 20.38	-	-0.21	0.00
UK Low Duration - Inst Acc	£ 14.19	-	-0.03	0.00
UK Real Return - Inst Acc	£ 22.94	-	-0.04	0.00
UK Sterling Long Average Duration - Inst Acc	£ 23.19	-	0.00	0.00
Unconstrained Bond - Inst Acc	$ 12.02	-	0.03	0.00
US High Yield Bond Fund Inst Acc	$ 28.82	-	0.22	0.00

Platinum Capital Management Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Platinum All Star Fund - A (Est)	$ 116.28	-	-	-
Platinum Global Dividend Fund - A	$ 49.35	-	-	-
Platinum Maverick Enhanced Fund Limited	$ 92.74	-	-	0.00

Polar Capital Funds Plc (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Asian Financials I USD	$ 290.23	290.23	0.85	1.16
Biotechnology I USD	$ 15.41	15.41	0.19	0.00
European Income Acc EUR	€ 11.04	11.04	0.38	0.00
European Ex UK Inc EUR Acc	€ 9.52	9.52	0.27	-
Financial Opps I USD	$ 11.21	-	0.27	1.93
GEM Growth I USD	$ 8.59	-	0.14	0.00
GEM Income I USD	$ 9.49	-	0.15	0.00
Global Alpha I USD	$ 12.89	12.89	0.29	0.00
Global Convertible I USD	$ 11.41	11.41	0.11	0.00
Global Insurance I GBP	£ 4.30	-	-0.06	0.00
Global Technology I USD	$ 23.96	-	0.29	0.00
Healthcare Blue Chip Fund I USD Acc	$ 10.47	10.47	0.14	0.00
Healthcare Opps I USD	$ 34.88	-	0.53	0.00
Income Opportunities B2 I GBP Acc	£ 1.69	1.69	0.00	0.00
Japan Alpha I JPY	¥ 165.42	165.42	0.94	0.00
Japan I JPY	¥ 1636.42	-	9.41	1.14
North American I USD	$ 17.54	17.54	0.13	0.00
UK Absolute Equity I GBP	£ 12.88	12.88	-0.13	0.00

Polar Capital LLP (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
ALVA Convertible A USD	$ 128.81	-	0.26	0.00
European Conviction A EUR	€ 145.54	-	2.09	0.00
European Forager A EUR	€ 171.42	-	-1.31	0.00

Private Fund Mgrs (Guernsey) Ltd (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
Monument Growth 17/06/2016	£ 471.37	476.37	-22.15	1.23

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

Fund	Bid	Offer	D+/-	Yield
Prusik Asian Equity Income B Dist	$ 163.16	-	0.26	3.99
Prusik Asia A	$ 187.87	-	1.50	0.00
Prusik Asian Smaller Cos A	$ 148.99	-	1.17	0.00

Purisima Investment Fds (CI) Ltd (JER)
Regulated

Fund	Bid	Offer	D+/-	Yield
PCG B ✠	163.17	-	-2.17	0.00
PCG C ✠	160.76	-	-2.14	0.00

Putnam Investments (Ireland) Ltd (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Putnam New Flag Euro High Yield Plc - E	€ 1010.25	-	6.52	4.01

Ram Active Investments SA
Tél. +41 22 816 87 30
www.ram-ai.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
RAM Systematic Emerg Markets Core Eq	$ 80.45	-	1.50	-
RAM Systematic Emerg Markets Eq	$ 146.73	-	2.61	-
RAM Systematic European Eq	€ 369.79	-	11.28	-
RAM Systematic Global Shareholder Yield Eq	$ 101.01	-	2.04	0.00
RAM Systematic Long/Short Emerg Markets Eq	$ 119.45	-	-0.05	-
RAM Systematic Long/Short European Eq	€ 139.34	-	0.73	-
RAM Systematic North American Eq	$ 239.53	-	1.94	-
RAM Tactical Convertibles Europe	€ 141.54	-	1.49	-
RAM Tactical Global Bond Total Return	€ 142.39	-	-0.09	-
RAM Tactical II Asia Bond Total Return	$ 130.79	-	0.01	-

Robeco Asset Management (LUX)
Weena 850, 3014 DA Rotterdam, The Netherlands
www.robeco.com/contact
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Asia-Pacific Equities (EUR)	€ 125.06	-	-0.26	0.00
Chinese Equities (EUR)	€ 66.84	-	0.51	0.00
Em Stars Equities (EUR)	€ 162.00	-	0.56	0.00
Emerging Markets Equities (EUR)	€ 138.46	-	0.79	0.00
Flex-o-Rente (EUR)	€ 109.88	-	0.15	0.00
Glob.Consumer Trends Equities (EUR)	€ 144.98	-	1.10	0.00
High Yield Bonds (EUR)	€ 131.73	-	0.82	0.00
Lux -O- Rente (EUR)	€ 148.45	-	-0.05	0.00
New World Financials (EUR)	€ 47.53	-	0.84	0.00
US Premium Equities (EUR)	€ 182.28	-	1.59	0.00
US Premium Equities (USD)	$ 204.43	-	1.79	0.00

S W Mitchell Capital LLP (CYM)
Regulated

Fund	Bid	Offer	D+/-	Yield
S W Mitchell European Fund Class A EUR	€ 284.08	-	7.39	-
S W Mitchell Small Cap European Fund Class A EUR	€ 218.44	-	0.90	-
The Charlemagne Fund EUR	€ 254.81	-	4.13	-

S W Mitchell Capital LLP (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
SWMC European Fund B EUR	€ 13612.09	-	524.77	0.00
SWMC UK Fund B	£ 10803.77	-	171.94	0.00
SWMC Small Cap European Fund B EUR	€ 12347.13	-	166.82	0.00
SWMC Emerging European Fund B EUR	€ 9484.59	-	202.18	0.00

RobecoSAM (LUX)
Tel. +41 44 653 10 10 http://www.robecosam.com/
Regulated

Fund	Bid	Offer	D+/-	Yield
RobecoSAM Sm.Energy/A	€ 11.43	-	-0.11	1.64
RobecoSAM Sm.Energy/N	€ 11.27	-	0.12	0.00
RobecoSAM Sm.Materials/A	€ 127.10	-	-0.90	1.38
RobecoSAM Sm.Materials/N	€ 142.46	-	1.82	0.00
RobecoSAM Sm.Materials/Na	€ 98.34	-	1.26	-
RobecoSAM Gl.Small Cap Eq/A	€ 79.84	-	-0.50	1.24
RobecoSAM Gl.Small Cap Eq/N	€ 154.95	-	2.09	0.00
RobecoSAM Sustainable Gl.Eq/B	€ 173.55	-	2.04	0.00
RobecoSAM Sustainable Gl.Eq/N	€ 150.31	-	1.77	0.00
RobecoSAM S.HealthyLiv/B	€ 175.65	-	1.38	0.00
RobecoSAM S.HealthyLiv/N	€ 164.31	-	1.30	0.00
RobecoSAM S.HealthyLiv/Na	€ 110.57	-	-1.32	-
RobecoSAM S.Water/A	€ 184.17	-	-0.57	1.11
RobecoSAM S.Water/N	€ 172.48	-	2.87	0.00

Schroder Property Managers (Jersey) Ltd
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Indirect Real Estate SIRE	£ 132.91	139.76	0.26	2.90

SIA (SIA Funds AG) (CH)
Other International Fds

Fund	Bid	Offer	D+/-	Yield
LTIF Stability Growth	SFr 183.20	-	-17.00	-
LTIF Stability Inc Plus	SFr 157.30	-	-14.60	0.53

Standard Life Wealth (JER)
PO Box 189, St Helier, Jersey, JE4 9RU 01534 709130
FCA Recognised
Standard Life Offshore Strategy Fund Limited

Fund	Bid	Offer	D+/-	Yield
Bridge Fund	£ 1.6250	-	0.0009	1.84
Diversified Assets Fund	£ 1.1799	-	0.0011	3.22
Global Equity Fund	£ 1.8981	-	0.0008	0.97
Global Balanced Fund - Income Units	£ 1.3606	-	-0.0061	1.99
Global Balanced Fund - Accumulations Units	£ 1.5920	-	-0.0071	1.96
Global Fixed Interest Fund	£ 1.0080	-	0.0021	4.46
Sterling Fixed Interest Fund	£ 0.8606	-	-0.0022	3.83
UK Equity Fund	£ 1.8807	-	0.0005	2.75

Stenham Asset Management Inc
www.stenhamassetmanagement.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Stenham Asia USD	$ 122.82	-	0.70	0.00
Stenham Credit Opportunities A Class USD	$ 101.33	-	1.75	0.00
Stenham Equity UCITS USD	$ 133.83	-	-4.39	0.00
Stenham Growth USD	$ 202.37	-	5.39	-
Stenham Healthcare USD	$ 168.54	-	5.82	0.00
Stenham Managed Fund USD	$ 108.62	-	1.87	0.00
Stenham Macro UCITS USD	$ 99.77	-	-0.20	0.00
Stenham Multi Strategy USD	$ 109.48	-	0.50	-
Stenham Quadrant USD A	$ 399.51	-	0.20	-
Stenham Trading Inc USD	$ 115.68	-	0.05	-
Stenham Universal USD	$ 413.17	-	3.58	-
Stenham Universal II USD	$ 152.68	-	1.26	0.00

Stratton Street Capital (CI) Limited (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
Japan Synthetic Warrant Yen Class	¥ 1356.05	-	95.18	0.00
Japan Synthetic Warrant GBP Hedged Class	£ 144.00	-	11.91	0.00
Japan Synthetic Warrant USD Class	$ 14.39	-	-1.47	0.00
Japan Synthetic Warrant USD Hedged Class	$ 144.19	-	12.09	0.00
Renminbi Bond Fund AUD Cls A	A$ 123.52	-	-0.05	3.35
Renminbi Bond Fund AUD Cls B	A$ 125.47	-	-0.05	3.13
Renminbi Bond Fund CHF Cls A	SFr 118.34	-	-0.07	3.47
Renminbi Bond Fund CHF Cls B	SFr 118.21	-	-0.07	3.22
Renminbi Bond Fund CNH Cls A	CNH 132.15	-	-0.09	3.26
Renminbi Bond Fund CNH Cls B	CNH 131.93	-	-0.10	3.02
Renminbi Bond Fund GBP Cls B	£ 123.12	-	-0.06	3.19
Renminbi Bond Fund SGD Cls B	S$ 122.80	-	-0.06	3.12
Renminbi Bond Fund USD Cls B	$ 122.92	-	-0.06	2.98
Renminbi Bond Fund YEN Cls B	¥ 13873.21	-	-7.69	0.00
Renminbi Bond Fund USD Cls A	$ 169.36	-	-0.07	3.23
Renminbi Bond Fund GBP Cls A	£ 163.98	-	-0.08	3.45
Renminbi Bond Fund SGD Cls A	S$ 162.54	-	-0.07	3.37
Renminbi Bond Fund YEN Cls A	¥ 20529.00	-	-12.00	0.00
Renminbi Bond Fund EUR Cls A	€ 110.70	-	-0.06	3.39

E.I. Sturdza Strategic Management Limited (GSY)
Regulated

Fund	Bid	Offer	D+/-	Yield
Nippon Growth Fund Limited	¥ 77322.00	-	-6566.00	0.00
Strat Evarich Japan Fd Ltd JPY	¥ 70026.00	-	-3853.00	0.00
Strat Evarich Japan Fd Ltd USD	$ 687.62	-	-38.11	0.00

E.I. Sturdza Funds PLC (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Nippon Growth (UCITS Fund Euro Hedged Class EUR)	€ 859.17	-	22.75	0.00
Nippon Growth (UCITS Fund Euro Hedged Institutional Class EUR)	€ 1012.43	-	26.84	0.00
Nippon Growth (UCITS) Fund JPY Class A shares	¥ 80195.00	-	2150.00	0.00
Nippon Growth (UCITS) Fund JPY Class B Acc shares	¥ 67280.00	-	1803.00	0.00
Nippon Growth (UCITS) Fund JPY Class C Dis shares	¥ 82212.00	-	968.00	0.00
Nippon Growth (UCITS Fund Class D Institutional JPY)	¥ 43699.00	-	1173.00	0.00
Strategic China Panda Fund USD	$ 1975.33	-	14.12	0.00
Strategic China Panda Fund Hedged EURO	€ 1913.13	-	12.96	0.00
Strategic China Panda Fund Hedged Sterling	£ 1943.48	-	13.56	0.00
Strategic Euro Bond Accumulating Class CHF	SFr 987.31	-	0.00	0.00
Strategic Euro Bond Institutional Class EUR	€ 1020.82	-	0.32	0.00
Strategic Euro Bond Fund Accumulating Class Shares	€ 1142.76	-	0.33	0.00
Strategic Euro Bond Fund Distributing Class Shares	€ 1031.96	-	0.30	0.00
Strategic European Smaller Companies Fund EUR Class	€ 967.93	-	-21.21	0.00
Strategic Global Bond RMB Acc	$ 1079.71	-	-1.53	0.00
Strategic Global Bond USD Acc	$ 1067.28	-	-2.27	0.00
Strategic US Momentum and Value Fund	$ 712.67	-	3.47	0.00
Strategic US Momentum & Value Fund USD I Class	$ 474.68	-	2.32	0.00
Strategic US Momentum and Value EUR Hedged Class EUR	€ 495.50	-	2.28	0.00
Strategic US Momentum and Value CHF Hedged Class CHF	SFr 491.08	-	2.20	0.00

The Hartford International Funds (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
Gbl Govt Bond (Ex Japan) Index (GBP)	£ 1722.06	-	-40.31	0.00
UK Corporate Bond	£ 1647.30	-	-3.91	0.00
Gilt	£ 1671.69	-	-8.29	0.00
Global Eq (Ex Japan) Index Fund	¥ 1.38	-	0.02	0.00
Global Eq (ex Japan) Class HJ4	¥ 1.43	-	0.01	0.00
Global Eq (ex Japan) Class JP5	¥ 1.35	-	0.02	0.00
Global Eq Ex Japan Index Fund (Hedge)	¥ 1.24	-	0.02	0.00
Gbl Govt Bond (Ex Japan) Index	¥ 1.21	-	0.00	0.00
Gbl Govt Bond (ex Japan) Class JP4	¥ 1.19	-	0.01	0.00
Japan Equity Index Fund	¥ 0.90	-	0.01	0.00
Japan Equity Class JP3	¥ 1.09	-	0.01	0.00

The National Investor (TNI)
www.tni.ae
Other International Funds

Fund	Bid	Offer	D+/-	Yield
TNI Blue Chip UAE Fund *	AED 10.57	-	-0.04	0.00

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

Fund	Bid	Offer	D+/-	Yield
Aptus Global Financials B Acc	£ 2.83	-	0.03	4.47
Aptus Global Financials B Inc	£ 2.47	-	0.02	4.62

Toscafund Asset Management LLP
www.toscafund.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Tosca A USD	$ 283.35	-	14.87	-
Tosca Mid Cap GBP	£ 267.56	-	5.62	0.00
Tosca Opportunity B USD	$ 368.32	-	8.62	0.00
Pegasus Fund Ltd A-1 GBP	£ 60.61	-	-2.02	0.00

TreeTop Asset Management S.A. (LUX)
Regulated
TreeTop Convertible Sicav

Fund	Bid	Offer	D+/-	Yield
International A	€ 268.17	-	0.56	0.00
International B	$ 346.50	-	0.63	0.00
International C	£ 113.08	-	-0.03	3.40
International D	€ 241.26	-	0.49	3.18
TreeTop Global Sicav				
Global Opp.A	€ 135.46	-	2.10	0.00
Global Opp.B	$ 137.11	-	2.59	0.00
Global Opp.C	£ 173.15	-	-1.33	3.11
Sequoia Equity A	€ 131.61	-	1.64	0.00
Sequoia Equity B	$ 137.75	-	2.01	0.00
Sequoia Equity C	£ 155.79	-	-2.02	3.10

Unicapital Investments (LUX)
Regulated

Fund	Bid	Offer	D+/-	Yield
Investments III	€ 5.03	-	-22.38	-
Investments IV - European Private Eq.	€ 210.25	220.76	-4.08	-
Investments IV - Global Private Eq.	€ 311.03	326.58	-10.79	-

Value Partners Hong Kong Limited (IRL)
www.valuepartners.net, fis@vp.com.hk
Regulated

Fund	Bid	Offer	D+/-	Yield
Value Partners Asia Dividend Stocks Fund	$ 8.32	-	0.05	-
Value Partners Classic Equity Fund USD Z Unhedged	$ 10.32	-	0.06	0.00
Value Partners Classic Equity Fund CHF Hedged	SFr 10.68	-	0.06	0.00
Value Partners Classic Equity Fund EUR Hedged	€ 10.82	-	0.06	0.00
Value Partners Classic Equity Fund GBP Hedged	£ 11.10	-	0.06	0.00
Value Partners Classic Equity Fund GBP Unhedged	£ 12.06	-	-0.06	0.00
Value Partners Classic Equity USD Hedged	$ 12.66	-	0.07	0.00
Value Partners Greater China Equity Fund	$ 7.80	-	0.05	-
Value Partners Health Care Fund RMB Class Z Unhedged	CNH 9.26	-	0.03	0.00
Value Partners Health Care Fund HKD Class A Unhedged	HK$ 8.65	-	0.04	0.00
Value Partners Health Care Fund USD Class A Unhedged	$ 8.67	-	0.03	0.00

Veritas Asset Management LLP (IRL)
HSSI Ltd, 1 Grand Canal Sq, Grand Canal Harbour, Dublin 2, Ireland
Veritas Funds Plc
www.veritas-asset.com
+353 1 635 6799
FCA Recognised
Institutional

Fund	Bid	Offer	D+/-	Yield
Veritas Asian Fund A USD H	$ 321.71	-	2.08	0.42
Veritas Asian Fund A GBP H	£ 406.01	-	-0.82	0.23
Veritas Asian Fund A EUR H	€ 324.63	-	2.26	0.21
Veritas China Fund A USD	$ 122.46	-	0.04	0.41
Veritas China Fund A GBP	£ 126.74	-	0.04	0.42
Veritas China Fund A EUR	€ 119.37	-	0.04	0.42
Veritas Global Equity Income Fund D USD	$ 121.19	-	0.98	4.02
Veritas Global Equity Income Fund D EUR	€ 207.81	-	1.78	4.03
Veritas Global Equity Income Fund D GBP	£ 159.73	-	-0.06	3.89
Veritas Global Focus Fund D USD	$ 26.38	-	0.17	0.63
Veritas Global Focus Fund D EUR	€ 23.46	-	0.16	0.64
Veritas Global Focus Fund D GBP	£ 30.35	-	-0.06	0.60
Veritas Global Focus Fund A GBP	£ 29.27	-	-0.07	0.35
Veritas Global Focus Fund A EUR	€ 13.66	-	0.10	0.36
Veritas Global Focus Fund A USD	$ 25.43	-	0.16	0.37
Veritas Global Focus Fund C GBP	£ 31.82	-	-0.07	0.00
Veritas Global Focus Fund C EUR	€ 24.71	-	0.17	0.00
Veritas Global Focus Fund C USD	$ 27.71	-	0.17	0.00
Veritas Global Equity Income Fund A GBP	£ 152.86	-	-0.06	3.90
Veritas Global Equity Income Fund A EUR	€ 201.60	-	1.72	4.04
Veritas Global Equity Income Fund A USD	$ 116.46	-	0.94	4.03
Veritas Global Equity Income Fund C GBP	£ 186.57	-	-0.07	-
Veritas Global Equity Income Fund C EUR	€ 245.64	-	2.10	-
Veritas Global Equity Income Fund C USD	$ 141.36	-	1.14	-
Veritas Global Real Return Fund A USD	$ 21.41	-	-0.04	0.28
Veritas Global Real Return Fund A GBP	£ 12.05	-	-0.01	0.31
Veritas Global Real Return Fund A EUR	€ 12.59	-	-0.02	0.11
Retail				
Veritas Asian Fund B USD	$ 223.94	-	1.45	0.00
Veritas Asian Fund B GBP	£ 299.15	-	-0.60	0.00
Veritas Asian Fund B EUR	€ 239.06	-	1.67	0.00
Veritas China Fund B GBP	£ 122.59	-	0.03	0.00
Veritas China Fund B EUR	€ 163.91	-	1.09	0.00
Veritas Global Focus Fund B USD	$ 18.32	-	0.12	0.00
Veritas Global Focus Fund B GBP	£ 22.31	-	-0.05	0.00
Veritas Global Focus Fund B EUR	€ 16.23	-	0.11	0.00
Veritas Global Equity Income Fund B GBP	£ 140.20	-	-0.06	3.93
Veritas Global Equity Income Fund B EUR	€ 184.45	-	1.58	4.06
Veritas Global Equity Income Fund B USD	$ 115.11	-	0.93	4.06
Veritas Global Real Return Fund B USD	$ 20.72	-	-0.03	0.00
Veritas Global Real Return Fund B GBP	£ 11.79	-	-0.02	0.00
Veritas Global Real Return Fund B EUR	€ 13.43	-	-0.02	0.00

Veritas Asset Management LLP
www.veritas-asset.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Real Return Asian Fund USD (Est)	€ 277.60	-	-26.20	0.00
Real Return Asian Fund GBP (Est)	£ 296.77	-	-7.03	0.00
Real Return Asian Fund EUR (Est)	$ 292.91	-	-10.89	0.00

Waverton Investment Funds Plc (1600)F (IRL)
waverton.investments@citi.com
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Waverton Asia Pacific A USD	$ 17.47	-	0.20	5.90
Waverton Global Bond Fund Cls A	$ 8.47	-	0.01	5.45
Waverton Global Equity Fund A GBP	£ 14.01	-	0.01	0.51
Waverton UK Fund A GBP	£ 12.89	-	0.01	1.75
Waverton Equity Fund A GBP	£ 14.19	-	0.02	0.37
Waverton Sterling Bond Fund A GBP	£ 9.31	-	-0.01	5.29

WA Fixed Income Fund Plc (IRL)
Regulated

Fund	Bid	Offer	D+/-	Yield
European Multi-Sector	€ 118.92	-	0.12	0.00

Yapi Kredi Asset Management (TUR)
Yapi Kredi Plaza A Blok Kat:13 Levent 34330 Istanbul / Turkey
Email: info@ykportfoy.com.tr; Tel: + 90 (212) 385 48 48
www.yapikrediassetmanagement.com
Other International Funds

Fund	Bid	Offer	D+/-	Yield
Eurobond (Dollar) Bonds and Bills Fund	TRY 0.079350	-	-0.000440	-
Fourth Variable Fund	TRY 0.021280	-	-	-
Koc Affiliate and Eq. Fund (Eq. Intense Fund)	TRY 0.779300	-	0.020150	-
Istanbul Hedge Fund	TRY 0.014520	-	0.000010	-

Yuki International Limited (IRL)
Tel +44-20-7269-0207 www.yukifunds.com
Regulated
Yuki Mizuho Umbrella Fund

Fund	Bid	Offer	D+/-	Yield
Yuki Mizuho Japan Dynamic Growth	¥ 6908.00	-	45.00	0.00
Yuki Mizuho Japan Large Cap	¥ 777.62	-	-0.38	0.00
Yuki Japan Low Price	¥ 26971.00	-	39.00	0.00
Yuki Japan Value Select	¥ 13671.00	-	37.00	0.00
YMR Umbrella Fund				
YMR N Growth	¥ 10931.83	-	-2753.17	0.00
Yuki Asia Umbrella Fund				
Yuki Japan Rebounding Growth Fund JPY Class	¥ 23407.00	-	13.00	0.00
Yuki Japan Rebounding Growth Fund USD Hedged Class	$ 907.37	-	0.45	-

Zadig Gestion (Memnon Fund) (LUX)
FCA Recognised

Fund	Bid	Offer	D+/-	Yield
Memnon European Fund I GBP	£ 115.73	-	1.57	0.00

Data Provided by

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Guide to Data

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Prices are in pence unless otherwise indicated. The change, if shown, is the change on the previously quoted figure (not all funds update prices daily). Those designated $ with no prefix refer to US dollars. Yield percentage figures (in Tuesday to Saturday papers) allow for buying expenses. Prices of certain older insurance linked plans might be subject to capital gains tax on sales.

Guide to pricing of Authorised Investment Funds: (compiled with the assistance of the IMA. The Investment Management Association, 65 Kingsway, London WC2B 6TD. Tel: +44 (0)20 7831 0898.)

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

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

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

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

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

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

Exit Charges: The letter E denotes that an exit charge may be made when you sell units, contact the manager/operator for full details.

Time: Some funds give information about the timing of price quotes. The time shown alongside the fund manager's/operator's name is the valuation point for their unit trusts/OEICs, unless another time is indicated by the symbol alongside the individual unit trust/OEIC name.

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

Investors can be given no definite price in advance of the purchase or sale being carried out. The prices appearing in the newspaper are the most recent provided by the managers/operators. Scheme particulars, prospectus, key features and reports: The most recent particulars and documents may be obtained free of charge from fund managers/operators. * Indicates funds which do not price on Fridays.

Charges for this advertising service are based on the number of lines published and the classification of the fund. Please contact **data@ft.com or call +44 (0)20 7873 3132** for further information.

FT explainer

Unicorns likely to remain a rare breed on Wall Street

Unicorn sightings have been rare on Wall Street even as their population has risen in Silicon Valley, *writes Nicole Bullock.*

Private tech companies with valuations of at least $1bn have grown from 14 at the start of 2012 to 147 now. Including the new breed of tech disrupters such as car-hailing app Uber, as well as Airbnb and Snapchat, the herd's total valuation tops $550bn, according to data from Triton Research.

"Promising growth companies that don't go public attract capital from private sources in larger amounts and at growing valuations, making an eventual IPO or trade sale more challenging, and necessitating additional private capital — in larger amounts and at growing valuations," said Rett Wallace, co-founder at Triton.

The explosive growth comes as mutual funds such as Fidelity and T Rowe Price, which traditionally buy into public deals, have joined venture capitalists and other investors in the early-stage funding of start-ups in the hope of high returns.

Has this growth in private valuations been mirrored in those tech companies that have gone public?

In aggregate, for tech start ups that listed from 2013 to 2015 valuations have shrunk more than a third from the initial public offering and about half from the first trade or first-day "pop", Triton found.

By contrast, soaring valuations in private fundraisings, and companies staying private longer than in the past, is sharpening concern about the potential returns these unicorns might offer to pre- and post-IPO investors if they go public. Some funds have already been writing down the value of private deals.

"Even though the indexed average is painful, what the data show is a huge dispersion of tech IPO outcomes — some are down by 90 per cent, some are up a double or more," Mr Wallace said.

The divergence in fortunes of the public and private financing markets in the technology sector is self-reinforcing.

With companies finding juicier sources of funding privately and investors losing money in some high-profile IPOs, public issuance has dried up. But the slow down in public issuance is coming, just as valuations in the private market are cooling.

"Private market valuations have come down dramatically in the past year, leaving many companies facing the reality of an IPO below prior private round valuations," said Matthew Walsh, a tech banker at Bank of America Merrill Lynch.

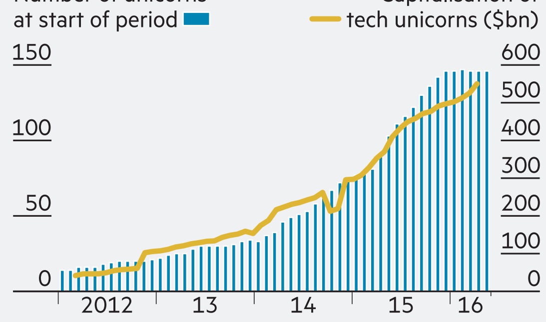
Unicorns have other options besides an IPO. Some will also be sold to other companies — though high valuations don't help here either — or develop enough to stand alone. And some will die.

A unicorn listing this week is being watched for clues as to whether the US IPO market is improving. Twilio, which enables voice and text functions in apps for customers including Uber and WhatsApp, is expected to start trading tomorrow.

It will be the first Silicon Valley unicorn to list since Square, the payments group led by Jack Dorsey, priced below its private valuation last autumn.

"The reception of [Twilio's] offering will send a message to other tech unicorns that have been called out for sky-high valuations," said Matthew Kennedy, an analyst at Renaissance Capital.

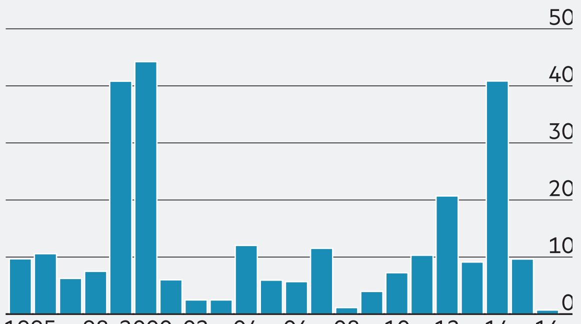
Unicorn population swells



Source: Triton Research

US tech IPOs dry up

Deal value ($bn)



Source: Dealogic

Commodities

Royal Mint reports surge in gold buying

Online platform registers 32% rise in transactions ahead of EU referendum

HENRY SANDERSON

The UK's Royal Mint online trading platform has seen a one-third rise in transactions this month compared with May, as investors buy gold and silver ahead of the EU referendum.

The surge in demand for bars and coins has been mirrored by other online bullion sites with gold's status as a "haven" asset prompting investors to believe it will appreciate further in the event of a UK vote to leave the EU tomorrow.

Gold prices have risen 5 per cent this month and analysts at HSBC say the precious metal could derive a boost of 10 per cent if Britain exits the EU. Gold touched a near two-year high of $1,315 last week and in sterling terms has risen 21 per cent this year.

The 32 per cent surge in volume over the month has led to a 150 per cent rise in revenue for the Royal Mint in June, said Chris Howard, director of bullion. "Overall since early 2016, demand for precious metals has risen," he added.

Rival online gold trading platform BullionVault said its new UK account openings in June had increased 85 per cent over the past 12 months' daily average.

"This year's widening financial and geopolitical risks are just finding a moment of concentration . . . in the high-volatility event of the Brexit referendum," Adrian Ash, head of research at BullionVault, said.

London-based Pure Gold Company said it had taken on seven extra staff to deal with a rise in enquiries.

"We've noticed impulsive and panicked behaviour from people purchasing gold and this echoes the trends we saw in 2008 during the financial collapse," chief executive Josh Saul said.

Aside from the retail buying of physical gold, investors have also sought gold-backed exchange traded funds, which have seen their holdings of the precious metal swell to the highest level since 2013.

Still, gold prices fell for a third day in a row yesterday, after polls showed voters in favour of the UK leaving the EU had lost some of their lead over the Remain camp. Gold fell more than 1 per cent to a 10-day low of $1,270.9 a troy ounce.

"Overnight we have seen two polls, one with Leave in the lead and the other with Remain in the lead.

150% The increase in revenue for Royal Mint this month, fuelled by rising gold volume

$1,315 The near two-year high that gold touched last week

"This will make the markets believe that we are in for a close vote and for that reason I would expect precious metals prices to continue sideways [from here]," said David Govett of Marex Spectron, a London-based broker.

Whatever the outcome of tomorrow's vote, bullion brokers say there are many reasons to own gold, including uncertainty over the global economy, the upcoming US presidential election and central banks introducing negative interest rate policies.

"There are really good reasons to own physical gold but taking position on short-term political outcomes is not one of them," said Ross Norman, head of bullion brokers Sharps Pixley.

"The long-term case for owning gold remains solid — but the short-term one in our view is questionable."

Analysis. Commodities

US wells 'fracklog' poses threat to oil rally

Price rise opens way for jump in production as uncompleted projects regain their allure

ED CROOKS

As oil trades at about $50 a barrel, everyone in the US industry is looking at DUCs.

Wells that are Drilled but Uncompleted are holes in rock waiting for the steel tubing and hydraulic fracturing needed to bring them into production.

From early in oil's two-year downturn DUCs have been seen as a readily available source of supply that will start producing as the market tightens.

In recent weeks there have been signs of this happening. Several shale producers — including Continental Resources, EOG Resources and Oasis Petroleum — have started to complete some of their DUCs. Others, including Whiting Petroleum, have said they can follow suit if oil stays near $50.

Some believe this "fracklog" of uncompleted wells could put a ceiling on oil prices, which have already rallied almost 80 per cent from their January lows. Yesterday, West Texas Intermediate, the US oil benchmark, was down 0.9 per cent at $50.18.

Citigroup reckons DUCs could add up to 1m barrels per day to the market in the second half of the year, "putting the brakes on oil's march higher".

> Drilled but uncompleted wells could add 1m barrels per day to the market in the second half, Citi says

"DUCs represent the low-hanging fruit for US oil producers," says Citi.

As crude prices fell, many US shale companies drilled wells that they either could not afford to, or did not want to, complete.

Often they had contracts with rig operators that meant they had to pay up whether or not the wells were drilled, and made a virtue out of necessity by arguing they were deliberately building up an inventory of DUCs to tap when prices rose.

Rystad Energy, the consultancy, estimates that about 90 per cent of all the oil DUCs in the US can be profitable with oil at $50. There have been signs in derivatives markets of increased hedging by producers, suggesting they are moving to lock in these prices and take the risk out of completing their wells.

But while wells are coming on stream and swelling US production, it is worth keeping the size of the DUCs in proportion. No one knows exactly how many there are, although analysts make educated guesses based on state records and company statements, with estimates varying widely. Rystad thinks there are now about 3,900 in the US, down from 4,000 at the end of last year.

It expects around 6,000 shale oil wells to be drilled in the US this year, so those 3,900 DUCs would give a noticeable boost to production if they came on line quickly.

Wood Mackenzie, however, argues that just because a well looks like a DUC and fracks like a DUC, that is no reason to jump to conclusions.

Some delay between drilling and completing a well is inevitable, it points out: the fracking crews and other workers and equipment need to be brought to the site to do their jobs, and the logistics are never frictionless.

So Wood Mac counts only the wells that are left uncompleted for longer than three months as excess or "abnormal" DUCs, and it thinks there are about 1,300 of those.

Rystad agrees that there will always be some uncompleted wells, but reckons the number that have been deliberately delayed is quite a lot higher, at 2,000 to 2,400.

Both firms are pretty confident, though, that the number of excess DUCs is falling.

Rystad expects the fracklog to drop by 100-150 per month through the end of the year, while Wood Mac forecasts a fall of about 120 per month.

And although their views on the numbers of DUCs are different, their estimates of the impact on production are quite close: Wood Mac expects about 250,000 barrels per day from completed DUCs in December, while Rystad forecasts about 300,000 b/d.

To put that into context, that would represent about 4-5 per cent of total onshore crude production from the "lower 48" states of the US.

While DUCs can slow the decline in US oil output that has been under way since April 2015, they cannot prevent it.

For that to happen, the US oil industry will have to start drilling again and putting rigs back to work.

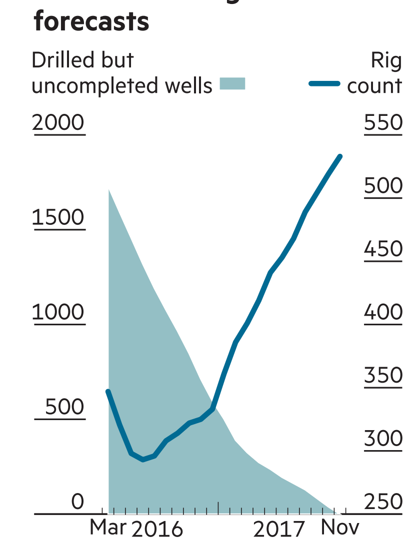
The Baker Hughes count of rigs drilling onshore oil wells in the US has now risen for three weeks in succession, but is still only back to its level in April.

Uncompleted wells could delay the rebalancing of the global oil market, pushing the correction back into 2017.

The belief that they can carry a recovery in US oil production, however, looks like a dead duck.

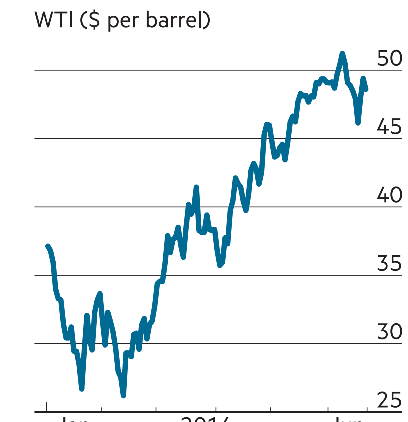
Gas and oil extraction using hydraulic fracturing in California, US
David McNew/Getty Images

US DUCs and rig count forecasts



Oil price

WTI ($ per barrel)



Sources: Wood Mackenzie; Thomson Reuters Datastream

Currencies

PBoC considers loosening renminbi controls

JENNIFER HUGHES — HONG KONG
GABRIEL WILDAU — SHANGHAI

China's central bank is considering allowing onshore commercial banks access to the offshore renminbi market for the first time in a move that could bring the two distinct currency rates closer together.

The People's Bank of China said yesterday via its microblog that it had held a meeting to look into the possibility.

Such a move would mark another step in the loosening of China's tight currency controls.

Since China surprised the world last August with a devaluation and a new regime for managing the currency, the offshore rate has been considered a reflection of international investors' views on the country.

At points this year — notably in early January — a growing gap between the fast-weakening offshore rate and the tightly managed onshore rate, unnerved markets around the world, and forced the PBoC to intervene directly for fear it could prompt further capital outflows.

Following the PBoC's actions, which also drained liquidity from the offshore market, the offshore renminbi actually ended the first quarter stronger against the dollar than it began.

The offshore rate has weakened slightly since, although the spread to the onshore rate — which is permitted to trade only 2 per cent either side of a PBoC-set midpoint each day — has never approached January's extremes.

Yesterday the PBoC said: "In order to raise the level of openness of the foreign exchange markets in both directions, in recent days the PBoC held a meeting to research the issue of commercial banks' orderly participation in the offshore foreign exchange markets."

Analysts said the unexpected announcement could be related to technical issues, such as China joining the International Monetary Fund's Special Drawing Rights basket of reserve currencies this year.

"This could be a requirement to enter the SDR. This could also be a preparation to smooth out volatilities in offshore because onshore banks would have an extra mandate to stabilise the offshore market to avoid instability akin to January 2016," said Iris Pang, strategist at Natixis.

No details were given by the PBoC as to what "orderly participation" might look like.

Additional reporting by Hudson Lockett in Hong Kong

Capital markets

Deutsche Börse set to launch fintech VC fund

PHILIP STAFFORD

Deutsche Börse, Europe's largest exchanges operator, is to shake up its disparate investments with the creation of a venture capital fund targeting fintech in capital markets.

The DB1 Ventures fund will make new investments in the emerging technology and offload some of its existing minority shareholdings in start-up companies.

The exchange is seeking to boost its single-digit growth rates by turning to fintech, or financial technology, one of the software industry's fastest-growing subsections. Profits at banks are under pressure from spiralling regulatory costs and low interest rates, while faster and cheaper computing power is allowing outsiders to handle vast quantities of data far more easily.

Venture capital-backed fintech companies raised $14.4bn of financing last year — almost double the previous year — according to a report from KPMG International and CB Insights.

"The future exchange and market infrastructure organisation will have a larger responsibility in fostering growth and innovation throughout financial markets," said Carsten Kengeter, Deutsche Börse's chief executive. "Technology is at the core of our business, so partnering with innovative fintech firms that are relevant for our clients is an absolute priority for us."

Rivals have also encouraged innovation in financial markets, following a path taken two years ago by CME Group. ICAP, the interdealer broker, will also make venture capital investments a significant part of its growth when it becomes NEX Group.

The fund will focus on areas such as market operator infrastructure, digitisation of post-trade services and big data and analytics. The move will be "formalising and institutionalising investing within Deutsche Börse", said Ankur Kamalia, head of venture portfolio management at the exchange, and responsible for DB1 Ventures. "It's not a fintech fund that will invest randomly. It will invest only in areas that are strategic to Deutsche Börse," he added.

Deutsche Börse's investments include minority stakes in fixed-income platforms Digital Vega and GMEX, and a venture to trade capacity for cloud computing, as well as a trade repository it runs with Spain's Bolsas y Mercados Españoles (BME).

However, since Mr Kengeter's arrival, it has started to rejig its portfolio, selling off a 50 per cent stake in Infobolsa, a data provider, to BME for €8.2m.

MARKETS & INVESTING

TRADING POST

Jamie Chisholm

Activity is thinning, some trading platforms are preparing to extend their hours and London-based bankers are in line to pull all-nighters.

Even UK spread betting groups are increasing initial margins significantly across a swath of products. Some may think it overblown but the market clearly is treating the UK referendum tomorrow as a big binary risk event.

But, from a purely speculative standpoint, such occasions tend to deliver opportunities as asset classes lurch in lockstep.

And given the bookies still tend to favour a Remain vote, the greater reaction *should* be delivered by a Brexit, providing mispriced "risk off" moves.

Take the oil price. Bjarne Schieldrop, chief commodities analyst at SEB, says: "In the event of a Brexit, we expect Brent to sell down to between $40/b and $45/b, which would be a great buying opportunity."

Recent action suggests "solid appetite for buying oil whenever it drops below $50/b . . . While overall sentiment in financial markets could be depressed for quite some time, the supply/demand balance for oil would not be impacted very much".

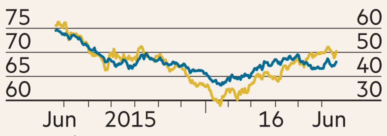
Trading Post notes that oil may also get support from a falling dollar should the Federal Reserve be seen holding off from interest rate rises amid Brexit funk.

This also means any initial risk off-induced retreat for emerging market currencies may be curtailed, or even reversed by the ultimately weaker greenback.

jamie.chisholm@ft.com

EM currency and oil price

JPM Emerging Market FX index — Brent crude ($ per barrel)



Source: Thomson Reuters Datastream

Global overview

Brexit worries overshadow Yellen speech as uneasy calm pervades

Sterling steadies as Leave campaign falters in the UK while equities regain ground and Brent crude slips below $50 a barrel

DAVE SHELLOCK

— Jason Alden/Bloomberg

EU referendum outcomes for sterling: FT.com/video
The FT's Rochelle Toplensky and John Wraith of UBS discuss scenarios for the British pound after the EU referendum

An uneasy calm settled over global markets following the previous session's sharp moves as the countdown to the UK's referendum on EU membership remained the key driver of sentiment.

The overriding focus on the vote meant that the normally keenly watched semi-annual testimony to congress by Janet Yellen, chair of the US Federal Reserve, attracted less attention than usual.

Sterling had a much steadier session after starting the week with its best one-day showing against the dollar for nearly eight years as opinion polls showed the Leave campaign in the UK vote losing momentum.

The latest polls pointed to a neck-and-neck race — although bookmakers' odds continued to favour Remain.

"Betting markets' implied chance of a Brexit has dipped to 25 per cent from 40 per cent last week," said Oliver Jones at Capital Economics. "In other words, betting markets consider a Remain vote three times as likely."

Global equities continued to regain some of the ground lost over the past couple of weeks — albeit at a gentler pace than on Monday — in spite of a retreat for oil prices. Moves in government bond markets were muted while gold stood out as it fell to a 10-day low.

Much of the day's focus was on the pound, particularly after George Soros, the international investor, warned that the currency could take a bigger hit in the event of a Brexit than it did on "Black Wednesday" in September 1992.

But sterling held the bulk of Monday's big advance against the dollar, slipping just 0.2 per cent to $1.4664 after touching $1.4781 in early trade. Just last Thursday, the UK currency came within a whisker of sliding below the $1.40 level.

Meanwhile, the pound rose a further 0.3 per cent against the euro to €1.3029 and another 0.5 per cent against the yen to ¥153.34.

UK **equities** also built on the previous day's rise as the FTSE 100 rose 0.4 per cent — giving it a gain over the past three days of 4.6 per cent.

The pan-European Stoxx 600 index rose 0.7 per cent to a 10-day high, led by another round of strong gains for financial stocks.

Trading was more choppy on Wall Street, where the S&P 500 stood 0.2 per cent higher at 2,087 by midday in New York. The CBOE Vix volatility index was up 0.3 per cent at 18.43.

The S&P was held back by a retreat for **oil** prices with Brent crude down 1.5 per cent at $49.90 a barrel.

Japanese stocks were buoyed by a weaker yen as the general mood in the market turned less risk-averse. The Nikkei 225 rose 1.3 per cent as the dollar gained 0.6 per cent against the Japanese currency to ¥104.53. The euro was up 0.1 per cent at ¥117.70.

The dollar index, a measure of the US **currency** against a basket of peers, was up 0.4 per cent — bolstered mostly by a 0.5 per cent decline for the euro to $1.1259 — even as Ms Yellen reiterated her cautious stance on the outlook for US monetary policy.

She said she saw "considerable uncertainty" about the US economic outlook, highlighting weaker jobs numbers and soft investment as some of the risks on the horizon.

Her remarks were viewed by many as consistent with the view that a July interest rate rise appeared unlikely.

Philip Marey, senior US strategist at Rabobank, said: "For now, the Federal Open Market Committee still expects the headwinds, which include economic and financial developments abroad, subdued household formation and meagre productivity growth, to slowly fade over time.

"Thus, gradual increases in the federal funds rate are likely to be needed. While today's testimony by the Fed chair supports our view of a September hike — assuming employment growth will pick up in the coming months — the risk to our expectation of two hikes before the end of the year, the second in December, is still to the downside."

US **Treasury** prices eased slightly after Ms Yellen's remarks — although this also reflected a continuation of the "risk-off" moves seen in the markets on Monday.

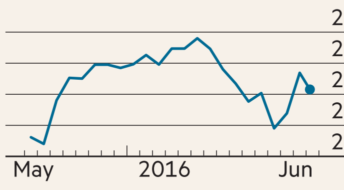
The yield on the 10-year note was up 2 basis points at 1.69 per cent while the more policy-sensitive two-year yield was 1bp higher at 0.76 per cent.

The 10-year German Bund yield slipped 1bp to 0.05 per cent, just three days after touching a record low of minus 0.038 per cent — while that on the 10-year UK gilt jumped another 5bp to 1.29 per cent, leaving it a hefty 22bp up from the record low that it reached last Thursday.

The firmer dollar and higher US bond yields weighed on gold with the metal sliding $22 to $1,267 an ounce, the lowest since June 10.

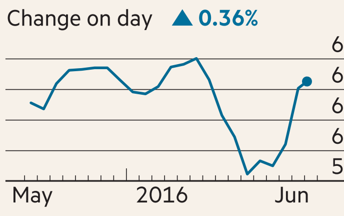
Markets update

S&P 500 index
Change on day ▲ 0.19%



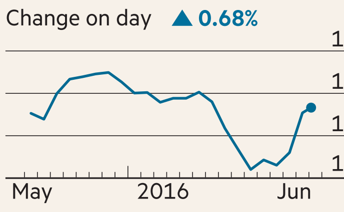
US equities The S&P 500 eked out a modest gain as the relentless focus on the UK's EU vote overshadowed the semi-annual testimony to Congress by Janet Yellen, Federal Reserve chair

FTSE 100 index
Change on day ▲ 0.36%



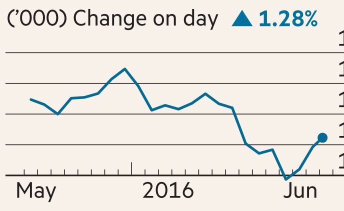
UK equities A rebound for commodity stocks off early lows helped underpin a third daily rise for the FTSE 100, although nerves about tomorrow's EU vote made for a tense session

Eurofirst 300 index
Change on day ▲ 0.68%

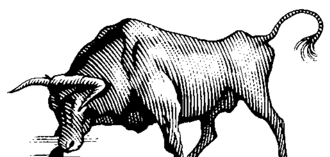


European equities Stocks rose for a third successive session as hopes for a Remain vote in the UK continued to pull the Eurofirst 300 up from last week's four-month low

Nikkei 225 index
('000) Change on day ▲ 1.28%



Japanese equities The Nikkei found support from the weaker yen although volumes were low as caution grew ahead of the UK referendum on the EU



Wall Street

Lennar jumps as jobs outlook and low rates buoy US homebuilders

Adam Samson

Lennar shares climbed yesterday as a robust US jobs market and low interest rates helped the homebuilder log a sharper than expected rise in quarterly profits.

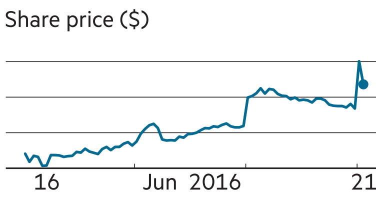
Florida-based Lennar said its net profits climbed to $218.5m, or 95 cents a share, in the quarter to the end of May, from $183m, or 79 cents a share, in the same period in the year prior.

That topped Wall Street estimates of 87 cents. Revenues rose 14.8 per cent to $2.7bn, also beating analysts' estimates.

The group added that deliveries rose 12 per cent on a year-on-year basis to 6,724 homes while new orders were up 10 per cent to 7,962 homes.

The upbeat sentiment from Lennar comes as data have painted a mixed picture of the strength of the US economy. Indeed, job growth slowed sharply in May while capital investment has remained sluggish, factors that some economists have said could weigh on the housing market.

Lennar
Share price ($)



Source: Thomson Reuters Datastream

Indices	Close	Day's change
S & P 500	2087.45	4.20
DJ Industrials	17825.08	20.21
Nasdaq Comp	4836.73	-0.48
Russell 2000	1204.70	-8.35
VIX	18.40	0.03
US 10 yr Treas Bd	1.69	0.01
US 2 yr Treas Bd	0.75	0.02

Lennar's shares rose as much as 3.3 per cent to $48.18. Meanwhile, **KB Home**, which was set to post its earnings after the closing bell in New York yesterday, rose 0.8 per cent to $14.61.

Elsewhere, **United Continental**'s shares flew higher after the group unveiled a brighter revenue outlook and a $3bn plan to cut costs and drive sales higher.

United said passenger unit revenue, an important metric for airlines, would probably decline 6.5-7.5 per cent on a year-on-year basis in the second quarter, compared with a previous estimate of a fall of as much as 8.5 per cent.

The group also said it was making "improvements across the commercial organisation" that are expected to generate $1.5bn in value, along with cost structure improvements that may produce a $1.3bn benefit.

It also plans to create $300m in value by running more reliably, which will cut costs associated with delays and cancellations.

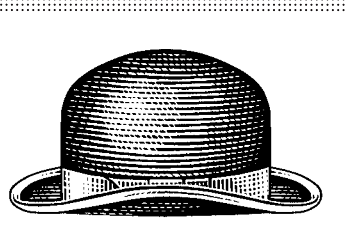
The shares jumped 4.2 per cent yesterday to $45.22, cutting their year-to-date loss to 21 per cent.

CarMax, a used car retailer, skidded after posting disappointing profits and sales figures.

The company said its net earnings declined by 3.6 per cent on a year-on-year basis to $175.4m. Earnings per share of 90 cents missed market expectations by two cents. Sales rose 2.8 per cent to $4.1bn, also missing forecasts of $4.2bn.

CarMax's shares dropped 4.2 per cent to $48.52 and have declined by 28.8 per cent over the past 12 months.

In midday trading, the S&P 500 rose 0.1 per cent to 2,086.1, the Dow Jones Industrial Average advanced 0.1 per cent to 17,822.1 and the Nasdaq Composite was little changed at 4,839.2.



London

Intu Properties extends winning streak after shopping centre deal

Bryce Elder

Intu Properties was a gainer yesterday as the FTSE 100 extended its pre-referendum rally into a third day.

Intu, formerly known as Capital Shopping Centres, climbed 3.3 per cent to 308.3p as upgrades followed its deal to buy its joint venture partner out of the Merry Hill centre near Birmingham. Queensland Investment Corporation last week sold its 50 per cent stake to Intu for £410m, an 8.5 per cent discount to the latest valuation.

Analysts saw the discount price as evidence that UK shopping centre valuations are sliding from their 2014 peak, and that sovereign wealth funds might be retrenching their UK property investments in response to oil price weakness. But Macquarie argued that Intu is getting a bargain if management can deliver site improvements to match its Trafford Centre and Lakeside malls.

With management confident of delivering like-for-like growth, Intu's 21 per cent discount to net asset value looks too wide, said Macquarie. It repeated a 320p target on Intu shares.

Oil stocks underpinned the wider market as the FTSE 100 added 22.55 points or 0.4 per cent to 6,226.55. **Royal Dutch Shell**, up 0.9 per to £18.35, was the biggest points contributor.

Rio Tinto edged 0.4 per cent lower to £20.32 despite break-up speculation. Rio's move to put $9bn of assets into an Energy and Minerals segment "seems like a portfolio of unwanted assets that could be ready for a spin-off", said Bernstein. **Chemring** dropped 17.5 per cent to 115.3p after posting weaker than expected interims and warning that full-year results would be "slightly below market expectations".

Management blamed operational problems in the UK and Australia, and the late start of ammunition contract from a Middle Eastern customer.

Senior faded 12.8 per cent to 196.4p after warning of an earnings shortfall at its Flexonics industrial division, which makes engine parts and assemblies used in the energy industries.

ICAP added 3.8 per cent to 430.1p after Merrill Lynch added the interdealer broker to its "buy" list on valuation grounds. Retaining a 500p target price, Merrill argued that ICAP looked oversold given currencies other than sterling make up nine-tenths of its revenue, so it would not be significantly affected by a referendum Leave vote.

WH Smith added 0.7 per cent to £16.91 on a Stifel upgrade to "buy".

Stifel said in more than a decade in charge of the retailer, senior management had coped with the rise of Amazon and falling sales of CDs and DVDs, proving they could weather rougher storms than a potential Brexit. "In our opinion, WH Smith shares deserve to trade at a sector premium to reflect Travel unit growth and strong group free cash flow, the vast majority of which is returned to shareholders."

Markets & Investing
FINANCIAL TIMES

INSIGHT

Gilliam Collinsworth Hamilton

Chinese regulators show more joined-up approach to debt

When China's stock market plunged more than 30 per cent last year, the country's regulators leapt into action. Unfortunately, the leaping in question was less a graceful, synchronised jump and more a slapstick comedy routine as the government scrambled to retain control of its equity markets. Regulator actions were uncoordinated, at times even contradictory.

The disharmony was the result of two factors: the lack of will for significant interdepartmental communication and a desire to avoid responsibility for failing to save the markets.

Chinese regulators have distinct agendas that can be at odds with one another. By increasing insurance and bank exposure to the then-collapsing markets, bank and insurance regulators were at risk of dragging their own sectors into a mess they could not control.

Political advancement in China tends to be a zero-sum game, which can mean an emphasis on competition over co-operation. Regulatory ministers compete for senior positions, angling for control over economic groups. Behind the scenes, it was assumed that getting in too deep with the rescue efforts would make your own department responsible should the efforts fail.

This year, as debt questions loom, China's regulators are striking a different tune: working in concert to identify the problem, dispose of bad debt and contain prudential risk.

Traditional non-performing loans are on the rise, while opaque, retail-exposed structured product defaults threaten systemic stability.

The worst-case scenario would be that losing structured products default to drag down liquidity, causing banks to call in bad debt. This would cause a domino effect across NPLs, interconnected wealth management products and short-term financing vehicles.

> Politics can put an emphasis on competition over co-operation

This time, however, regulators are pre-empting the problem. More than 25 policies released in the past few months are meant to address these concerns. Regulators have been implementing national debt-equity swap programmes, establishing additional regulations meant to facilitate corporate debt restructuring, enhancing transparency in bank NPLs and banning high debt local governments from selling new debt.

All these policies have been enacted by the People's Bank of China, the China Banking Regulatory Commission and the ministry of finance. The CBRC and the China Insurance Regulatory Commission are also working together to cut down on short-term financing vehicles. They are also clamping down on systemic risk across sectors. The CBRC has released a draft of tighter risk management tools for securities firms, tightened underwriting measures for private bond issuance and strengthened measures to curb speculation across asset classes.

The CBRC has suspended a swath of commercial bank wealth management products, along with requiring banks to review credit risks in China's notorious overcapacity sectors. The CIRC has banned insurers from conducting business with risky non-bank financing platforms. It has also required insurers to suspend the not-so-legitimate business practice of helping banks move debt off balance sheet.

Regulatory co-ordination on this level does not occur without a tight leash from Beijing, which points to a central government conductor managing the strategy. This theory is bolstered by an article in the Communist party's official People's Daily that sketched out red flags in the economy. It talked of the need to clamp down on debt while identifying significant leverage in the economy, the two objectives already being carried out. The conductor in question is most likely a close adviser to Xi Jinping and potentially the same person interviewed in the article.

Our bet is on Liu He, one of Mr Xi's top economic advisers. Mr Liu is a long-time technocrat, having advocated for market-based policies since the 1990s. Look for his continued rise within the ranks: the greater the responsibilities he assumes, the more likely market reforms will overcome China's entrenched interests favouring the unsustainable status quo.

Gilliam Collinsworth Hamilton is the head of the Beijing office for NSBO, a Beijing-based China policy research house. The views in this article are his own and do not necessarily reflect NSBO house views.

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Analysis. Capital markets

New normal dawns if the UK votes to remain

Focus would turn to interest rate rises, global economic growth and company earnings

DAN MCCRUM

Rate sensitive

FT graphic Source: Bloomberg

The sun rises on Friday morning as votes pour in from all corners of the UK, revealing the decision of a country that at the last moment has decided to stick with the status quo after all.

Sterling, the easiest thing to buy or sell during darkness, will have been moving in response to the announcements of referendum returning officers all night. The London dawn will launch a special early session for trading in European government bonds.

For the traders and investors arriving early at their desks in case of the tumult a departure from the 28-country bloc had been expected to prompt, there is relief at a world returning to normal.

But, as markets move they will have to consider one question: what does normal look like, now? A year ago, after the Conservative party won the election which set the UK on a path to holding its EU vote, the FTSE 100 stock market index traded above 7,000. A pound was worth $1.59, and a 10-year Gilt offered buyers a yield of 2.2 per cent. Yesterday the respective values were 6,200, $1.47 and 1.26 per cent. Removing the possibility of a withdrawal from the common market, and the uncertainty entailed in talks about Britain's relationship with the EU, will probably prompt all three numbers to rise.

Beyond that lies a debate about the strength of UK growth, future corporate profits, and the moment when the Bank of England will increase interest rates for the first time since 2007.

Trevor Greetham, who invests in asset classes for Royal London, is an optimist. "The economy has been slowing because of the uncertainty to do with the referendum," he says. Resolution should see confidence and property rebound, he says, as activity postponed until after the vote resumes. "We're currently forecasting a November interest rate hike, and the market is just so far from expecting that it's untrue."

> 'When the fog clears, all of the problems will still be there'

Others are more circumspect, arguing there is not much time for a rebound to show up in the data which would guide any central bank activity. Activity may not bounce straight back. "If we're looking at the UK, and some of the softness in the data, actually it's possible this softness could continue just because it's created its own dynamic," says Justin Knight, interest rate strategist for UBS.

Indeed, look further abroad and the big questions are about the pace of global growth. Bond yields, which move inversely to prices, have collapsed to zero in Japan and Europe in response to bleak prospects for expansion and inflation. Andrew Lapthorne, part of Société Générale's alternative strategy team, says "investors will still be facing the prospect of negative rates and negative yields on a huge range of bonds, massive corporate leverage with worryingly rising delinquencies and of course expensive equity markets and falling profits".

"When the fog clears," he argues, "all of the problems will still be there."

Jim Leaviss, head of fixed interest at M&G Investments, is less of a pessimist, but says "you have to assume we don't immediately get rid of the political uncertainty". Sunday brings fresh elections in Spain, after a December vote failed to produce a government. The ability of a divided Conservative party to govern the UK may be in doubt.

Beyond that, even if Donald Trump does not win the US presidency, the discontent that has propelled him may also feature in French and German elections next year. But, Philip Rush, senior European Economist at Nomura, says a consequence of a vote to remain will be the activation of the EU deal secured by David Cameron, prime minister. A Remain result will also return attention to the question of what policymakers do next. "It will make it easier for the Bank of Japan to do its long-awaited easing move," he says, on the basis that it did not want to waste the effect of policy by acting in advance of any Brexit turmoil.

A week after the result will come the next big piece of US data on hiring. Strong growth in employment, and a Remain bounce could return attention to when the Federal Reserve next raises rates. What will be normal then, in the US and UK, may be to go back to waiting for signs of something absent for years. When it comes to the rate rises, says Mr Rush, "ultimately, it's when spot price and wage inflation pick up".

Referendum countdown

One day left: reading EU poll music

FT REPORTERS

Just one day remains until UK voters decide whether to stay in the EU. Here are the latest readings on markets and investor reaction.

Currencies

Dogged for the past three months by fears the UK will exit the EU, the pound has rallied this week after latest opinion polls showed the Remain camp had erased Leave's lead, with the sides now virtually tied.

After three straight days of strong gains, sterling weakened 0.2 per cent in late London trading after earlier touching $1.4781, close to the highest level of the year that it reached in January. The currency is up 1.3 per cent against the dollar in June — much of which was dominated by the Leave camp pulling ahead in opinion polls. Against the euro, the pound strengthened 0.2 per cent. It has gained 3.2 per cent in the past five days.

One-week sterling volatility — a measure of expected market moves and the cost of hedging against a sterling shakeout this week — fell again yesterday to 38.86 as fears of a Leave vote eased.

However, banks are wary of the threat of volatility in the aftermath of the result, which should be known early on Friday. UBS became the latest bank to tell customers that extreme swings may stop the bank from supporting customer orders.

Government bonds

UK government bonds have been one of the biggest beneficiaries of Brexit concerns, as investors turn to haven assets. However, with polls pointing to some momentum for Remain, gilts were under pressure yesterday. The yield on the 10-year gilt, which fell as low as 1.07 per cent last week, rose 5 basis points in London to 1.28 per cent, adding to Monday's sell-off. Robust demand for gilts has so far contradicted warnings from the UK Treasury that leaving the EU would trigger a sharp rise in borrowing costs for the government and companies.

The referendum outcome is now centre stage in global markets, with Federal Reserve chair Janet Yellen telling Congress yesterday a UK vote to leave could pose risks to wider financial stability and economic growth.

Bookmaker odds

Betting markets have seen a 17-point swing in favour of Britain voting to stay in the EU, as momentum has shifted towards Remain. The implied probability of a Remain vote stands at nearly 75 per cent, jumping from a low of just under 58 per cent last Thursday, according to Betfair-compiled odds.

Equities

Having ended last week on a firmer footing UK stocks surged on Monday and ended yesterday marginally higher. The FTSE 100, where member companies are more dependent on the rest of the world for revenues, rose nearly 0.4 per cent to stay above 6,200. Energy groups gained the most, rallying from early losses. The FTSE 250, where companies are more reliant on the UK economy's performance, ended 0.1 per cent higher.

Reporting by Richard Blackden, Rochelle Toplensky and Roger Blitz

JUNE 22 2016

FT GENERAL COUNSEL

RESEARCH PARTNER

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FT General Counsel

In-house lawyers step into the spotlight

The recent rise in importance and status of the general counsel, a company's chief legal officer, has an inauspicious origin, but some fascinating and groundbreaking careers have come from a period of creative destruction. These are the people we profile in the first FT General Counsel report and our FT Global GC 30 list.

The global crisis that began in 2008 forced legislators to look again at how they regulated financial companies, and in doing so they added layer upon layer of reporting requirements to the general counsel's workload.

Other crises since have also compelled companies in various fields, from oil to engineering, to manage a much more intrusive degree of compliance. One general counsel says regulatory matters have risen from 5 per cent to 70 per cent of his in-tray, and he has had to hire a much larger team to manage the extra work.

Fortunately for general counsel, with this greater responsibility have come greater prominence and greater importance in the company hierarchy. As you will see from the FT Global GC 30, general counsel are able to reorganise their divisions into a better fit for the threats they face; to become strategic advisers to chief executives and boards; and to innovate with imagination.

The 30 general counsel were chosen from internal submissions and external nominations, and had to have C-suite validation. They were then scored out of 10 for originality, business alignment, value creation and impact.

Technology is helping them in their innovation. The rise of artificial intelligence is taking some of the trouble out of contracts: using machine learning, computers can determine which might be riskier than others, for example, saving thousands of hours of lawyers' time.

Still, there are decisions a general counsel needs to make that cannot be electronically outsourced: those with an ethical dimension. A chief executive may expect his or her general counsel to justify a course of action, however (im)moral.

These are all aspects the general counsel featured in this report face. We hope that reading the report will demonstrate the intelligence and dexterity they require.

Josh Spero, commissioning editor

Inside FT General Counsel

FT Global GC 30
From fighting litigation and shaping legislation to reorganising businesses and even making money for their organisations, our top 30 general counsel have far more to offer than just legal advice
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The rise of the robots threatens over 100,000 jobs in the legal sector, but it also promises to make business faster and safer through artificial intelligence. Plus: how Wikipedia crowdsourced its legal advice
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As the most senior legal officer in the company, the general counsel has to ensure their business obeys the law — but when ethics is pitted against profit, what do they do?
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Contributors

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Freelance journalist

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Freelance journalist

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The FT Global GC 30

We have combed companies to find the best in-house lawyers, who are more than simply legal eagles

MARTIN BOWEN
Group general counsel
Dyson

Martin Bowen has developed a multidisciplinary intellectual property team at Dyson that has harnessed the power of new technologies to operate as efficiently as the company's vacuum cleaners. Consisting of lawyers, engineers and marketers, the team identifies products infringing on its IP across the globe and assembles the necessary information to launch a challenge within 48 hours. Dyson's IP team has been commended in the FT Innovative Lawyer reports for its extraordinary engagement in the business, which has generated significant cost savings. Max Conze, Dyson chief executive, describes Mr Bowen as "q critical partner and leader to all parts of the enterprise — from opening countries to opening factories, to defending our IP and to ensuring we serve Dyson owners flawlessly".

PHILIP BRAMWELL
Group general counsel
BAE Systems

With experience in the pharmaceuticals and telecommunication sectors, Philip Bramwell helps industries that are undergoing difficult change. When asked to describe the purpose of a corporation, Mr Bramwell says that it is "creating sustainable value measured by value to customers, returns to owners, opportunity to employers and benefit to wider society". Thus one of his big challenges is to continue to build trust in large corporations. This is not an easy task but one that is essential for a general counsel who was hired to embed a culture of compliance and ethics into one of the world's largest arms traders. Chief executive Ian King says: "Philip brings sound judgment and an unswerving commitment to the integrity and long-term sustainability of the business — these are the bedrock of his contribution."

GEOFF BRIGHAM
General counsel
Wikimedia Foundation

Winner of the first North American Innovative General Counsel award, Geoff Brigham has had a rich and varied career. It spans an education in music and law, and roles at the Department of Justice and as deputy general counsel at eBay. As general counsel of the Wikimedia Foundation, the non-profit organisation behind online encyclopedia Wikipedia, he leads a team of lawyers, legal specialists and Wikipedia's community of volunteers to draft policy and solve legal problems. Mr Brigham has pioneered the concept of crowdsourcing legal advice, which ensures policy is developed in a collaborative and transparent way. Importantly, it also builds essential support and links with the organisation's community. He says: "Lawyers, like regulators, must start embracing the 'sharing economy'," because businesses depend on individuals' resources.

General counsel, specific stars

MITSURU CLAIRE CHINO
Executive officer and general counsel
Itochu Corporation

When Mitsuru Claire Chino was appointed executive officer and general manager of Itochu Corporation's legal division in 2013, she became the first female executive director in a Japanese trading company, as well as the youngest. Since joining the conglomerate, Ms Chino has launched programmes to foster gender diversity. With Japan's poor record — women hold 3.1 per cent of board seats, according to a 2015 survey — initiatives such as her mentoring scheme were avenues for women in the company to find advice, and the programme has inspired more experienced female workers to think like leaders. "This is more of a wider comment about Japanese society, but I really do think that diversity (whether be it gender, age and so on) and more mobility in the workforce will result in more innovation," says Ms Chino.

IVAN FONG
Senior vice-president, legal affairs, and general counsel
3M

A trained chemical engineer, Ivan Fong epitomises the modern general counsel. Before joining multinational conglomerate 3M in 2012, he held general counsel roles at the US Department of Homeland Security, Cardinal Health and GE Vendor Financial Services. He created a vibrant compliance programme, improved supply chain management and developed a robust approach to intellectual property for 3M. He sees the purpose of a corporation as harnessing people, ideas and capital to increase social value. His chief executive, Inge Thulin, says his company's reputation "has flourished under Ivan and his legal team. When customers know they can trust you to operate with integrity in every industry and every part of the world, that is a tremendous competitive advantage."

TOM KILROY
Chief operating officer
Misys

Tom Kilroy, winner of the first Most Innovative General Counsel award, made the rare leap from in-house lawyer to acting chief executive officer in 2012, providing executive leadership in a critical takeover period. He joined Misys, a financial services software company, in 2009, and as general counsel and company secretary he has turned his legal team into a revenue-generating department. He helped Misys through a programme of transformation that has seen substantial growth in both sales and employee satisfaction. He now leads 900 of the company's 4,700 staff in his role as chief operating officer, and has created a path for other general counsel wanting to move into business leadership roles. When asked what he thinks the proper business of a corporation should be, he replies: "To invent the future."

FELIX EHRAT
Group general counsel
Novartis

The healthcare industry is undergoing a period of transformation, and Felix Ehrat and his legal team have led Novartis into new sectors and new ways of doing business. In 2013, his work on a joint venture enabled an exclusive global collaboration with the University of Pennsylvania to research, develop and commercialise a potentially revolutionary immunotherapy treatment for cancer. Last year the FT featured the role Novartis lawyers are playing in the company's approach to digital medicines. Chief executive Joseph Jimenez says: "Legal is one of the drivers of economic growth of our company." Mr Ehrat believes legal has a key role to play in supporting and shaping the change under way in healthcare. He believes "drivers for success will be an appetite for change, flexibility, courage and resilience".

AMANDA HARKNESS
Group general counsel
Australian Securities Exchange

In a broad role at Australia's primary securities exchange (ASX), Amanda Harkness has an influence that extends to the success of Australia's financial markets and exchanges and regulators overseas. Ms Harkness has found faster pathways for regulatory approvals, reduced the cost of compliance and enabled the ASX to launch numerous products and services. Elmer Funke Kupper, ASX's former chief executive, says that "without a doubt" she has given the business a competitive advantage, enabling it to compete with much larger exchanges elsewhere. He says: "Amanda played a key role in ensuring that the Australian regulatory framework and ASX's implementation are 'fit for purpose'." Ms Harkness recently helped ASX to introduce distributed ledger technology, which has the potential to accelerate the post-trade process.

EDWARD KNIGHT
Executive vice-president and general counsel
Nasdaq

The Nasdaq stock exchange operates at the intersection of technology and regulation. Edward Knight heads a legal and regulatory team of 200, supporting the business in highly regulated markets. Unusually, it can be viewed as an extension of the regulator and its role is to create new rules and to enforce them. Mr Knight thinks the business has much in common with a Silicon Valley technology company, and has built a team of lawyers with diverse experience and computer programmers to work alongside one another. They are also inventors and revenue generators, and have patented a market surveillance technology to be used by regulators. Mr Knight sees the general counsel of the future as having "dual degrees in the law and computer science or computer engineering".

DAN FITZ
Group general counsel and company secretary
BT Group

Facing a year-on-year budget cut of 5 per cent at the telecommunications group, Dan Fitz reorganised his team to deliver legal, compliance and governance advice more effectively and efficiently. He has improved every aspect of how the legal team, which won BT the Europe Innovative Lawyers in-house award in 2015, now operates. Two years earlier, Mr Fitz led the creation of BT Law, an alternative business structure that services legal claims for BT and other clients and generates £5m in annual revenue. Gavin Patterson, BT's chief executive, praises Mr Fitz's global reach and perspective; he also admires the way his team of 450 lawyers "interacts intensively" with each other and the business. He adds: "Through Dan, BT benefits from an extensive network of external and internal legal talent."

BRENT IRVIN
Vice-president and general counsel
Tencent

Brent Irvin joined Tencent in 2010 to build a legal team for the fast-growing Chinese internet company. He describes his greatest challenge as "managing increasing regulatory scrutiny and litigation while still allowing the company to serve users in a fast and creative way". In 2012, Mr Irvin established the Tencent Cyber Law Research Centre, a forum to share best practice, and his team continues to play a role educating the Chinese courts and regulators about the importance of protecting intellectual property. When asked if he had one big idea that would improve how his industry operates, he replies: "I think the use of technology needs to get better. While there are moves in this direction already, too often lawyers work through hard issues by simply working hard(er)."

MASSIMO MANTOVANI
Head of legal and regulatory affairs
Eni

Massimo Mantovani could be considered the king of legal function organisation. On joining Eni, an Italian oil and gas company, in 2007, his first priority was to centralise legal operations, followed by a restructuring that was radical at the time: organising the internal lawyers to reflect the company's largest risks rather than its business lines. It has enabled the in-house legal division to become what the chief executive now describes as "an essential strategic and problem-solving partner to the business units". Mr Mantovani plays a leading role fighting corruption and bribery in business globally. He helped the United Nations to establish an oil and gas sector working group and worked with the International Bar Association and others to develop an anti-corruption strategy for the legal profession.

FT General Counsel

ROSEMARY MARTIN
Group general counsel and company secretary
Vodafone

The winner of the FT's inaugural in-house award in 2007 and its special achievement award in 2014, Rosemary Martin personifies a general counsel at the top of her game. Her first general counsel role at Reuters saw her shift the status of the in-house legal team from that of cost centre to driver of growth. The team had an extensive remit, from advising on government and regulatory affairs to social responsibility. Ms Martin also spent time as chief executive for the Practical Law Company before Vodafone. When asked for one big idea on how to improve the way her industry works, she replies: "I would love to see the industry adopt more standardised contracts and start using smart contracting and distributed ledger technology to speed things up and reduce uncertainty."

LOUISE PENTLAND
Senior vice-president, chief legal officer and company secretary
PayPal

In her previous role as chief legal officer of Nokia, Louise Pentland led her team through a period of dramatic change: she merged the legal and intellectual property departments, created platforms to enable collaborative working and encouraged lawyers to broaden their skills in other areas of law or business. The agile team she developed was better equipped to adapt to the quickly changing needs of the business. A supporter of diversity in the legal profession, she mentors young women and speaks on panels to encourage more women to pursue the role of general counsel. In 2015, Ms Pentland took on her current roles at online payments service PayPal. One of her first projects has been to launch a global pro-bono initiative to provide legal services to communities worldwide.

DONALD ROSENBERG
Executive vice-president, general counsel and corporate secretary
Qualcomm

Donald Rosenberg has revolutionised Qualcomm's intellectual property strategy and delivered substantial returns to the company, which develops wireless technology and services. He took on the role at Qualcomm after a stint as general counsel at Apple and nine years with IBM. In addition to numerous internal process improvements, his chief innovation has been the creation of a cross-functional intellectual property litigation department with lawyers, engineers and business professionals. In doing this, he made the company more active in its defending its IP than it had been. He says the best way to improve the industry would be to "respect and value IP for what it has been and will continue to be — the driver of innovation and progress."

CARMEL MULHERN
Group general counsel
Telstra

Carmel Mulhern heads the legal team at Australia's largest telecommunications and media company and is the winner of the 2016 Asia-Pacific Innovative Lawyers in-house legal award after many peer recommendations. She finds ways to better harness lawyers' energy and creativity, and reinvent the way the legal team and the business operate. She has introduced ideas such as design thinking, which encourages creative approaches to problems, and sprints (short periods for rapidly developing and testing ideas) to find new ways of working in any business area. Telstra's chief financial officer endorses Ms Mulhern's ability to deliver competitive advantage to the business. Ms Mulhern says that her one big idea for making the industry better is: "To focus on customer experience. And we can do this just as easily as lawyers as commercial people."

BILL REILLY
Senior vice-president and group general counsel
Ansell

As the first appointed general counsel of Ansell, Bill Reilly has had to get his hands dirty. Luckily he works for a global maker of rubber gloves. One of the company's longest-serving executives, he has built a lean team of 11 lawyers who serve a $1.6bn company operating in over 50 jurisdictions. He has helped to develop the company's patent portfolio and his knack for negotiation has driven a successful mergers and acquisitions strategy. Mr Reilly's technological foresight has meant the company's legal team was quick to adopt the Serengeti legal tracking platform and automate its contract management processes. When asked what he does that his chief executive does not know about, he says: "Invest time in continuous learning (market knowledge, new processes, management skills), mentoring senior leaders."

THOMAS RUSSO
Executive vice-president and general counsel
AIG

Over the past five years, Thomas Russo has helped bring insurance group AIG back from the brink of bankruptcy. He organised and centralised much of AIG's $2.5bn annual legal budget, allowing the company to collect data and exercise greater control. In 2015, AIG announced plans to launch a consulting business that will draw on the company's legal purchasing data to help other business buy legal services at competitive prices. In Mr Russo's view, the general counsel of the future must embrace technology. Referring to recent developments in artificial intelligence, he says: "If a computer can beat the most sophisticated expert in the most complicated game, it can answer or draft a complaint and can produce a quality first draft of a brief or merger agreement."

TIMOTHY MURPHY
General counsel and chief franchise officer
MasterCard

Bringing experience from a range of senior business roles to the job, Timothy Murphy is an unusual general counsel. Before his current position, he was MasterCard's chief product officer and president of its US business. He says that these experiences have changed his understanding of what it means to deliver value as a lawyer. During his time as general counsel, Mr Murphy has reorganised and embedded lawyers into the business, positioning them as co-investors in its future. He has drafted and driven new business strategies and continues to add to the company's growth by developing products and strengthening its approach to intellectual property. Protecting patents for the company's payments technology has delivered a clear competitive advantage.

STEVEN RODGERS
General counsel and senior vice-president
Intel Corporation

Since joining Intel in 2000, Steven Rodgers has risen through the ranks and in 2014 took on his current roles. Mr Rodgers leads Intel's law and policy group and is a senior member of the executive team. In 2015 he introduced a programme to identify and nurture talent at law firms used by the company, giving greater opportunities to high-performing junior lawyers and helping to build long-term relationships with them. He has been heavily involved in Intel's successful litigation strategy, with several prominent victories including a case at the International Trade Commission that helped to prevent a ban on the import of Intel microprocessors into the US. He oversees a team of about 500 lawyers across over a dozen countries and has advised on Intel's billion-dollar investments in China.

JOS SCLATER
General counsel, director of strategy and mergers and acquisitions
GKN

Jos Sclater, who leads the legal team at GKN, the global engineering company, is one of a new breed of general counsel. GKN's chief executive, Nigel Stein, says Mr Sclater "contributes on a broad front far beyond the normal remit of a general counsel" and he was even interim head of human resources for a period. Other functional responsibilities include being head of corporate strategy, where his leadership of successful acquisitions has given the GKN board the confidence to take more risk. He enables the legal team to play a more influential role with the business. Mr Sclater says: "The general counsel of the future will have to possess a bigger toolkit with which to add value to the business, from general commercial acumen to financial and project management skills."

FT General Counsel

EDITH SHIH
Group general counsel and corporate secretary
CK Hutchison Holdings

Edith Shih joined diverse Hong Kong-based conglomerate Hutchison Whampoa in 1993 as its sole legal counsel. She now leads a team of around 300 lawyers and in 2015 helped guide Hutchison Whampoa through its $24bn merger with Cheung Kong Holdings to form CK Hutchison Holdings. Ms Shih is viewed by her colleagues as an enabler of the company's expansion. Her team has handled a number of large acquisitions, including those of mobile phone networks Orange in Austria and O2 in Ireland. It also manages complex regulatory and compliance requirements across a business operating in more than 50 countries. Ms Shih says she would like to see "senior leaders in the in-house counsel industry" create a trade organisation to promote "the interest, growth and wellbeing of the industry".

GEOFFREY TIMMS
Group general counsel
Legal & General

While the general counsel may traditionally be viewed as the goalkeeper on a football team, Geoffrey Timms has been described by his colleagues as a free-scoring midfield player — an all-round achiever, rather than a reactive pair of hands. He leads a lean team to support a financial services company with annual revenues of over £17bn. He has helped the business hold the biggest market share in its sector through organic growth and a series of mergers and acquisitions. Mr Timms is described as a great motivator and someone who shares the collective ambition of the Legal & General group. He says the job of the general counsel is to: "Make judgment calls. For example, going to the wire on difficult external negotiations and taking full responsibility for the outcome. General counsel are expendable, chief executives are not."

KENT WALKER
Senior vice-president and general counsel
Google

Describing his role as "adviser and advocate", Kent Walker believes that "one key to being a good general counsel is making sure that you're deeply in sync with the business. Even the behind-the-scenes work should be in the service of the company's mission."
He says that mission, in Google's case, is to organise the world's information and make it universally accessible. To do so sometimes requires fighting high-profile battles in court against competitors and governments. Google's success means Mr Walker is prominent in resolving complex issues in an industry that often moves into areas the law has not yet contemplated. However, the value he delivers to the business is not just in solving problems but anticipating them. (*See page 11 for an in-depth profile.*)

DAVID SNIVELY
Executive vice-president, secretary and general counsel
Monsanto

David Snively is general counsel for a controversial company. Agrochemical producer and biotechnology developer Monsanto has been criticised by environmentalists for its work with genetically modified crops and has endured public demonstrations against its work. This puts Mr Snively in a delicate position, as bringing new products to market means Monsanto has to get clearance from multiple regulators for each one. This extensive regulatory work is matched by often high-profile litigation. The legal team won the FT's Most Innovative In-house Legal Team award in the US in 2013. He says that his big idea to improve how his industry works is to "overthrow the 'precautionary principle' since it constrains advancement of innovation and society by diminishing the role of science".

DIRK TIREZ
Chief legal officer and company secretary
bpost

In his time at bpost, Dirk Tirez has seen Belgium's postal company go through substantial change from a state-owned bureaucracy to a private company and, in 2013, to a public company. Along the way, he has overhauled compliance and changed the perception of the legal team from an old-school support service to value-adding strategists, in line with other general counsel across industry. Several in-house lawyers now hold management positions. Mr Tirez says he thinks the counsel of the future will help to create value and influence. He believes that they will also resolve the tension that is inherent in a role that encompasses being a strategic leader, a trusted adviser and a problem solver. Furthermore, he feels that they will become an integral part of boardroom culture.

CLARE WARDLE
Group general counsel and company secretary
Kingfisher

When asked to describe the role of the general counsel in three words, Clare Wardle of multinational retailer Kingfisher gives it a new title: "chief sorting officer". With a background at the Royal Mail and the Post Office, this may refer to ensuring missives reach their correct recipient, but is more likely to mean the role she plays in corporate problem solving beyond her legal and compliance responsibilities. She is widely recognised as a trailblazer for women in the boardroom and a leader in both the business and legal worlds. Women occupy more than half of Kingfisher's leadership roles and this is in part credited to the Kingfisher Women's Network, established by Ms Wardle. When asked what things she does that her chief executive does not know about, she replies: "Join the dots for people."

TIM STEINERT
General counsel
Alibaba

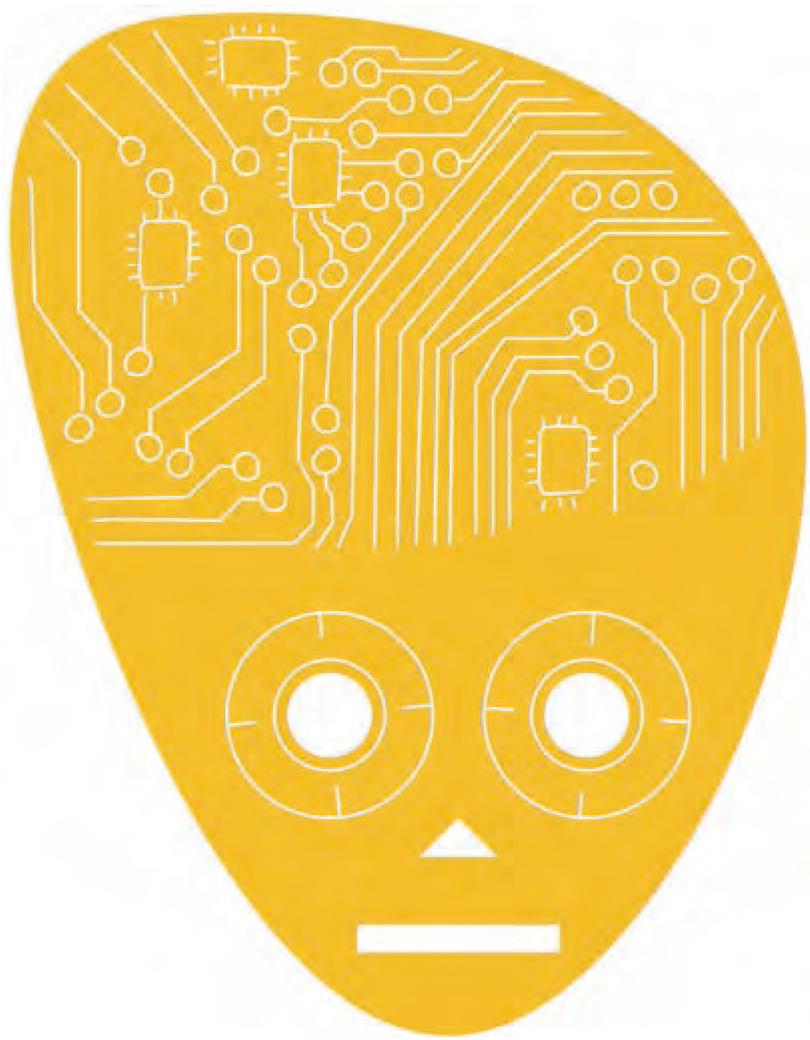
In 2007, Tim Steinert left the corporate practice at Freshfields Bruckhaus Deringer for a post at an internet ecommerce company that was less than 10 years old, based in Hangzhou, China. After nine years at the helm of Alibaba's in-house team, Tim has built it into one of the world's most sophisticated. It was commended as both operationally efficient and technically brilliant. In 2014 alone the team handled around 50 complex financing transactions, in addition to Alibaba's $25bn stock offering, the world's largest. Mr Steinert has harnessed Alibaba's analytics and processing power to better scrutinise contracts. Mr Steinert says: "If you don't have the data, you can't have an objective and comprehensive basis to make . . . assessments and target the area you need to fix." (*See page 11 for an in-depth profile.*)

DAN TROY
Senior vice-president and general counsel
GSK

Since he joined GSK in 2008, Dan Troy has been working to move the legal profession away from its reliance on the hourly rate — acknowledged by some law firms' managing partners as the main obstacle to innovation in the sector. His department collects extensive data on company's spending on lawyers and has invested in fee analytics. Mr Troy has pioneered approaches to incentivise law firms for delivering better value and efficiency. It now employs a reverse auction process for large matters, selecting firms based on factors besides price, such as diversity. He says that the general counsel of the future will be: "Global, mobile, digitally and IT savvy, flexible, forward leaning, comfortable with uncertainty but able to provide stability to legal departments, executive teams and boards."

GEOFF WILD
Director of governance and law
Kent County Council

The first in-house lawyer to set up a revenue-generating model for his department, Geoff Wild pioneered the idea that a legal team could move away from being a pure cost centre. This shared-service model has been adopted by several other general counsel working in the private sector. Mr Wild's work at Kent County Council has been featured in the FT Innovative Lawyers report on several occasions, and Mr Wild himself won the Most Innovative General Counsel award in 2014. Over a decade, Mr Wild and his team have brought in profits of over £15m to Kent County Council to help fund community services. The three words Mr Wild uses to describe his role: "Peace. Of. Mind." David Cockburn, head of paid services at the council, says that Mr Wild "returns reputational and financial benefit [and] gives us real competitive value".



Cashing in on compliance

Regulation Corporate experts are turning the weight of rules into new sources of business, says *Reena SenGupta*

Emrah Turudu/Getty Images

At an early gathering of the Innovative GC Club in 2013, a forum for general counsel ranked in the FT Innovative Lawyer reports, one senior delegate made an offhand comment that the regulator had gone mad. She was referring to the plethora of regulations with which global corporations now need to comply and the burden they have generated.

One of the striking developments over the past five years for in-house lawyers is how compliance has become a large part of their remit. Massimo Mantovani, the group general counsel of Eni, the Italian energy company, estimates compliance went from representing 5 per cent of his workload to 70 per cent between 2012 and 2014. He says that the compliance team is still growing.

Martim Della Valle, European general counsel of Anheuser-Busch, the brewing company, was appointed to a new role as global head of compliance in January 2015 alongside his legal job. He now manages a team that increased from two compliance professionals to 34 in less than three months.

The office of the general counsel is an obvious destination for regulatory work, given their broad legal focus. As James Ormrod, the general counsel of outsourcing company Mitie, says: "In-house lawyers often play the role of the white blood [cells] in an organisation" — meaning they fight external threats, just as the cells fight infections.

However, it is an obligation that is getting worse. In-house legal departments, regardless of company type and nationality, have faced a common and persistent challenge since the financial crisis of 2008: the need to do more with the same or fewer resources. Adding to this burden is the fact that it is impossible for companies to be 100 per cent compliant with every country's regulations if they operate in multiple jurisdictions, as rules are often contradictory.

The requirements for internal investigations, for example, vary across jurisdictions. In some, the authorities are happy for the company to carry out full forensic searches into potential regulatory breaches. In others, privacy and data laws mean authorities require the company to have no dealings with the breach.

Furthermore, the costs of compliance go beyond employing lawyers. Sarah Bower, chief legal counsel at KPMG China, says: "It is difficult to capture the overall cost of compliance for companies. Banks with an Asia-wide footprint may be submitting 50,000-60,000 regulatory and tax reports per year in Asia alone. The largest banks with broad Asia footprints may be submitting as many as 90,000," she says.

The volume and complexity of reporting, where often the reports are bespoke for different regulators, also means companies have to design, create and manage thousands of systems, notes Ms Bower.

> Banks may be submitting 50,000 to 60,000 regulatory and tax reports per year in Asia

This burden is affecting company results. According to a study published by Deloitte based on research by RSG Consulting (the company belonging to this article's author and the FT's research partner for this report), 56 per cent of 243 global general counsel and C-suite directors said that the area of legal spending experiencing the most rapid growth was regulatory compliance.

However, there is evidence that general counsel are turning regulation into a competitive advantage. Some take a simplifying approach. For example, Jos Sclater, general counsel of GKN, the British engineering company, says it had looked at compliance tools from the Big Four accountants, but felt they were over-engineered and decided to build its own.

Others have tried to turn compliance with ethical legislation and guidance, such as the UK's Modern Slavery Act or the UN's guiding principles on business and human rights, to their benefit by offering early statements and transparent reporting. Such thinking has led BT to formalise a robust human rights policy.

Peter Solmssen, the former general counsel of Siemens, attributes part of the company's quick settlement and emergence from the cloud of bribery and corruption investigations in the mid-2000s to the constructive and co-operative relationship he had with various regulators. This meant the investigations were conducted in a less adversarial and punitive atmosphere than otherwise might have been the case and more in a spirit of resolution rather than blaming and shaming.

The regulatory and compliance problems of multinational corporations are turning into an opportunity for some firms to create new services. KPMG, for example, is aggregating vast amounts of regulatory data from all around the world. It is also monitoring the development of emerging regulations over a three to four-year time span. The purpose of all this is to help clients identify regulatory obligations likely to be imposed in the medium term.

Ms Bower, who leads the initiative, says this tool is helping companies turn their regulatory challenges into a strategic advantage.

In-house teams balance profit against morality

Blend Images/Getty Images

Ethics Advisers can often be embroiled in tricky dilemmas, says *Rhymer Rigby*

A recent piece of research from University College London on in-house lawyers, Mapping the Moral Compass, has caused a stir in the legal community. It identifies four main ethical groups of in-house lawyers: the capitulators, the coasters, the comfortably numb and the champions. Perhaps unsurprisingly, some general counsel have taken exception to these characterisations.

"There's an inference that in-house lawyers' ethical positions need to be questioned," says Rosemary Martin, group general counsel at Vodafone, the telecoms group. "It seems to suggest that in-house lawyers are likelier to be morally compromised than those in outside practice."

However, 36 per cent of research respondents said that legal loopholes should be identified when they benefited the business and 30 per cent said an emphasis on commercial awareness could inhibit their role as an in-house lawyer. The controversy of this research notwithstanding, it also points to other questions about the world of the general counsel. The first is how much this role has grown over the past decade. The second is whether the general counsel should act as some sort of moral compass.

The in-house legal function has grown in size and status. A 2014 survey by the legal recruitment specialist Laurence Simons showed that in-house legal teams covering Europe, the Middle East and Africa had increased by 60 per cent between 2010 and 2014. The Law Society's GC350 study in 2016 concluded that, in FTSE 350 companies, two-thirds of general counsel sat on boards or executive management teams. Meanwhile conglomerate General Electric has a legal department of 5,000, comparable to some of the biggest law firms.

There are several reasons for this growth. The collapse of energy company Enron in 2001 shone a light on the potential conflicts of interest facing general counsel. Neal Batson, the court-appointed bankruptcy examiner, wrote in his 2003 report on Enron that its in-house counsel "considered [Enron's] officers to be their clients when, in fact, the attorneys owed duties to Enron". The banking crisis of 2008 also put heads of legal departments in the public eye. A notable example was Thomas Russo, the general counsel who played a pivotal role in steering insurer AIG after its turmoil.

The question of whether a general counsel should be a moral compass remains a matter of debate. Undoubtedly the role has changed in ethical terms, says Ms Martin.

"When I was first practising law in business in the 1980s, the question was, 'is it legal?' Now that's no longer sufficient." With social media, the question "how it will look in the court of public opinion?" has become more important as companies need to consider not only broad public opinion but online communities. "Social media has broken down a lot of boundaries," says Ms Martin.

General counsel, she says, often possess a degree of scepticism and objectivity that allows them to point out the moral dimensions of a problem as well as the reputational risks.

Susan Liautaud, founder of an ethical consultancy and vice-chair of governors at the London School of Economics, says complying with the law is not enough. "My vision of the law is that it is the lowest common denominator. It's not a reflection of the highest standards a company and its stakeholders should adopt. There are standards above and beyond the law."

Moreover, she says, it is wrong to see one person as a moral repository: "If you look at one leader to be the guardian of ethics, it absolves everyone else of responsibility."

Instead, the chief executive and board should lead from an ethical viewpoint and "all the employees of the company should integrate ethics into their decision making".

The general counsel, she says, should consider ethical factors and point them out in their advice. "But someone else needs to make these decisions. It is not the general counsel's decision to make where there is a conflict between ethics and law."

> There can be pressure to make certain decisions, even when they are ethically wrong

There can be great pressure to make or endorse decisions even when, ethically speaking, they are wrong. The UCL research found 10-15 per cent of in-house lawyers had experienced "elevated ethical pressure" while 9 per cent felt "saying no was to be avoided, even when there is no legally acceptable alternative".

In enlightened organisations, however, in-house legal staff can be champions of higher standards. Sophia Yap, former Asia-Pacific general counsel at commercial property group CBRE, says counsels and their teams need to be agents of change: "They have the influence, they can raise the bar . . . and raise the ethical standard."

Some go further and act as champions for entire industries. Brian Lowry, deputy general counsel for agriculture company Monsanto, plays a visible role outside the company on matters such as food security, the agricultural biotech debate and human rights. He co-chairs the US business working group on the UN Sustainable Development Goals.

However, as Ms Liautaud says, legal teams cannot function in isolation and the real reason that the general counsel should possess an ethical compass is because everyone in a good organisation should have one.

Stone Sub/Getty Images

Robot power strengthens services

Technology will give more power to company lawyers, writes *Sarah Murray*

While many talk of robots replacing lawyers — a report from professional services firm Deloitte has even predicted 114,000 legal sector staff could lose their jobs to artificially intelligent programs — the reality may prove to be more complex. Automation may instead transform the nature of people's work rather than necessarily reducing the demand for their skills.

Much digital innovation is taking place among in-house legal teams, which are under pressure to increase productivity and lower risk levels.

For AIG, the insurance group, data mining is being used to improve the hiring of external legal service providers. When looking at its suppliers — more than 1,500 with over 30 business lines in 90 countries — the company realised it would never be able to obtain the best services at the best value using a manual process.

AIG now has automated tools that can send requests to suppliers for information on everything from the geographical regions they cover to their areas of expertise. The information is fed into a regularly updated database.

This data-driven approach — along with organisational change, the creation of a purchasing unit and consolidating the company's approach to purchasing — has generated savings of $200m a year on legal services.

Technology can help to drive other efficiency gains, particularly when it comes to laborious contracting work.

"There's a core productivity issue in law," says Tim Pullan, founder and chief executive of ThoughtRiver, which provides contract intelligence software to the legal sector. "If you gave a lawyer a contract to review today, it would take the same time [to do] on average as it did 20 years ago."

However, by applying "machine learning" — the ability for software to train itself without being programmed — to the review of contracts and other legal tasks, teams can save time that is better used elsewhere. This is the aim of Dentsu Aegis Network, a London-based media, digital and creative communications business. It is working with ThoughtRiver to use machine learning to increase automation and lower risks in contract departments. After scanning thousands of documents, the system — which is currently being tested — can identify specific language and word patterns that assess the value and risk of each contract.

For example, a contract governed by Singaporean law with Singaporean courts specified for dispute resolution would be categorised as low risk. A contract based on China's governing law, under which dispute resolution would take place in courts in Beijing, would be deemed higher risk. Nick Tomlinson, Asia-Pacific general counsel at Dentsu Aegis, says this information is depicted graphically on a dashboard based on the set parameters. "When you run the assessment report it highlights the relevant text in the document."

Teams can then decide how to apportion contract workloads by distinguishing those that are high risk and high value — whether in monetary terms or because they relate to important clients — from ones that are low risk and low value.

"It helps us think about who is the right person to review specific agreements and, if it's low value, low risk, whether the contract needs a full legal review or could be handled by a contract manager or paralegal, or eventually a non-human review," says Mr Tomlinson.

A similar principle lies behind the development of UK company Riverview Law's Kim, a legal virtual assistant, which the in-house services provider licenses to its customers. Kim uses artificial intelligence to help in-house teams improve and speed up their decision making.

Kim has three levels of complexity. In the first, automated process-level assistants prioritise the management of workloads. "You now know what work you've got, who it goes to, how long it takes and what it costs," says Karl Chapman, chief executive of Riverview Law. "And when you have that type of data, you're laughing because you suddenly have control."

At the next level, artificially intelligent advisory assistants automatically send information to legal teams about the cases they are working on. Smart assistants go a step further and offer potential solutions based on analysis of thousands of past cases.

The system can identify improvements and efficiency opportunities by analysing and learning from past contracts that can be applied to new ones. It sends these to the legal team, which can review them and make decisions accordingly.

But while the new technologies may generate cost savings, in-house lawyers stress that their real power lies in reducing risk and helping to deploy human resources more effectively. This is the main attraction for Mr Tomlinson. "Our business is growing so part of the objective is to scale the growth of the legal team with the right level of resource and smarts — rather than simply just adding more bodies," he says.

He dismisses predictions that artificial intelligence will replace lawyers. "It's not necessarily firing up the robots and reducing our headcount," Mr Tomlinson says. "I'm not doing myself out of a job."

Wikipedia
Crowd control

Sometimes a general counsel needs to look outside his team for legal advice. Take Geoff Brigham at the Wikimedia Foundation, the non-profit group that supports and runs Wikipedia, the online encyclopedia written by volunteers.

When Wikimedia wanted to revise its terms of use policy, it asked its community to make edits to the group's proposal, just as members edit Wikipedia entries. After 200 changes, the draft was put to the board.

Mr Brigham stresses the importance of being prepared to accommodate stakeholders' suggestions. "There were certain provisions they were concerned about," he says. "And in another world as a general counsel, I might have insisted on keeping those provisions. But as general counsel, I made decisions on what made sense for our community."

Sarah Murray

Meet the GC: Searching for Google's Kent Walker

Working in a business that is inventing the future poses challenges to a profession that is used to relying on the past

The stars of a technology company are usually those sitting at computers, crunching away at the code that creates the future. But at Google, general counsel Kent Walker and his team have received their fair share of the limelight, too.

When commending the team for the FT Innovative Lawyers' In-house award in 2013, executive chairman Eric Schmidt said the lawyers were able to articulate the detail of the company's new products as well as its product designers.

Others who had worked for many years in industry felt the in-house lawyers' job at Google was particularly hard because they had to work in an environment of so-called "zero precedent". "They touch things that the world has never seen before," says one colleague.

The ability of Google's lawyers to get their heads around the company's latest innovations is essential to the performance of their role. Mr Walker says that not only do the lawyers have to think about developments such as the implications of driverless cars, Google Glass and machine learning, they have to anticipate what is coming. "It is like being in a perpetual law school exam, where you have to twist the hypothetical 10 degrees from centre," he says.

He adds that the lawyers' role is to further the company's mission but says that, at the same time, they have to be counsellors to the business and ensure it steers a safe path through legislative and regulatory frameworks. He believes this is where his team of lawyers gives the company a competitive advantage.

However, Mr Walker agrees that the role is complicated by working in a "what if?" culture where possibilities are explored before either the law or society is ready for them. "In this era of rapid change you need to think about using your imagination as well as your ability to understand precedent," he says. "We hope that our advice moves things in the right direction and on the side of our users."

There are downsides to working in this environment. Lawyers find it hard to adapt their risk-averse approach to Google's more experimental one, Mr Walker suggests, and there are fewer of the anchors and less of the tradition that an in-house lawyer might find in a more traditional company.

It is part of the reason that many members of the legal team are under 30 years old. It is essential for a Google lawyer to understand the products and those that are likely to be groundbreaking.

"Some of our team, for example, think about the legal and policy implications of machine learning in applications like Google Translate, image search and spam detection," says Mr Walker. The rich philosophical debates that ensue are meat and drink for young lawyers.

One such project in which the lawyers were instrumental was Project Loon, Google's idea to introduce internet connections to less developed countries via weather balloons with wireless transmitters. It was an ambitious idea from the founders but it was the lawyers who ran a test scenario with the New Zealand government and negotiated with governments to make sure it complied with regulations — now Project Loon is on its way.

There are fewer of the anchors and less of the tradition that an in-house lawyer might find in a more traditional company

Meet the GC: Alibaba's Tim Steinert moves justice online

The company has hopes of helping China's legal system to step into the internet age and become more complete

As leader of the legal team at Alibaba Group, the Chinese online sales company, Tim Steinert tends to eschew the limelight. But it is difficult to escape it completely as Alibaba is one of the most high-profile and controversial companies in the world, a mixture of Amazon, Walmart and eBay. Its initial public offering in 2014, which raised $25bn, was the largest in history.

Powering much of its momentum is the legal team, an internationally capable group whose 50 big transactions a year constitute a steady diet of work. Behind the IPO lay a unique governance structure devised by the lawyers to enable the founders to continue to maintain the culture and management structure of Alibaba.

Mr Steinert, an American and ex-Freshfields Bruckhaus Deringer partner, joined the company in 2007. A technically superb lawyer, according to those who nominated him for the FT Innovative Lawyer In-house award, he manages a team of more than 250. He believes the role of the in-house legal department should mirror the values of the company, which in the case of Alibaba is to make it easy to do business anywhere. "We believe in harnessing the power of the internet to make small businesses successful, especially in economies with high levels of state ownership," he says.

This approach means the legal team often takes a leadership role in important societal conversations in China. For example, in 2014 it established the Alibaba Legal Practice Research Centre as a forum in which government, academia, legal practitioners and industry leaders can exchange views on internet-related legislation. It allows Alibaba to have an influential role in how the internet should develop in China — although the supremacy of the government must not be forgotten.

Alibaba does not lack issues to occupy its lawyers: the US Securities and Exchange Commission is investigating the group's accounting practices, and Alibaba's platform has been accused of tolerating the sale of counterfeit goods. Last week founder Jack Ma said the company had "to do everything to stop the fake products" but that counterfeiters were "making better products at a better price".

A related initiative supported by the legal team is co-operation with China's Zhejiang province to build a platform for an online court for ecommerce disputes. Once this court is fully up and running, it will benefit Alibaba by making it easier for customers to resolve disputes over items they have bought, including potential counterfeits, as well as the broader court system.

However, the hidden benefits are potentially more profound. The Alibaba legal team already collects many pieces of data from their litigation; with the establishment of the online court, these data will be enhanced and can then be used to prevent litigation by identifying its causes, or where contracts fall down and which clauses are useful or not.

"It is tremendously exciting to help the justice system step up into the internet age," says Mr Steinert. "And ultimately we hope it will promote a more complete justice system in China."

Interviews by Reena SenGupta

The entire litigation process can now be done online, from the initiation of proceedings to the hearing and final decision

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