FINANCIAL TIMES

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Governments must keep up the pressure — SARAH GORDON, PAGE 11

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Large tracts of the US have lost their entrepreneurial verve — BIG READ, PAGE 9

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Tech's Big Five race to win new markets — RICHARD WATERS, PAGE 14

Carney issues stark warning with package to ease Brexit downturn

● First BoE rate cut for 7 years and £70bn injection ● 250,000 jobs in peril, says governor

EMILY CADMAN

The Bank of England launched its biggest stimulus package since the financial crisis yesterday and said it stood ready to make further interest rate cuts this year in an attempt to cushion a looming Brexit-induced downturn.

Mark Carney, BoE governor, said there was a "clear case for stimulus, and stimulus now" after a string of business surveys suggested the UK was heading for recession because of the uncertainty following Britain's vote to leave the EU.

Mr Carney warned that despite the central bank's "exceptional package of measures" — which included its first rate cut in more than seven years and a new £70bn bond-buying programme — 250,000 people were set to lose their jobs because of the economic shock.

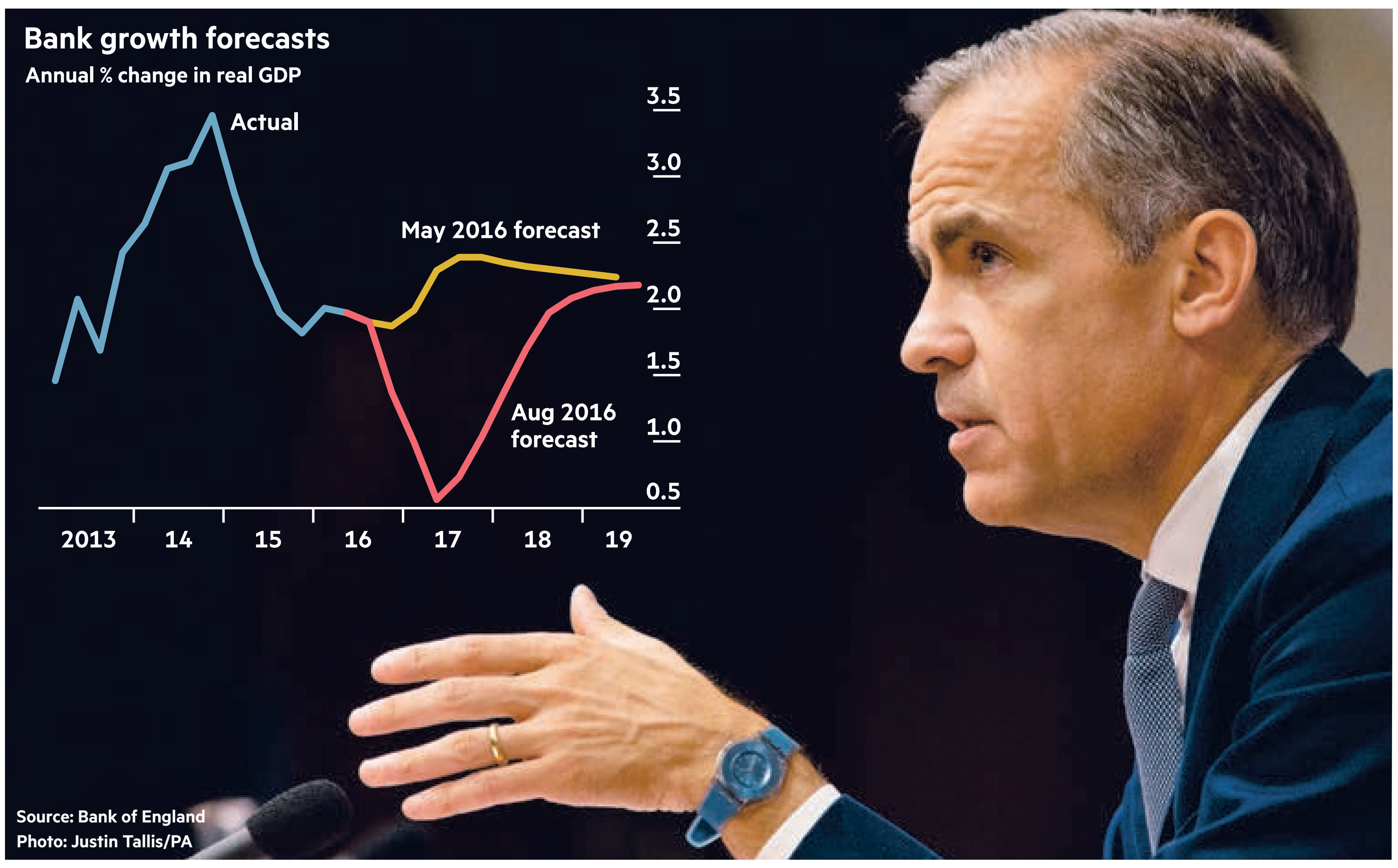
Although the cut in interest rates to a record low of 0.25 per cent from 0.5 had been widely predicted, the restarting of bond purchases and a new £100bn funding scheme for banks was more than many in the market expected.

Sterling fell 1.5 per cent against the dollar to $1.31, while both the blue-chip FTSE 100 and more UK-focused FTSE 250 indices rose 1.5 per cent — driven by outperformance in banking stocks.

British government bond yields plumbed new lows, with 10-year gilt rates dropping 16 basis points to just 0.63 per cent, while sterling corporate debt prices jumped in anticipation of the new bond-buying scheme.

"The market reaction can be partly explained by the bank's over-delivery but also by an open-door message that means more could be done in the future," said Owen Murfin, portfolio manager at BlackRock, the world's largest asset manager.

The market response belied the gloomy outlook presented by Mr Carney. Even with the new stimulus taken into account, the BoE forecasts include the biggest downgrade to growth for more than 20 years.



Mark Carney forecasts that unemployment will rise, house prices will fall and inflation will go up

Currently, the BoE expects the country narrowly to avoid outright recession, forecasting growth of 0.1 per cent in the third quarter of 2016 and stagnation for the six months after that.

The new "term funding scheme" for banks will allow them to borrow at close to the BoE's base rate from official reserves, provided they lend on to consumers and businesses. Mr Carney said the programme was designed to ensure banks had "no excuse" not to pass the rate cut on in full. Two leading high street lenders, Santander UK and Barclays, immediately announced cuts to their standard variable-rate mortgages, putting pressure on others to follow suit.

The Monetary Policy Committee meeting stressed that if the economy weakened as much as the BoE expected, "a majority of members expect to support a further cut in the bank rate" during the course of this year.

In a rebuttal to critics who have accused Mr Carney of "talking down" the economy, the governor said he believed Britain was resilient enough to bounce back from the Brexit shock.

But he was clear that households face a poorer future. Forecasting that unemployment will rise, house prices will fall and inflation will go up, the BoE said it would "provide support as the economy adjusts".

But the governor warned that much of the downgrade to the outlook — a cumulative 2.5 percentage point hit by 2019 compared with its May forecasts — was due to a knock to the economy's growth potential "that monetary policy cannot offset". He added: "Monetary policy is more nimble and it's appropriate that it's the first responder to a shock."

Additional reporting by Gemma Tetlow, Elaine Moore and Emma Dunkley

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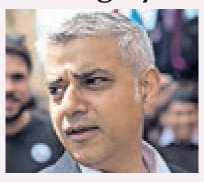

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The owner of The Scotsman and the Yorkshire Post has cut the value of its newspaper business by almost half, forcing it to miss profit targets and taking 15 per cent off its shares.— PAGE 13

▸ North Sea oil workers on strike
Seven Shell platforms have been hit by a 48-hour strike that has exposed anger in the North Sea workforce over successive rounds of job and pay cuts since oil prices crashed two years ago.— PAGE 2

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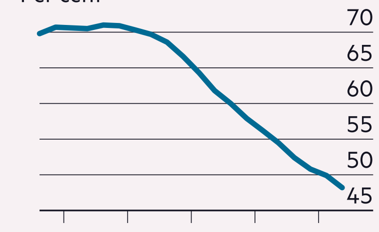
The prestigious American Association for Clinical Chemistry has descended into infighting after Elizabeth Holmes used her appearance at its annual conference this week to unveil a product.— PAGE 15

Datawatch

Share of UK floating-rate mortgages
Per cent



Source: Thomson Reuters Datastream

About half of UK mortgages are at a floating rate, and are likely to quickly benefit from yesterday's interest rate cut to a record low. The proportion of such loans has rapidly declined over the past four years, from more than 70 per cent in 2012

Luxury retirement home to have tunnel to Harrods

Planners have given the green light to a £200m luxury retirement home that will come complete with a tunnel linking it to Harrods. The project on Pavilion Road in London's posh Knightsbridge is to be built on a site once used by the upmarket shop — 100m away — for storage and staff accommodation. Prices have not been set but square-foot costs in the district suggest the smallest apartment in the development would cost £5m.

Analysis ▸ PAGE 2

Blow for Zuma as ANC suffers worst election result since coming to power

KRISTA MAHR — JOHANNESBURG
DAVID PILLING — LONDON

South Africa's ruling African National Congress party has suffered its worst election result since it came to power in 1994, threatening its rule in several of the country's biggest cities.

Its share of the vote in local elections sank to 55 per cent or below in a humiliation for President Jacob Zuma, who has survived a number of scandals and been blamed by many for overseeing a corrupt administration that has betrayed the party's core principles.

In what was set to be the ANC's lowest ebb since it took power after the end of apartheid, indications were that the party would lose control of Port Elizabeth, where the opposition Democratic Alliance (DA) was leading the vote. The ANC's control over the economic hub of Johannesburg and the capital Pretoria also hung in the balance.

"We see decline pretty much across the board, in all of the metros," said Susan Booysen, a political scientist. "The declines were expected, but their severity was not."

Adam Habib, vice-chancellor of Wits university, said the result was a "huge blow" to the party. "This is definitely an anti-Zuma vote," he said.

The result is expected to throw South African politics wide open. The Economic Freedom Fighters, a radical breakaway from the ANC led by Julius Malema, is likely to be able to decide whether to form coalition governments in some cities with the ANC or the centre-right DA.

Meanwhile, what Mr Habib called the "modernist" wing of the ANC will have to decide whether to mount a further attempt to oust Mr Zuma. "Either way you're going to see a massive conflict within the ANC," he said.

The DA, which grew out of the white liberal movement, has been gaining support among black voters under the leadership of Mmusi Maimane, its first black leader. It appeared to make significant gains in this week's contest, winning just over 27 per cent of vote, up from 24 per cent in 2011, with other parties also making inroads at the ANC's expense. "Many South Africans came out in these elections and, we believe, voted for change," Mr Maimane said. "We've shown some incredible growth, and we're quite excited about that."

The ANC has lost support from South Africans who feel excluded from the economy and are losing faith in the party that led the struggle against apartheid, observers say.

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World Markets

STOCK MARKETS

	Aug 4	prev	%chg
S&P 500	2166.78	2163.79	0.14
Nasdaq Composite	5169.87	5159.74	0.20
Dow Jones Ind	18358.66	18355.00	0.02
FTSEurofirst 300	1331.68	1322.21	0.72
Euro Stoxx 50	2928.34	2911.06	0.59
FTSE 100	6740.16	6634.40	1.59
FTSE All-Share	3659.12	3603.96	1.53
CAC 40	4345.63	4321.08	0.57
Xetra Dax	10227.86	10170.21	0.57
Nikkei	16254.89	16083.11	1.07
Hang Seng	21832.23	21739.12	0.43
FTSE All World $	273.09	271.97	0.41

CURRENCIES

	Aug 4	prev		Aug 4	prev
$ per €	1.114	1.117	€ per $	0.898	0.895
$ per £	1.313	1.333	£ per $	0.762	0.751
£ per €	0.849	0.839	€ per £	1.178	1.193
¥ per $	101.095	101.295	¥ per €	112.604	113.178
¥ per £	132.692	134.975	£ index	79.819	79.487
€ index	88.578	88.845	$ index	99.268	98.992
SFr per €	1.084	1.086	SFr per £	1.278	1.295

COMMODITIES

	Aug 4	prev	%chg
Oil WTI $	41.73	40.83	2.20
Oil Brent $	44.01	43.10	2.11
Gold $	1358.90	1363.75	-0.36

INTEREST RATES

	price	yield	chg
US Gov 10 yr	101.17	1.50	-0.04
UK Gov 10 yr	107.21	0.75	-0.17
Ger Gov 10 yr	106.29	-0.15	0.00
Jpn Gov 10 yr	101.89	-0.07	0.00
US Gov 30 yr	105.42	2.25	-0.05
Ger Gov 2 yr	103.14	-0.65	0.00
	price	**prev**	**chg**
Fed Funds Eff	0.38	0.37	0.01
US 3m Bills	0.28	0.29	-0.01
Euro Libor 3m	-0.31	-0.30	-0.01
UK 3m	0.49	0.49	0.00

Prices are latest for edition — Data provided by Morningstar

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EU renegotiations

May seeks to reassure small businesses

Lobby groups welcome PM's pledge to place sector at heart of Brexit strategy

SARAH GORDON — BUSINESS EDITOR

Theresa May has attempted to reassure small business in the UK that cuts to EU funding after Brexit would be replaced and that the sector would be "at the heart" of the government's renegotiation strategy.

In a shift of emphasis from David Cameron's administration, the new prime minister's first formal meeting with UK bosses was at a gathering in Downing Street of small business representatives, including the Federation of Small Businesses, the EEF manufacturing association and the British Chambers of Commerce.

"There's a bigger recognition that 5.4m small businesses are playing a really big part in the economy," said Martin McTague, policy director at the FSB, who attended the meeting yesterday. "This has hit home more with Theresa May than it has with the David Cameron administration."

"It was very important to have the prime minister's first business summit to be with SMEs," said Fiona Graham, who represented the Institute for Family Business.

Mrs May's commitment to an industrial strategy, including the creation of a Cabinet committee, has been welcomed by UK business, which complained of its lack under the previous administration.

Francis Martin, BCC president, said the government needed to focus on areas such as the skills gap in the workforce.

"The government must in particular address the longstanding under-investment in the UK's infrastructure," he added. "This means action on transport, broadband and energy generation, which is absolutely vital in driving long-term growth."

Greg Clark, the new business and energy secretary, emphasised that the approach would not be based on picking winners and would not be a "one size fits all" policy; instead, differentiating between regions. In particular, there was recognition by Mrs May of the impact the probable loss of EU funding would have on the UK's devolved regions.

Attendees called for confidence-boosting measures, including implementing long-delayed infrastructure projects. They also asked the government to stick to the former administration's commitments, particularly on the planned reduction in business rates announced in this year's Budget.

"There wasn't even a hint that [Mrs May] was going to decommit on any of these things," Mr McTague said.

Participants suggested that the cumulative effect of policies such as pension auto-enrolment and the introduction of a new higher minimum wage — the National Living Wage — were all depressing confidence, and thus investment, in the small business sector.

Ahead of the meeting, Mrs May said: "The priorities I have set — a more productive, skilled workforce, an economy balanced across the UK and open to new opportunities — can only be achieved if we listen to [small] businesses. I want those firms, across all the sectors of our economy, to be able to take advantage of the opportunities presented by Brexit, such as exporting to new destinations."

Mike Cherry, FSB chairman, said: "Our members want access to European markets, the ability to hire the right people, reassurance on key EU-funded schemes and a new approach to both regulation and deregulation."

Regeneration. Housing

Olympics legacy remains uncertain, says Khan

London mayor attacks lack of action on new and affordable homes on site of 2012 games

CONOR SULLIVAN AND GEORGE PARKER

The mayor of London has said there is a "big question mark" over the legacy of the London 2012 Olympics because of a failure to regenerate the east of the city with homes that are affordable.

Four years after a games whose £9bn cost was justified on the basis that it would revive a huge area of polluted post-industrial land, the mayor has been scathing about plans for the site.

"I thought the Olympics were great. I think there is a big question mark about legacy or lack of," Sadiq Khan told the FT. "I am not sure we have got the benefits out of the Olympics we should have done in relation to affordable homes or in relation to the number of homes.

"It is massive real estate, prime real estate. You have got fantastic public transport links. We should have had far more homes being built more rapidly that are affordable.

"We would have had the cultural centre there sooner rather than later, because there has got to be a reason to go there. We would have made sure that we made the most of the sports legacy."

His comments come as the Olympic stadium completes its contentious transformation to become the home of West Ham United football club; architects design a cultural and educational quarter that will host universities, museums and a theatre; and construction proceeds on 4m square feet of office space.

By 2031, the London Legacy Development Corporation, which is controlled by the mayor and is both planning authority and the main landowner in the area, plans to oversee the construction of 24,300 homes.

Construction is scheduled to start next year on two areas, to be called East Wick and Sweetwater, where 1,500 homes will be built of which just under a third will be classed as affordable.

The mayor has not sought to intervene in these deals. But he has called for more to be done on the next two sites, at Pudding Mill Lane and Rick Roberts Way, and staff at LLDC are figuring out how to squeeze in more affordable housing.

Some of the profit from housing developments in the park will be passed back to the government to repay the costs of staging the games and redeveloping the area.

The LLDC is considering whether to build a higher density of homes or to restructure offers for developers, for example by making the homes available for rent rather than sale.

The mayor said he wants the government to rethink arrangements. "I think the opportunity the Olympics presented is in danger of being squandered unless the government works with me to make sure we have got the best deal for what is left of the opportunity."

David Goldstone, chief executive of the LLDC, said rising property prices were "almost a symptom of the success" of the area's improvement.

Apart from the unease over housing, local politicians are enthusiastic over the redevelopment of the area. Westfield Stratford City is one of the biggest shopping centres in Europe and attracts hundreds of thousands of people a week. The Olympic swimming pool, velodrome and an indoor arena that hosted the handball are open to the public and set in landscaped gardens alongside the football stadium.

The Orbit, a steel tower designed by Anish Kapoor with a viewing deck on top, was less popular, until it was decided to fit it with a 178-metre slide. It costs £15 to go down and bookings are recommended. Former mayor Boris Johnson joked: "It is my intention before I leave office to be the first to go down that tube in what may or may not be the ideal metaphor for the rest of my political career."

The cultural and educational quarter will eventually host a new campus for University College London, as well as the London College of Fashion, the Victoria and Albert Museum, and Sadlers' Wells theatre. The £850m cost has been secured except for £180m of hoped-for donations.

Sir Robin Wales, mayor of Newham borough, said improvements to the lives of local residents were hard won. He told a conference organised by think-tank Centre for London on the Olympics legacy last week that "the International Olympic Committee is the second most venal organisation in the world, after Fifa. In Rio they have lived up to their reputation. They are an appalling organisation with no interest whatsoever in legacy. [After the games are over] whoosh and out they go."

The borough, which is south and east of the park, and one of the most deprived areas in the country, set up a jobs brokerage scheme that secured jobs in Westfield for thousands of its long-term unemployed residents. Sir Robin's focus has shifted to affordable housing now prices are rising with the middle classes "swarming" into the borough.

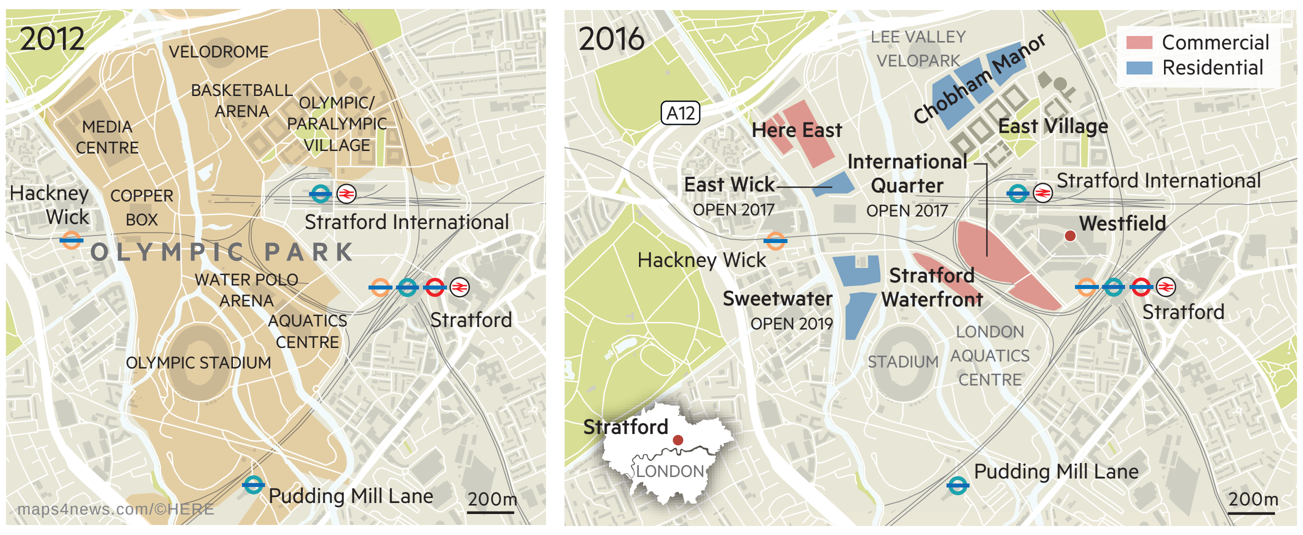
Jules Pipe, who moved this week from being Hackney mayor to London's deputy mayor for planning and regeneration, said it was unlikely the area would have been cleaned up were it not for the Olympics, despite proximity and excellent transport links to central London.

"No private developer, even with a massive subsidy, would have cleaned this up," he said. "Eventually, there would have been a lot of off-the-shelf housing in the middle of nowhere with very few facilities and a big layer of plastic a metre below their gardens to keep all the heavy metals and whatever at bay from their vegetables and flowers. That would not have been a good result."

He sympathised with the LLDC, saying: "If a public authority can only make it stack up with this level of affordable housing, it really is the bare economics . . . it is not as if it is a private company hiding behind viability assessments."

Swings and roundabouts: children play in the Olympic Park in one of London's poorest boroughs — Dan Kitwood/Getty Images

Olympic Park redevelopment



Going underground

Retirement home offers private tunnel to Harrods

JUDITH EVANS

They have the spa, the doctor's surgery and the library; what more could a wealthy pensioner want from a retirement home? Well, how about a tunnel to Harrods?

On Pavilion Road in Knightsbridge, planners have approved a £200m luxury retirement home on a site that has an underground tunnel linking it to the upmarket department store less than 100m away.

The seven-storey development of 34 apartments will be among the UK's most expensive retirement homes and is part of a growing industry catering for rich baby-boomers.

As well as the shopping tunnel, it will also have an in-house spa, a library and private nursing care.

As the UK's population ages, property developers are building for retirees, who now have a bigger share of the country's wealth than the under-45s, according to research last year by the Resolution Foundation.

While the developer, Singapore-listed City Developments, has not yet set prices, homes in Kensington and Chelsea, London's wealthiest borough, sell for at least £4,000 a square foot, which would equate to £5m for the development's smallest homes. The tunnel exists as the site was once used by Harrods for storage and staff accommodation.

The scheme, which will take about three years to build and will have a minimum age of 55, is one of a handful of "super-prime" retirement developments in the capital.

The Auriens development close to the King's Road will open in 2019 and offer apartments from £3m.

As with the planned Pavilion Road scheme, Auriens falls in the "extra care" category, meaning that medical services are available when needed but residents can live independently.

Meanwhile Battersea Place, a 109-apartment complex for wealthy retirees south of the river Thames in London, opened last year with apartments costing from £600,000 to about £3m. Battersea Place has a concierge service, cinema and spa pool, but as with most luxury retirement developments, residents must pay service charges of more than £1,100 a month and an extra membership fee when the apartment is sold.

"There is an enormous amount of interest in the high-end, extra-care retirement housing sector," said Emma Cleugh, a partner at the property advisers Knight Frank.

"What has changed really significantly is the quality of the developments. There is more and more coming forward for older people with the aspirations for a great lifestyle and the wealth to buy."

The Kensington and Chelsea borough expects the proportion of those aged 65 and over to rise from 14 per cent four years ago to 23 per cent in 2037.

The £200m Knightsbridge development will be linked to Harrods by a tunnel dating back to when the site was used for storage

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Leaving office

Cameron rewards Osborne in outgoing PM's honours list

HENRY MANCE
POLITICAL CORRESPONDENT

More than 50 of David Cameron's allies and former aides, including George Osborne, have been awarded honours in the outgoing prime minister's resignation honours list.

The list, the first resignation honours to be granted since Sir John Major left office in 1997, has led to claims of cronyism.

But it also raises questions for Labour, as it includes a peerage for Shami Chakrabarti, the former head of advocacy group Liberty, who led the party's independent inquiry into claims of anti-Semitism under Jeremy Corbyn's leadership.

Other new peers include Ed Llewellyn, Mr Cameron's former chief of staff; Camilla Cavendish, the former head of his policy unit; and Sir Nicholas Macpherson, the former permanent secretary at the Treasury who will sit as a cross-bencher.

Several ministers under Mr Cameron receive honours, including Oliver Letwin, who briefly headed the Brexit unit, and Michael Fallon, defence secretary.

Mr Osborne will become a member of the Order of the Companions of Honour, an award traditionally reserved for those with many decades of service.

Michael Spencer, ICAP founder and former Tory treasurer who was proposed for a peerage by Mr Cameron, does not appear on the final list. Nor does Philip Hammond, the chancellor who was to be offered a knighthood, according to a leaked draft.

Ian Taylor, head of oil trader Vitol and a Conservative donor, asked for his name to be withdrawn.

There is a knighthood for Andrew Cook, a Conservative donor and former treasurer of the anti-Brexit Conservatives In group. Will Straw, director of the Britain Stronger In Europe campaign, receives a CBE.

The awards are mostly focused on political appointees working for Mr Cameron and Mr Osborne.

Labour leadership

Corbyn aims to build radical image with £500bn promise

HENRY MANCE AND CATHERINE BELTON

Jeremy Corbyn has pledged a £500bn investment spree, as the Labour leader seeks to burnish his radical credentials in the face of a leadership challenge from Welsh MP Owen Smith.

In a rare policy speech yesterday, ahead of a debate against his opponent, Mr Corbyn also promised to end private sector involvement in the NHS, but he did not detail how this would work or how he would fund investment.

The pledges came as some Labour members made a legal challenge at London's High Court, claiming that the party had broken its rules by setting a cut-off point for members eligible to vote.

Stephen Cragg QC, for the claimants, said the rule book contained no provision for the decision to limit retrospectively those eligible to those who joined Labour before January 12. The party had misled prospective members, he added.

Mr Corbyn, elected leader 11 months ago, remains favourite in the election next month. However, polls have signalled that he is now less popular than Mr Smith among party members who joined before the 2015 general election. When taking into account all those who are eligible to vote, Mr Corbyn is ahead.

Mr Smith, who has struck a pro-EU tone, has said Labour could split if Mr Corbyn wins the leadership election. There were "people on the hard left and right of the party who have become fatalistic about a split, and are concerned either by controlling the terms of it or by not being blamed for it", said the former shadow pensions secretary.

The warning came after a YouGov survey suggested that support for Labour could fall to about 20 per cent if a separate centrist or hard-left party was formed. The spectre of a split is unwelcome to many members, who blame the creation of the Social Democratic party in 1981 for having contributed to 18 years of Conservative government.

YouGov found that, in the case of a split, whichever faction kept control of the party's branding would benefit most.

The legal case continues.

Business split over Carney stimulus

CBI broadly positive on complete package but Institute of Directors doubts effects of rate cut

GEMMA TETLOW
ECONOMICS CORRESPONDENT

The Bank of England said the UK will avoid a recession in the wake of the vote to leave the EU after it launched an aggressive "sledgehammer" stimulus package.

A four-part package saw a cut in the BoE's base rate from 0.5 per cent to 0.25 per cent, a new "term funding scheme" that encourages banks to pass the rate cut on to borrowers by giving them access to cheap credit, an expansion of government bond purchases and a drive to buy corporate debt.

The BoE's plan to buy an additional £60bn of government bonds over the next six months means that it will then hold almost half of the outstanding stock of eligible gilts.

The BoE said the measures would have a significant impact on the British economy, but some commentators were sceptical. Victoria Clarke of Investec said it was difficult to know "whether the governor's package will achieve much bang for buck", while Oliver Jones of Fathom Consulting concluded "the impact on the macroeconomy will be vanishingly small".

> 'The term funding scheme will make it easier for banks to ensure the rate cut will benefit businesses'

"The innovation of the term funding scheme will make it easier for banks to ensure that the interest rate cut will fully benefit businesses and households," said Rain Newton-Smith of the Confederation of British Industry, in a broadly positive response to the BoE's announcements.

But there remains a question over whether a 0.25 percentage point reduction in borrowing rates will significantly affect behaviour.

The Institute of Directors warned yesterday that, according to a survey of their members conducted before the BoE announcements, 60 per cent thought it would make no significant difference to the economy's prospects.

The BoE expects business investment in the UK to fall, unemployment to rise by a quarter of a million and household incomes and house prices to drop over the coming months.

After years of sluggish economic growth since the financial crisis, it was only towards the end of last year that average income per person in the UK returned to pre-crisis levels.

According to the Resolution Foundation, a think-tank, the BoE's new figures suggest average earnings will be £615 a year lower by 2018, after adjusting for inflation, than their projection in May before the Brexit vote.

The BoE downgraded its forecast and voted to take strong action after evidence in the past few weeks, including the purchasing managers' surveys earlier this week, of a sharp slowdown in business spending and increasing pessimism about the future.

But the members of the BoE's interest rate-setting committee also assumed that the gloom was, to some extent, a short-term overreaction.

"We would need [the purchasing managers' index] to recover over the coming months to meet the forecast we have, which is for a little bit of growth during the second half of the year," said BoE deputy governor Ben Broadbent.

Having recently been one of the fastest growing developed economies, the UK looks likely to fall well behind others in the developed world — with growth of just 0.8 per cent expected in 2017.

It is a long-running convention that the BoE bases its forecasts on the assumption that current government policy is followed. But significant areas of future policy are undefined.

Mr Carney was careful to say yesterday that the committee had not made any specific assumption about the UK's future trading relationships.

But he acknowledged the BoE's figures assume there will be "some reduction in openness" of the UK economy in the longer run, as warmer relations with other countries outside Europe fail to offset the UK's withdrawal from the bloc.

"The future potential of this economy and its implications for jobs, real wages and wealth are not the gifts of monetary policymakers," said Mr Carney. "We cannot immediately or fully offset the economic impacts" of the vote to leave the EU, he added.

It will be up to Prime Minister Theresa May's government to pursue policies that boost the UK's long-run growth potential. The government has so far remained non-committal about what action, if any, it will take.

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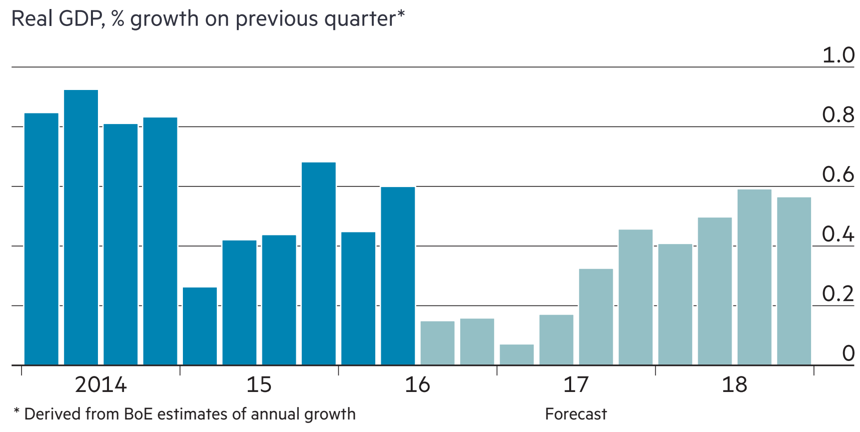
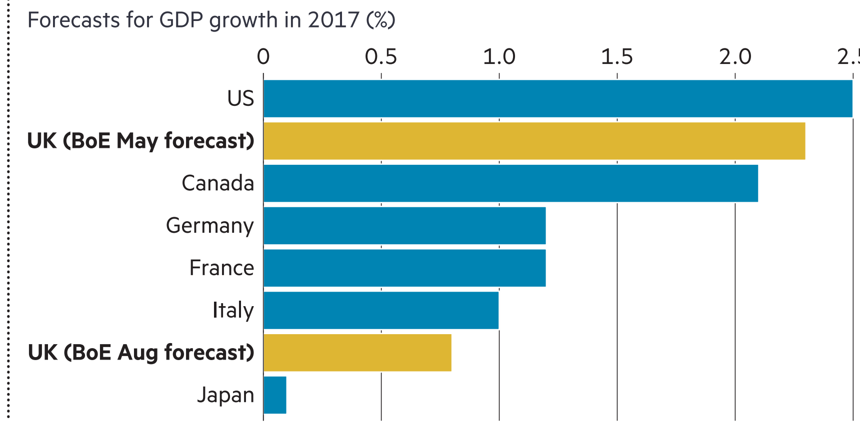
Forward focus

The BoE sees the economy coming close to recession over the next year ...
Real GDP, % growth on previous quarter*

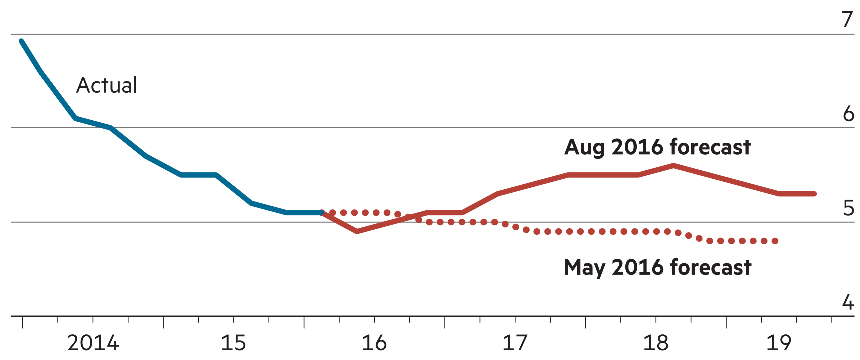


* Derived from BoE estimates of annual growth

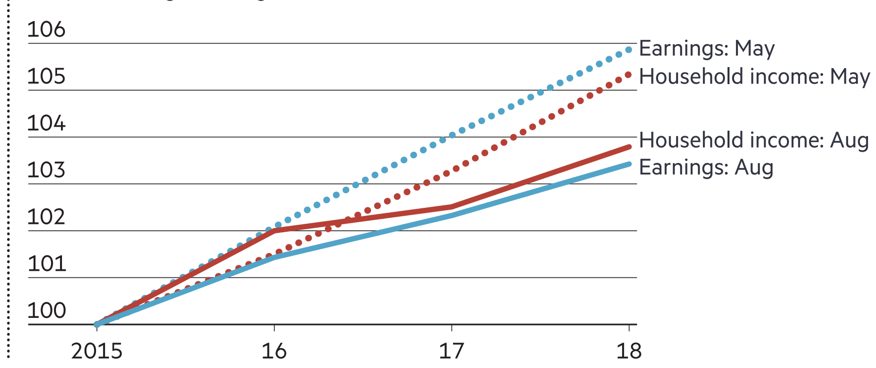
... taking the UK from being one of the best performers in the G7 to one of the worst
Forecasts for GDP growth in 2017 (%)



Slower growth is likely to mean higher unemployment ...
Forecasts for unemployment (%)



... and a hit to living standards
Forecasts for real net household income and real average earnings (2015=100)



Sources: Bank of England; IMF; Resolution Foundation

Term funding scheme

'No excuse' for lenders who refuse to make loans cheaper

EMMA DUNKLEY

The Bank of England governor has told banks they have "no excuse" not to pass on the cut in interest rates to customers.

Mark Carney also launched a £100bn "term funding scheme" with the aim of helping banks to lend at low rates to households and businesses in an attempt to buoy the economy following the Brexit vote.

Santander UK and Barclays immediately announced cuts to their standard variable rate mortgages, following the BoE's decision to slash the bank rate to 0.25 per cent yesterday.

"For two major lenders to announce cuts quickly, that will put pressure on other major to follow suit," said Ray Boulger, of broker John Charcol.

"The fact they made the announcement so soon after the bank rate cut . . . suggests they've had board meetings to decide their policy before the announcement."

However, the rate cut means banks face pressure on their profits, and the move could stoke tension with the lenders. Royal Bank of Scotland warned last week that it could start charging businesses for deposits if the bank rate drops too far.

Bill Michael, global head of banking at KPMG, said the rate cut "will have an adverse impact on banks' ability to make money and impact their appetite to lend".

Low interest rates weigh on banks' returns by reducing the amount of interest they receive from lending. Analysts at Citi estimate that a 0.25 per cent rate cut will hit large UK bank earnings by an initial 2-3 per cent, and HSBC, which is more global, by 1 per cent.

HSBC said in its results on Wednesday that it would take a $200m annual hit if rates were cut to 0.25 per cent.

But analysts are not certain the cut will be passed on to all customers.

About half of mortgages and four-fifths of business loans in the UK are floating rate, which includes tracker and standard variable rate mortgages.

Tracker mortgages rise and fall with bank rate, meaning borrowers' repayments will drop straight away, although some have a floor below which rates will not fall.

But banks do not necessarily have to pass on any changes to the standard variable rate mortgages.

Lloyds Banking Group, the biggest lender in the UK, said its standard variable mortgage would be reduced in line with the rate cut from September.

Ian Gordon, an analyst at Investec, said: "Will mortgage rates come down by 0.25 per cent? Lower funding makes that more deliverable, but the correlation is less certain. Banks might not feel compelled to pass on the rate reduction in full . . . there's no lack of willingness to lend, but it's about the price and demand."

He added that banks will "almost certainly" use the cheap financing from the BoE to "crush savers' rates even more".

To alleviate the pain of lower interest on mortgages, banks could reduce the rates they pay depositors. However, many banks are already paying savers close to zero and have little room to cut rates further.

INTERNATIONAL

Lending safeguards

World Bank draws ire with rule changes

Institution accused by activists of betraying the world's poorest countries

SHAWN DONNAN — WASHINGTON

The World Bank is pushing through the biggest changes in decades to the social and environmental rules that cover its lending, drawing fire from activists who are accusing it of betraying vulnerable populations across the world's poorest countries.

After four years of consultations and contentious negotiations among its shareholder countries, the bank's governing board yesterday unanimously approved an update of the so-called "safeguards" in place since the 1980s.

It is part of a bigger effort by president Jim Yong Kim — who is in the final year of what has been a controversial first term — to make the institution more nimble and address concerns from borrowers about the often burdensome process of securing loans.

The World Bank's place in the global economy is in question as it faces growing competition from new institutions such as the China-backed Asian Infrastructure Investment Bank.

The bank said the old rules were ad hoc and cumbersome. The new standards for the first time include requirements on labour and working conditions on World Bank projects.

Also incorporated are bans on discrimination against people on any basis, requirements for borrowers to estimate the impact of projects on climate change and a nod to human rights in an introductory "vision statement".

The biggest change, however, is that the rules are becoming more flexible, giving more power to borrower countries.

They allow for the increased use of local environmental and other regulations as benchmarks for projects.

They also, critics claim, would allow governments to put off drafting things such as plans for relocating people affected by dams and other big infrastructure projects until after loans have been approved.

Nadia Daar, head of Oxfam International's Washington office, said the overhaul would shift much of the bank's due diligence on projects until after they are approved.

"Frankly it is disappointing. A lot of us are looking to the World Bank to set the highest standards when it comes to all sorts of policies in development and particularly environmental and social standards."

The changes come as the bank continues to face problems with its projects.

Last year, for example, the bank cancelled a $265m road programme in Uganda after activists documented repeated cases of contractors sexually abusing children in the area surrounding the project.

> 'The bank hasn't shown that it is very good at these sorts of things'

"The reason that we have this rules-based system is . . . the carnage and wreckage across the world [that has been left] as a result of World Bank projects," said Jeff Hall, executive director of the Bank Information Center, a Washington-based lobby group.

"The bank hasn't demonstrated that it is very good at these sorts of things."

Other analysts say the bank has vastly improved its performance over the years and that, while often high profile, its failures have been relatively rare.

Scott Morris, a former US Treasury official at the Center for Global Development, said that the new rules were part of a shift to encourage broader changes in countries where the bank works by putting more emphasis on improving local laws rather than focusing on individual World Bank projects.

Republicans. Race to Elysée

Sarkozy taps into French terror fears

Former president feeds off public anxiety and reduces poll lead held by Juppé

ADAM THOMSON — PARIS

Political tribute: former French presidents Nicolas Sarkozy and Valéry Giscard d'Estaing, centre, join President François Hollande, far right, at a mass for murdered priest Jacques Hamel at Notre-Dame cathedral, Paris, last week Benoit Tessier/EPA

In 2012, as he vowed to abandon politics following his failed bid for re-election as France's president, Nicolas Sarkozy told voters: "A page has turned for me . . . I hope I can now be left to enjoy a bit of quiet."

Today, "Sarko", as the 61-year-old centre-right leader is known, is back on the frontline and fighting: recent opinion polls see him closing ground on his chief rival, Alain Juppé, in the race to win the Republicans' presidential nomination in November — a contest likely to produce the next French head of state.

Even just a few months ago, Mr Sarkozy's chances of returning to the Elysée Palace seemed slim. Four years after leaving office, dogged by various party fundraising scandals, opinion polls suggested he was still widely disliked by French voters. They rated Mr Juppé, a former prime minister, higher on the economy and jobs, traditionally the electorate's top concerns.

But a mood of anxiety following this summer's terrorist attacks has changed the equation, says Jérôme Fourquet, a pollster at Ifop. People are clamouring for tougher measures to stop Islamist-inspired assaults that have claimed more than 230 lives in 18 months. Two-thirds have lost confidence in the government's ability to fight terrorism, according to one recent poll.

"The climate has changed," says Mr Fourquet. "Terrorism has become the overriding theme for at least the next few months, and Sarkozy has adapted more quickly to the new reality."

Hours after two knife-wielding Islamist terrorists burst into a church last week and slit the throat of the local and much-loved priest, Jacques Hamel, Mr Sarkozy slammed a counter-terrorism policy governed by "legal niceties". He quickly posed a question already on many people's lips: how was it possible that one of the assailants was not only known to authorities but was also under judicial control and wearing an electronic tag? Mr Sarkozy told Le Monde newspaper: "This new ordeal shows just how much we have to change the dimension of our response to Islamist terrorism. I cannot accept dealing with today's realities by applying intellectual schemes from the past."

Among other things, the former president advocates detaining the roughly 10,000 people authorities have identified as potentially radicalised.

In a reminder of how politics is so often marked by unfortunate timing, Mr Juppé found himself more than 15,000km away on a tour of Polynesia when the church killing took place.

The two men share many policy proposals, such as tighter regulation of mosques, boosting police numbers and overhauling the intelligence services. But Mr Juppé has insisted on full respect for the rule of law, "which is not a legal nicety". Mr Sarkozy's insistence on extreme measures for extreme times has horrified voters on the left and centre, who say his proposals of preventive detention amount to creating a Guantánamo "à la Française".

Moreover, Mr Sarkozy still has plenty to do if he is to pull off a victory in November's primary — he has yet formally to declare his candidacy in the race, but is expected to do so this month.

According to Dominique Moïsi, special adviser to the French Institute of International Relations, Mr Sarkozy has to tread carefully when criticising President François Hollande on the security issue. "Hollande still retains an element of dignity and that is a problem for Sarkozy," says Mr Moïsi. "How can you attack a symbol of your country when it is suffering so much?"

Mr Sarkozy also remains a divisive figure. "The stronger he is in his proposals, the more he rallies those behind him and the more he isolates those against him," Mr Moïsi says. "He is a polarising figure at a time when the French are calling for national unity."

Critical to November's primary contest is how many of France's registered voters ultimately cast their ballot: anyone on the electoral register can vote but they must pay €2 and sign a pledge that states they agree with "the values of the right and of the centre".

With Mr Hollande's popularity still languishing and polls suggesting the far right's Marine Le Pen may qualify for the second round of next year's presidential election, Mr Fourquet says leftists and centrists could end up voting to prevent a Le Pen-Sarkozy run-off.

Mr Juppé retains a 10-point poll lead over Mr Sarkozy, assuming a turnout that extends well beyond the centre-right party faithful. But with three months to go before the vote, and fears of another terrorist attack, it is Mr Sarkozy who has the momentum.

GLOBAL INSIGHT

SYRIA

David Gardner

Aleppo war of attrition writes another chapter in story of stalemate

The ferocious fight for Aleppo, started with Russian air strikes and a ground offensive by Bashar al-Assad's forces four weeks ago and met this week by a huge rebel counter-offensive, is shaping up as the biggest battle of a piteous civil war well into its sixth year. Begun with high regime hopes it could recapture Syria's largest city and turn the tables on its opponents, the struggle is settling into a pattern of attrition as Aleppo, historically the country's commercial hub, is pounded to dust.

Wave upon wave of Russian jets bomb the rebel-held east of the city, supplemented by barrel bombs rolled out of Syrian army helicopters. Rebel sappers meanwhile have detonated a vast tunnel bomb under Assad loyalist headquarters in the west of the city. An estimated 300,000 civilians, running out of food, medicine and fuel, are trapped in the fighting, mistrustful of so-called "humanitarian corridors" the regime opened for them supposedly to escape.

The regime is reliant on Hizbollah, the Lebanese Shia paramilitaries, and Iran's revolutionary guards, to spearhead its ground forces. On the rebel side, the main strike force is the jihadi group that last week severed its links with al-Qaeda and rebranded itself from Jabhat al-Nusra to Jabhat Fatah al-Sham. Though Nusra had almost no presence inside Aleppo, for this operation it has closed ranks with mainstream rebel forces — some of them backed by the US and its allies — to push through from south of the city and lift the regime's siege.

Yet it is not clear either side really expects Aleppo, great prize and morale barometer though it is, to be decisive. The battle looks to be more about each side cutting the other's supply lines. The regime is trying to separate the rebels in Aleppo from their adjoining stronghold in Idlib and, above all, from the border with Turkey and its resupply pipeline. The rebels, as well as trying to break the siege, want to cut regime lines westwards. Aleppo may be another chapter in the baleful story of bloody stalemate in a nevertheless shape-changing civil war.

> Russian officers are said to be shocked at the condition of Syria's regular forces

The Assad regime's forces "can continue taking ground but they can't hold it", says one western official involved with Syria. Conversely, "the opposition will lose ground but the army will not be able to move freely".

Put another way, while President Vladimir Putin's decision to intervene in Syria 10 months ago undoubtedly salvaged President Assad when he was at risk of succumbing to the rebels, the regime has so far been unable to take full advantage of the ferocity of Russia's air force with commensurate advances on the ground. Seizing and holding ground, after all, needs troops, and Mr Assad's army is severely depleted — often reliant on Iran and Hizbollah, and the militia networks they have created.

The lack of numbers and cohesion applies to the fragmented opposition, too, but on the government side, Mr Assad's patrons look dismayed by the fighting ability of the Syrian army after five years of war. Russian officers, who inherit a long army-to-army relationship over almost half a century of Assad family rule, are said by Arab and western aides to be shocked at the condition of Syria's regular forces. There also seems to be doubt about their reliability in Iranian and Hizbollah circles.

While all this may amount to little more than murmuring now, it does not suggest Syria's patrons will provide the ground forces to reconquer, as Mr Assad regularly pledges, every inch of the country. The calculation of regime and rebels, therefore, may come down to judging at what point attrition favours them in negotiation.

Diplomacy, led by a US fixated on fighting Isis and a Russia determined to restore its superpower status, has failed Syria. A political solution may start to look more urgent once the two external actors realise that while neither side can win on the ground, everyone can keep losing. Aleppo, tragically, could be a step along that road.

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Upper house

Australia Senate election boosts opponents of trade accords

JAMIE SMYTH — SYDNEY

Malcolm Turnbull's chances of implementing his agenda have been set back by the election of a large number of independent and minor party politicians to Australia's Senate.

Full results from the July 2 election released by the Australian Electoral Commission yesterday show that the powerful upper house will include 20 senators outside Mr Turnbull's Liberal-National coalition or the opposition Labor party.

They include a significant number of populist and protectionist politicians who oppose trade deals and have expressed concerns about Chinese investment.

Ian McAllister, politics professor at Australian National University, said: "This doesn't look good for Turnbull or the government's trade agenda. Many of these crossbench senators want to go back to the future by introducing tariffs to support old industries and opposing foreign investment."

Mr Turnbull, who took over as Australia's prime minister in September, justified his decision to call a snap election to win a mandate to clear legislation that had been blocked by crossbench senators in the 76-seat upper house. The coalition's number of Senate seats fell from 33 to 30. Labor won one additional seat to bring its tally to 26, and the Green party lost one and now has nine.

Independent candidates picked up four seats, but the big winners were the far-right One Nation party led by Pauline Hanson, which won four seats, and the Nick Xenophon Team, which won three. To pass legislation, Mr Turnbull must negotiate the support of crossbench senators who blocked industrial relations reforms and billions of dollars in budget-saving measures in the previous parliament. If Labor and the Greens oppose the measures, the government will need the support of nine of the 11 remaining crossbench senators.

Analysts warned Mr Turnbull would struggle to push his flagship policy of corporate tax cuts through the Senate. Two industrial relations reforms that were the basis for the snap election could also be blocked, they said.

"Australia is experiencing a bit of the anti-elite sentiment we are seeing in the US with [Donald] Trump and in the UK with Brexit," said Mr McAllister. "Australian voters don't trust the two main parties enough to give either of them control of both houses of parliament."

Pauline Hanson's Senate return has raised the political heat — David Gray/Reuters

The return of Ms Hanson, a fish and chip shop owner turned firebrand politician, to the Senate along with three of her One Nation colleagues is likely to raise the political temperature over foreign investment and immigration.

Mr Xenophon, who rose to political prominence as an anti-gambling campaigner, is pressing Canberra to tighten rules on the sale of farmland to foreigners. This follows the blocking of the proposed sale of S Kidman & Co, which owns a block of land the size of Ireland, to Shanghai Pengxin Group of China.

Also yesterday Mr Turnbull said Australia's bank executives would be asked to appear before parliament every year to explain their actions.

The move follows calls for a public inquiry into alleged rule breaking by Australia's big four banks. The government opposes a full public inquiry.

Mr Turnbull said the big banks would have to give parliament's economics committee a full account of how they run affairs.

Indian business hails milestone in tax reform

Replacing interstate levies will help to boost the economy, claim supporters

AMY KAZMIN — NEW DELHI

India's Godrej makes everything from locks to office furniture. But rather than sending its wares from the factories to its distributors in the country's 29 states, it dispatches each item to a company-owned warehouse in a state where the product is to be sold.

For if Godrej products remain in the company's possession in transit from one state to another, the group avoids a 2 per cent central sales tax on interstate shipments between two parties.

Adi Godrej, chairman of the 120-year-old group, said passing products through its own warehouses saved the equivalent of 1 to 2 per cent of turnover over a year — less than the cost of the warehouse network and extra transport. "It's a perfectly legal way to save on taxes, but it has a cost to it, too," he says.

But Mr Godrej and many other Indian manufacturers hope such inefficiencies will soon be in the past. Parliament on Wednesday approved a long-awaited overhaul of the burdensome tax system, which many industrialists blame for undermining their competitiveness.

In coming months, India's welter of

Business leader Adi Godrej hopes the new tax will lift the Indian economy and root out inefficiency

national, state and local taxes will be replaced by the new goods and services tax; a unified value added tax, turning the nation into a single market for the first time. Economists expect a boost to growth, although the magnitude and timing remain a matter of debate. HSBC has forecast a 0.8 percentage point increase to gross domestic product growth in the medium term, while some Indian businesses believe the change will add up to 2 percentage points for five years from the time of implementation.

"Once this GST is implemented it will bring basic changes as far as the Indian tax structure is concerned," said Arun Jaitley, finance minister. "It will convert India into one unified market, with one unified tax. It will improve the tax base and make evasion very difficult."

At present, taxes account for about 25 per cent of the final consumer price of Indian-made goods, because of the compound effect of tax on tax. While the rate for the new GST is yet to be decided, it is likely to be lower than the current effective rate, which should lead to lower consumer prices — and heightened domestic demand. The change will also reduce logistics costs by eliminating queues of trucks at state borders, which can wait from a few hours to a few days for officials to inspect documents and wares.

Many industrialists believe the tax regime explains why manufacturing accounts for only 16 per cent of GDP.

"If someone had chosen to be truly perverse, they would have designed the system we have now," says Naushad Forbes, vice-president of the Confederation of Indian Industry and co-chairman of Forbes Marshall, a boiler and industrial equipment-maker. "This is a problem for Indian industry, and it's great to be within sight of seeing it addressed."

Not every industry will come under the ambit of the GST. Initially, alcohol and petroleum products — both widely used industrially but also big revenue sources for state governments — will be excluded, and subject to state taxes. Taxes on services will also rise.

Yet overall, government finances are expected to receive a long-term boost from improved tax compliance. Value added tax systems give companies an incentive to demand their suppliers fulfil their own tax obligations so they can claim tax credits for taxes already paid.

"GST is called a self-policing mechanism," says Rajeev Dimri, a partner at BMR, an accountancy firm.

"Rather than the tax officer, it will be your customer who is shouting at you to pay your tax. A lot of people who now stay out of the organised trade may move into the mainstream because otherwise they will be uncompetitive."

Indian companies long ago found ways to reduce their tax burden — at a cost to efficiency. Instead of large, modern factories, many big manufacturers have small ones scattered across states so they can serve markets with locally made products. Others, like Godrej, maintain otherwise unnecessary warehouses in nearly every state. Yet small companies unable to afford such strategies have faced a higher tax burden.

Little wonder that manufacturers see the GST as a huge potential boon, despite uncertainty about when it will come into force — and the challenge of getting ready for the regime.

"The impact will be huge," says Dinesh Kaushal, chief financial officer of VI John, a male grooming products company that uses factories in two states and pays the central sales tax on most of its goods. "GST will make us more competitive in the market, and we will be able to expand distribution."

Mr Godrej, meanwhile, says he awaits the day when his group can dismantle its warehouse network and ship products directly to market. Godrej believes its profits could rise between 20 and 30 per cent from higher sales, lower freight costs and lower taxes that it feels GST will bring.

"Life will be easier — the ease of doing business will improve dramatically and our competitiveness internationally will improve," he says.

Signs of change

0.8 Medium-term percentage-point rise in GDP growth arising from the simplified tax system, forecast by HSBC

25% Current tax share of final consumer price of Indian-made goods

16% Manufacturing's contribution to Indian GDP — a figure many industrialists believe is held down by the tax regime

The goods and services tax will replace India's welter of levies — Indranil Mukherjee/AFP/Getty

Anti-dumping regulation

Chinese and Russian steel imports hit by EU penalties

ARTHUR BEESLEY — LONDON

The European Commission has imposed more anti-dumping duties on Chinese and Russian steel imports and has applied the penalties retroactively for the first time, in a fresh move to protect the bloc's producers.

The duties on cold-rolled steel, which is used to make cars and washing machines, range up to 22.1 per cent for Chinese imports and up to 36.1 per cent for Russian imports. The rates are a little higher than provisional penalties in place since February.

The European steel industry has long called for tougher EU anti-dumping duties, which aim to protect the bloc's companies from ultra-cheap imports. Using a different calculation method, the US imposed tariffs in excess of 500 per cent on similar cold-rolled steel materials from China earlier this year.

The commission is planning further measures that would allow it to impose US-style tariffs against steel dumped at particularly low prices or subsidised.

"This shows the EU is starting to tackle the state-supported dumping of steel into the UK, but it's still being outmuscled by Uncle Sam," said Dominic King, head of policy at UK Steel, an industry group. Britain will need its own tariff regime once it leaves the EU to ensure that China and Russia do not "destroy" the UK steel industry, he added.

The duties follow a formal complaint in April 2015 from European steel groups, which argue surging imports from China are to blame for last year's price collapse. Steel prices have been rising throughout most of this year.

Cut-price steel imports have become a particularly politically sensitive topic in Europe and the US as western leaders face a popular backlash against globalisation. In Britain, 11,000 jobs are in jeopardy as efforts continue to rescue lossmaking factories owned by Tata Steel, which has partly blamed China for its problems.

Cold-rolled steel is used in the production of packaging and white goods, as well as in the construction and auto industries.

China's commerce ministry said it regretted the commission's decision, adding that the EU should "avoid abusing trade remedies and sending a wrong signal" to the world. "This move amplifies legal uncertainty and gravely affects normal international trade," the ministry said.

The tariff will be levied retroactively on imports registered in the two months before the provisional duties were applied. This is seen as a warning to steel importers to avoid stockpiling in the future.

Olympic flame's path to Rio mirrors Brazil's rocky road

Torch journey illustrates strain on first emerging market democracy to host games

Demonstrators clash with police this week over the cost of the Olympic Games and, below, a woman lights a broom with the Olympic flame — Leo Correa/AP

SAMANTHA PEARSON — SÃO PAULO

Today the Olympic flame will finally arrive in Rio de Janeiro's Maracanã stadium for the games' opening ceremony, marking the end of its epic and particularly tumultuous 12,000-mile odyssey across Brazil.

As the torch made its way into the host city on Wednesday police used stun grenades and tear gas to clear the way, removing protesters angry over the cost of hosting the Olympics.

It is a journey that has revealed the unique challenges facing the first emerging market democracy to host the games — a tale of heady idealism and crushing disappointment, economic boom and bust, innovation and chaos.

In June, in a bizarre but strangely poetic moment, as the torch was paraded through Brazil's northeastern city of Mossoró, an elderly woman careered through the crowds with a broom in hand and lit its bristles from the Olympic flame.

"The torch! The torch!" she screeched as she ran through cheering spectators, wielding the burning broom in the air.

She had unwittingly re-enacted the Greek myth of the origin of the Olympic torch tradition; the moment when Prometheus steals fire from the god Zeus to share with mankind.

However, for Dona Irene, as the former hospital janitor is known in her home town, it was just another of the outlandish stunts that has turned her into a local celebrity, explains her son and manager, Kerginaldo. "The authorities didn't make a fuss," he says. "They could see she's just an old lady."

Even the production of the Rio 2016 torch, or rather the 12,800 torches made for the event, seemed symbolic. Like Rio's bid in 2009 to host the games, the torch's design was wildly ambitious, perhaps overly so. Conceived by São Paulo-based studio Chelles & Hayashi, it expands 5.5cm vertically when passed between torchbearers — a reference to Brazilians' welcoming nature.

"We wanted to represent Brazil in a non-stereotypical way; the Olympic Committee itself said that we should not just show carnival, football, samba," says studio founder Gustavo Chelles.

Riding high on the global commodity boom and on track for its best growth in decades, the Brazil of 2009 wanted to do just that — show the world a different Brazil, worthy of respect.

However, to the dismay of the committee, Chelles' design was so innovative that Brazil did not have the machinery or technical know-how to make it. The contract was handed to Spanish engineering group Recam Làser, which built the torches in Barcelona.

"It is probably the first and last time that a torch is not made in the host country," says Pere Barrios, Recam's founder.

After a whirlwind trip to Greece for the obligatory lighting ceremony in Olympia, followed by a UN ceremony in Geneva, the Olympic flame arrived by chartered plane in Brasília on May 3.

What should have been a moment of fanfare was overshadowed by Brazil's political crisis — only days later President Dilma Rousseff was suspended from office, ostensibly for breaking budget laws but mainly for the dire state of the economy.

In the seven years Brazil was given to prepare for the games, the country went from emerging market darling to an economic basket-case, mired in its worst recession on record. Economists say Ms Rousseff's Workers' party failed to make the necessary reforms during the boom years to increase productivity, which would have allowed industry to flourish and perhaps even have allowed Brazil to make its own torch.

Under the watch of security guards, the Olympic flame then began its journey across another 500 town and cities in Brazil. In the Amazonian city of Manaus, the ceremony featured a pet jaguar, which was later killed after trying to escape, sparking a global outcry.

In São Paulo, retailer Luiza Helena Trajano fell running with the torch. Two days' later, a police motorcyclist ran over a colleague during the procession.

In Angra dos Reis in Rio, local media reported that a group even managed to briefly steal the torch and extinguish it in the midst of protests.

If Brazil hosted the Olympics so that the world would take it seriously, it has failed spectacularly, critics say, pointing to Rio's other myriad problems such as pollution, crime and poor infrastructure. Others disagree.

"Brazil was a serious country in 2009 and it still is," says Paulo Sotero, director of the Brazil Institute at the Wilson Center, adding that the country has made remarkable progress over the past seven years, particularly on fighting corruption. "For that, it deserves a gold medal."

After the antics of the torch relay and Brazil's roller-coaster ride since 2009, today's opening ceremony may be an anticlimax. For Recam's Mr Barrios, though, it will be his proudest moment.

Robotic limbs page 11

Security risk
Fears cybercriminals will prey on off-guard tourists

As thousands of international visitors flock to Rio for the Olympic Games, cybercriminals are ramping up for rich pickings.

Cyber intelligence companies and western government officials warn that the two-week sporting festival in Brazil could lead to some of the highest levels of cyber criminal activity in years. The fear is that organised groups within Brazil and abroad will look to take advantage of a glut of information-hungry tourists — a cohort unlikely to be thinking of security when they visit websites to find news or open email attachments to find guides and maps.

"This is a high-risk category event when it comes to cyber crime," said Jens Monrad at FireEye, a digital security vendor.

Over the past month, US officials have warned of the threat of hacking for visitors to Brazil. Bill Evanina, US national counter-intelligence executive, advised Americans to leave their phones or computers at home and use only temporary phones.

The Olympics have been a prime target for hackers before: London 2012 was hit by about 165m online security events, security officials said then.

Brazil already suffers badly from cyber crime. It has the second-highest incidence of online banking fraud and there has been a surge in criminal activity as attackers take advantage of poorly defended corporate networks and weak digital security infrastructure.

Despite the widespread incidence of cyber crime in Brazil, businesses and organisations within the country consistently rate it as a low threat.

On the dark web — part of the internet that requires specific software to access — forums used by criminal hackers are awash with discussions over how to exploit Rio 2016.

In June alone, there was an 83 per cent rise in malicious URLs in Brazil, according to Fortinet, a leading network security group. *Sam Jones*

White House race
Clinton gains traction in Colorado as Trump falters

COURTNEY WEAVER — DENVER

As her opponent continued to reel from one of the worst weeks of his campaign, Hillary Clinton touched down in Denver, Colorado, with an ample amount of schadenfreude.

In swing states, her campaign had just begun airing new ads pillorying Donald Trump for manufacturing Trump ties in China and other products overseas. In Denver, Mrs Clinton happened to pull up to a place called Knotty Tie Co, a local small business that was that was founded by a US military veteran, employs refugees, and, yes, makes its ties in the US.

"I really would like [Trump] to explain why he paid Chinese workers to make Trump ties . . . instead of deciding to make those ties right here in Colorado," Mrs Clinton told Knotty Tie's two-dozen employees, as they nodded along in the background. "If he wants to make America great again, he should start by making things in America. And there's a lot he could learn by coming here."

After a rocky primary season and shaky start to the general election, Mrs Clinton is having a moment, largely thanks to her opponent.

Two polls this week, from Fox and CNN, have shown Mrs Clinton ahead of Mr Trump nationally by 10 and 9 points respectively. In the crucial swing state of Pennsylvania, a survey from Franklin & Marshall now showed Mrs Clinton ahead by 11 points.

And in Michigan, a Detroit News poll had Mrs Clinton leading Mr Trump 41 per cent to 32 per cent, with 60 per cent of the state's voters saying they did not think the businessman was qualified to be president.

Mrs Clinton's ascent in the polls comes partially thanks to Mr Trump's own mis-steps which have dominated the news coverage, distracting from a rash of firings at the Democratic National Committee, which has been plagued by accusations of bias in the wake of an email leak, and from Mrs Clinton's own weaknesses as a candidate.

In the Fox News poll, for example, 70 per cent of respondents said they found Mr Trump's recent comments about the parents of a Muslim-American soldier killed in combat to be "out of bounds".

Yet the Clinton campaign also appears to have been able to break new ground with white men and women, as well as millennials, with polling showing her starting to improve among those demographics, and winning over more supporters of Bernie Sanders.

In Boulder, Colorado, a Sanders-friendly hippie outpost, Paul Martinez, 46, said most of his Sanders-loving friends had already come around to embracing Mrs Clinton as the nominee, while Mr Trump's seemingly never-ending stream of gaffes had made him more confident that he would lose.

"I hope he says something that ends him up in jail," he said gleefully.

Cathy Goodman, a 69-year-old child therapist in Boulder and a relatively recent Clinton convert, said the Democratic convention had helped humanise Mrs Clinton for her in a way she hadn't expected. "I think she does have a heart and cares about people," she said.

Mr Trump, she said, reminded her of some of her preadolescent patients who struggle from severe emotional problems. "I could diagnose him," she deadpanned. "Narcissistic personality disorder."

For most of the past year, Mrs Clinton has been largely on the receiving end of the Sanders and Trump narratives, tweaking her own messages in response to them, rather than shaping the narrative herself.

In the wake of the convention, her campaign has found more footing, with Mrs Clinton occasionally calling the shots, not just dodging them.

This week, she toured working-class areas of Pennsylvania and Ohio, touting her jobs programme to white working-class voters, who remain one of her toughest demographics to crack, and seizing on some of the populist, anti-trade messages that made Mr Sanders and Mr Trump so appealing.

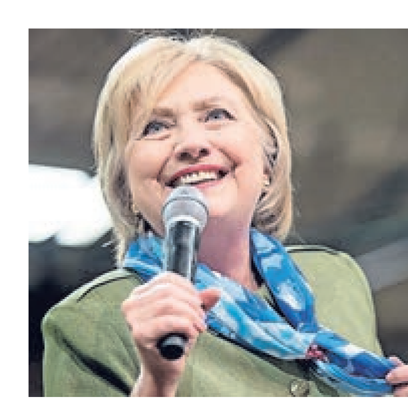
> 'If Trump wants to make America great again, he should start by making things in America'

At a high-school rally in Commerce City, a Denver suburb, Mrs Clinton told a crowd the story of her late father, a second world war veteran who spent his life making fabrics for drapes.

She compared him with the small businessmen who say they have been cheated by Mr Trump, and were not paid their bill in full.

"I cannot imagine what it would have been like for my dad who stood at that log table and took the silk screen and put paint into it and took a squeegee and put it across and then lifted it up and went down over and over . . . to have done his part to have fulfilled his contract and then be told we're not going to pay you," she said, prompting boos from the onlookers.

It was just one of the shots she fired at Mr Trump, bringing her audience to its feet. "We are having a good time in this campaign," she told them.



Hillary Clinton at a high-school rally in Commerce City, a Denver suburb

Human rights
Head of China law firm given seven-year jail term for subversion

TOM MITCHELL — BEIJING

The head of a Chinese law firm at the centre of an unprecedented crackdown on rights lawyers has been handed a seven-year prison sentence for subversion, a court announced yesterday.

Zhou Shifeng, 51, was director of the Fengrui law firm when police detained about 250 lawyers and activists in July 2015, in a campaign that human rights organisations say has had a chilling effect on civil society.

While most of those rounded up were released, Mr Zhou and three other lawyers were tried this week in the city of Tianjin on charges of subversion, which carries a maximum penalty of life in jail.

Two of the lawyers were released on bail or given a suspended sentence, while Mr Zhou and Hu Shigen, a veteran activist, both received seven-year terms after reportedly pleading guilty.

Mr Zhou took on high-profile cases from which other lawyers shied away. In 2008, he represented families affected by sales of tainted milk powder that killed half a dozen infants and sickened hundreds of thousands of babies.

According to Amnesty International, another 14 rights lawyers and activists caught up in last year's sweep are still awaiting trial, 10 of them facing charges related to state security.

Many of their confessions have been carried by Hong Kong media outlets, which have been given unprecedented access to the trials in Tianjin No 2 Intermediate People's Court. As a Chinese special administrative region, Hong Kong has civil and media freedoms not protected elsewhere in China.

Maya Wang, a researcher with Human Rights Watch in Hong Kong, said: "There has been a trend towards 'leniency' for those who confess or who have accused others of crimes, in accordance with the government's wishes. But none of these people should have been detained in the first place."

Ms Wang said the authorities' use of Hong Kong media "seems to illustrate both the Chinese government's increasing control over Hong Kong media as well as its greater sophistication in manipulating public opinion both at home and abroad."

Albert Ho, a veteran member of Hong Kong's pro-democracy camp, noted that the confessions came after the defendants had spent almost a year in detention with sporadic access to lawyers and none to family members.

On Monday, Wang Yu, one of Mr Zhou's colleagues, reportedly denounced "foreign forces" who had tried to use her case to "attack and smear" the Chinese government. Ms Wang, who was released on bail, recently received an American Bar Association human rights award.

According to the Tianjin court, Mr Zhou had "spread rumours and sensationalised sensitive cases" in an alleged attempt to subvert the ruling Chinese Communist party.

The South China Morning Post, one of the Hong Kong media outlets at his trial, reported that prosecutors had played a recording of a lunch at which Mr Zhou said "the ship is sinking" and urged his colleagues to "add more sand".

Zhai Yanmin, who received a suspended sentence earlier this week, testified against Mr Zhou.

Roseann Rife, at Amnesty International, said: "This wave of trials against lawyers and activists are a political charade. Their fate was sealed before they stepped into the courtroom."

Additional reporting by Gloria Cheung in Hong Kong

Investment scams
Beijing regulator warns groups not to misuse the word 'bank'

DON WEINLAND — HONG KONG

China's banking regulator has warned companies not to use the word "bank" in their names following a series of scandals and multibillion-dollar investment scams.

Several outfits posing as accredited financial institutions have been exposed by the regulator in the past year, among them a China Construction Bank operating out of a convenience store in a village in Shandong province.

An international trade union spotted a company whose name included the words "Goldman Sachs" operating in Shenzhen, bordering Hong Kong, last year.

The China Banking Regulatory Commission's Beijing office cautioned against use of the word "bank" — either in Chinese or in English — in titles and advertising and also warned against illegal capital raising.

Industrial and Commercial Bank of China, the country's largest bank by market capitalisation, has issued a similar warning concerning a company called Silver Valley Bank, which had advertised financial services in the country's capital.

Banks and other deposit-taking institutions in China need approval from the State Council to use the label "bank" or perform most banking services.

Misappropriation of the title touches a nerve with China's financial regulators, which worry about social unrest stemming from plundered investments.

Roger Ying, founder of Pandai, a peer-to-peer lending platform in Beijing, said: "Bank is a very sensitive word as it implies government ownership. Banks are there to instil confidence in the people. Thus authorities do not want other financial services companies to be using the word 'bank' to raise funds illegitimately if they don't have a banking licence."

Investors have fallen victim to scandals in which online financial platforms have disappeared with billions of dollars, provoking angry protests on the streets. In February more than 20 people were arrested for their involvement in Ezubao, a "complete Ponzi scheme", that allegedly took more than Rmb50bn ($7.6bn) from investors, China's biggest-ever case of financial fraud.

A month later, a court in southern China jailed 24 people for defrauding about 230,000 investors of nearly Rmb10bn in a similar scam.

A bogus branch of China Construction Bank was reported to authorities last year after a woman who had deposited Rmb40,000 was unable to make withdrawals in a real branch of CCB.

Goldman Sachs (Shenzhen) Financial Leasing Company, which was noted in a report by the International Union of Operating Engineers last year, said at the time it had no connection to the global investment bank.

Financial crimes in China can carry hefty penalties. A tycoon in Zhejiang province named Wu Ying was sentenced to death in 2012 after she was convicted of cheating investors out of Rmb380m. Her sentence was later overturned.

FT
FINANCIAL TIMES

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Emerging Voices 2016

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We are delighted to announce the shortlist for the FT / OppenheimerFunds Emerging Voices Awards, which recognise extraordinary artistic talent across more than 100 emerging market nations.

ART

- **Noor Abuarafeh**, *Jordan*
- **Syowia Kyambi**, *Kenya*
- **Gareth Nyandoro**, *Zimbabwe*

FICTION

- The Seventh Day by **Yu Hua**, Pantheon Books, *China*
- Man Tiger by **Eka Kurniawan**, Verso Books, *Indonesia*
- The Four Books by **Yan Lianke**, Chatto & Windus, *China*

FILM

- Collision by **Clarissa Campolina**, *Brazil*
- Olia by **Tania Cattebeke**, *Paraguay*
- Impressions of War by **Camilo Restrepo**, *Colombia*

Winners will be announced at a gala awards ceremony in New York on 26 September.

For more information please visit:
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FINANCIAL TIMES
Make the right connections

ARTS

Tale of a dog and its hounded owners

FILM

Nigel Andrews

Wiener-Dog (15)
Todd Solondz
★★★★☆

Suicide Squad (15)
David Ayer
★★☆☆☆

Up for Love (12A)
Laurent Tirard
★★★☆☆

The Carer (15)
János Edelényi
★★★☆☆

Bobby Sands: 66 Days (15)
Brendan J. Byrne
★★★★☆

Sid and Nancy (18)
Alex Cox
★★★★☆

Todd Solondz's latest movie is about a dog, but it's not exactly *Lassie Come Home*. Come to that, **Wiener-Dog** (opening in the UK next week) is not really about a dog either. How do you start to unscramble a new film from the caustic, cryptogrammatic creator of *Welcome to the Dollhouse*, *Happiness* and *Dark Horse*? With an unsentimentality you could slice with a knife — or whose cutting-edge bleakness might slice you — Solondz follows an ill-fated and ill-fating Dachshund bitch as she moves between four consecutive owners and stories.

The dog looks cutely at each of her masters or mistresses in turn, with that doggy quizzicality that can melt the heart. But a few "aahs" or "oohs" are all we're allowed, because her paw-print on the script diminishes tale by tale. The role of glistening-eyed mirror to the characters becomes, by osmosis or transference, ours — even though *Wiener-Dog* has at least one telling or traumatic misadventure per episode. (Hold your jaw from dropping to the floor when Debussy's "Clair de Lune" accompanies a long-drawn-out scene of digestive accident.)

A dog sops up tragedy and comedy without understanding either, and that's what Solondz is saying of humanity too. Life's pathos is that we don't get it; yet we battle on regardless. So the cancer-survivor kid with the bullying dad, the neo-hippy veterinarian trying to do good works (Greta Gerwig as Dawn Wiener, presumably the now-grown-up heroine of *Welcome to the Dollhouse*), the Hollywood screenwriter despairing of truth and artistic fulfilment (Danny DeVito as a *buffo* alter ego for Solondz) and the bitter, poignant old lady (Ellen Burstyn, superb) visited by a sponging granddaughter: they may all be going to purgatory in a pushcart.

But the film's own bitter beauty is that the four characters, or character sets, are really one, and are really us. We're watching the ages of Every(wo)man. Life's miscarriages and miscalculations are sad, ghastly or sometimes hysterical; we know we can never go back to repair them. All we can offer is a Candide-like optimism, celebrated in a best-sense-hysterical "midlude" halfway through the film. In a high-volume, high-colour hymn to Wiener-Dog, our Citizen Canine struts across the composited landscapes of a folkloric America amid ad banners announcing a mid-movie intermission that never, of course, comes. It's very funny. It's a gift from Solondz in Christmas mood to an audience knowing that what has gone before and will come after in this film is a screen Halloween hounded by grimmest humour.

Another day; another comic-book pandemonium. There must be an audience for **Suicide Squad**. They're probably converging on theatres right now. Comix-frazzled eyes; an OCD obsession with DC (will the film get everything in the ur-texts correct?); a joyful anticipation of two hours' Armageddon with wackily wardrobed stars — Will Smith, Margot Robbie, Jared Leto — speaking naff or po-mo dialogue.

A badass Dirty Dozen is sprung from a cartoon-world jail to fight evil forces led by, don't laugh, supermodel Cara Delevingne. Robbie and Leto are the only actors worth watching. He does Heath Ledger's Joker with extra Method: scarily intense, supererogatorily crackers. She finds what carnival wit she can in Harley Quinn (get it?), licking the acidity from the archness in the dialogue of her circus-dressed overgrown moppet. Responding to an evil demon's *basso profundo* threat to the group, "Vex me and you die," our killer Lolita puts up a reasoned hand to say: "I am known to be *quite* vexing. I thought I should forewarn you." It gave me a laugh. And it's her character that gets the film's last laugh.

What happened to French star Jean Dujardin? Yesterday's hero with the Oscar-winning *The Artist*, he is back in near-literally diminished form — four foot five, courtesy of special effects — in **Up for Love**. A Gallic romcom about a beautiful girl (Virginie Efira) falling for a short chap, it battles heroically, if not hilariously, to confer PC special status on lovers experiencing height mismatch. You like its goodness of heart; you grin warmly once or twice; you never feel wholly comfortable with Dujardin's CGI midgetry.

People who throw parties they can't afford deserve a hug. At least they tried. You feel this touched affection for **The Carer**, a British comedy drama. After rubbing two pennies together for a cast including a Cox (Brian), a Fox (Emilia) and a Chancellor (Anna), it blows its reserve on a late guest appearance by Sir . . . no, mustn't spoil the party. Basically everyone converges on a London theatre for the grand luvvie finale; and before that it's a May-December nomance between Cox the elderly actor knight and his young Hungarian carer. She is played with deft diffidence by newcomer Coco König.

It is 35 years since he starved himself to death in a Northern Ireland jail. **Bobby Sands: 66 Days** — that's the time it took him — is a chastening film about the man, the time, the Troubles. Documentarist Brendan J. Byrne argues that the failure of Sands and his fellow hunger-strikers to move Margaret Thatcher during their lives became their success, after their deaths, in moving that imponderable glacier called the peace process. Their martyred teamwork may well have begun the thaw. The film quotes, powerfully, an earlier Irish hunger striker who claimed that those who suffer the most, not those who inflict the most suffering, gain the final victory. Maybe. Or at least we could say: if only.

Alex Cox's **Sid and Nancy** (1986) is worth the 30th birthday revival. Restoration by its cinematographer Roger Deakins has buffed it to a gleam. Cox makes no apologies for Sid Vicious or his music, ranging between the tremendous and the terrible, nor his hell-raising antics which ended in the death of his American girlfriend Nancy Spungen.

For Sid and Nancy it's easy to read Sikes and Nancy. With Gary Oldman's Vicious a serio-pantomimic marvel, the movie is in the best sense Dickensian. Cox's punk Britain (and in some scenes New York) is as drenched in bleak farce and arrested development as *Oliver Twist*. Every character is booked through to hell or purgatory. But we gasp at the inventiveness, ferocity and cuckoo anarchy — Sid's "My Way", in Oldman's rendition, re-manifesting itself as a cod-pop masterpiece — with which these rockers prepared their route to destruction or damnation.

Bitter beauty: Greta Gerwig in 'Wiener-Dog'. Below left: Margot Robbie in 'Suicide Squad'

WEEKEND ARTS

Ingrid Bergman
As a new documentary, 'Ingrid Bergman: In Her Own Words' tells her story, film historian David Thomson reflects on a star who was both revered and reviled during her lifetime. In Life & Arts tomorrow.

ft.com/arts

Chekhov's genius celebrated in triplicate

THEATRE

Young Chekhov
National Theatre (Olivier), London
★★★★★

Sarah Hemming

"I don't want to be happy — I want to be with you!" It's a line from *Platonov*, Chekhov's earliest large-scale drama and one that demonstrates the writer's genius for nailing the absurdity of human beings — in love, in debt, in despair. One of the great pleasures of *Young Chekhov* (transferred from Chichester Festival Theatre) is in watching this talent unfold, expand and shift over three plays: *Platonov*, *Ivanov* and *The Seagull*.

Translated with wit and freshness by David Hare, and superbly staged by Jonathan Kent on Tom Pye's simple, evocative set, the three emerge here like a piece of music: similar themes in different movements. *Platonov* is rough, warm and painfully funny; *Ivanov* darker; *The Seagull* bittersweet and haunting.

And while there is delight in ticking off the recurring features — the vodka, the heat, the ingénue, the sardonic doctor, the embittered schoolteacher, the gunshot — there's little sign of crumpled cream linen and melancholic ennui here. These characters are vibrantly alive — sometimes grubby or over-dressed — and often comically or bitterly self-aware. They sometimes step out of the action and talk to us. And their creator, though funny and sympathetic, is also angry: at the waste, self-absorption and corruption.

Anna Chancellor in 'The Seagull'

At the heart of each play is an act of casual destruction. In *Platonov* it comes at the hands of the titular character, the local lothario who loathes himself for seducing women — but not enough to stop. He's outstandingly played by James McArdle, who oozes roguish charm and cheek, but also a tragic degree of self-knowledge, and is beautifully complemented by Nina Sosanya as one of his conquests. Unstaged in Chekhov's lifetime, it's a bit rough and sprawling, but has great energy and a real edge of comic despair.

In *Ivanov* the key is minor. Geoffrey Streatfeild plays a landowner who is sinking into depression, disgusted by his loss of love for his wife (Sosanya) and his attraction to a neighbour (Olivia Vinall, who plays all three young love interests with subtle differences). Everything feels sharper and darker here — the comedy more acid, the doctor viciously "honest" (McArdle, coolly cruel), the money troubles to the fore.

And yet in a sense the destruction is worst in *The Seagull*, unthinkingly perpetrated by self-absorbed artists — actress Arkadina (Anna Chancellor) and writer Trigorin (Streatfeild) — who trample over their younger counterparts' dreams. Kent's staging is witty and delicately modulated, the characters balanced between ridiculousness and aching sadness. Joshua James brings out the youthful contempt of the would-be avant-garde playwright, but also his struggle to create something of meaning.

Emma Ryott's costumes subtly evolve, ending in the early 20th century, and, a few longueurs aside, this fine ensemble demonstrate one of the world's greatest dramatists finding his voice.

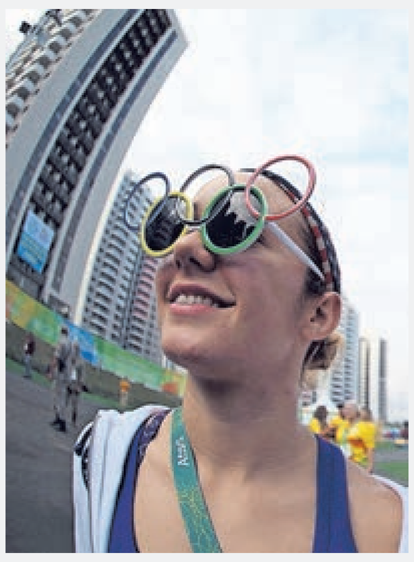
To October 8, nationaltheatre.org.uk

TODAY'S TELEVISION & RADIO

TELEVISION

Olympics 2016: Countdown to Rio (BBC1 8.30pm) and the **Opening Ceremony** (BBC1 11.40pm) provide the main event. On such a night, is it appropriate to show **Munich '72 and Beyond** (PBS America 9pm)? The atrocity in this vividly recounted documentary must be remembered . . .

Memory, mundane and everyday, along past experience "of which we're not aware", comes into an unusually articulate **Artsnight** (BBC2 11pm). The excellent author Meg Rosoff discusses the subconscious and creativity with a fastidiously picked selection of artists, including actors, a Royal Ballet dancer, a cellist, a novelist, a neuroscientist and psychotherapist Susie Orbach. Dancer Edward Watson speaks of a force "a little bit beyond your control even though you're controlling it" and writer Eimear McBride describes "the step between" conscious and unconscious, impossible to verbalise. It leaves you with plenty to think about.



Olympic spirit: BBC1 covers the countdown and opening ceremony

RADIO

In **A Most Ingenious Paradox: Loving G&S to Death?** (Radio 3 9.30pm), conductor Martin Handley assesses Gilbert and Sullivan's place in Victorian theatre (almost revolutionary) and music (equal to Offenbach, superior to Strauss, though often sneered at by their own compatriots). Pros and antis contribute; the pros include Mike Leigh and Jonathan Miller, who seems to think he's the first man since 1885 to realise that *The Mikado* is actually a satire on British institutions. Get away!

Martin Hoyle

FT BIG READ. US ECONOMY

Despite the headline-grabbing tales of Silicon Valley unicorns, new business formation in the US is waning. Can the country that spawned Henry Ford and Steve Jobs get its capitalist mojo back?
By Sam Fleming

Decline of the start-up nation

In the desert city of Tucson, Arizona, local entrepreneurs have gathered in the Pueblo Vida bar for a crash course in failure.

The standing-room-only evening in the sweltering downtown area is called F*ckUp Night. Business owners freely recount their own mishaps, including one whose attempt to make money turning restaurant grease into biodiesel fuel never got off the ground.

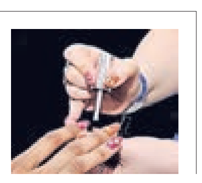
Readiness to fail is essential to entrepreneurship and more aspiring businesspeople need to recognise it, shouts Felipe Garcia, who imported the format from Mexico City, over the noise of the crowded bar. "They are afraid of failing," he says. "No one wants to say 'Hey, I messed up.'"

Glugging beer brewed on site, the entrepreneurs share ideas about products ranging from eco-friendly dinner plates and unmanned aerial vehicles to technology that cools car seats.

Yet the bustling entrepreneurialism evident in this corner of Tucson, a cactus-strewn metropolitan area 60 miles from the Mexican border, has become harder to find in many parts of the US.

While major cities including San Francisco, Boston and New York are flourishing, a host of indicators suggest large tracts of America have lost some of the entrepreneurial verve that made the country the biggest economic success story of the past century.

A quarter of all workers require a licence to do their jobs, which is a drag on state-to-state mobility

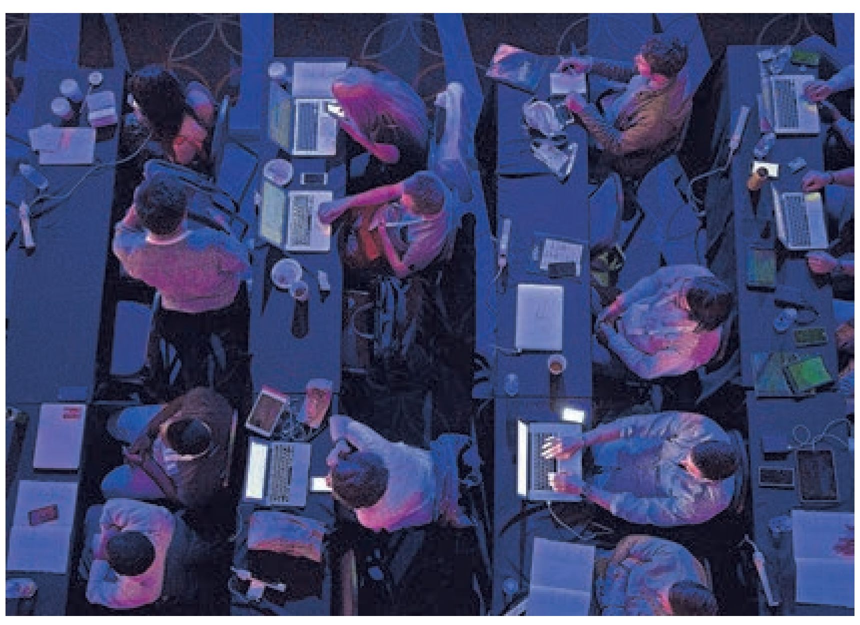


Half of the growth in business establishments from 2010-14 occurred in just 20 counties, according to the Economic Innovation Group, a research organisation. Pima County, where Tucson is located, was among those that lost businesses during the period.

The patchy performance in business formation comes amid broader signs that the US is not the start-up nation it once was. Despite headline-grabbing tales of tech unicorns in Silicon Valley, the portion of the US workforce employed in young companies has been shrinking, as has the pace at which new employer-owned businesses are created. In another sign of depressed dynamism, Americans change jobs and move between geographies less frequently.

Figures released yesterday by the Kauffman Foundation, which tracks entrepreneurship in the US, showed that the share of companies that are start-ups employing at least one person was at the second-lowest level on record in 2013, and 20 per cent below its pre-recession levels. There has been improvement since, with a bounce in openings in the fourth quarter of 2015 to their highest level in 10 years.

But the improvement has not been enough to dispel the musty air surrounding large parts of American business. Companies are growing older, competition is less fierce and market power is consolidating in the hands of a few large companies in many industries.



A TechCrunch summit in New York, which hosted a contest for best start-up. Data show that start-ups tend to be clustered in a few US cities — Bloomberg

Early learning
Universities urged to foster entrepreneurs

Universities need to focus less on "cranking out managers" and devote more effort to fostering entrepreneurship says Michael Crow, president of Arizona State University. The institution has been prodding its students into starting their own companies by integrating entrepreneurship into its curriculum.

The need seems clear. Around a quarter of new entrepreneurs are aged 20-34, according to the Kauffman Foundation, down from 34 per cent in the mid-1990s. That slower start-up activity comes despite an explosion in the number of entrepreneurship classes and diplomas on offer at colleges and universities, with courses growing approximately 20-fold between 1985 and 2008.

In a bid to boost business start-ups, a growing number of universities are taking things into their own hands — providing funding to promising students, on top of academic instruction. ASU, for instance, has an initiative to provide seed funding of up to $20,000, plus office space and mentoring.

The competition for funds is intense says Patrick McFarland, an engineering student and head of Korwave, which is developing a wearable piece of kit that detects and reports medical seizures.

On a bigger scale, the University of California recently started a $250m venture capital fund to invest in companies with ties to its institutions and laboratories. The University of North Carolina at Chapel Hill has started a fund to channel up to $10m into companies commercialising technology developed at the university.

Chris Camacho, chief executive of the Greater Phoenix Economic Council, says his city's experience shows how much the presence of a strong university can mean for a region's entrepreneurial growth. "I see a growing divide between those markets and everyone else," he says.

In three-quarters of US sectors, the 50 biggest companies boosted their revenue share between 1997 and 2007, according to research by Jason Furman, chairman of President Barack Obama's Council of Economic Advisers, and Peter Orszag, an economist and banker. Industries from retail and finance to transportation became increasingly concentrated.

"Without question there is less fluidity in the US economy, whether it comes to workers moving between jobs or firms entering and exiting," says Mr Furman. Weaker business formation "is an important focus of attention and something we need to take seriously. Unfortunately academics and experts don't fully understand what is happening."

The suggestion that the US has a problem in the entrepreneurship department has come as a jolt for a country that prides itself in the red-blooded capitalist spirit that spawned the likes of Henry Ford, Ray Kroc and Steve Jobs.

That exceptionalism was at the heart of Hillary Clinton's attempt to paint an optimistic picture of a dynamic America in her acceptance speech at the Democratic party's convention last week.

Drawing a contrast with the bleak image of American decline painted by her opponent Donald Trump a week earlier, the former secretary of state lauded the country's entrepreneurs as the world's most innovative. "We have the most dynamic and diverse people in the world," she told the convention.

Stifled competition?

By many measures Mrs Clinton is right. Indexes that show the ease of doing business and global entrepreneurship put the US at or near the top of the rankings. In world-beating, technology-rich areas such as San Francisco and Silicon Valley, business is booming and effervescent activity can be found in plenty of other niches.

Andrew Geffken, an energy consultant turned entrepreneur, points to his sector, craft brewing, as evidence of frenzied growth with new breweries and distilleries popping up across the country. He quit a steady job to help start a Baltimore-based fermenter of mead targeted at millennials called Charm City Meadworks that is on track to double its revenue this year to $850,000. "It is a good time to be an entrepreneur, at least in my segment," he says.

While there has been a long-term decline nationwide in the share of businesses that are start-ups, analysis from the OECD finds similar trends in its other member countries, suggesting the US is by no means uniquely challenged.

Nevertheless, concern about subdued capitalist mojo and ageing businesses is circulating at the highest level of policymaking, triggering congressional hearings and worried commentary from the Federal Reserve and International Monetary Fund.

The stakes are particularly high because of America's miserable productivity performance in recent years, as well as the poor income growth and rising inequality that has hung over the presidential race. Newer companies tend to be more innovative than established ones, and the IMF warned in a recent report that the lack of start-ups is eating into US productivity.

At the same time, the power of established companies may be stifling some of the opportunities for new entrants, while workers at companies generating outsized earnings may be reluctant to jump ship to new companies. In an acknowledgment of the concentration problem, President Obama in April issued an executive order telling government agencies to take steps to promote competition in the country.

"Most of the net new jobs in the US are created by young businesses, and new firms are responsible for a lot of the innovation and wealth creation in the economy," said Arnobio Morelix, a senior analyst at the Kauffman Foundation. "It is worrying that we are seeing a long-term decline in new business formation."

The question is why this is happening — and it is here that consensus quickly breaks down. Some analysts have suggested there is a particular problem with millennials, who perhaps as a result of record-high levels of student debt or a paucity of home equity with which to leverage loans, are starting businesses at a lower rate.

But the problem with blaming it on a particular generation is that the trend of declining start-up activity has been under way since the 1970s. Indeed, the most recent two years of Kauffman data have shown a pickup in entrepreneurial activity among 20-34 year olds, even if the share of new entrepreneurs in that age group is below levels in the 1990s.

Other research focuses on burdensome regulation and problems with access to capital as key barriers to a bigger resurgence in business growth.

A quarter of workers require a licence to do their jobs, with the share of workers licensed at a state level up fivefold since the 1950s. This explosion of paperwork, which affects professions ranging from manicurists to interior designers, is dragging on job switching, state-to-state mobility and employment opportunities, prompting calls for reform by the White House and some lawmakers.

What's more, small companies do not have the resources that big incumbent companies enjoy when it comes to navigating America's thicket of local, state and federal regulations, which may be making it harder for start-ups. Steve Glickman of the EIG points out that new companies also lack the lobbying budgets and power to affect regulation.

A paucity of capital, driven in part by tougher post-crisis lending standards and financial regulation, is making matters worse, says Patrick McHenry, the Republican vice-chairman of the House Financial Services Committee and a North Carolina congressman. In July he won bipartisan support for two bills aiming to smooth access to capital for smaller companies. The bills will now go to the Senate. "We have capital deserts in this country in places where there are plenty of new ideas," he says, pointing out that nearly four-fifths of venture capital goes to just three states: New York, Massachusetts and California. "What we have got to do is spread those economic opportunities more broadly across the 50 states."

Complaints about the difficulty of accessing venture capital are heard frequently in Tucson, which like large tracts of America are off the beaten track for the big players. Manny Teran, president of a Tucson technology-development company called Aztera whose products include a machine that turns hospital patients over in bed, says access to capital is a problem in his region. "They are flying right over," he says of VC bosses. "They are not stopping here."

'Jump off the cliff'

Pima County, where Tucson is located, saw a 1.9 per cent decline in the number of new business establishments from 2010-14, according to data compiled by EIG. That differs from the rebounds following the 1990s and 2000 recessions, when it saw business establishment growth of more than 10 per cent.

By contrast, Maricopa County, home to the much larger Phoenix, only an hour and a half's drive north of Tuscon, saw 3.5 per cent establishment growth during the current recovery.

Some entrepreneurs argue that Tucson lacks the critical mass to provide the base for large numbers of entrepreneurs. Vivek Kopparthi, the Phoenix-based chief executive of NeoLight, a young company making equipment for treating jaundice in infants, says start-up founders like him want to be in big, highly connected cities such as the Arizona capital. "This [Phoenix] is where everything is happening. People come from Tucson to Phoenix, not from Phoenix to Tucson," he says.

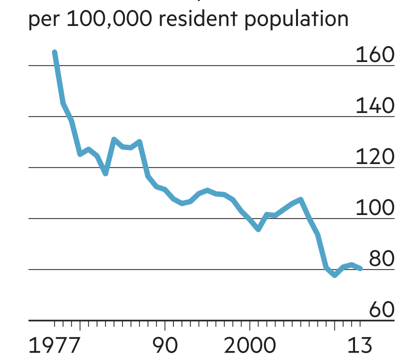
Yet Tucson's advocates say it has the raw materials to become a bigger business hub. Programmes run by Startup Tucson, which seeks to bolster local enterprise, are heavily oversubscribed, with 40 companies applying for one incubator course with 18 places.

Among the attendees at a recent session was Brian Herrera, a 23-year-old former University of Arizona student, who stood up to practise making a pitch for his virtual reality company, Vidi VR.

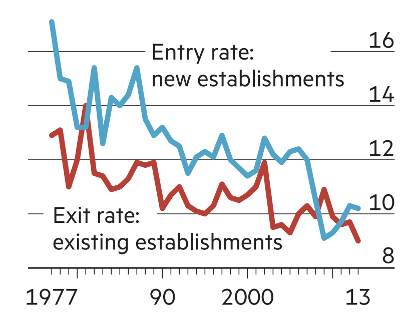
More of Mr Herrera's contemporaries will need to join him in coming years — and accept the risk of failure — if the start-up deficit is to be turned around.

"A lot of people get really comfortable and are not willing to take a risk," says Mr Herrera, who first started working on his company's 3D camera in his bedroom. "You have to jump off the cliff and figure out how to grow wings before you hit the ground."

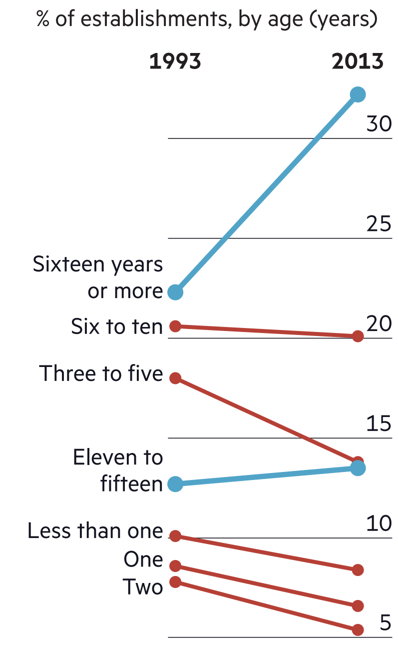
Startup density
Number of startup firms per 100,000 resident population



The business sector is becoming less dynamic
Number of new and closed establishments as a % of total establishments

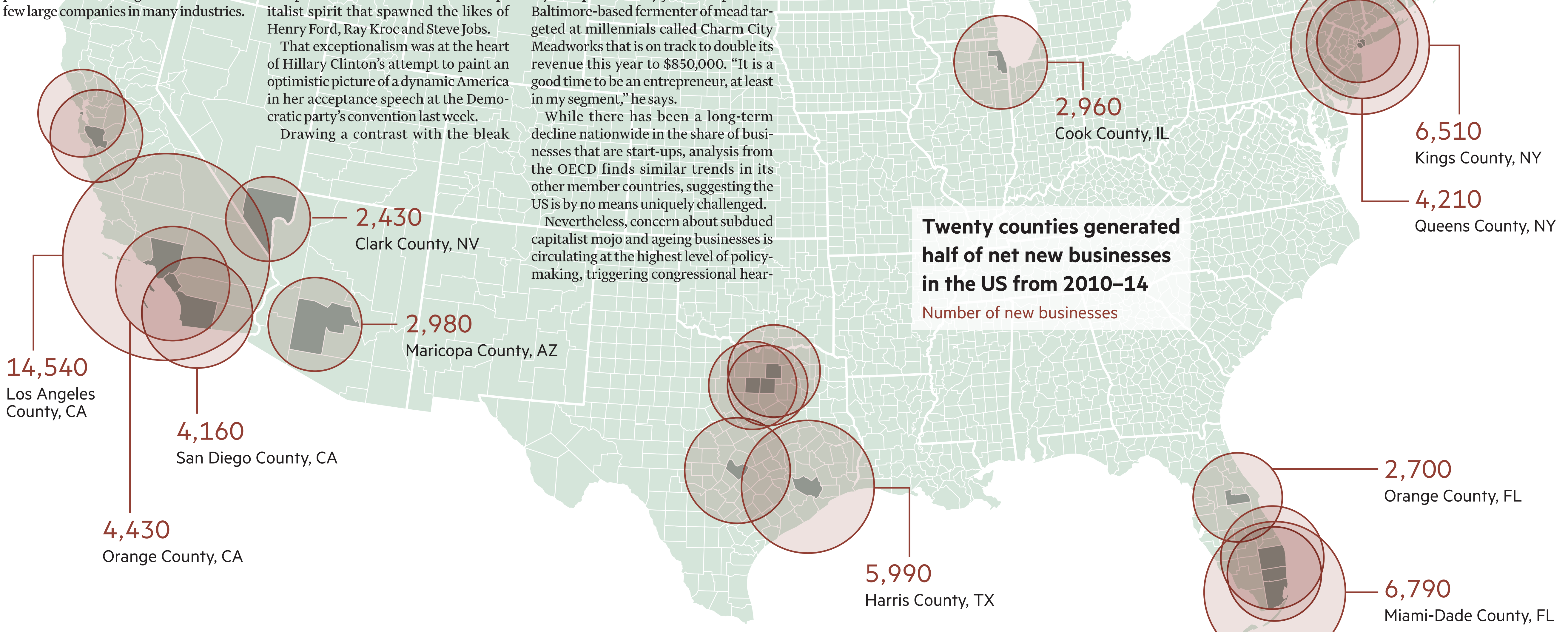


Fewer young establishments
% of establishments, by age (years)



Sources: Kauffman Foundation; OECD; Business Dynamics Survey; Census Bureau

'We have capital deserts in places where there are plenty of new ideas. Opportunity needs to be spread more broadly'



FT graphic: Chris Campbell
Source: Economic Innovation Group

FINANCIAL TIMES

'Without fear and without favour'

FRIDAY 5 AUGUST 2016

The BoE has delivered: now for a fiscal response

Monetary stimulus can only cushion the adjustment to a new reality

Mark Carney had a lot of doubts to dispel as he announced a monetary stimulus to offset the shock of the UK's vote for Brexit. Many Remain voters fear the economy is now doomed to years of uncertainty. Leave supporters have accused the Bank of England governor — who warned of the economic consequences of leaving the EU — of talking the country into a downturn. Banks say that near-zero interest rates will ravage their business. Besides these partisan views, there is a widespread concern that, after years of extraordinary measures, policymakers have little remaining firepower.

Mr Carney has done his best to answer the sceptics. The BoE has cut rates to 0.25 per cent as expected. It has also gone much further. It has created a new funding facility to make sure that banks pass the cut on to borrowers; it will resume quantitative easing, buying a further £60bn of gilts; and it will include corporate bonds in its asset purchases for the first time.

Although some policymakers opposed this two-pronged expansion of QE — pointing to a lack of hard data to show the trend in activity since the referendum — the decision to ease using readily available tools is correct.

Even after factoring in the effects of this sweeping stimulus, the BoE's new forecasts, the biggest downgrade to its outlook in 20 years, are grim. In the short term it expects higher unemployment, falls in house prices and household incomes, and a spike in inflation. It believes growth will stall in the second half of this year and be a cumulative 2.5 percentage points lower by 2019 than its May forecasts suggested. Yet the central forecast is for the UK to avoid an outright recession. As Ben Broadbent, deputy governor, underlines, this is an optimistic interpretation of the best data yet available.

If the BoE's projections prove correct, it is highly likely that further stimulus will be needed. Mr Carney was resolutely upbeat in his assurances that the BoE could go further on all fronts.

But it is becoming much more difficult to make monetary stimulus stick. Policymakers will probably cut interest rates again before the end of the year, to just above zero, but Mr Carney opposes negative rates. The BoE can expand QE, but gilt yields are already at record lows, and corporate bond buying is an innovation that will take time to put into effect. As for helicopter money, Mr Carney said he could not conceive of a situation that would merit such "flights of fancy" in the UK.

More to the point, while the BoE can offset a shock to confidence and smooth the UK's adjustment to a "new reality", as Mr Carney terms it, there is little it can do to alter that reality. Brexit represents a huge supply-side shock that will suppress investment for years. The UK's long-term prosperity will depend on the evolution of its trading relations and on its ability to improve on dismal productivity.

So while the BoE's burst of monetary stimulus may have bought politicians time, the onus is now on government to deliver a well-targeted fiscal boost, while it decides on the form that Brexit should take and begins negotiations.

Mr Carney put considerable emphasis on the months of contingency planning and analysis that underpinned the BoE's response to the referendum. Now the central bank has done all that can reasonably be expected of it to lessen the risks of recession.

So far, the government's response has been singularly wanting in any such preparations. It is to be hoped that by the time of the autumn statement, when the chancellor updates his spending plans, he will be in a position to set out a fiscal stimulus of similar ambition.

ANC should respond to voters' reprimand

South Africa's closely fought local elections are good for democracy

South Africans voted this week in a watershed election. The African National Congress is heading for its worst result since it came to power in 1994. With about three-quarters of the votes counted in the local elections, the ANC looks likely to lose Port Elizabeth, a historical stronghold, to the opposition Democratic Alliance. Even Pretoria, the capital, and Johannesburg, the country's urban powerhouse, hang in the balance. Nationally, it seems certain that the ruling party will drop below 60 per cent for the first time in its electoral history.

South Africa has reason to celebrate this vote. It is time for the ANC to loosen its monopoly on power. The fact that there is room in the political arena for competing ideas over dealing with the country's numerous problems can only be positive for the future.

South Africans remain politically engaged. However disappointed voters may be in their political leaders, they have not given up on the idea of politics as an agent of change. Most black South Africans still see their right to vote, denied for decades under apartheid, as precious and significant.

Similarly, the country's institutions are, more or less, holding steady. Though there has been some concern about the ANC beginning to erode the independence of organisations as diverse as the prosecution service and the state broadcaster, South Africa's institutional capacity to hold a free, fair and largely peaceful election is very much in tact.

For the ANC itself, the message of the election is that many voters are dismayed at the direction the party has taken under Jacob Zuma. He is perceived to have overseen an administration more interested in enriching itself than in serving the people. The economy has stalled. So has meaningful policy. The treasury is trying desperately to save the country from a downgrade to junk status by rating agencies. But it is receiving no help — quite the reverse — from the presidency. South Africa's problems are grave. Ferociously high unemployment is perhaps the most serious. Half of young black South Africans have no job. Many have no hope of ever finding gainful employment.

If the ANC is to recover, it needs to sort itself out quickly. It must do more to stem the perception that corruption is rife, or its legitimacy will further erode. Mr Zuma must also show he is serious about trying to get the economy moving again. Education, vocational training and youth employment schemes would be places to start. Putting more emphasis on free-trade zones to encourage inward investment could be another. The party should also dust off the National Development Plan, a serious proposal to raise economic potential and to bring social justice, services and — above all — opportunity to millions of its citizens. It has never been seriously tried.

The opposition also has a role to play. Julius Malema's Economic Freedom Fighters is serving a useful, if sometimes overly aggressive, role in keeping pressure on the ANC. The larger Democratic Alliance has an even more critical job. The DA traces its roots back to white parties. It must now do even more to connect with black South Africans and purge its ranks of any semblance of racism. Its new black leader Mmusi Maimane has made a decent start, but he needs to go further.

The DA must also prove it is as good an administrator as it claims. If it ends up in charge of Port Elizabeth it should run an impeccably clean administration that can deliver the services it promises. That would give the electorate a meaningful choice in the 2019 general election, as well as forcing the ANC to raise its game.

Letters

Email: letters.editor@ft.com or
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Include daytime telephone number and full address
Corrections: corrections@ft.com

Police are dishonestly targeted as the bad guys

Sir, The tragedy of Carol Anderson's article "America is more racially divided than it has been in decades" (August 3) is that it is a perfect example of why race relations in America have gotten worse and it gives your readers a distorted view of reality.

While I did not vote for Barack Obama because of his lack of executive experience and his extreme liberal views (in my opinion), when he was elected I hoped that the election of the first black president would dramatically improve race relations. Sadly, a majority of Americans say race relations have gotten worse under President Obama. Instead of attacking the root cause of black violence, which is the fact that 73 per cent of black children are raised without a father; President Obama, Democrats and the media have dishonestly targeted the police as the bad guys. A new study by black Harvard University professor Roland G Fryer proved with hard data regarding 1,000 police shootings that there is statistically "zero" racial bias in police shootings. Based on the negative view of the police portrayed by the media and Obama administration, Professor Fryer said this about his study: "It is the most surprising result of my career."

Since the beginning of this year up until July 15, a total of 2009 people had been shot in Chicago. Of those, more than 85 per cent were black and 85 per cent of those blacks were shot by fellow blacks. Only nine people, or 0.4 per cent of the total, were shot by the police, and in most cases those people were carrying a weapon, resisting arrest or attacking the police. What dominated the news in the media? The 0.4 per cent of people shot by the police!

A majority of Americans believe that race relations have indeed gotten worse in America under President Obama. He and the media carry a heavy percentage of the blame for that decline.

Randy Rossi
Grayslake, IL, US

Crime-fighting policies were not put in place to crush black Americans

Sir, Professor Carol Anderson, in "America is more racially divided than it has been in decades" (August 3), constructs a laundry list of what she sees as unjust and discriminatory state and police policies that single out, kill, imprison and limit opportunities for African-American citizens in the US. She seems to believe that things such as "broken windows policing", voter ID laws and other crime-fighting measures are mainly subterfuges for limiting and crushing opportunities for black participation in American life. While injustices are unfortunately a part of life in any system and cannot be supported, more current statistical analysis appears to show that white citizens are killed by the police at a higher rate per capita than black citizens, and that broken windows policing, despite some abuses, has helped to lower crime rates overall.

As a life-long New Yorker who remembers the city before and after the interventions of Rudolph Giuliani, I can say that there is really no comparison with the sense of safety overall that had come about in part because of his efforts. We are seeing catastrophic increases in violent crime in cities like Chicago, some would say because of a decrease in aggressive policing, despite Prof Anderson's protestations that aggressive policing only inflames the communities in which it occurs.

Will the country really be a better place if we just allow "anything goes"?

Saul D Raw
Brooklyn, NY, US

Some jostling is going on across the channel, too

Sir, The question of who is in charge in negotiating Brexit is an intriguing one ("The three Brexiteers jostle for prime position ahead of battle with Brussels", August 3). As the FT has noted elsewhere, an equivalent question is being asked (and contested) across the channel: is the European Commission in pole negotiating position, as its president Jean-Claude Juncker wishes — or the member states, the Council and its president Donald Tusk?

It's not difficult to see the answer. In bilateral relations between the member states — the arena in which the possibilities of creativity are greatest, partly because the UK is not alone in having problems with the current EU set-up — prime ministers are the focus and to a lesser extent foreign ministers, including Boris Johnson. Expect the yet-to-be nominated UK sherpa to work closely with Downing Street, whatever the formal reporting line.

In parallel, and somewhat less constructively, Michel Barnier can represent the commission's traditionally rigid position to his designated opposite number, Brexit secretary David Davis. However, these two will eventually have to fall in line with whatever order heads of state and the Council can construct. That's why Mr Davis does not need that many civil servants, at least not at this stage of the game; if things work out then he will get his troops.

Meanwhile, international trade secretary Liam Fox can range all over the world.

Nicholas Dorn
Institute of Advanced Legal Studies, University of London, UK

Revolving doors work in both directions

Sir, The Financial Times has expressed concern that former regulators have gone over to the side of those they used to regulate ("The case for tough rules on 'revolving door' jobs", editorial, and "Lord King's Citi role highlights need to police revolving door", Inside Business, Patrick Jenkins, August 2). Others have gone even further in their criticism. French president François Hollande has called it "morally unacceptable" that former European Commission president José Manuel Barroso has taken a role as adviser to investment bank Goldman Sachs.

In your editorial you mention a number of cases where former central bankers have joined the private financial sector. The phenomenon has been around much longer in the US where, moreover, the revolving door works both ways. Robert Rubin went straight from being co-chairman of Goldman Sachs to Treasury secretary and then back to chairman and director at Citigroup. Hank Paulson was chief executive and chairman at Goldman Sachs before becoming Treasury secretary. Paulson's successor, Tim Geithner, became president of private equity firm Warburg Pincus after his term ended.

To this could be added that the boards of directors of the 12 regional Federal Reserve banks contain a number of senior bankers. The CEO of Lehman Brothers, Dick Fuld, was one example, Jamie Dimon of JPMorgan Chase another. Steve Friedman was simultaneously chairman of the board of the Federal Reserve Bank of New York and a member of the board of Goldman Sachs when the latter applied to the former to change status to bank holding company.

Of course we need rules to supervise the potential conflict of interest. Of course it is necessary with a cooling-off period of, say, one year in going from the public to the private sector. But we should rather encourage than criticise a phenomenon that adds necessary competence to both parties. I have great difficulty in seeing how someone can become a supervisor or regulator without having done a stint in banking first. Both the present head of the Bank of Sweden (who is also chairman of the Basel Group on Banking Supervision) and his predecessor previously worked in high-level positions in Svenska Handelsbanken. Nor should the private sector be deprived of the enormous competence that people like Lord King can contribute to Citi. We need more revolving doors, not fewer.

Johan Lybeck
Lézignan-Corbières, France

'Project Fear isn't a project any more'

Those with right to vote are not disenfranchised

Sir, Reader Mark Eisenger (Letters, August 4), like many of your own journalists, describes supporters of Brexit and Donald Trump as disenfranchised, referring to them as "disenfranchised voters". Enough! They may be disillusioned, dissatisfied, disappointed — even dispossessed — but if they have the vote, whether or not they use it, they are not disenfranchised.

David P Leader
Glasgow, UK

Hygiene standards slip at HMRC

Sir, Sarah O'Connor's article "The striking effects of Britain's pay rise" (August 3) intrigued me. Over a decade ago I was involved in preparing a large IT company's bid for the contract to support HM Revenue & Customs' IT function. HMRC's invitation to tender included several hundred documents, in some cases defining service standards in a very detailed way. As HMRC was spending our money, one would expect this attention to detail.

No doubt, HMRC applies the same standards to its property management contracts. Cleaning offices and toilets to a required standard is, however, a more easily defined task than prompt and effective software maintenance and enhancement. Specifically, there is a minimum number of hours that can be estimated for cleaning a given number of toilets to an acceptable standard of hygiene. As contractors compete keenly on price I suspect that no more than this minimum number of hours was included in the successful contractor's bid. Yet if, as Ms O'Connor's article states, the number of hours worked by cleaners has been cut, then the acceptable standard of hygiene cannot be reached. So perhaps the headline to her report should have been "Health warning to HMRC visitors and staff"?

Peter McLoughlin
London N2, UK

Mid-sized cities ready to take up their strategic role

Sir, Regarding your report "Industrial strategy casts doubt over 'northern powerhouse'" (August 3): I welcome Theresa May's intention to create a "nationwide agenda" for boosting productivity outside the south-east rather than focusing on select areas. It is not just my own northern England that has not seen sufficient investment, but cities along the south coast, in the Midlands and in East Anglia which have been bypassed by too much of Whitehall policy.

Mid-sized cities that we represent have shown that we can be powerful engines of economic growth and innovation, alongside our colleagues in Manchester, Liverpool and other larger metropolitan areas. A full-throated, national industrial strategy is three decades overdue, and we urge ministers to move forward quickly and boldly to establish and implement a real programme to deliver prosperity and opportunity to all corners of the country. We will support them fully in this endeavour.

Paul Watson
Leader, Sunderland City Council
Chair, Key Cities Group, UK

All good fun and nothing to do with social values

Sir, I was disappointed by Ian Shuttleworth's unenthusiastic review of *Half a Sixpence* at the Chichester Festival Theatre (July 28). I took a party of 25 to see the show (age range 17 to just 70) and all felt that it was excellent. The show's appeal is not "a matter of personal social outlook" — it is simply good entertainment, the enjoyment of which does not mean an endorsement of Edwardian social values.

Harriet Sergeant
Partner,
Sheen Stickland Chartered Accountants, Chichester, West Sussex, UK

The changing world of work challenges us all

Notebook
by Emma Jacobs

Recently I went to a new bar in Wapping, east London. What was striking was not its cocktail list but its name: Trade Union.

It was a curious choice for a bar so close to the site of the ferocious dispute 30 years ago between newspaper workers and their employer, then called News International — and then, as now, owned by Rupert Murdoch. The strike was sparked by the media titan's decision to move The Times, The Sunday Times, The Sun and The News of the World to former docklands a few miles down the river from their old home in Fleet Street, to enfeeble the unions, and to impose flexible working and new technology.

When I visited, Trade Union was buzzing with office workers, encouraged no doubt by the three-hour happy hour, kale Caesar salad and Cornish crab: a vision of metropolitan affluence, a world away from industrial strife. The woman who had set up the bar's social media account told me she had received hostile tweets saying the name was disrespectful. She had never heard of the print dispute and had taken to Wikipedia to read about it. It took place five years before she was born.

It was a reminder of just how much the world of work has changed in a few decades. Almost five years ago I started writing Working Lives, a weekly feature for the Financial Times chronicling changes in work, the creation of new types of job and the death of others, as well as trends in office life. In other words, putting faces to employment data.

The first article was about Nolan North, a Hollywood actor who has made his career out of video games. Last week's was the final piece in this format, although the series will continue with podcasts and long-form stories. By coincidence the final feature, too, was about video games: this time featuring a presenter of electronic sports (esports) — competitions between professional video gamers.

Typically I ask people doing such jobs what their parents make of their career. They report pride but also bewilderment. Parents cannot comprehend these new industries, let alone that their offspring have fashioned a career out of them.

While technology has produced opportunities, it has also intensified precariousness. On-demand services require on-demand labour. One woman, who refused to be identified as she felt embarrassed by her piecemeal work waiting at clients' homes for their online deliveries, said: "It is a strange job. A new type of working situation."

The financial challenges of precarious work for those on low incomes are well documented. Yet even for the well paid there are repercussions. Uncertainty and isolation trigger anxiety, as employers relinquish their duty of care and offload risk on to workers. At the same time, technology is deployed to track employees' every move.

"Companies can't have it both ways," one cycle courier union representative said. "There is extreme monitoring but no employment rights. It's hypocritical." It is easy for those on the company payroll to make fun of human resources teams, but a working life without them often means discrimination and stress.

It can be hard to convince people to talk about their work — they worry about losing their jobs — yet when you do it can be a delight. Conducting hundreds of interviews in researching these articles, I have been constantly surprised by the entrepreneurial spirit of ordinary people. It might be ethically dodgy, such as the man who writes Wikipedia entries for pay, doubling down on his efforts every time he is blocked from the site. It might be outrageous, like the New York play date consultants who coach three and four-year-olds to share toys.

It is, however, impressive to see people carve careers from niches, like the sports car enthusiast who ditched his accountancy degree (much to his mum's disappointment) and became a valet for supercars. Or the graffiti artist who turned teen vandalism into a business, selling to corporates hoping to buy some street cool.

So despite the air of uncertainty since the UK's vote to leave the EU, I take comfort from the fact that, somewhere, someone will have spotted a gap in the Brexit market for a money-spinning opportunity.

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Comment

Only the government can ensure women get on to boards

BUSINESS

Sarah Gordon

Kevin Roberts got it wrong. The chairman of advertising agency Saatchi & Saatchi was forced to resign this week after he suggested, among other provocative statements, that the debate on gender parity was "all over". If only that were true. The number of women on the boards of the UK's largest public companies just inched over the 25 per cent mark last year, driven by a voluntary target imposed by Lord Davies of Abersoch and the government-backed review he headed. Since then, however, things appear to be going backwards.

Sir Philip Hampton, chairman of the healthcare company GSK, who took over from Lord Davies as chair of the Women on Boards review in February, released research last month showing that female representation on the boards of the FTSE 100 had remained stagnant at 26 per cent. Worse, fewer than a quarter of board appointments between September and March — the best measure of future composition — were women, the lowest since 2011, when the 25 per cent target for the FTSE 100 was set. This is despite the target being updated in 2015 to having women make up a third of boards of the UK's 350 largest listed companies by 2020.

The UK is not the only country where progress is stagnating or going into reverse. Research published in June by campaign group Catalyst found that fewer than a fifth of board seats at the US's largest public companies were held by women in 2015, a percentage unchanged from the year before. Even in Norway, which adopted mandatory 40-60 female-male boardroom quotas in 2006, progress at the top has stalled.

But the UK provides a salutary example of what happens when you take the pressure off.

Increasing the number of women at the top is difficult, and the reasons are not just varied but well-rehearsed. The nature of professional aspirations, childcare challenges and unconscious bias all play a role. Working with people who look and sound like us is easier than working with a diverse team, and the fact that diversity is uncomfortable means that, however well-intentioned they are in this regard, company directors often have to be either coaxed or threatened into improving it.

> Working with people who look and sound like us is easier than working with a diverse team

But diversity delivers results. Research from McKinsey shows that companies in the top quartile for gender or racial and ethnic diversity are more likely to see superior performance measured by average financial returns. Numerous studies have found that more diverse leadership teams improve problem solving and decision making.

If any example of the dangers of a narrow leadership group was needed, the recent Chilcot report into the decision-making process leading up to the invasion of Iraq in 2003 provides it. Tony Blair, the report suggests, liked to restrict discussion to members of his inner circle, and as prime minister was not challenged enough by them; the larger cabinet was given a "much more limited" chance to have a substantive debate. These factors contributed to the catastrophic errors that ensued.

"Sofa" governance by a group of people who feel comfortable together does not deliver the best decisions, and works no better at companies than it did at Number 10. But the tendency to revert to such a group is a strong one and requires powerful counteraction.

The stagnation in the UK's progress towards improving diversity at the top is down to one factor: the failure of the Conservative government to give Sir Philip and his review the support and backing that Vince Cable, the former business secretary under the coalition government, so firmly gave his predecessor.

The UK's big corporates met the original target of 25 per cent because they much preferred a voluntary goal to a legislative imposition — and the threat of the latter was constantly present.

That implicit threat has disappeared. Announcing the latest numbers this month, Sir Philip said that the "lull in activity" since his appointment in February had been due to the distraction of the UK's EU referendum.

Such an excuse seems risible. It is also, worryingly, still present, given that Brexit will take up a great deal of government head space for the foreseeable future, not to mention the fact that the UK will fall out of any EU initiatives to improve diversity. But the truth is that, unlike its predecessor, the Conservative government has simply not put its weight behind the push.

The lessons from the past are that voluntary targets work if they are backed by the implicit threat of legislation. Sir Philip needs the new people in power (many of them women) to give him vocal — and credible — backing.

sarah.gordon@ft.com

The myth of the European peace project

GLOBAL POLITICS

John Plender

As Britain detaches itself from the EU and nationalism is resurgent across the continent, realism requires that we challenge a cherished but hubristic myth about this supranational construct — namely that the grand European plan has kept conflict at bay for decades.

Granted, the original strategy of the EU's founding fathers whereby they sought to enmesh the nation state in a network of economic relations to help secure peace by stealth was successful in bringing increased co-operation between formerly hostile states. The aim, in the celebrated phrase of French foreign minister Robert Schuman, was to make war "not only unthinkable but materially impossible".

Yet stealth came at a cost. It has bred in the European political elite a habit of profound disrespect for public opinion and democratic process, not least in relation to referendums that yield the "wrong" result. That is an important component of the resentment behind the rise of rightwing populist parties in the EU. And the underlying claim that economic interdependence within, first, the Schuman-inspired Franco-German coal and steel community in the 1950s, and then the wider EU, has purged Europe of its ancient enmities is not only fanciful but based on a misunderstanding of the relationship between economics and national security.

The idea of trade as conducive to peace goes back at least as far as the 18th century French political theorist Montesquieu who argued in *De L'Esprit Des Loix* that the desire for financial gain could restrain the destructive passions that are innate in human nature. The thought resonated across the channel and morphed into the liberal internationalism championed in the 19th century by the English free trader and anti-imperialist Richard Cobden. Its high tide came with the publication in 1910 of *The Great Illusion* by Norman Angell, a British politician who argued that the economic costs of victory in war always outweighed the gains. Many took his thesis to mean that war was futile and thus no longer likely. Disillusionment followed in 1914.

The notion that economic interdependence curbs military aggression has nonetheless proved resilient. As well as inspiring the founding fathers of the EU, it features in the official pronouncements of the World Trade Organisation. Many academics, including the Nobel-winning Yale economist Robert Shiller, are firm believers. And indeed there are elements of truth in the thesis. Economic interdependence undoubtedly raises the economic cost of conflict.

Yet other factors provide a better explanation of the postwar peace. In the dangerous nuclear context of the immediate postwar period the existence of a common enemy during the Cold War was helpful in bringing France and Germany together. The taming of interstate rivalries was also facilitated by the US military umbrella. Above all, Germany, having suffered appalling defeats in successive world wars, understandably had no wish for a third self-inflicted catastrophe. Within the EU as a whole the appetite for conflict has been seriously diminished for the foreseeable future. For the populist parties, today's enemies are globalisation, immigration, Brussels and any other perceived threat to national identity.

> The notion that economic interdependence curbs military aggression has proved resilient

In the harsh world outside the EU, there is little to suggest that economic interdependence is a potent restraint on military aggression — witness Russian interventions in Crimea and eastern Ukraine. Once again nationalism trumps economic interest.

The more subtle interaction between politics and economics in the EU relates to the eurozone. Here economic interdependence is proving a recipe for increasing friction. In effect, Europe's old balance of power politics has been internalised within an unstable monetary union, but with the difference that Germany has emerged as the hegemon, insisting on austerity through the eurozone crisis and running record current account surpluses. In the absence of a proper infrastructure — common fiscal policy, full banking union, mutualisation of debt obligations — the single currency has become a mechanism for generating endemic imbalances.

This chimes less well with the thinking of Cobden than of John Maynard Keynes, who argued in a Dublin lecture in 1933 that free trade combined with international capital mobility was a recipe for "strains and enmities".

Since its foundation the EU has undeniably achieved much. But the notion that it has been the main force for peace and stability in postwar Europe has been wildly oversold, and intensified economic interdependence through monetary union has now become a recipe for political and economic turbulence. As the political elite contemplates the rise of rightwing populism it should not forget how often in European history identity has triumphed over interest. War between European member states remains unthinkable for the non-mythic reasons mentioned earlier. A retreat into damaging protectionism is another matter.

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A tweak to helicopter money will help the economy take off

OPINION

Robert Skidelsky

Theresa May, the UK prime minister, has all but repudiated the economic policies of the previous chancellor of the exchequer, George Osborne. She has promised an "industrial strategy to get the whole economy moving". What form should a renovated economic strategy take?

The immediate problem to overcome is the uncertainty engendered by the Brexit vote. What weapons exist to fight it? Mr Osborne's target of eliminating the budget deficit by 2019-20 has already been abandoned, but adding to the national debt by issuing government bonds for an infrastructure programme is likely to unsettle the financial markets. The Bank of England's base rate is already close to zero, and judging by Thursday's announcement we should not expect a rise any time soon. Quantitative easing — the central bank buying bonds for cash — mainly works by enriching those who already own assets. So the standard expansionist tools to cope with a likely recession are blunt or unusable.

It is not surprising, therefore, that interest should turn to hitherto untried devices like so-called helicopter money. "Let us suppose that one day a helicopter flies over this community and drops $1,000 bills from the sky," mused Milton Friedman in 1968. Believers in sound money will regard the suggestion of gifts of newly minted money from the central bank as crazy. But the main problem with it is that there is no assurance that a lot of such helicopter money would not be hoarded, just as much of the cash already issued under QE lies idle.

That is why contemporary advocates of helicopter money like Willem Buiter and Adair Turner see it mainly in terms of monetary financing of additional government spending. The government should pay for, say, an investment programme not by issuing debt to the public but by borrowing from the central bank. This will increase the government's deficit, but not the national debt, since a loan by the central bank to the government is not intended to be repaid. Thus the government acquires an asset but no corresponding liability.

However, this is only one possible form of helicopter money. Another way of achieving the desired increase in spending was suggested by the Swiss businessman, Silvio Gesell, in 1906. His idea was to give cash directly to households. But to give people an incentive to spend the money and not hoard it, there had to be a cost to holding on to it. In his scheme, unspent currency notes would have to be stamped each month by the post office, with a charge to the holder for stamping them.

> Gesell's idea was to give cash directly to households with an incentive not to hoard it

How can this be done today? You could create smart cards with £1,000 for each person on the electoral register. The cards could be programmed to reduce the value of the balance automatically each week. There are 46m voters on the register in the UK. Thus £46bn of new money might be injected into the economy. Since the pattern of spending will be determined by individual recipients, the effect on sales and prices would be widespread.

The tax on hoarding Gesell money would boost its multiplier effect. John Maynard Keynes' advocacy of a public works programmes was similarly based on the idea of getting money into the pockets of workers who would be guaranteed to spend most of what they received from the jobs created and thus generate further spending. The tax on Gesell money does the same.

However, I would not advise Philip Hammond, chancellor, to put all his eggs in the Gesell basket. There is a strong argument that the prolonged recession and mediocre recovery has destroyed a great deal of industrial capacity. If this has left us with no spare capacity, then to increase consumer demand without at the same time increasing the economy's capacity to meet that demand would simply invite inflation. The issuing of Gesell money to consumers should, therefore, be done in parallel with the monetary financing of a public investment programme. For example, a £50bn programme of transport, housing, hospital, and school-building would not just restore capacity in the construction industry, it would simultaneously increase demand in the retail sector. If you build a new school or hospital you set up a demand for all the equipment needed for them to work. To limit the leakage of the extra spending power into imports, the government should give preference to British firms. An infrastructure programme financed by borrowing from the Bank of England that gives preference to British manufacturers would give Mrs May the industrial policy she is looking for.

The investment programme and Gesell money initiative together spread over, say, two to three years, would inject a total of £100bn of extra spending power into the economy — £50bn on consumer goods, £50bn on producer goods. Here is a two-pronged strategy both for fighting the next recession and for rebalancing the British economy. And if it is a step too far for a Treasury still mired in Osbornian austerity thinking, it should be taken up by the Labour party. That way we may still turn Brexit to our advantage.

The writer is author of 'Keynes: The Return of the Master'

Olympian achievements beckon for robotic limbs

SCIENCE

Anjana Ahuja

Perfectly honed bodies, controlled by perfectly composed minds, will tomorrow officially begin living the motto of the Olympic Games: *citius, altius, fortius* (faster, higher, stronger). Such is the extreme physical aptitude on display that sofa-bound spectators might be left wondering whether Olympians are some kind of alien superspecies.

The sentiment is misplaced: an average, functioning human body is itself a masterpiece of engineering, a fact most apparent when things go wrong. That sofa-bound spectator — let us imagine her with her feet up enjoying tea and a biscuit — is unwittingly accomplishing feats of motor control and co-ordination that are almost impossible to replicate using robotics. Scientists who develop prostheses struggle to make artificial limbs that work as well as their natural counterparts. This is the challenge that underpins an alternative Olympic-style event taking place in Zurich in October.

The Cybathlon, billed as the first cyborg Olympics, is no faux Paralympics: the stars will be the cutting-edge assistive technologies on display, not the humans to which they are attached. Aspiring cyclists, for example, will pedal by having their muscles electrically stimulated. By contrast, Paralympians compete under their own muscular steam, using only commercially available devices.

At the Cybathlon more than 80 research groups drawn from 25 countries will battle it out at Zurich's ice hockey stadium. It is not the usual sporting fare. Competitors vying in the prosthetic arm event will prepare a meal and hang washing on a line. Those in the prosthetic leg event will navigate stairs, uneven floors and doorways.

> Scientists struggle to make artificial prosthetics that work as well as their natural counterparts

Perhaps the most unusual event, reports the journal Nature, is a test of brain-computer interfaces: 15 competitors will try to move a screen character with their minds (or, rather, with brain activity). Three distinct manoeuvres — accelerate, jump and roll — are needed to complete the onscreen obstacle course, with each move requiring a specific pattern of brain activity.

Similar technology could eventually allow paralysed individuals to guide wheelchairs using thought alone. This year, researchers in the US showed that monkeys implanted with brain devices could control a wheelchair in this way.

The Cybathlon is the design of Professor Robert Riener, a biomedical engineer at the Swiss Federal Institute of Technology in Zurich, who wanted to make people aware that while life-changing technology exists in the laboratory it was not reaching those who needed it.

He considered organising stunts such as mountain climbing with prosthetic limbs but changed his mind after realising it was ordinary activities that wearers of prosthetic limbs found most challenging. For example, mimicking the incredible strength and flexibility of human fingers — which can both crush a can and hold an egg without breaking it — has for decades been the dream of biomedical engineers. Yet many artificial hands still largely comprise hooks and cables.

One company feeling its way to success is Open Bionics, a crowdfunded start-up that uses 3D printing to make relatively cheap, advanced artificial hands that can grip eggs.

The Cybathlon does exactly what technology competitions are supposed to do: it attracts big players while winkling out smaller outfits flying under the radar. There is already a buzz around one competitor's cut-price 3D-printed exoskeleton with windscreen-wiper motors for joints. Contests also encourage engineers to push their not-quite-perfect creations out of the lab and into the real world. There are nearly 2m amputees in the US alone, and millions more worldwide who have lost limbs to cancer, diabetes, trauma and war. They want progress, not perfection.

The writer is a science commentator

Lex.

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Nike: can't stand the heat

Serious golfers know that good rounds are not mistake-free. A foolish recovery attempt can quickly turn a bogey into two or three more lost strokes. Better to focus on making the next birdie. Nike is following this playbook. On Wednesday the company said it would ditch its golf equipment business (though it will continue to sell golf attire), knowing it has opportunities to score elsewhere.

The exit is not before time. Two decades ago the company signed Tiger Woods to a clothing contract. Then, predicting a golf explosion, it made a leap into the technically challenging world of irons, drivers and balls (its well-known R&D facility in Texas is known as The Oven).

Today, participation rates in the sport are stalling. Out of $32bn in revenue in the financial year that ended in June, Nike attributed only about $700m to golf clothing and equipment — a tenth lower than two years ago. Despite its efforts, Nike clubs were not listed as a competitor of the Titleist brand in the prospectus of Acushnet, Titleist's parent, which is preparing to go public — the honours went to Callaway, Ping and Adidas.

Adidas is competing elsewhere, too: it will also hang up its clubs. In May the company said that it would look for buyers for its golf club brand TaylorMade (like Nike, Adidas wants to keep selling golf shoes and clothing). Enhancing its prospects, Adidas declared yesterday a 7 per cent revenue increase in the unit in its quarterly earnings, which handily beat forecasts.

Still, Nike should not be distracted. The company has said it will hit $50bn in annual sales by 2020 (current revenue is $32bn). Yet fourth-quarter revenue growth in its biggest division, North America, was flat; future orders were surprisingly weak. Shares of Nike are down more than a tenth this year (though over the past two years they are up more than 40 per cent).

While Nike's foundation is still in basketball, running and general fitness gear, it has not been afraid to make new, targeted bets. And it also has not been afraid to cut losses. Over the years, it has dumped brands that did not work out such as Cole Haan, Umbro and Bauer. With competitors including Under Armour on its heels, it is savvy for Nike to avoid wasting resources in a fringe division. A round of golf should never be marred by a bad hole or two.

Walmart: propulsion needed

Walmart seems too attuned to the short-term return goals of its restless shareholders to blow $3bn on a dicey, online start-up. After a profit warning in October, to which an incremental $1.5bn investment in ecommerce contributed, Walmart's shares had their sharpest one-day fall for 25 years; it has been trying to provide reassurance on margins ever since.

Couple that with conservatism in acquisitions and it seems unlikely that Walmart will pay such a price for Jet.com, a one-year-old ecommerce start-up, despite reports that talks are under way. For years, though, Walmart was too cautious in investing online. It should be prepared to spend much more of its annual $16bn in free cash flow to kick-start its ecommerce operation. Its ecommerce sales of $14bn are dwarfed by Amazon's $99bn. More damningly, the growth slowed to 7 per cent last quarter against almost 30 per cent at Amazon.

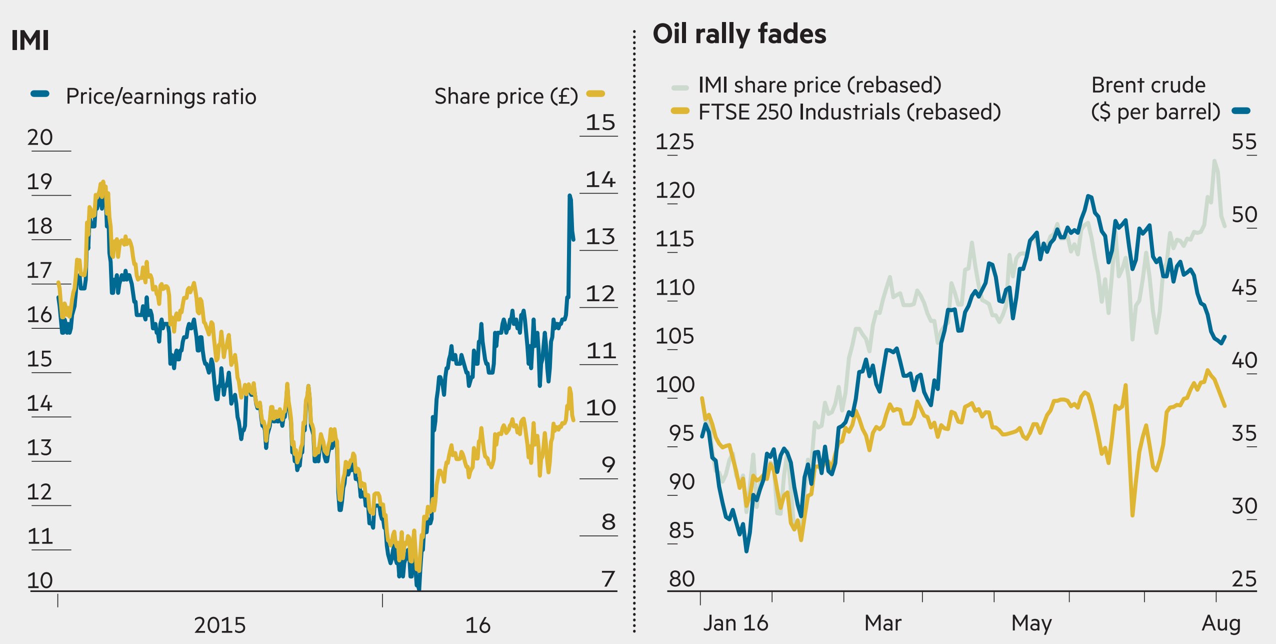
If Jet were on course to hit its lofty launch targets the acquisition would be a no-brainer. It told investors that it expected, on a "very conservative" basis, to hit $20bn by 2020 in gross merchandise volume, more than Walmart makes. Since then, however, the start-up has chopped and changed its business model, abandoning a $50 membership fee three months after launch in a worrying sign of its appeal.

There is at least a happy crossover in brands. Jet focuses on being low cost, offering the lowest prices for customers who buy in bulk, matching up with Walmart's "everyday low pricing".

And good alternatives are few. The company Walmart needed to buy was Amazon back in the 1990s — if it could have wrested it from Jeff Bezos. Then Amazon was valued at less than $3bn and Walmart more than $100bn. Now Amazon is the fifth-biggest public company in the world and Walmart is 16th, trailing by $84bn in enterprise value. This long-shot acquisition might not happen, at least at $3bn, but there will, by necessity, be much more painful investment to come.

Under pressure

Shares in UK engineer IMI have rallied this year along with the oil price. But a dipping oil price and dulling outlook for growth in its core markets make the current valuation look unsustainable.



FT graphic Source: Thomson Reuters Datastream

Britain still makes stuff. Its flock of mid-cap engineers keep the global economy humming. Those exposed to oil and gas markets rode the rally in energy prices earlier this year. Hopes of a sustained oil rally have faded since then.

Can current valuations — boosted by the drop in sterling — be justified?

Streamlining valve maker IMI into an industrial flow control specialist over the past few years has made the company a purer play on industrial and commodity markets. This is a good idea when growth is on the up and commodity prices strong, but the downside is clear when the cycle turns.

A deluge of profit warnings pulled the stock down from its mid-2014 high as the commodity slowdown saw earnings drip away. The shares hit a four-year low in February.

But IMI shares have outperformed the wider FTSE industrials index by 18 per cent since then, helped by the weak pound.

Mark Selway, CEO, joined the company in 2014, fresh from success at rival Weir, and announced plans to double operating profits by 2019. Results for the first half of this year suggest that forecast is overly optimistic. Operating profits fell by 23 per cent year on year, on a 5 per cent fall in revenues.

With shares at 18 times earnings the stock is pricing in a growth recovery that looks increasingly unlikely. Oil and gas industry sales account for some 20 per cent of revenue, according to analysts, industry orders to IMI's critical engineering division fell by a quarter in the first half. Recovery in its power division also looks doubtful as China scraps plans to build new coal plants.

IMI has positioned itself to prosper should growth return. The introduction of lean manufacturing has improved cost efficiency and investment in new product types will broaden its revenue base. Cash flow has been resilient. Despite the fall in earnings it managed to generate the same amount of cash as a year ago, and upped its interim dividend a bit.

But with a cyclical upturn now looking more distant, the shares need to let off a little steam.

ICICI Prudential: wheel of life

The old joke about life insurance is that it is a bet you cannot win. ICICI and Prudential are aiming to demonstrate that, for investors at least, the opposite is true.

The Indian bank has confirmed plans to list 12 per cent of ICICI Prudential Life, a joint venture with the UK insurer and the biggest player in India's life insurance market. At the likely sale price, the company would be worth $6.2bn, making it the largest initial public offering since 2012.

Less than 3 per cent of Indians have life policies, compared with 4 per cent of Thais and 7 per cent of Koreans. McKinsey predicts life insurance premiums will grow at 12 per cent a year over the next decade, driven by a large, young population, a growing middle class and high savings rates. Demand for non-life products should also rise with disposable wealth.

Regulatory changes introduced in 2010 after mis-selling scandals have squeezed insurance profits; margins on new policies have dropped from around 20 per cent in 2009 to mid-teens now. But the new regime benefited those like ICICI Prudential that could sell through retail bank networks. Pre-tax profits at ICICI Prudential Life have grown at 6 per cent a year since 2012.

The sale will not raise new capital for the business but a public listing would certainly facilitate the logical next step: consolidation. The industry is fragmented, although last month Max Life announced a merger with HDFC Life that will result in the creation of another listed life insurer. Both Max and HDFC are joint ventures. State Bank of India is also expected to float its life business in due course.

Even without more consolidation, the outlook is promising. Shares in Max Financial Services, the holding company for Max Life, have more than tripled over the past five years, well ahead of returns from the country's benchmark index.

ICICI Prudential Life looks like a gamble worth taking.

Siemens: looking sharp

Joe Kaeser, CEO of Siemens, calls his ambitious restructuring agenda "Vision 2020". Impatient investors hope he will deliver improvements earlier than that. This year offers some relief: yesterday, earnings targets for 2016 were raised for the second time this year. The shares rose 5 per cent.

The strength is in part derived from a 69 per cent profit increase in the power and gas unit. It acquired Dresser Rand, a Texan oil equipment manufacturer, last year. The deal was controversial amid falling oil prices. Today, the combined subsidiary is benefiting from an €8bn "megaproject," building power plants and wind turbines in Egypt. Profits from the projects will continue to lift revenues — if in lumpy fashion — as delivery progresses.

Despite global challenges, orders are flowing faster than revenue gets booked. If this continues through the current environment of global stress and uncertainty, Mr Kaeser's vision will have proven perfect indeed.

Aviva: sweet lowdown

Low interest rates are bad for insurers in general and life insurers in particular. They make it more expensive to meet payouts on savings products which offer guaranteed returns, weigh on investment profits and (given low-yielding government bonds) funnel money into riskier assets such as commercial property.

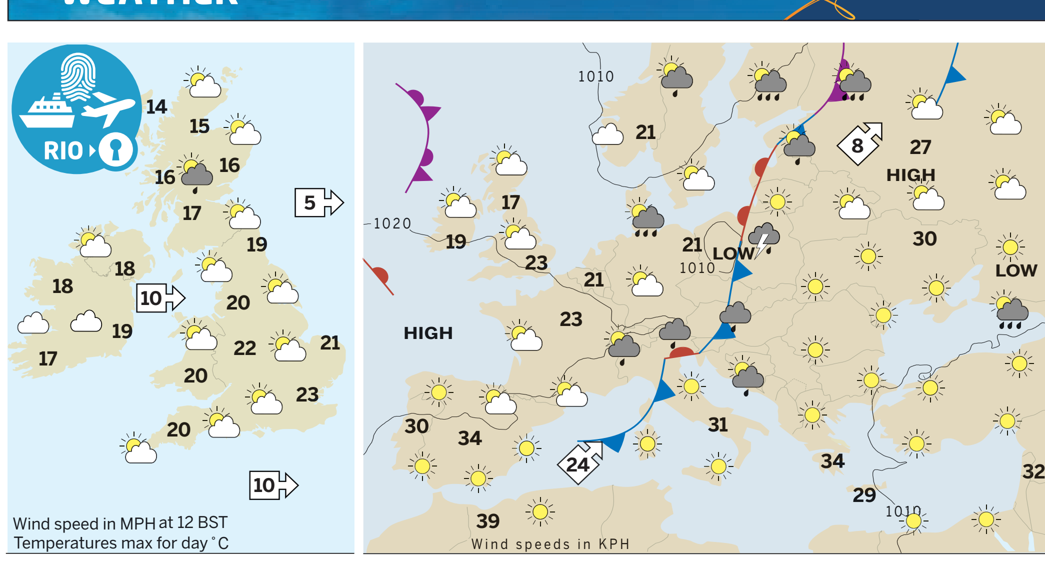
But Mark Wilson, chief executive of Aviva, brags the UK-focused composite insurer's business is "built" for low interest rates — even as it went out and spent £5.6bn on a life insurer last year. Shareholders fretted: the shares have fallen by nearly a quarter since then.

Yesterday, Aviva announced a 13 per cent rise in half-year earnings and the dividend was raised by a tenth. Shares rallied. Several hours later, the Bank of England cut interest rates. Aviva trades at 8 times forward earnings, a discount to the sector on an average of around 9 times. If Mr Wilson can keep backing up his boast that gap will keep closing.

Lex on the web
For notes on today's breaking stories go to **www.ft.com/lex**

WEATHER

NEC Public Safety Solutions



Forecasts by MeteoGroup

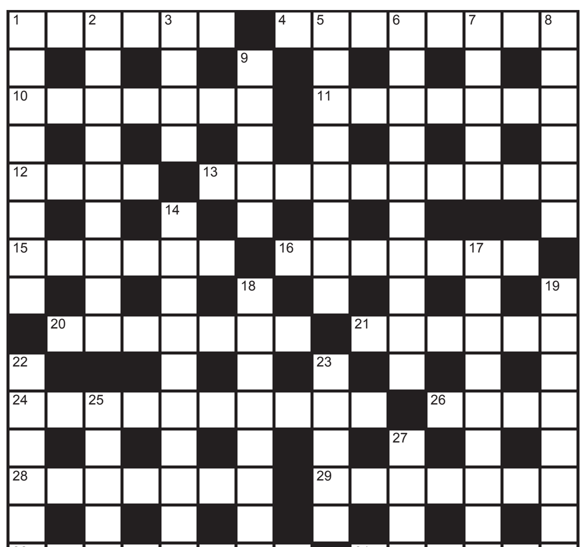
Today's temperatures Maximum for day °C & °F Warm front Cold front Occluded front

Abu Dhabi	Sun	44	111	Belgrade	Sun	35	95	Copenhagen	Fair	21	70	Hamburg	Shower	21	70
Amsterdam	Fair	21	70	Berlin	Rain	21	70	Delhi	Fair	35	95	Helsinki	Fair	23	73
Athens	Sun	34	93	Brussels	Fair	22	72	Dubai	Sun	43	109	Hong Kong	Fair	32	90
B'ham	Fair	22	72	Budapest	Sun	32	90	Dublin	Cloudy	19	66	Istanbul	Sun	32	90
Bangkok	Thunder	33	91	Buenos Aires	Rain	18	64	Edinburgh	Cloudy	19	66	Jersey	Fair	19	66
Barcelona	Sun	28	82	Cardiff	Fair	20	68	Frankfurt	Fair	22	72	Lisbon	Sun	30	86
Beijing	Cloudy	32	90	Chicago	Fair	29	84	Geneva	Fair	23	73	London	Fair	23	73
Belfast	Cloudy	18	64	Cologne	Shower	21	70	Glasgow	Fair	17	63	Los Angeles	Fair	27	81

Luxembourg	Fair	21	70
Lyon	Fair	21	70
Madrid	Sun	34	93
Manchester	Fair	20	68
Miami	Cloudy	33	91
Milan	Thunder	23	73
Montreal	Fair	33	91
Moscow	Fair	27	81
Mumbai	Thunder	29	84
Munich	Rain	25	77
New York	Sun	28	82
Nice	Sun	28	82
Paris	Fair	23	73
Prague	Rain	18	64
Reykjavik	Fair	14	57
Rio	Sun	28	82
Rome	Sun	29	84
San Francisco	Fair	20	68
Stockholm	Fair	22	72
Strasbourg	Cloudy	23	73
Sydney	Rain	15	59
Tokyo	Sun	32	90
Toronto	Thunder	31	88
Vancouver	Sun	21	70
Vienna	Rain	26	79
Warsaw	Sun	31	88
Washington	Cloudy	30	86
Zurich	Shower	19	66

CROSSWORD

No. 15,311 Set by WANDERER



JOTTER PAD

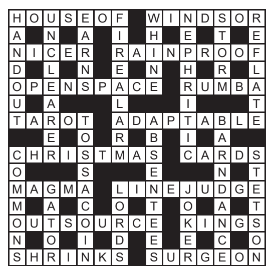
ACROSS

1 Nimble and flexible model turned 51 earlier (6)
4 Need time (8)
10 During quarrel bra worries backing singer (7)
11 Agreed about odd bod's belly (7)
12 Bird from another nest (4)
13 Wily setter, cooking with sage (10)
15, 16 Put some money in the bank as a way of paying later (6,7)
20, 21 See friend at one cinema (7,6)
24 Hack reporting about love for parent? (10)
26 Fairy appearing in first half of Shakespeare play (4)
28 Knife left in incorrect places (7)
29 Voyage in trouble east of Sweden (7)
30 For which chaps have got into cooking ham and pea soups? (8)
31 Hearing battle-axe will barter (6)

DOWN

1 Novelist initially into Buddhism (8)
2 Tiger seen here mistakenly, it's plain (9)
3 More than one painting topless works (4)
5, 23 Residence of Prince Charles once EU gets involved (8,5)
6 Further operation required by gangster (10)
7 Setter is into both men and women's feet (5)
8 Playing partners holding stake in French port (6)
9, 18 Violinist with animated cat likes playing outside right in front of royalty (5,8)
14 Non-drinking male – in his pocket was just what was needed (3,3,4)
17 Putting in order in French – gin drunk without tonic initially? (9)
18 See 9
19 Bit of a sweet gum 'ere, perhaps? (8)
22 Spouse unfortunately works (6)
23 See 5
25 Norwegian group after short time over in US city (5)
27 Girl adopted by Maggie Thatcher initially (4)

Solution 15,310



Companies & Markets

FINANCIAL TIMES

Cashing in US banks boost lending to bolster profits
ANALYSIS, PAGE 15

MetLife	Ford Motor	HSBC	Two-year UK gilt	Brent oil	Sterling/euro	Nikkei 225	Dollar/yen
9%	0.5%	2.6%	8bp	2.3%	1.4%	1.1%	0.1%
$39.35	$12.07	517.3p	0.12%	$44.07	€1.1785	16,254	¥101.11

Goldman warns on UK operations

Bank cautions on pressure to restructure after Brexit vote • Sector awaits result of talks

LAURA NOONAN — LONDON
BEN MCLANNAHAN — NEW YORK

Goldman Sachs has said the UK's vote to leave the EU might force it to "restructure" some UK operations, in one of the clearest signs from a Wall Street institution that is was preparing specific actions following the vote.

In a US regulatory filing yesterday, Goldman, which employs about 5,500 people in the UK, said the referendum result "may adversely affect the manner in which we operate certain of our businesses in the European Union and could require us to restructure certain of our operations".

A New York-based spokesman declined to comment on what form the restructuring might take or how advanced the planning had become at the bank, which recently hired former EU chief José Manuel Barroso as chairman of its London-based subsidiary.

However, its 10-Q regulatory filing was more specific than that of Morgan Stanley, which said that while there were "several alternative models of relationship that the UK might seek to negotiate with the EU", it would "continue to evaluate various courses of action".

Before the EU referendum Morgan Stanley had warned that 1,000 of its London jobs could be relocated in the event of a vote to leave, although it later denied it had plans to move staff to Dublin or Frankfurt.

Most banks have been working on the basis that so-called Brexit means their London operations will lose the EU "passports" they use to do business in the 28-country bloc, but this will not be settled until negotiations between Downing Street and Brussels are complete.

Loss of passporting could force them to set up subsidiaries in EU countries that would carry out trading and other regulated activities between the banks and their European clients.

In the run-up to the UK vote in June, banks including JPMorgan and HSBC suggested that Brexit might result in the loss or relocation of thousands of EU jobs. Since then, most have toned down their rhetoric as they await the outcome of the UK/EU negotiations.

In its filing, Goldman Sachs wrote that "the timing and the outcome" of negotiations were "both highly uncertain".

> 'The timing and the outcome' of negotiations were 'both highly uncertain'

Bill Michael, head of financial services at KPMG in London, said all the banks he advises felt the talks were crucial. "I've never seen the sector as united as it was now, not even during the financial crisis," he said.

"If we move away from where we are now significantly, it has a significant impact on all of their businesses."

A London-based executive at a top Wall Street bank said it would be "irresponsible" for him not to consider the loss of his EU passport as his "base case" but his bank would not start making concrete plans until the situation was clearer.

Maintaining access to the single market was one of the key issues cited by the City earlier this week in a wide-ranging manifesto on its post-Brexit priorities.

Another Wall Street banker said his bank could still serve UK and European clients. He added: "We could execute solutions on the continent, we could execute in the UK." His unit had "not rejigged any headcount" yet.

Short View

Robin Wigglesworth

Just a day before the summer Olympic Games kicks off, the Bank of England decided to break a record of its own, pushing its benchmark interest rate to the lowest level in the central bank's 322-year history.

The scope of the accompanying package surprised investors, but in truth the Bank's chief economist Andy Haldane had already indicated that policymakers would err on the side of aggression. Last month he said that he would "rather run the risk of taking a sledgehammer to crack a nut than taking a miniature rock hammer to tunnel out of prison".

This was clearly the sledgehammer approach. The rate cut was expected, but the Bank's quantitative easing programme was restarted earlier than many economists had predicted. Corporate bond purchasing was another positive surprise, even if the size is — at least initially — modest. The so-called Term Funding Scheme is aimed at ensuring that banks quickly push through the benefits of the rate cut to borrowers.

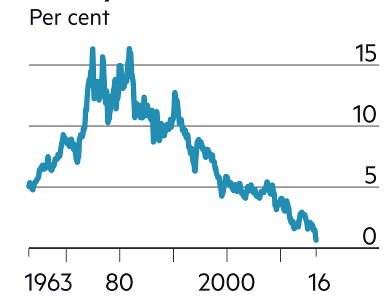
The 10-year gilt yield duly fell to another record low of 0.63 per cent, and has more than halved since the UK voted to leave the EU as investors price in an ultra-cautious monetary stance for years to come.

But even a sledgehammer will work no better than a rock hammer against an iron wall. Mark Carney, Bank of England governor, indicated that another rate cut is probably forthcoming, but reiterated that he is no fan of negative interest rates. Investors have soured towards sub-zero rates, so that stance might prove to be wise, but it limits the Bank's options.

The TFS is an intriguing new tool that has no theoretical lower bound, and could prove powerful. But its success is uncertain. The impact of simply buying more bonds is dubious (after the latest round, the Bank will hold about a third of the gilt market). Tumbling interest rates will also pile more pain on UK pension funds, which had already begged the Bank to refrain from more QE.

So much of the onus to ameliorate the economic downturn will fall on the UK government and fiscal policy. The upcoming Autumn Statement has rarely been more important.

10-year UK government bond yield
Per cent



Source: Thomson Reuters Datastream

The 10-year gilt yield has fallen to a record low of 0.63 per cent, and more than halved since the UK voted to leave the EU

robin.wigglesworth@ft.com

In the shadows
Lame Turtles add to Viacom woes

The legal battle at Viacom has created an "overhang" for the US media company, according to its executive chairman Philippe Dauman, as the owner of Paramount Pictures and MTV reported disappointing results marred by a box-office flop, **writes Matthew Garrahan in New York.**

Mr Dauman and the Viacom board are in dispute with Shari Redstone and her father, Sumner, who controls Viacom and its sister company CBS. The fight has thwarted Mr Dauman's plans to sell a stake in Paramount, with the Redstone camp opposing the sale. Mr Dauman said plans to sell a stake "had been slowed down" by the dispute.

Mr Dauman has struggled to improve Viacom's performance. The company had a tough third quarter: a poor box-office showing for the *Teenage Mutant Ninja Turtles* film, and lower advertising revenues at its cable channels held back profits, which fell close to 30 per cent.

Ratings improved at its VH1 and Nickelodeon channels but could not stop a slide in profits. Revenues rose 2 per cent to $3.12bn. Adjusted operating income slipped 29 per cent to $769m.

Paramount's 'Teenage Mutant Ninja Turtles: Out of the Shadows' disappointed at the box office

Johnston Press slashes value of local newspaper assets as revenues fall 11%

LAUREN FEDOR AND NICHOLAS MEGAW

Johnston Press cut the value of its local newspaper business by almost half, forcing it to miss profit expectations and knocking as much as 20 per cent off its share price yesterday.

The UK newspaper publisher, which owns more than 200 titles including The Scotsman and the Yorkshire Post, reported revenues of £114.2m in the 26 weeks to July 2, down 11.4 per cent from the same period last year.

Advertising revenues fell nearly 18 per cent year on year in the first quarter, and were down 15 per cent in the second.

The publisher revealed a £216.9m writedown on the value of most of its newspaper assets, reducing their worth to £259m, excluding the "i", the national newspaper it acquired this year.

The charge pushed the group into a pre-tax loss of £183.7m in the first half, compared with a £2.2m pre-tax profit a year earlier.

Johnston bought the "i" tabloid title in February for £24m from Alexander and Evgeny Lebedev, owners of The Independent.

Shortly after announcing the sale, the Lebedevs ceased publication of the daily and Sunday newspapers, making the titles available only online.

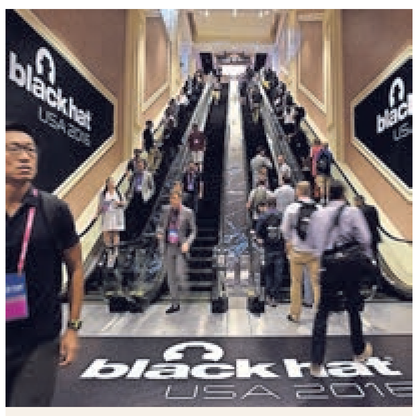
Johnston said yesterday the acquisition of the "i" had been "transformational", pointing to a surge in sales of the newspaper since the deal was completed in April. Average daily circulation was 294,223 in June, compared with 270,182 the month before the acquisition.

Ashley Highfield, chief executive, said the acquisition was enabling Johnston to present its entire portfolio of newspapers to media buying agencies and clients "afresh".

He added: "Further, we have started to see significant content sharing between the 'i' and the rest of the portfolio."

Analysts were less optimistic. Peel Hunt said the acquisition's circulation trends looked "encouraging", but the results painted a "depressing picture".

Johnston Press shares closed down 16 per cent at 11.6p, for a market value of £12.2m — about half of what it paid for "i".



Cyber security companies vulnerable to M&A attack

M&A is booming in the cyber security industry, with the number of notable deals up 50 per cent in the first quarter. Private equity firms are chasing software deals and smaller private companies are consolidating as valuations fall.

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Companies

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COMPANIES

Insurance

'Lower for longer' takes toll on MetLife

Fears over interest rate squeeze wipe $5bn from US life group's shares

ALISTAIR GRAY — NEW YORK

MetLife shares tumbled 10 per cent yesterday even after it set out plans to protect profits with further cost cuts, as investor concerns mount about the impact of central banks' easy-money policies on the insurance industry.

The largest US insurer by assets warned in quarterly results it needed to bolster its reserves by $2bn in large part because of a squeeze caused by low interest rates — wiping almost $5bn off its stock market value.

Steven Kandarian, chief executive of the life insurance and pensions group, cautioned about the impact of the UK's vote for Brexit, which meant "'lower for longer' is not going away anytime soon".

While the group has limited direct exposure to Britain, he said, "more troubling is the referendum's residual impact — namely, a global flight to safety that has put further downward pressure on interest rates".

"Life insurance companies will need to adapt to the low rate environment."

He said MetLife would reduce its expenses by $1bn, equivalent to 11 per cent of total costs, as the company "must do even more to avoid simply running in place". MetLife hopes to meet the target by the end of 2019. The New York-based company employs about 65,000 people globally but would not say how many positions would go.

> MetLife 'must do even more to avoid simply running in place'
> Steven Kandarian, chief executive

Low rates make it harder for insurers to produce adequate returns on fixed-income dominated portfolios.

MetLife also warned that a lack of attractive investments on offer from financial markets meant fewer customers than expected were lapsing their "variable annuity" contracts, which have a minimum guaranteed return.

Low rates also meant fewer customers were annuitising, converting savings into steady income streams, causing further pressure.

The resulting non-cash reserve charge helped push net income down from $1.04bn a year ago to $64m in the second quarter — a fall of 94 per cent.

$1bn
Planned cut in MetLife's expenses, or 11% of total costs

94%
Drop in the insurer's second-quarter net income to $64m

On an operating basis, earnings fell almost half to $924m. By midday in New York shares in MetLife were down 10 per cent at $39.43.

About 75 per cent of the business affected by the reserve charge is expected to be spun off from the rest of the group. There were signs the timetable for the separation was slipping, as MetLife said it would not file documents relating to the deal until the autumn. The new business is to be named Brighthouse Financial.

It is the latest in a series of downbeat results in the sector. Shares in Canada's biggest life insurer, Manulife, fell 5 per cent on disappointing financial results.

Despite the pressures, analysts said there were few concerns about the industry's solvency as the big companies — in North America, at least — tend to be well capitalised.

INSIDE BUSINESS
TECHNOLOGY

Richard Waters

West Coast winners seek growth in ever more corners of life

Monday was something of a red-letter day for the tech industry. When the stock market closed, the five most valuable companies on the planet were, for the first time, technology concerns. And they all hailed from the west coast of the US, whether the San Francisco bay area (Apple, Alphabet and Facebook) or in and around Seattle (Microsoft and Amazon).

In subsequent days ExxonMobil — which had held the title of world's most valuable company until it was overtaken by Apple — edged back above Facebook and Amazon.

But it may be only a temporary reprieve. A seemingly inexorable shift in business and stock market momentum is under way, as technology leaders assume a more central place in personal and business life.

Unlike 10 years ago, at the height of the personal computer era, when Microsoft was the only tech company in the top 20, the big five groups control a wide array of digital platforms around which life and work revolve — including smartphones, cloud data centres and mobile messaging apps.

They are also racing to build the next platforms, from virtual reality headsets to driverless cars and digital assistants powered by artificial intelligence.

Only China, a market that is hard for outsiders to penetrate, can lay claim to tech companies with the scale and ambition to compete. That has been underlined by this week's detente in the ride-hailing wars, in which Uber's global expansion has been halted and a Chinese digital champion crowned, in the shape of Didi Chuxing.

The question is: which markets are in the big five's sights as they cast around for growth?

It is true that there is still plenty of room for them to expand in their core markets. Although Google and Facebook are already the world's biggest advertising-based businesses, only about 30 per cent of global advertising spend is digital. Two percentage points of this spend shifts from analogue to digital every year.

However, in other markets, such as smartphones, growth is harder to come by. For a company as big as Apple, the only hope for material expansion comes from breaking into a huge new business, such as automobiles. Giant bets of this sort, or indeed Google's "moonshot" projects, are hard to assess.

> Facebook will struggle in face of innovation unleashed by open platforms

Closer to home, there are two areas that seem likely to support growth in the short and medium term. One is building and running the infrastructure on which the digital economy runs. Companies that make hardware and software, or sell IT services, are facing disruption as their customers spend more on cloud services rather than extending their own IT systems.

Much of Amazon's stock market advance reflects the huge opportunity with which its cloud platform business, AWS, is presented. Microsoft's renewed relevance in the tech world, following the sidelining of the PC, reflects a similar shift to the cloud, where it has become Amazon's closest competitor.

The second promising growth area is in applications for the pervasive new platform that is emerging from developments in cloud and mobile computing. In the past Microsoft, with Office, cornered the market for the main applications that ran on its PC operating system. But the next big digital applications will reach into many more corners of life and touch many more businesses.

Uber's use of a mobile app to invade the taxi business is the blueprint — and it is angling to become a new transport and logistics platform itself.

The big five — with their large user bases and control of platforms — should have an advantage when it comes to developing such applications. But there is no guarantee that they will be the ones to grab the opportunities first.

Facebook's unveiling of a virtual clone of the rival Snapchat app is a sign of the justifiable paranoia that even the biggest digital companies can feel. While the social network has shown itself to be an effective fast-follower, it will struggle to outrun all the innovation unleashed by open digital platforms.

Indeed the history of other seemingly unstoppable tech companies, such as IBM and Microsoft, should give others hope. Competition regulations are among the factors that eventually weigh them down, as is the increasing difficulty of staying on the cutting edge as they become giant companies.

For other companies battling against their stock market dominance, that may be cold comfort.

richard.waters@ft.com

Media

Mediaset hits at Vivendi bid to renegotiate pay-TV deal

RACHEL SANDERSON

Piersilvio Berlusconi, chairman of Mediaset, has hit back at Vivendi over its attempt to renegotiate a deal to buy the Italian group's pay-TV unit — and said he is considering legal action in the civil and criminal courts.

His comments mark an escalation in the war of words between the groups, which are controlled by two of Europe's most colourful billionaires: Silvio Berlusconi, founder and owner of Mediaset, and Vincent Bolloré, owner of Vivendi.

Vivendi's agreement to buy Mediaset's pay-TV business was part of a wider deal in which the two media groups would take a 3.5 per cent stake in each other. It was hailed at the time as an important complement to Vivendi's 24.9 per cent stake in Telecom Italia, enabling the Paris-based company to expand its base in the region and take on the likes of Sky.

But Vivendi has since claimed its plans have run aground, because of Mediaset's over-optimistic growth projections for its pay-TV unit. According to the French group, it only realised this when it gained full access to the financials after signing the deal.

However, yesterday Mr Berlusconi — who is Silvio Berlusconi's eldest son — disputed Vivendi's version of events. He said Vivendi was well versed in the financials of the pay-TV business. It had seen the accounts in 2014 when Telefónica took an 11 per cent stake in the unit and analysed them again in the first quarter of 2016 before signing its agreement with Mediaset on April 8.

Mr Berlusconi said: "Making the argument that they do not know the accounts does not hold. It is laughable. The contract is binding. Their new proposal, sent on July 25, completely changed the terms."

Earlier this week, Vivendi chief executive Arnaud de Puyfontaine expressed his concerns over Mediaset's pay-TV growth assumptions to the Financial Times. "If you tell me that you are selling me a Ferrari but it turns out to be a Fiat Punto, there is a problem," he said.

Yesterday, Mr Berlusconi said he had been particularly incensed by the "absurd automotive example" made in Vivendi's interview. Nevertheless, he said Mediaset still wanted to seek an agreement consistent with the deal signed on April 8. "They are going to have more difficulty finding another partner than we are," he added.

Mr Berlusconi said the letter from Vivendi about changing its offer had come "completely out of the blue".

Technology

Samsung is locked in a legal row with Apple, which accuses the South Korean group of copying its designs. Sir Paul Smith, top left, Lord Norman Foster, centre, and Sir Terence Conran are supporting the iPhone maker
Charlie Bibby/FT/ David M. Benett/Getty

Top designers back Apple in patent battle

TIM BRADSHAW

Star designers are being pitted against tech titans in the latest episode of Apple's legal battle with Samsung. More than 100 design leaders, including Lord Norman Foster, Sir Paul Smith, Sir Terence Conran, Calvin Klein and Dieter Rams, have joined Apple's side as the long-running patent case is considered by the US Supreme Court.

The move sets many of the most famous names in industrial design, fashion and architecture against some of the biggest tech companies in the world, including Google and Facebook, who have lined up behind Samsung in the case.

Samsung's appeal to the Supreme Court hinges on what portion of a copied product's profits can be awarded in damages to a patent holder. It is the first time in decades that the top US court has considered an issue relating to design patents.

In an *amicus* brief filed yesterday, 111 international design professionals and academics urged the court to uphold the 129-year-old ruling by the US Congress that "it is the design that sells the article" and therefore patent infringement should incur damages equal to the whole of the profits generated by a copycat product.

The submission marks the first intervention by the design community in the high-profile case, after a jury in California handed what was originally more than $1bn in damages against Samsung to Apple four years ago.

Samsung has argued that the 2012 ruling, if upheld, could "stifle competition" in the tech industry by awarding "excessive" damages to patent holders and arm so-called "patent trolls" who abuse the intellectual property system. It has already paid $548m to Apple after its earlier appeals failed.

The designers' filing follows Apple's response last week, which argued that Congress's original ruling should stand and Samsung had failed to provide adequate evidence to support its case. The group of "friends to the court" was convened by Charles Mauro, founder of the New York design consultancy Mauro New Media, and law firm Orrick.

"It became very clear to leading designers in the US and design researchers globally that Samsung, should they prevail in their effort to remake the compensation methodology for infringement, would create an existential threat to design professionals who rely on intellectual property for value and protection," Mr Mauro said.

He added that Samsung was "dead wrong" to argue that consumers consider a variety of technical features, as well as the external design, when deciding which product to buy. "Modern marketing and cognitive science shows very clearly that visual design in consumer decision-making overrides underlying functionality," he said.

Mr Mauro told the Financial Times that if Samsung prevailed in the Supreme Court, it could unleash a new wave of copycats and create a "massive problem" for US patent holders by making litigation much more complicated.

"We would see the return of exact copyists and a flooding of the US market of copycat products because nobody would be afraid any more," he said. "It would become a cost-benefit equation."

Other signatories include executives at fashion houses Louis Vuitton, Dries Van Noten and Lanvin, tech groups including Microsoft, Dyson and McLaren Technology Group, as well as carmaker Bentley Motors, furniture designer Knoll and jeweller Georg Jensen.

A Samsung spokesperson said: "We have received overwhelming support for overturning the ruling in favour of Apple, including from leading patent experts, numerous concerned companies, and the US government.

"If left uncorrected, the appeals court's ruling could lead to diminished innovation, pave the way for design troll patent litigation and negatively impact the economy and consumers."

Food & beverage

AB InBev to dominate merged brewer's board

SCHEHERAZADE DANESHKHU
CONSUMER INDUSTRIES EDITOR

Anheuser-Busch InBev's domination of the global beer industry, once it takes over SABMiller, is to be mirrored on the management board, where it will take 19 out of 20 senior roles.

The multinational Belgian brewer, which after the deal will sell one in three beers in every continent except for Antarctica, will also have on its executive board a majority of Brazilian nationals, who have proved successful at integrating takeovers.

Twelve of the 20, including Carlos Brito, AB InBev chief executive, are Brazilian, as are Jorge Paulo Lemann, Marcel Telles and Carlos Alberto Sicupira, who transformed a domestic brewer into a group that is set to soak up almost half the global industry's profits.

The sole SABMiller executive to be joining the management board — assuming the £79bn deal is accepted by shareholders — is Mauricio Leyva, head of the South African business.

Analysts had expected AB InBev to retain SAB senior managers in Africa because it is the one region where AB InBev has almost no exposure. But Mr Leyva has been appointed to run the new middle Americas division.

AB InBev's current head of Mexico, Ricardo Tadeu, will run the Africa unit.

"It's clear that AB InBev is prioritising the culture of their own company over experience in the SAB business," said Philip Gorham, a Morningstar analyst.

AB InBev's hard-driving, cost-cutting culture contrasts with decentralised SAB, which makes 70 per cent of its sales in emerging markets.

SAB employs 576 people in UK corporate roles, including 525 in Woking and 51 in London. Most of these jobs are likely to be lost. The company has promised to extract $1.4bn in annual cost-savings after the fourth year. The deal is scheduled to complete on October 10.

Financial services

Singapore exchange makes offer for Baltic

PHILIP STAFFORD — LONDON
JEEVAN VASAGAR — SINGAPORE

SGX's pursuit of the Baltic Exchange has moved a significant step closer after the Singapore exchange made an offer for the venerable UK bourse.

The Baltic, which traces its origins to the coffee houses of London in the mid-1700s, said yesterday that it would allow SGX to solicit shareholders to back a cash bid at £160.41 per share. Together with the £18.80 final dividend, the deal would value the UK bourse at £86.7m ($115m).

The offer marks a significant step forward for SGX in the complicated negotiations with some of the privately-held company's shareholders. There have been two months of exclusive talks with the Baltic's 48 panellists, which provide daily pricing. Discussions have progressed sufficiently to make an offer, although it is not formal.

The Baltic is best known for compiling the Baltic Dry Index, which charts the cost of transporting commodities such as iron ore and grain in bulk. The bid fits with SGX's strategy of developing Asian benchmarks for pricing commodities. The Baltic's London address also gives the Singapore exchange a bridgehead to build contacts in Europe.

"We've looked at the business and done extensive modelling on the needs and opportunities for the business," said Jeremy Penn, chief executive of the Baltic. "We were also concerned that the acquirer would have a plan that would be acceptable to shareholders that would retain what the Baltic is."

Until now, the Baltic's shareholders — who include shipbrokers, shipowners and trading houses — have resisted approaches from bidders, including the London Metal Exchange. Many have feared that new owners would raise prices, but SGX has made a commitment to keep the fees paid by users of Baltic data the same for five years.

See Lombard

COMPANIES

US credit push stokes fears of a house of cards

The increase in loans to consumers and industry has raised questions about the risks that groups are taking on

ALISTAIR GRAY — NEW YORK

Fancy 5 per cent off all Amazon purchases? How about a free ride on Uber for every 10 you take? Perhaps you would prefer cash — $100 after you spend $500?

They could be yours if you sign up for a US credit card. Banks are bombarding Americans with increasingly lavish offers as they battle to provide the piece of plastic in their wallets.

"There's several folks with some very high headline rewards rates that are out there," Mark Graf, chief financial officer of Discover Financial Services, the $23bn market cap lender, told Wall Street analysts recently. "It doesn't seem to make economic sense to us in a lot of cases."

In the past year, US banks have piled on about $54bn worth of loans to consumers through credit cards and overdrafts, according to Federal Reserve data.

They are also lending more in other sectors, from industry to commercial property, as they try to combat a historic squeeze on profit margins caused by rock bottom interest rates.

It is far from a deluge overall — residential mortgage lending remains particularly weak — but the cash taps are flowing steadily. Banks have added $643bn in loans and leases in the past year.

The industry stepped up lending to American business in 2011 and began a surge in commercial real estate about two years later.

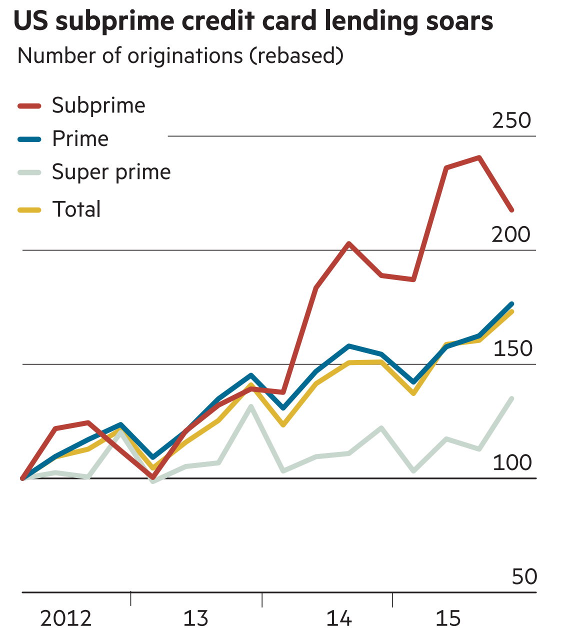
Over the past year banks have accelerated lending to consumers. Loans through overdrafts and credit cards are expanding at the fastest pace since 2007, although it comes after significant post-crisis contraction.

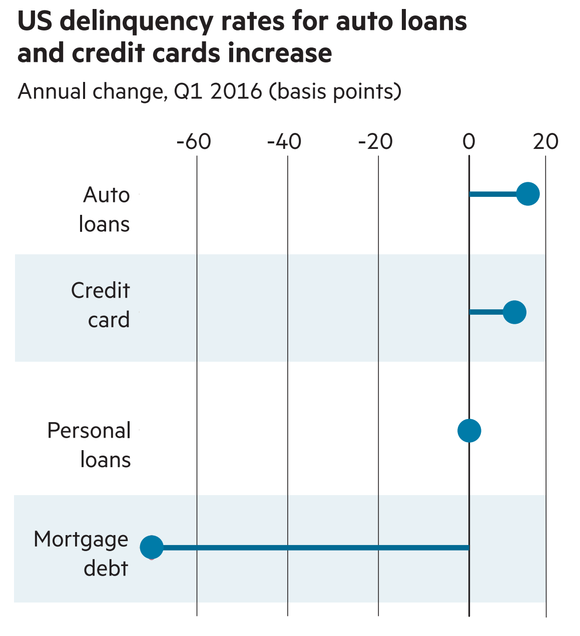
While credit card lending is unsecured, banks are attracted by the prospect of hefty returns. Financially savvy consumers who pay their balances down each month avoid interest charges, but those who do not — known as "revolvers" — pay average rates of between 12 and 14 per cent, and significantly more if they are considered higher risk.

For now at least, borrower default rates are near historic lows. As Michael Taiano, financial institutions director at Fitch Ratings, puts it: "The risk-adjusted margins are off the charts relative to everything else."

Seven years since the recession ended, consumers hard hit during the

Debt mountain





FT graphic Sources: TransUnion; Federal Reserve Bank of St. Louis

$54bn
Loans US banks have piled on to consumers through overdrafts and credit cards in the past year

$30,000
Average loan taken out to buy vehicles, but consumers are taking longer to pay off their debt

financial crisis have found their credit scores are improving. Bankers point to rising house prices and low unemployment as evidence that things, across the board, are looking up.

"They're trying to meet the demand that exists out there," says James Chessen, chief economist at the American Bankers Association.

Paul Siegfried, credit card business leader at TransUnion the credit reporting specialist, says that some of the recent expansion is down to banks becoming more comfortable with post-crisis regulations that constrained card lending.

Banks are lending more as one of the most important drivers of their profits — net interest margins, the difference between returns on assets and the cost of funds — remains near the lowest level in decades. Between April and June, the median margin among 352 US banks tracked by Raymond James, the financial services group, ticked down again, from 3.49 per cent in the first quarter to 3.45 per cent.

Yet the increase in loans — and the accompanying myriad of fees — nudged revenues 3.4 per cent higher.

The lending push has, however, raised questions about the risks banks are taking on — not least because of indications that the economy is becoming more fragile ahead of the US election.

Regulators, industry analysts and some executives have been raising concerns for months about the risks of a ramp up in car loans.

Encouraged by low interest rates, falling unemployment and cheap petrol prices, banks have added $43bn worth of auto loans since the start of last year, according to Federal Reserve data. As competition intensifies, underwriting standards have fallen.

Americans are borrowing more to buy bigger and better vehicles: the average loan has topped $30,000, according to Experian. They are also taking longer to pay off the debt — the average term has reached almost six years.

Subprime loans have been the fastest-growing part of the market, and delinquency levels are rising. Jamie Dimon, chief executive of JPMorgan Chase, warned earlier in the summer that the market for lower-quality car loans was "clearly a little stretched".

Similar questions are starting to be asked about credit cards.

During the recent second-quarter results season top bankers were peppered with questions from analysts about whether they were being tempted to do riskier lending.

'While they've entered the non-prime zone, banks are being quite diligent'

Several executives demurred. Paul Donofrio, chief financial officer of Bank of America, said its retail arm remained focused on the most creditworthy consumers. "That strategy works for our shareholders and our customers — and we're sticking to it."

Still, second-quarter results showed several lenders set aside additional provisions for soured loans. Capital One added $375m to its loan loss reserve for its domestic card business, according to Barclays, while JPMorgan added a $250m loss allowance for its credit card portfolio.

Executives said this was largely because they were issuing more cards and did not reflect an across-the-board deterioration in credit quality, although some acknowledged they were going up the risk spectrum.

Previously about 40 per cent of JPMorgan's new credit card customers had FICO scores — a widely used metric of creditworthiness — of above 760. Now, says Marianne Lake, its chief financial officer, between about a fifth and a third had scores of lower than 700.

"At the end of the day, still pristine credit, relatively speaking," she says.

Across the credit card industry, charge-offs are rising. According to TransUnion, payments that are at least 90 days late reached 1.47 per cent in the first quarter — up 10 basis points from a year ago.

That reflects a rise in the numbers of less creditworthy consumers getting credit cards. In the fourth quarter of last year, credit card providers increased the number of "subprime" accounts 15 per cent from 2014 levels and 17 per cent for "near prime" accounts.

In contrast, openings were 11 per cent higher for the least risky, "super prime", consumers.

Still, the average credit limit per card for a subprime borrower was little changed at $2,300. This compared with about $11,500 for the safest customers.

Executives also say the most questionable lending practices are being undertaken not by them but by other types of institution. Banks have been subjected to a succession of post-crisis regulations designed to make their businesses less risky.

Non-bank lenders originated the bulk of subprime loans last year, according to TransUnion data cited by UBS.

"While they've entered the non-prime zone, banks are being quite diligent," says Mr Siegfried of TransUnion. "That's going to help them manage should there be more difficult times ahead."

Investors are nevertheless watching anxiously for signs of stress. And some executives have sounded caution. As David Nelms, chief executive of Discover, puts it: "Generally people that grow really fast in loans for a short period of time, it comes back and bites them."

Healthcare

Theranos founder's invitation to science meeting sparks row

DAVID CROW — NEW YORK

A prestigious scientific organisation has descended into infighting over a decision to invite Elizabeth Holmes, founder of blood-testing group Theranos, to deliver a presentation at its annual conference this week, with at least two members of the association threatening to resign.

The American Association for Clinical Chemistry invited Ms Holmes to deliver a 90-minute talk in front of 3,000 scientists on Monday night despite protests from some scientists responsible for organising the conference, who argued that a series of damaging scandals at Theranos should disqualify the company.

Ms Holmes had been expected to use the session to present scientific data in defence of her company's proprietary blood-testing technology, including a tiny finger-prick vial or "nanotainer" that she claims can generate accurate test results without traditional needles or venous draws.

However, Ms Holmes, whose company is under Federal criminal investigation, sidestepped past controversies and used her appearance to unveil a completely new machine, the MiniLab, which she said could enable small samples of blood to be analysed remotely using cloud computing.

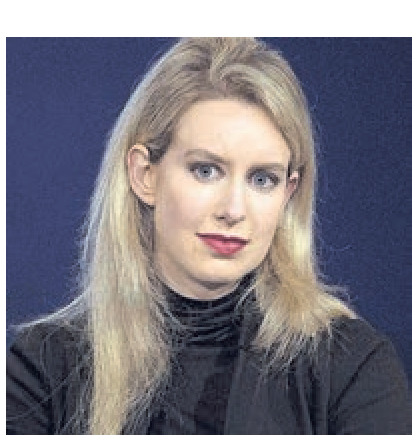
Theranos earned plaudits for the nanotainer when it launched in 2013 but in recent months the company has been tarnished by damaging revelations over the limitations of its technology, culminating in Ms Holmes being banned from the industry for two years.

She was handed the ban after a government inspection of one of the company's labs concluded that erroneous results had put patient lives at risk.

Several scientists on the committee responsible for organising the meeting opposed the decision to invite Ms Holmes fearing it would lend credibility to her company, while others decided to boycott the presentation in protest. They believe the association invited Ms Holmes in order to generate publicity.

Dr Andy Hoofnagle, a member of the organising committee, said he and several of his colleagues had "fought really hard to prevent" Ms Holmes from appearing but were overruled by Patricia Jones, the AACC president. "This conference is about peer reviewed science — you don't bring in advertisers and give them the stage at a scientific meeting," said Dr Hoofnagle.

Ms Jones defended the AACC's decision to invite Theranos to speak and said that the leadership of the association had the right to determine who should appear.



Elizabeth Holmes: unveiled a new blood testing system this week

Financial services

LSE chief plays down risk of City losing euro clearing role

PHILIP STAFFORD

The head of the London Stock Exchange Group has said there is "no immediate threat" that euro-denominated clearing, one of the City's most prestigious businesses, could leave London after the UK voted to quit the EU.

Xavier Rolet, group chief executive, yesterday said the rules that could prise the business away from London "would require an [EU] treaty change. An EU treaty change is not an easy thing . . . so that is not impossible but at this time, for the moment, there is no immediate threat from that standpoint".

The Brexit vote potentially strikes at the clearing of euro-denominated derivatives and the LSE's LCH clearing house, which clears the vast majority of the $400tn over-the-counter market. Tools such as swaps help protect banks and corporations against interest rate and currency moves. French president François Hollande has called for it to be moved to the EU.

For London, clearing of swaps is a cornerstone of the City. Euro-denominated swaps trading represents a third of the global interest rate derivatives market.

In the past the European Central Bank has tried and failed to force euro-denominated business to take place in the eurozone.

The central bank also recently reactivated its location policy but only applied it to payments in euros, admitting that it did not have the jurisdiction to cover clearing houses.

Mr Rolet also called for a "transitional arrangement" in exit negotiations with the EU to provide stability to banks and investors. "Negotiations will be incredibly complex. I don't expect a swift resolution, it will take time. European industry also depends on the 'money pump' that the City represents . . . sides have an overriding interest in stability in the short to medium term, and a settlement that works for both sides."

He added that the LSE's €24.4bn merger with Deutsche Börse to create a European powerhouse for trading, data and risk management was "on track". Both sides' shareholders have backed the deal, which now faces antitrust scrutiny in the UK, Germany and Brussels.

Interim results released by the LSE yesterday also showed a rise in first-half earnings, thanks in part to increased risk management needs from under-pressure Italian banks.

The LSE benefited in the first half from the amount of collateral posted at the LSE's Italian clearing house on deposit from the banks as part of the clearer's treasury operations. Treasury income increased 47 per cent on a constant currency basis to £21m, it said.

For the six months to June 30, total revenues at LSEG on a constant currency basis rose 5 per cent to £721.9m, while total income rose 7 per cent to £785.8m.

The interim dividend increased 11.1 per cent to 12p per share.

Information services and data provision to investors, the LSE's largest unit, rose 12 per cent to £285.9m.

The group recorded an 11 per cent rise in share trading on its markets in London and Milan while total income for its post-trade services business, including its majority-owned LCH clearing house, rose 17 per cent to £206.5m.

COMPANIES

Technology

Nigerian email scam targets unpaid invoices

Cyber criminals steal $5m a year from groups buying and selling big shipments

HANNAH KUCHLER — SAN FRANCISCO

A criminal syndicate in Nigeria is stealing millions of dollars from companies around the world by intercepting their emails and diverting bank transfers, according to a new report.

The cyber security company SecureWorks says it has uncovered a group of 30 to 40 cyber criminals stealing about $5m a year, often from industries which buy and sell large shipments, including chemical manufacturing, pharmaceuticals and heavy machinery.

Cyber criminals are increasingly pretending to be executives and using fake email accounts to steal money from companies, with the FBI warning of a dramatic rise in business email compromise scams. The US law enforcement agency reported in June that cyber criminals had tried to snatch more than $3bn, an increase of 50 per cent over 10 months.

James Bettke, a researcher at SecureWorks, said the Nigerian criminal ring was more sophisticated than some email spoofing scams, which try their luck by sending emails claiming to be from a senior executive ordering wire transfers, in that they intercept an existing transaction.

"They [the victims] sincerely believe there is a real transaction going on, so they become completely confused," he said, adding that "nothing seems out of place" until the money does not turn up.

SecureWorks has informed law enforcement agencies about the scam and attempted to contact companies involved. The cyber security company, which went public earlier this year, claims to have identified the participants in the crime, including their names, social media profiles and conversations between them, with details on how the business is run.

The group's tactics are less sophisticated than those used to steal from the Swift global bank payments system, which has been under the spotlight this year after $81m was stolen from the Bangladesh central bank and ended up in casinos in the Philippines.

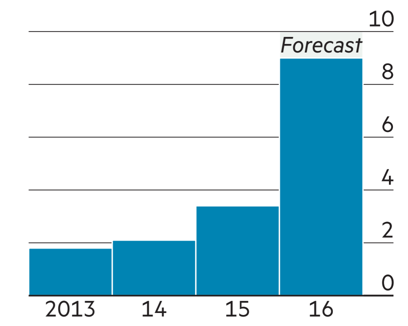
Mr Bettke said the method was "digital cheque washing", the online equivalent of the crime where cheques are stolen from a mailbox and washed in acetone to obscure the true payee and redirect the money to another bank account. The hackers find unpaid invoices, change the payee and reply to the buyer, who then sends money to the criminal's account, not the seller.

In one case, SecureWorks says the group hijacked the email of an employee at an Indian chemical company. When a US chemical company sent a request to purchase $400,000 of chemicals, the hackers changed the rules in the employee's email account so that all future email from that company was direct to the hackers' inbox. They changed the details on an invoice so the US company paid them.

Technology. Software

Cyber security groups vulnerable to M&A attacks

Cyber security M&A transactions
$bn



Source: PrivCo

Safety first: delegates arrive at the 2016 Black Hat cyber security conference in Las Vegas, Nevada
David Becker/Reuters

Boom in dealmaking as private equity groups circle and industry consolidates

HANNAH KUCHLER — LAS VEGAS

The cyber security industry is in the midst of a deals boom as private equity buyers hunt for cash-generating companies and smaller start-ups get snapped up for their technology or in-demand security engineers.

As security companies — in Las Vegas this week for the annual Black Hat and Def Con conferences — expose the latest examples of software vulnerability, investors are pushing for consolidation in the fragmented industry.

The total number of exits in the cyber security industry — the vast majority of which are deals — rose by a third from 2014 to 2015, according to PrivCo, the private company research firm. In the first quarter of 2016, notable deals in the industry increased by 50 per cent from eight to 12, the firm said.

Jack Andrews, an analyst at DA Davidson, said there had been a two-pronged boom in dealmaking in the sector, with private equity chasing software deals and smaller private cyber security companies consolidating as valuations fall.

The end result would help to protect corporations against cyber threats, he said. "Given the increasing complexity of the threat, there has been an explosion of all these companies selling products. It is hard for customers to figure out which is real and which are 'me too' products. [The M&A] will be good for the management of security in general."

Private equity companies have been attracted to the software industry overall, realising that "old tech never really dies" and can be milked for revenue for a long time, Mr Andrews added.

Since the first quarter closed, security software maker Symantec has bought Blue Coat for $4.65bn in its largest deal for more than a decade; antivirus provider Avast Software has bought its rival AVG Technologies for $1.3bn; and Ping Identity has been bought by Vista Equity Partners for an undisclosed sum.

Even Intel Security, bought as McAfee in 2010 when it was one of the largest independent security companies, may be an attractive target for private equity buyers, as Intel is talking to bankers about the future of the unit, according to people close to the discussions. Intel has declined to comment.

> 'The M&A will be good for the management of cyber security in general'
> Jack Andrews, DA Davidson

The market is separating into two halves, with private equity buyers eager for established businesses with strong cash flow from corporate customers who are unlikely to abandon paying for security.

Then there are existing security companies picking up some of the hundreds of smaller operations that have sprung up with a good idea, a piece of innovative technology or a great team that can be integrated into a larger organisation.

George Kurtz, chief executive and co-founder of Crowdstrike, which recently linked the hack at the Democratic National Committee to Russian intelligence agencies, said valuations had come down 30 to 40 per cent in some areas for early-stage companies that did not have meaningful traction in the market.

"If you got to series C [third-round funding], you probably have a decent product and customer traction, you've brought it to market and are starting to prove it with larger enterprise customers who are more conservative," he said.

Many security companies believe now is the time to buy, because valuations have been coming down at the series A and B level, as venture capitalists realise how crowded the market has become.

Jim Dolce, chief executive of Lookout, a mobile security company that counts Morgan Stanley and Deutsche Telekom among its investors, said start-ups moving from series A to series B are having a particularly tough time.

Lookout made a small acquisition of technology from Bluebox Security for an undisclosed sum, adding its technology to Lookout's core platform and hiring some of its personnel.

"The fundraising environment has changed dramatically for many companies," he said. "It is now a buyers' market."

Banks

BNP sharpens focus with sale of $500m stake in First Hawaiian

BEN MCLANNAHAN AND NICOLE BULLOCK — NEW YORK

BNP Paribas has taken a big step in reshaping its US operations by selling a near-$500m stake in First Hawaiian Bank, allowing it to sharpen its focus and top up capital.

France's biggest bank by assets has long had a significant presence in the US, through its San Francisco retail arm, Bank of the West, and corporate and investment banking operations based in New York.

But in the regulatory environment that has emerged since the financial crisis, the Honolulu-based unit — with branches across Hawaii, Guam and Saipan — has been a misfit.

BNP's US subsidiary — its biggest outside France with about $6bn in annual revenues — raised $485m yesterday by selling a 15 per cent stake in First Hawaiian. It was the biggest initial public offering of a bank in the US for almost two years, since Royal Bank of Scotland raised $3.5bn by spinning off Citizens Financial.

Regulators in the US have drawn up tougher rules on capital and liquidity while subjecting banks to rigorous tests of their ability to withstand shocks.

In particular a requirement for foreign institutions to group their US businesses under an intermediate holding company — effective from July — has prompted a switch of focus to core activities, whether they are driven by investment banking (such as Deutsche Bank, Credit Suisse, UBS and Barclays) or retail (Santander, TD Bank and BBVA).

Even those that run both retail and wholesale activities, such as Mitsubishi UFJ Financial Group, Royal Bank of Canada and BNP, have pared lines of business.

All intermediate holding companies will be subject to a full public stress test in 2018 by the Federal Reserve. BNP's BancWest subsidiary, which includes Bank of the West and First Hawaiian, took the test for the first time this year and passed.

Deutsche and Santander both failed, for the second and third times respectively, limiting their ability to return profits to their parent groups.

Regulation has pushed up the cost of competing in the world's biggest economy, according to a senior New York-based executive at a non-US bank. "We have to be far more comprehensive in the management of our entities in the US," the person said.

"Global financial services firms got used to running themselves on purely global lines. That was not as strong an axis of management as it needed to be."

In yesterday's IPO, BNP sold 21.1m shares at $23 each, at the top of the indicative pricing range.

In December it had said a "complete" sale of the bank would add about 40 basis points to its core tier one equity capital, which stood at 11.1 per cent of risk-weighted assets at the end of June. Under Basel standards, the bank needs to achieve a ratio of at least 11.5 per cent by 2019.

Financial stocks have performed poorly this year, falling 1 per cent since January, but bank IPOs have done better. All three smaller deals that have priced in 2016 — Paragon Commercial, Midland State and Argentina's Grupo Supervielle — are up.

Banks

European lenders join forces to target Africa

ELAINE MOORE

Three European lenders have pooled stakes in sub-Saharan African banks to create a $660m investment company that will be called Arise.

Investments in financial service providers in more than 20 African countries have been combined by Norfund, a Norwegian development body, Dutch lender Rabobank and FMO, a private development bank based in the Netherlands. The countries include Kenya, Tanzania and Zambia.

From January 2017 Arise plans to allocate capital for investment in banks that serve retail and small and medium-sized business clients in eastern and southern parts of the continent.

Africa's banking sector is undergoing a fintech revolution, driven by mobile payment systems such as Kenya's M-Pesa, which gives millions of new customers access to financial services.

However, a broad economic slowdown and fall in overseas investment have hampered progress. The continent was once lauded as the best source of growth in emerging markets, but the "Africa rising" narrative has suffered a blow in the past two years, as prices of oil and other commodities exported by many economies have fallen.

The International Monetary Fund expects sub-Saharan gross domestic product growth of just 1.6 per cent this year, which would mean the first fall in income per head for more than two decades.

Nigeria, the most populous nation, is expected to undergo a 1.8 per cent economic contraction this year — driven by falling oil prices, terrorist attacks and the government's struggles to prop up its currency, the naira.

However, Nanno Kleiterp, FMO chief executive, said the reduction in commodity prices had not resulted in problems for all 49 sub-Saharan countries. "For some it has had a positive effect," he said.

"The growth prospects in countries in east Africa are positive and we take a long-term view that this is a good moment to step in and join forces."

Portual's Banco Montepio is expected to join the partnership in the near future.

The aim is for Arise to have $1bn in assets invested in financial companies and to expand into west Africa eventually.

Berry Marttin, board member of Rabobank, said the long-term forecasts were compelling. "The population growth projections mean there is upside potential," he said.

"We have a focus on food production, and local banks provide access to finance for farmers, which will support that development."

Sub-Saharan Africa is the world's most food-insecure region, with almost a quarter of the population undernourished, according to the UN's Food and Agriculture Organization.

Rabo Development holds minority stakes in five banks: NMB, Tanzania's largest; Zambia's Zanaco; BPR in Rwanda; BTM in Mozambique; and Uganda's DFCU.

Automobiles

Strong yen spurs Toyota cost cuts as VW signals to overtake

KANA INAGAKI — TOKYO

Toyota has launched an emergency cost-cutting programme to address a rise in the yen since the UK's Brexit vote, while lowering its profit and revenue guidance.

Yesterday's surprise downward revision came as the Japanese carmaker appeared likely to relinquish its position as the world's largest for the first time in five years to Volkswagen after falling behind its rival in the first six months of the year.

For the full year to March 2017, Toyota expects net profit of ¥1.45tn ($14.3bn), down from ¥1.5tn projected in May, as it revised its currency forecasts. The carmaker assumes an average ¥102 to the dollar and ¥113 to the euro, compared with ¥105 and ¥120 previously.

"The yen appreciated dramatically in the wake of Britain's vote to leave the EU so we launched an emergency programme to improve our profits," said Tetsuya Otake, managing officer.

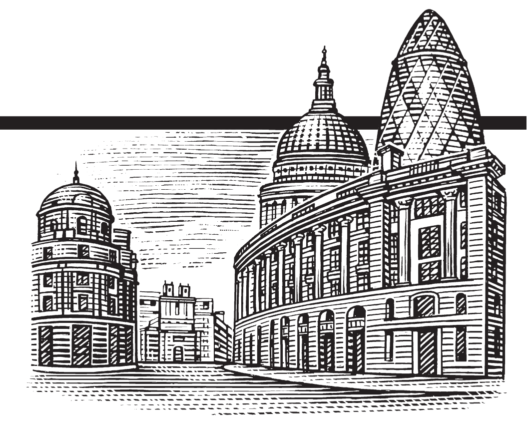
The carmaker is known for cost-cutting efforts such as using fewer elevators, reusing envelopes and turning off lights. Toyota said it expected to save ¥115bn from a further review of costs and marketing efforts against a negative currency impact of ¥185bn for the 2016-17 fiscal year.

For the three months to June net profit was ¥552bn — down from ¥646bn a year earlier but beating analysts' consensus forecasts of ¥440bn.

Quarterly revenue fell 5.7 per cent to ¥6.6tn as sales softened in the US and Japan.

Despite growing concerns over the stronger yen, most Japanese carmakers have reported stronger than expected results, with Honda achieving 45 per cent of its annual profit target in the fiscal first quarter, and Nissan delivering 26 per cent.

Lombard



The drugs don't work, leaving Woodford's patient trust feeling poorly

Kate Burgess

Investment ace Neil Woodford's twin attributes as an evangelist and share price prophet have sparked a cult-like following.

Both characteristics were on display yesterday at Woodford Patient Capital's investment trust results. Mr Woodford bowed his head over his backers' disappointment in the trust's 11 per cent slide in asset value — courtesy of the likes of Circassia, whose cat allergy treatment turned out to be as effective as a placebo, and Northwest Biotherapeutics, embroiled in a row over its governance.

But in the same breath he said prices had become so divorced from reality he had been impelled to sell the trust's shares in big, stable businesses such as Legal & General to invest more in small, illiquid biotech businesses.

This is Mr Woodford uncut. The investment trust's portfolio is his investment vision, untrammelled by a committee — unlike the £25bn of funds he ran at Invesco Perpetual until leaving abruptly in 2013, or indeed Woodford's £9bn open-ended income fund launched two years ago.

About 40 per cent of WPC is in unquoted companies and two-thirds in healthcare. Almost a third is invested in six biotechnology hopefuls including Oxford Nanopore, which is developing DNA sequencing technology being sent to space, and Prothena, a US immunotherapy group tackling diseases that cause organ failure.

As Susan Searle, WPC's chairman says, the risks in biotechnology are binary. The products either work or they don't. Quite often they don't. Mr W urges his followers to be "forward thinking" and remain patient. The trust is about patient capital, after all, and has been investing for little more than a year. His message is subliminally reinforced by the phrase "long term", which occurs 25 times in WPC's six-month statement. "Early stage" appears a dozen times.

But backers of the investment trust are making an accumulator bet that the bluff veteran hasn't lost his touch as an investor and that Woodfordmania isn't wearing thin. WPC's shares now stand at discount of about 4 per cent to assets. A year ago, they were at a 15 per cent premium.

The niggling suspicion is that when investment managers talk about holding on for the long term, it is because a series of short terms has gone wrong.

RSA: horticultural Hester

Radio 4's Gardeners' Question Time deals with an unusual query:

Derek Robson: A question now from a keen City gardener: Stephen Hester of the Fenchurch St Allotment Society.

Hester: I'm trying to revive a tired perennial — RSA Insurance. Any tips?

Robson: Got a photo?

Hester: Even better — here's a 43-page interim results statement.

Anne Swithinbank: Oh, I see. It's a *prosaicus semi-vivens* — a non-life species of insurer.

Hester: "Non-life" certainly described it when I took it on in 2014.

Bunny Guinness: It doesn't look too bad now. The weather's hardly been kind. But there's earnings growth coming through. Operating profits are up 20 per cent to £312m and the combined ratio is 2 percentage points better at 94.3 per cent.

Hester: I pruned back dead wood hard and hacked off a few offshoots that were spoiling the shape.

Pippa Greenwood: Any pests?

Hester: Investors moaned because they said my turnround wasn't working.

Greenwood: You know how to deal with them, don't you? Just get the shares up above £5.27, where they were a year ago before Zurich pulled its bid approach. You're almost there.

Bob Flowerdew: Have you tried spreading yak dung round the roots?

Guinness: Ignore Bob. He's a spaced-out old hippy. More fruitfully, you can push down expenses, talk up your foreign exposure and lure a bidder hunting cheap sterling yield. Then you can relax in your potting shed as you plan a portfolio career.

Hester: Onwards and upwards!

Robson: Hey! That's my catchphrase!

Sailing into the sunset

Shipping market veterans should allow themselves a moment for nostalgia, as the Baltic Exchange comes closer to losing its independence. The forum for dealings in cargo space has been going for 272 years, so it is almost as old as some of its 650 members.

Singapore Exchange is offering £86.7m with the endorsement of the Baltic Exchange company, which stopped providing trading facilities before the millennium. These days its key assets are indices. SGX aims to use these as backbones for derivatives platforms it can promote in Asia.

The institution will continue, albeit with a single owner — many current shareholders are also members. Lloyd's, the historic insurance marketplace, looks increasingly lonely as a member-owned organisation. This week's blueprint for the Square Mile from TheCityUK rather insensitively pointed out how expensive it is to write insurance through London.

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Aerospace & defence

Cobham chief adamant about recovery hopes

Equipment supplier hit by one-off charges and lower profits across divisions

PEGGY HOLLINGER — INDUSTRY EDITOR

Cobham delivered a bleak first half, with each of its divisions turning in lower profits and as one-off charges pushed the aerospace and defence equipment supplier into loss at the pre-tax level.

However, Bob Murphy, chief executive — whose profit warning in April sent the shares plunging 20 per cent and forced a £500m rescue rights issue — said he was sticking to full-year guidance of a strong recovery in the second half, albeit with caveats.

"A number of challenging market and contract execution risks still remain ahead, including on development programmes and macroeconomic uncertainties that could have an impact on Cobham's shorter-cycle businesses," he said.

"The board's expectations for the full year, excluding currency translation impacts, remain unchanged."

Analysts had not forecast a strong recovery after a tough first quarter, but they said the business continued to underperform against expectations.

Pre-tax losses of £38.4m contrasted with a profit of £4m for the first six months of last year.

On an underlying basis, excluding the effect of disposals and one-off charges, pre-tax profits fell from £135m to £76m. Operating profits were down from £160m to £102m.

Analysts are forecasting full-year trading profits of just under £300m. "It leaves a lot to do in the second half to make the [full-year] numbers," said Nick Cunningham of Agency Partners. "They would have to beat the second half of 2015, so it probably implies minor downgrades."

The shares closed down 1.3 per cent to 166p.

Mr Murphy has come under fire from analysts and investors for a costly diversification strategy aimed at reducing exposure to constrained defence markets. However, acquisitions since his arrival in 2012, culminating in the $1.5bn purchase of a US rival, Aeroflex, in 2014, forced the group to launch a rescue rights issue to avoid breaching bank covenants.

Cobham has been hit by a downturn in many of the commercial markets served by these new businesses, while it found errors in accounting for deliveries and encountered production problems.

Mr Murphy is under pressure from investors, and the chairman has launched a search for a successor, which could take months.

He insisted yesterday that the group was responding to efforts to restore profitability and integrate Aeroflex. Cash conversion had improved significantly in the second quarter as a result of efforts to reduce working capital and capital expenditure, he said.

Order intake had shown a significant increase, leaving the total for the first half up 22 per cent to £960m. Nevertheless revenue fell 13 per cent to £1bn.

The interim dividend per share was rebased to 2.03p, down 21 per cent, to take account of the rights issue. The total 2016 dividend was expected to be about 7.4p per share, as promised at the time of the one-for-two rights issue.

Profits leap Ladbrokes ahead at half time

Ladbrokes posted a double-digit rise in revenues and profits yesterday as the bookmaker benefited from favourable sporting results and a higher number of bets placed.

Total revenue in the six months to June 30 rose 13.1 per cent year on year to £661.8m, while pre-tax profits jumped 61 per cent to £39.8m.

Ladbrokes has recorded a 15 per cent uptick in the number of bets placed on football ahead of the new season, which it said was partly due to the unlikely success of Leicester City last year. It also benefited from "favourable" results over the summer, with most Euro 2016 matches going the bookmaker's way. Sales growth was fastest in its online division, where revenues rose 41 per cent to £158m. Ladbrokes posted robust growth in high street stores too, with UK retail sales up 6.4 per cent to £436.6m.

It took a £14.5m hit on exceptional costs, largely related to its merger with Gala Coral. The Competition and Markets Authority cleared the way for the £2.2bn tie-up last month, when it confirmed the bookmakers would have to sell about 400 stores.

"Ladbrokes has issued very strong H1 results with operating profit sharply ahead of our expectations," said Greg Johnson at Shore Capital. *Paul McClean*

Andrew Boyers/Reuters

Briefs

Serco
Brighter profit outlook

Shares in Serco rose 13 per cent after the government contractor bumped up its profit forecast for the second time in 2016 and gave further indications that it was leaving recent troubles behind.

The lower sterling exchange rate and better than expected performance in the first six months of the year led the group to lift projected revenues to £3bn and underlying trading profit to at least £80m. They had stood at £2.9bn and at least £65m, respectively.

Rupert Soames, chief executive, pictured, said progress was partly down to one-offs. "Although much of the improvement came from items that will not recur, it reflects the result of a lot of hard work and successful resolution of a number of commercial issues," he said.

Underlying trading profit rose 8.7 per cent in the six months to £51m, while Serco swung into a pre-tax profit of £58.1m, from a loss of £16m a year earlier. But revenue declined 7.4 per cent to £1.5bn. *Michael Pooler and Joel Lewin*

Randgold Resources
Mine woes hit output

Randgold Resources shares fell sharply from record highs after the miner said it had endured one of its "toughest quarters in years".

The Africa-focused gold miner has been one of the beneficiaries of renewed investor interest in precious metal stocks this year, buoyed by gold's perceived status as a haven from economic turmoil.

But Randgold said operational issues at two mines led to a fall in production in the second quarter of the year. Net income fell 8 per cent quarter on quarter in spite of a higher average gold price.

Shares in the company fell more than 11 per cent in London before recovering some ground.

The miner said it expected to meet its targets for the year, which include producing at least 1.25m oz of gold, after output of 573,000 oz in the first half. *James Wilson*

Patient Capital
Woodford falls short

High-profile fund manager Neil Woodford has admitted investors "will be disappointed" after his investment trust failed to deliver returns in the first half of this year.

The Woodford Patient Capital Trust suffered a net asset value decline of 10.8 per cent over the six months to June. The FTSE All Share was up 4.3 per cent over the period.

Investors lost 10.41p per share, a further decline from the 2.63p loss per share for the year ending last December. The trust was trading at 89.9p per share yesterday.

Patient Capital concentrates on early-stage and early-growth companies. It targets 10 per cent annual returns and is aimed at investors with long-term horizons.

The fund, which is 47 per cent invested in unlisted companies, has declined 12.2 per cent in its net asset value since launch in April 2015. *Aime Williams*

City Insider returns in September

Insurance

Restructuring moves boost dividend payout at RSA and Aviva

OLIVER RALPH
INSURANCE CORRESPONDENT

Two of the UK's biggest insurers have announced sharp increases to their dividends as they emerge from long periods of restructuring.

RSA yesterday increased its first half payout by 43 per cent, while Aviva raised its dividend by a tenth.

"They're throwing off a lot of cash," said Barrie Cornes, an analyst at Panmure Gordon. "Having been through a lot of pain, it is a process of giving capital back to shareholders." Based on Mr Cornes' forecasts for this year, Aviva's shares offer a dividend yield of 5.7 per cent while RSA's yield 2.8 per cent.

Investors say dividends are one of the main attractions of the insurance sector. Shares in Aviva rose 6 per cent yesterday, while RSA was up 2 per cent despite the Bank of England's cut in interest rates. Low rates are traditionally seen as bad for the insurance industry.

RSA chief executive Stephen Hester said that the payout was in line with company policy. "We plan to pay out 40 to 50 per cent of our profits as dividends. There will be scope for special dividends in the future, but not in the near term."

Mr Hester has been selling off unwanted businesses and cutting costs since he joined RSA in 2014. The company reported a 20 per cent jump in first-half profits to £312m as a record underwriting performance offset a fall in investment income.

He said this is the first half-year in RSA's history where underwriting profits are higher than investment income. The company's combined ratio (claims and costs as a proportion of premiums) improved from 96 per cent to 94 per cent. That was despite large losses from events such as floods in Europe and wildfires in Canada coming in at £277m, which was £49m worse than last year.

Aviva was also hit by floods and fires. Profits from its general insurance business dropped by 17 per cent because of both natural catastrophes and costs associated with Flood Re, the new flood insurance scheme.

> 'There will be scope for special dividends in the future, but not near term'
> Stephen Hester, RSA chief

However, earnings from life insurance rose 20 per cent at the group thanks partly to the inclusion of Friends Life, which Aviva bought last year. There were also strong sales of protection products and individual annuities.

Aviva chief executive Mark Wilson, who last month promised to generate more cash and pay higher dividends, was keen to stress the company's resilience to low rates.

"A lot of people think that because we are a big financial services business, we're sensitive to interest rates. We're not," Mr Wilson said. "Aviva is performing pretty well with the rain clouds looming".

See Lex and Lombard

MARKET DATA

WORLD MARKETS AT A GLANCE

FT.COM/MARKETSDATA

Change during previous day's trading (%)

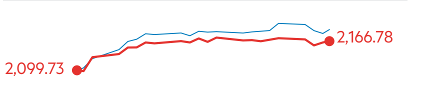
S&P 500	Nasdaq Composite	Dow Jones Ind	FTSE 100	FTSE Eurofirst 300	Nikkei	Hang Seng	FTSE All World $	$ per €	$ per £	¥ per $	£ per €	Oil Brent $ Sep	Gold $
0.14%	0.20%	0.02%	1.59%	0.72%	1.07%	0.43%	0.41%	-0.269%	-1.500%	-0.197%	1.192%	-0.90%	-0.36%

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

AMERICAS

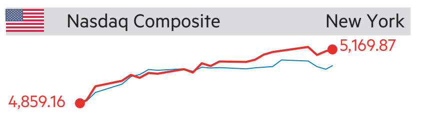
Jul 05 - Aug 04 Index All World

S&P 500 New York



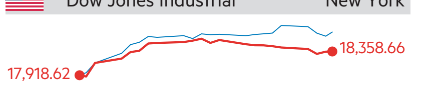
Day 0.14% Month 3.22% Year NaN%

Nasdaq Composite New York



Day 0.20% Month 6.31% Year 1.06%

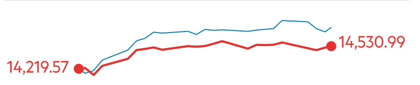
Dow Jones Industrial New York



Day 0.02% Month 2.26% Year 4.30%

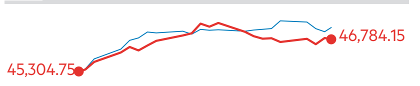
Jul 05 - Aug 04 Index All World

S&P/TSX COMP Toronto



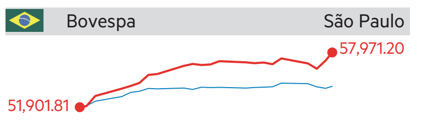
Day 0.13% Month 1.90% Year 0.27%

IPC Mexico City



Day -0.13% Month 1.26% Year 3.56%

Bovespa São Paulo

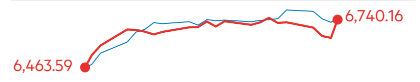


Day 1.57% Month 10.30% Year 15.83%

EUROPE

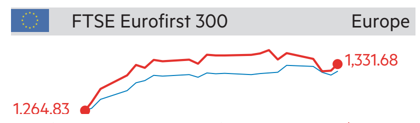
Jul 05 - Aug 04 Index All World

FTSE 100 London



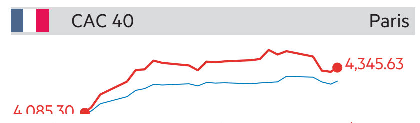
Day 1.59% Month 3.26% Year 0.72%

FTSE Eurofirst 300 Europe



Day 0.72% Month 1.89% Year -15.83%

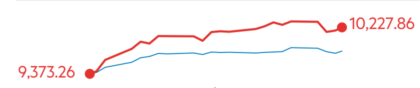
CAC 40 Paris



Day 0.57% Month 1.68% Year -15.13%

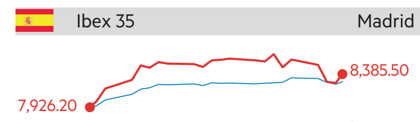
Jul 05 - Aug 04 Index All World

Xetra Dax Frankfurt



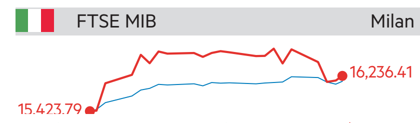
Day 0.57% Month -0.46% Year NaN%

Ibex 35 Madrid



Day 1.48% Month 1.41% Year -25.57%

FTSE MIB Milan

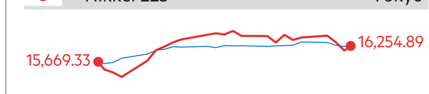


Day 0.66% Month 1.40% Year -30.83%

ASIA

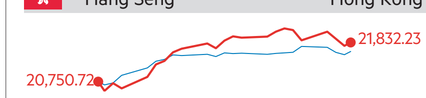
Jul 05 - Aug 04 Index All World

Nikkei 225 Tokyo



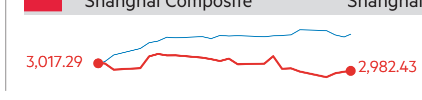
Day 1.07% Month 3.65% Year -20.89%

Hang Seng Hong Kong



Day 0.43% Month 4.99% Year -10.57%

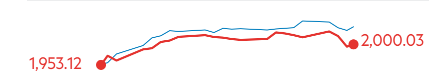
Shanghai Composite Shanghai



Day 0.13% Month 1.70% Year -17.68%

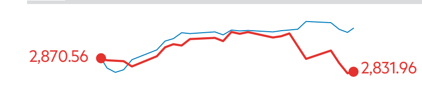
Jul 05 - Aug 04 Index All World

Kospi Seoul



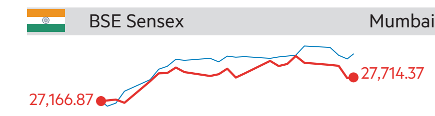
Day 0.26% Month 0.64% Year -0.42%

FTSE Straits Times Singapore



Day 0.15% Month -0.51% Year -11.30%

BSE Sensex Mumbai



Day 0.06% Month 2.10% Year -1.68%

Country	Index	Latest	Previous
Argentina	Merval	15588.02	15429.76
Australia	All Ordinaries	5563.40	5551.40
	S&P/ASX 200	5475.80	5465.70
	S&P/ASX 200 Res	2924.10	2911.60
Austria	ATX	2187.67	2166.58
Belgium	BEL 20	3427.34	3401.21
	BEL Mid	5860.89	5812.67
Brazil	Bovespa	57971.20	57076.91
Canada	S&P/TSX 60	841.99	843.09
	S&P/TSX Comp	14530.99	14512.05
	S&P/TSX Met & Min	668.67	669.13
Chile	IGPA Gen	20351.87	20273.10
China	FTSE A200	8097.58	8100.03
	FTSE B35	9385.52	9358.88
	Shanghai A	3122.11	3117.98
	Shanghai B	344.15	342.99
	Shanghai Comp	2982.43	2978.46
	Shenzhen A	2038.54	2023.74
	Shenzhen B	1150.20	1148.44
Colombia	COLCAP	1304.62	1303.35
Croatia	CROBEX	1752.37	1749.83

Country	Index	Latest	Previous
Cyprus	CSE M&P Gen	67.64	67.01
Czech Republic	PX	856.10	857.86
Denmark	OMXC Copenahgen 20	990.99	996.35
Egypt	EGX 30	7973.45	7973.45
Estonia	OMX Tallinn	1011.08	1008.35
Finland	OMX Helsinki General	7979.72	8001.14
France	CAC 40	4345.63	4321.08
	SBF 120	3451.51	3428.49
Germany	M-DAX	20951.06	20814.74
	TecDAX	1698.23	1683.87
	XETRA Dax	10227.86	10170.21
Greece	Athens Gen	556.62	551.61
	FTSE/ASE 20	1481.13	1464.06
Hong Kong	Hang Seng	21832.23	21739.12
	HS China Enterprise	9004.62	8978.33
	HSCC Red Chip	3710.17	3698.64
Hungary	Bux	27574.38	27023.94
India	BSE Sensex	27714.37	27697.51
	S&P CNX 500	6627.95	6634.30
Indonesia	Jakarta Comp	5373.86	5351.88
Ireland	ISEQ Overall	5756.26	5714.39
Israel	Tel Aviv 100	12.65	12.76

Country	Index	Latest	Previous
Italy	FTSE Italia All-Share	17866.13	17756.76
	FTSE Italia Mid Cap	29686.23	29577.29
	FTSE MIB	16236.41	16129.84
Japan	2nd Section	4180.29	4194.09
	Nikkei 225	16254.89	16083.11
	S&P Topix 150	1053.66	1042.67
	Topix	1282.99	1271.98
Jordan	Amman SE	2136.86	2128.48
Kenya	NSE 20	3479.73	3478.97
Kuwait	KSX Market Index	5470.80	5463.15
Latvia	OMX Riga	633.23	638.06
Lithuania	OMX Vilnius	538.73	544.40
Luxembourg	LuxX	1571.16	1541.65
Malaysia	FTSE Bursa KLCI	1655.29	1648.50
Mexico	IPC	46784.15	46844.53
Morocco	MASI	9914.31	9859.95
Netherlands	AEX	444.47	440.36
	AEX All Share	678.77	673.54
New Zealand	NZX 50	7298.08	7277.40
Nigeria	SE All Share	27831.95	27843.00
Norway	Oslo All Share	663.11	665.18
Pakistan	KSE 100	39446.70	39446.70

Country	Index	Latest	Previous
Philippines	Manila Comp	7978.57	7888.44
Poland	Wig	47303.42	46762.24
Portugal	PSI 20	4668.97	4647.36
	PSI General	2480.63	2466.69
Romania	BET Index	6694.63	6666.06
Russia	Micex Index	1942.04	1919.15
	RTX	923.91	910.54
Saudi-Arabia	TADAWUL All Share Index	6237.56	6268.13
Singapore	FTSE Straits Times	2831.96	2827.58
Slovakia	SAX	317.21	312.11
Slovenia	SBI TOP	715.85	716.33
South Africa	FTSE/JSE All Share	52543.37	52532.76
	FTSE/JSE Res 20	31931.84	31845.27
	FTSE/JSE Top 40	45533.22	45559.57
South Korea	Kospi	2000.03	1994.79
	Kospi 200	249.24	248.65
Spain	IBEX 35	8385.50	8263.50
Sri Lanka	CSE All Share	6478.25	6511.58
Sweden	OMX Stockholm 30	1345.44	1359.14
	OMX Stockholm AS	480.68	485.01
Switzerland	SMI Index	8081.14	8010.10

Country	Index	Latest	Previous
Taiwan	Weighted Pr	9024.71	9001.71
Thailand	Bangkok SET	1507.93	1507.47
Turkey	BIST 100	74552.15	75803.92
UAE	Abu Dhabi General Index	4509.62	4507.35
UK	FT 30	2938.40	2906.20
	FTSE 100	6740.16	6634.40
	FTSE 4Good UK	6000.01	5906.75
	FTSE All Share	3659.12	3603.96
	FTSE techMARK 100	4312.02	4265.53
USA	DJ Composite	6418.85	6411.81
	DJ Industrial	18358.66	18355.00
	DJ Transport	7716.30	7711.36
	DJ Utilities	705.81	702.67
	Nasdaq 100	4744.63	4734.33
	Nasdaq Cmp	5169.87	5159.74
	NYSE Comp	10720.23	10695.14
	S&P 500	2166.78	2163.79
	Wilshire 5000	21224.32	21238.05
Venezuela	IBC	12373.88	12427.86
Vietnam	VNI	631.94	631.61

Country	Index	Latest	Previous
Cross-Border	DJ Global Titans ($)	244.75	243.85
	Euro Stoxx 50 (Eur)	2928.34	2911.06
	Euronext 100 ID	859.33	853.32
	FTSE 4Good Global ($)	5423.35	5412.21
	FTSE All World	273.09	271.97
	FTSE E300	1331.68	1322.21
	FTSE Eurotop 100	2622.63	2603.80
	FTSE Global 100 ($)	1349.52	1344.93
	FTSE Gold Min ($)	2063.66	2076.11
	FTSE Latibex Top (Eur)	3066.70	3048.50
	FTSE Multinationals ($)	1539.34	1542.40
	FTSE World ($)	484.02	482.12
	FTSEurofirst 100 (Eur)	3736.27	3711.31
	FTSEurofirst 80 (Eur)	4012.16	3983.31
	MSCI ACWI Fr ($)	411.85	412.95
	MSCI All World ($)	1703.43	1706.52
	MSCI Europe (Eur)	1353.91	1355.06
	MSCI Pacific ($)	2306.79	2359.02
	S&P Euro (Eur)	1343.30	1333.75
	S&P Europe 350 (Eur)	1368.29	1358.55
	S&P Global 1200 ($)	1896.09	1889.18
	Stoxx 50 (Eur)	2838.54	2820.05

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

STOCK MARKET: BIGGEST MOVERS

[illegible]

UK MARKET WINNERS AND LOSERS

[illegible]

CURRENCIES

Aug 4	Currency	Dollar Closing Mid	Dollar Day's Change	Euro Closing Mid	Euro Day's Change	Pound Closing Mid	Pound Day's Change
[illegible]							
Bolivia	Bolivian Boliviano	6.9350	-	7.7245	-0.0240	9.1025	-0.1384
Brazil	Brazilian Real	3.2184	-0.0577	3.5847	-0.0755	4.2242	-0.1410
Canada	Canadian Dollar	1.3041	-0.0053	1.4526	-0.0104	1.7117	-0.0331
Chile	Chilean Peso	657.6550	0.3600	732.5266	-1.8731	863.2003	-12.6442
China	Chinese Yuan	6.6382	0.0091	7.3939	-0.0128	8.7129	-0.1203
Colombia	Colombian Peso	3086.1350	-26.5450	3437.4810	-40.3359	4050.6854	-96.9557
Costa Rica	Costa Rican Colon	548.1900	0.0100	610.5994	-1.8854	719.5228	-10.9262
Czech Republic	Czech Koruna	24.2623	0.0588	27.0244	-0.0182	31.8452	-0.4058
Denmark	Danish Krone	6.6778	0.0202	7.4380	-0.0005	8.7648	-0.1063
Egypt	Egyptian Pound	8.8780	0.0197	9.8887	-0.0088	11.6527	-0.1510
Hong Kong	Hong Kong Dollar	7.7567	-0.0022	8.6398	-0.0293	10.1810	-0.1577
Hungary	Hungarian Forint	279.3061	1.0236	311.1040	0.1773	366.6011	-4.2098
India	Indian Rupee	66.9450	-0.0275	74.5664	-0.2623	87.8682	-1.3726

Aug 4	Currency	Dollar Closing Mid	Dollar Day's Change	Euro Closing Mid	Euro Day's Change	Pound Closing Mid	Pound Day's Change
[illegible]							
..One Month		101.0949	-0.2002	112.6043	-0.5732	132.6914	-2.2841
..Three Month		101.0946	-0.2007	112.6043	-0.5732	132.6913	-2.2844
..One Year		101.0934	-0.2032	112.6042	-0.5734	132.6914	-2.2854
Kenya	Kenyan Shilling	101.4000	-	112.9440	-0.3508	133.0918	-2.0235
Kuwait	Kuwaiti Dinar	0.3019	0.0010	0.3362	0.0000	0.3962	-0.0048
Malaysia	Malaysian Ringgit	4.0515	-0.0090	4.5127	-0.0241	5.3178	-0.0928
Mexico	Mexican Peson	18.8948	-0.0487	21.0458	-0.1197	24.8002	-0.4419
New Zealand	New Zealand Dollar	1.3921	-0.0049	1.5506	-0.0102	1.8272	-0.0343
Nigeria	Nigerian Naira	318.5000	0.2500	354.7600	-0.8226	418.0448	-6.0228
Norway	Norwegian Krone	8.4397	0.0113	9.4005	-0.0166	11.0774	-0.1534
Pakistan	Pakistani Rupee	104.6650	-	116.5807	-0.3621	137.3773	-2.0887
Peru	Peruvian Nuevo Sol	3.3406	-0.0147	3.7209	-0.0280	4.3846	-0.0863
Philippines	Philippine Peso	47.0225	-0.0025	52.3758	-0.1655	61.7190	-0.9417

Aug 4	Currency	Dollar Closing Mid	Dollar Day's Change	Euro Closing Mid	Euro Day's Change	Pound Closing Mid	Pound Day's Change
[illegible]							
Saudi Arabia	Saudi Riyal	3.7503	-	4.1773	-0.0130	4.9224	-0.0748
Singapore	Singapore Dollar	1.3429	0.0006	1.4958	-0.0040	1.7626	-0.0261
South Africa	South African Rand	13.7750	-0.2168	15.3432	-0.2898	18.0803	-0.5637
South Korea	South Korean Won	1114.2000	-3.6000	1241.0475	-7.8771	1462.4352	-27.0316
Sweden	Swedish Krona	8.5119	-0.0164	9.4809	-0.0477	11.1722	-0.1916
Switzerland	Swiss Franc	0.9734	0.0018	1.0842	-0.0014	1.2776	-0.0170
Taiwan	New Taiwan Dollar	31.7030	-0.0420	35.3123	-0.1566	41.6115	-0.6886
Thailand	Thai Baht	34.9305	-0.0110	38.9072	-0.1331	45.8478	-0.7117
Tunisia	Tunisian Dinar	2.2118	0.0003	2.4636	-0.0073	2.9031	-0.0437
Turkey	Turkish Lira	3.0156	-0.0017	3.3589	-0.0124	3.9580	-0.0625
United Arab Emirates	UAE Dirham	3.6729	-0.0002	4.0910	-0.0129	4.8208	-0.0736
United Kingdom	Pound Sterling	0.7619	0.0114	0.8486	0.0101	-	-
..One Month		0.7619	0.0114	0.8485	0.0101	-	-

Aug 4	Currency	Dollar Closing Mid	Dollar Day's Change	Euro Closing Mid	Euro Day's Change	Pound Closing Mid	Pound Day's Change
[illegible]							
..One Month		-	-	1.1137	-0.2186	1.3126	-0.0200
..Three Month		-	-	1.1134	-0.2186	1.3128	-0.0200
..One Year		-	-	1.1122	-0.2187	1.3133	-0.0200
Venezuela	Venezuelan Bolivar Fuerte	9.9900	0.0100	11.1273	-0.0234	13.1123	-0.1860
Vietnam	Vietnamese Dong	22295.0000	-10.0000	24833.2448	-88.3146	29263.2109	-458.1808
European Union	Euro	0.8978	0.0028	-	-	1.1784	-0.0142
..One Month		0.8977	0.0028	-	-	1.1783	-0.0142
..Three Month		0.8974	0.0028	-	-	1.1782	-0.0142
..One Year		0.8961	0.0028	-	-	1.1776	-0.0142

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

FTSE ACTUARIES SHARE INDICES

UK SERIES www.ft.com/equities

Produced in conjunction with the Institute and Faculty of Actuaries

	£ Strlg Aug 04	Day's chge%	Euro Index	£ Strlg Aug 03	£ Strlg Aug 02	Year ago	Div yield%	Cover	P/E ratio	X/D adj	Total Return
FTSE 100 (100)	6740.16	1.59	6196.95	6634.40	6645.40	6752.41	3.71	0.71	37.99	153.47	5414.37
FTSE 250 (250)	17244.32	1.45	15854.55	16997.13	17063.01	17775.08	2.67	1.95	19.16	285.03	12208.55
FTSE 250 ex Inv Co (209)	18507.42	1.38	17015.86	18256.11	18334.30	19351.96	2.72	2.08	17.68	309.74	13361.42
FTSE 350 (350)	3717.00	1.57	3417.44	3659.50	3666.89	3741.31	3.54	0.86	32.74	80.81	6009.97
FTSE 350 ex Investment Trusts (309)	3690.16	1.56	3392.76	3633.37	3640.76	3719.85	3.57	0.86	32.63	80.81	3072.64
FTSE 350 Higher Yield (125)	3487.17	1.95	3206.13	3420.35	3422.07	3487.77	4.91	0.41	49.78	102.59	5835.08
FTSE 350 Lower Yield (225)	3582.31	1.14	3293.60	3541.87	3555.06	3631.86	1.98	2.14	23.59	46.75	3844.37
FTSE SmallCap (279)	4762.75	0.39	4378.91	4744.36	4742.26	4730.29	2.90	1.41	24.47	82.01	6648.97
FTSE SmallCap ex Inv Co (144)	4209.80	0.21	3870.52	4201.04	4189.96	4282.12	3.02	1.92	17.23	74.35	6171.28
FTSE All-Share (629)	3659.12	1.53	3364.23	3603.96	3610.93	3681.21	3.52	0.88	32.37	79.00	5983.89
FTSE All-Share ex Inv Co (453)	3617.01	1.54	3325.50	3562.21	3569.15	3646.65	3.56	0.88	32.11	78.93	3061.26
FTSE All-Share ex Multinationals (565)	1108.61	1.15	844.78	1096.03	1096.23	1261.50	3.17	1.43	22.07	21.81	1926.95
FTSE Fledgling (104)	7959.93	0.33	7318.42	7934.06	7918.82	7963.20	2.60	-0.05	-748.23	121.22	14574.35
FTSE Fledgling ex Inv Co (53)	10276.23	0.08	9448.04	10268.16	10233.04	10892.72	2.83	-1.20	-29.55	161.19	18297.54
FTSE All-Small (383)	3302.17	0.38	3036.04	3289.53	3287.81	3280.88	2.88	1.34	25.92	56.53	5918.47
FTSE All-Small ex Inv Co Index (197)	3136.83	0.20	2884.02	3130.49	3122.12	3195.63	3.01	1.78	18.61	55.20	5825.75
FTSE AIM All-Share Index (823)	761.66	0.57	700.28	757.33	758.03	756.14	1.68	0.64	93.17	6.16	826.80
FTSE Sector Indices											
Oil & Gas (16)	**7409.67**	**2.26**	**6812.51**	**7246.09**	**7263.44**	**7036.91**	**6.08**	**-0.66**	**-25.03**	**270.60**	**6471.37**
Oil & Gas Producers (9)	7091.49	2.28	6519.97	6933.15	6953.85	6667.91	6.13	-0.68	-24.07	260.67	6406.92
Oil Equipment Services & Distribution (7)	13830.91	1.41	12716.24	13639.08	13410.99	17575.05	4.62	0.26	84.01	394.46	10459.36
Basic Materials (27)	**4129.04**	**1.05**	**3796.27**	**4085.94**	**4094.16**	**3974.11**	**3.11**	**0.37**	**87.72**	**53.46**	**4120.67**
Chemicals (7)	12610.14	1.06	11593.86	12477.39	12508.29	12230.69	2.35	2.05	20.70	239.20	11068.30
Forestry & Paper (1)	18182.71	0.85	16717.32	18029.12	17982.90	18735.13	2.57	3.97	9.81	347.94	19310.20
Industrial Metals & Mining (2)	1707.75	4.39	1570.12	1635.98	1634.47	1093.99	0.34	0.67	444.37	0.00	1490.34
Mining (17)	11319.70	1.04	10407.41	11203.45	11228.37	10922.19	3.26	0.05	587.71	134.88	5912.40
Industrials (116)	**4651.01**	**1.35**	**4276.17**	**4589.20**	**4626.09**	**4619.13**	**2.45**	**1.07**	**38.36**	**70.17**	**4696.46**
Construction & Materials (15)	5634.51	1.52	5180.41	5550.24	5569.40	5333.13	2.25	0.09	496.50	87.22	5855.27
Aerospace & Defense (9)	4647.18	0.64	4272.65	4617.57	4664.27	4792.88	2.54	-0.50	-78.81	74.36	4885.96
General Industrials (5)	4005.93	1.18	3683.08	3959.04	4013.41	3715.75	2.96	1.14	29.60	48.86	4418.50
Electronic & Electrical Equipment (10)	6161.82	1.85	5665.22	6050.03	6063.42	5601.80	2.03	1.80	27.50	74.29	5530.46
Industrial Engineering (13)	9725.25	1.13	8941.46	9616.48	9556.79	8783.75	2.55	1.29	30.37	166.99	11623.16
Industrial Transportation (8)	4715.49	0.74	4335.46	4680.91	4670.96	4442.34	3.66	1.06	25.87	123.38	4081.57
Support Services (56)	6804.30	1.62	6255.93	6695.81	6767.70	6934.68	2.30	1.79	24.25	96.41	6929.70
Consumer Goods (39)	**20453.95**	**1.39**	**18805.51**	**20174.36**	**20428.24**	**17905.90**	**2.68**	**1.81**	**20.64**	**336.10**	**14685.11**
Automobiles & Parts (1)	6890.34	-0.81	6335.03	6946.74	6730.53	7520.15	2.97	1.29	26.06	136.30	6469.26
Beverages (6)	17233.99	0.71	15845.06	17112.61	17213.02	14220.61	2.24	1.59	28.06	228.71	11904.16
Food Producers (8)	8486.92	1.71	7802.94	8344.21	8161.40	8472.95	1.95	1.82	28.23	94.31	7186.93
Household Goods & Home Construction (15)	13554.41	1.06	12462.02	13412.29	13584.63	13618.86	2.29	2.56	17.07	153.86	9323.54
Leisure Goods (1)	4903.91	-2.65	4508.69	5037.35	5054.03	5552.88	3.48	1.50	19.19	129.52	4250.88
Personal Goods (6)	26416.85	0.98	24287.84	26160.31	26477.66	23787.31	2.75	3.24	11.23	551.94	17432.15
Tobacco (2)	56511.49	2.33	51957.08	55225.97	56583.32	45599.27	3.30	1.18	25.58	1163.34	35268.78
Health Care (19)	**10900.01**	**1.48**	**10021.55**	**10740.66**	**10787.79**	**9700.66**	**3.06**	**0.41**	**79.07**	**211.12**	**8136.12**
Health Care Equipment & Services (8)	7841.80	1.30	7209.81	7741.35	7751.04	7150.70	1.40	2.01	35.50	64.89	6708.90
Pharmaceuticals & Biotechnology (11)	14815.26	1.50	13621.26	14596.15	14664.53	13157.90	3.22	0.35	89.44	303.96	9838.91
Consumer Services (93)	**4639.89**	**1.19**	**4265.94**	**4585.10**	**4595.77**	**5073.86**	**2.64**	**1.99**	**19.02**	**80.50**	**4261.06**
Food & Drug Retailers (7)	2643.03	1.29	2430.02	2609.41	2617.45	3305.48	1.57	2.46	25.90	29.93	3055.35
General Retailers (31)	2501.18	0.55	2299.60	2487.53	2469.21	3229.11	3.00	2.13	15.61	44.67	2789.59
Media (21)	7641.62	1.31	7025.76	7542.47	7589.35	7615.84	2.84	1.82	19.38	146.10	4601.30
Travel & Leisure (34)	8132.25	1.39	7476.85	8020.69	8049.28	8411.77	2.57	2.00	19.43	139.32	7540.06
Telecommunications (6)	**3865.26**	**0.86**	**3553.75**	**3832.18**	**3785.50**	**4200.84**	**4.33**	**-0.24**	**-96.68**	**85.24**	**4141.36**
Fixed Line Telecommunications (4)	4753.15	0.41	4370.08	4733.53	4683.06	5390.54	3.33	1.87	16.06	11.68	4132.66
Mobile Telecommunications (2)	5226.51	1.12	4805.29	5168.80	5101.41	5545.84	4.89	-1.04	-19.58	172.86	5057.61
Utilities (7)	**9249.20**	**1.81**	**8503.78**	**9085.18**	**9186.29**	**8339.63**	**4.39**	**1.72**	**13.23**	**303.54**	**10199.05**
Electricity (2)	9015.87	1.95	8289.25	8843.29	8838.33	8913.93	5.50	1.47	12.40	484.22	12667.79
Gas Water & Multiutilities (5)	8795.66	1.77	8086.80	8642.67	8763.14	7746.80	4.13	1.80	13.45	245.09	9694.22
Financials (288)	**4179.33**	**1.84**	**3842.50**	**4103.82**	**4068.44**	**4963.39**	**4.02**	**1.46**	**17.08**	**107.67**	**3747.76**
Banks (11)	3238.07	1.55	2977.11	3188.62	3091.91	4440.47	5.09	0.88	22.24	102.10	2304.81
Nonlife Insurance (10)	3126.43	1.05	2874.46	3094.06	3141.86	2728.84	2.65	2.37	15.89	60.13	5366.36
Life Insurance/Assurance (10)	6914.34	3.41	6357.09	6686.55	6704.84	8213.38	4.27	1.46	16.01	201.97	6529.46
Index- Real Estate Investment & Services (20)	2422.28	1.53	2227.06	2385.82	2408.97	3276.07	2.73	3.77	9.72	38.38	6317.11
Real Estate Investment Trusts (28)	2693.30	1.88	2476.24	2643.52	2673.82	3127.08	3.50	4.34	6.57	59.89	3253.40
General Financial (33)	7636.40	1.52	7020.96	7522.10	7541.13	8217.21	3.43	1.92	15.24	181.28	8494.51
Equity Investment Instruments (176)	8222.72	1.35	7560.03	8113.33	8126.48	7834.20	2.55	0.97	40.28	130.99	4400.29
Non Financials (341)	**4444.84**	**1.44**	**4086.62**	**4381.78**	**4403.99**	**4233.66**	**3.37**	**0.67**	**44.13**	**90.47**	**6365.49**
Technology (18)	**1976.67**	**0.76**	**1817.37**	**1961.76**	**1953.92**	**1339.17**	**1.11**	**1.62**	**55.49**	**14.65**	**2498.39**
Software & Computer Services (12)	2165.23	1.85	1990.73	2125.96	2138.26	1675.11	1.73	1.62	35.76	26.40	2881.01
Technology Hardware & Equipment (6)	2461.50	0.04	2263.12	2460.51	2434.73	1509.17	0.69	1.63	88.37	10.68	2845.88

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	6640.01	6626.89	6637.82	6640.98	6643.82	6734.99	6721.94	6727.40	6747.51	6749.34	6616.04
FTSE 250	17018.53	17020.48	17030.01	17077.89	17071.20	17259.87	17214.97	17237.70	17264.35	17293.45	16964.56
FTSE SmallCap	4738.11	4745.69	4747.13	4746.88	4742.10	4758.08	4755.43	4761.74	4762.35	4763.51	4736.97
FTSE All-Share	3606.97	3601.48	3606.63	3609.61	3610.56	3657.25	3649.95	3653.27	3663.02	3663.02	3595.18

Time of FTSE 100 Day's high:13:41:30 Day's Low07:47:00 FTSE 100 2010/11 High: 6750.43(27/07/2016) Low: 5536.97(11/02/2016)
Time of FTSE All-Share Day's high:15:00:00 Day's Low07:47:00 FTSE 100 2010/11 High: 3663.95(27/07/2016) Low: 3046.53(11/02/2016)

 † Sector P/E ratios greater than 80 are not shown. For changes to FTSE Fledgling Index constituents please refer to www.ftse.com/indexchanges. ‡ Values are negative.

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Issue price	Amount paid up	Latest renun. date	High	Low	Stock	closing Price p	+or-
95p	Nil	23-08-16	710.00	686.12	Melrose Industries PLC	699.50	-9.00

FT 30 INDEX

	Aug 04	Aug 03	Aug 02	Aug 01	Jul 29	Yr Ago	High	Low
FT 30	2938.40	2906.20	2908.60	2926.90	2939.70	0.00	2966.70	2508.90
FT 30 Div Yield	1.57	1.59	1.58	1.57	1.57	0.00	3.93	2.74
P/E Ratio net	28.47	28.08	28.30	28.38	28.41	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
2906.2	2907.3	2904.9	2907.8	2910.4	2945.4	2937.4	2941.4	2943.2	2946.5	2899.7

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

FX: EFFECTIVE INDICES

	Aug 03	Aug 02	Mnth Ago		Aug 04	Aug 03	Mnth Ago
Australia	90.94	91.06	90.24	Sweden	78.00	77.84	79.14
Canada	88.97	89.12	90.45	Switzerland	159.66	160.35	159.83
Denmark	107.57	107.74	107.28	UK	79.82	79.49	79.67
Japan	151.67	151.85	149.72	USA	99.27	98.99	99.43
New Zealand	115.26	116.11	116.20	Euro	88.58	88.84	88.46
Norway	86.28	86.04	87.36				

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 &	132.14	Beverages	12.05	Mobile Telecomms	1.07
Mining	59.63	NON FINANCIALS Index	11.80	Oil Equipment & Serv	0.34
Tech Hardware & Eq	53.22	Consumer Goods	11.65	FTSE 250 Index	-0.84
Basic Materials	50.00	Chemicals	11.25	Household Goods & Ho	-1.43
Technology	36.20	Utilities	10.74	Telecommunications	-3.90
Industrial Eng	29.25	Aerospace & Defense	10.73	Leisure Goods	-5.61
Oil & Gas Producers	27.34	Industrials	7.80	Financial Services	-5.67
Oil & Gas	26.39	FTSE 100 Index	7.72	Consumer Services	-5.69
Tobacco	22.38	Nonlife Insurance	6.83	Automobiles & Parts	-6.16
Personal Goods	18.17	Construct & Material	6.52	Travel & Leisure	-7.70
Industrial Transport	17.00	Equity Invest Instr	6.42	Real Est Invest & Tr	-8.67
Software & Comp Serv	16.98	FTSE All{HY-}Share Index	6.08	Food Producers	-8.78
Forestry & Paper	14.69	Health Care Eq & Srv	5.49	Financials	-9.76
Pharmace & Biotech	13.98	FTSE SmallCap Index	3.03	Fixed Line Telecomms	-11.35
Electronic & Elec Eq	13.98	Support Services	2.97	Life Insurance	-14.55
Health Care	13.22	Electricity	1.70	Banks	-15.81
Gas Water & Multi	13.10	Media	1.55	General Retailers	-16.07
		Food & Drug Retailer	1.51	Real Est Invest & Se	-20.83

FTSE GLOBAL EQUITY INDEX SERIES

Aug 04 Regions & countries	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
FTSE Global All Cap	7711	466.53	-0.3	2.8	3.5	649.03	5.2	2.5
FTSE Global All Cap	7079	462.39	0.3	7.3	-0.3	624.68	0.2	2.5
FTSE Global Large Cap	1424	409.82	-0.3	2.6	2.8	583.91	4.7	2.7
FTSE Global Mid Cap	1641	630.50	-0.2	2.8	4.7	835.08	6.2	2.1
FTSE Global Small Cap	4646	664.38	0.0	3.6	5.9	853.34	7.3	2.0
FTSE All-World	3065	271.97	-0.3	2.7	3.1	399.40	4.9	2.6
FTSE World	2540	482.12	-0.3	2.6	3.1	950.34	4.9	2.6
FTSE Global All Cap ex UNITED KINGDOM In	7385	482.42	-0.3	2.8	4.1	661.54	5.8	2.5
FTSE Global All Cap ex USA	5766	419.34	-1.0	2.4	0.5	622.04	2.7	3.1
FTSE Global All Cap ex JAPAN	6447	477.50	-0.1	2.8	4.0	670.43	5.8	2.6
FTSE Global All Cap ex Eurozone	7066	484.98	-0.2	2.9	4.5	661.97	6.1	2.4
FTSE Developed	2093	437.29	-0.2	2.6	2.5	612.93	4.2	2.6
FTSE Developed All Cap	5679	460.17	-0.2	2.7	2.9	637.70	4.5	2.5
FTSE Developed Large Cap	898	403.34	-0.3	2.6	2.2	573.41	4.0	2.7
FTSE Developed Europe Large Cap	223	312.29	-0.4	0.8	-5.4	506.86	-2.5	3.7
FTSE Developed Europe Mid Cap	307	488.63	-0.7	2.7	-4.7	716.35	-2.4	2.8
FTSE Dev Europe Small Cap	705	684.08	-0.6	3.1	-6.5	972.80	-4.7	2.7
FTSE North America Large Cap	291	461.62	0.3	2.9	5.8	615.87	7.2	2.2
FTSE North America Mid Cap	394	695.92	0.5	2.7	8.7	867.77	9.8	1.7
FTSE North America Small Cap	1475	705.13	0.6	4.0	9.9	855.47	11.0	1.7
FTSE North America	685	309.62	0.3	2.9	6.2	423.09	7.6	2.1
FTSE Developed ex North America	1408	219.85	-1.1	2.1	-3.0	350.18	-0.8	3.3
FTSE Japan Large Cap	176	314.65	-2.5	3.4	-4.0	398.34	-2.8	2.4
FTSE Japan Mid Cap	307	489.12	-2.6	1.4	-0.5	596.93	0.5	2.0
FTSE Global wi JAPAN Small Cap	781	538.27	-2.6	2.0	2.3	679.21	3.5	2.2
FTSE Japan	483	131.88	-2.5	3.0	-3.3	187.53	-2.1	2.3
FTSE Asia Pacific Large Cap ex Japan	548	572.25	-1.6	3.9	5.8	874.18	8.0	3.2
FTSE Asia Pacific Mid Cap ex Japan	420	792.14	-1.1	4.2	6.1	1162.45	7.9	2.8
FTSE Asia Pacific Small Cap ex Japan	1442	518.32	-0.8	3.1	3.8	749.56	5.5	2.7
FTSE Asia Pacific Ex Japan	968	454.32	-1.6	3.9	5.8	737.33	8.0	3.2
FTSE Emerging All Cap	2032	628.81	-0.8	3.5	10.1	916.37	12.5	3.0
FTSE Emerging Large Cap	526	590.74	-0.9	3.2	9.7	866.93	12.2	3.1
FTSE Emerging Mid Cap	446	816.18	-0.6	4.6	14.9	1180.46	17.2	2.7
FTSE Emerging Small Cap	1060	661.06	-0.6	4.0	7.4	925.88	9.4	2.8
FTSE Emerging Europe	112	292.42	-0.9	-2.0	9.5	443.48	13.1	4.2
FTSE Latin America All Cap	236	775.61	0.5	3.8	29.6	1163.11	31.5	3.0
FTSE Middle East and Africa All Cap	219	702.23	-0.1	6.5	13.5	1064.76	15.5	2.9
FTSE Global wi UNITED KINGDOM All Cap In	326	312.50	-0.1	1.7	-5.0	505.07	-2.8	3.6
FTSE Global wi USA All Cap	1945	531.89	0.4	3.1	6.1	689.96	7.4	2.0
FTSE Europe All Cap	1422	362.37	-0.4	1.2	-5.0	569.23	-2.3	3.5
FTSE Eurozone All Cap	645	336.65	-0.5	1.9	-6.2	535.59	-3.4	3.5
FTSE RAFI All World 3000	3038	5556.18	-0.1	2.3	2.4	7144.83	4.5	3.3
FTSE RAFI US 1000	998	9427.51	0.7	2.3	6.6	12091.98	8.2	2.4
FTSE EDHEC-Risk Efficient All-World	3065	331.40	-0.2	2.5	5.0	452.01	6.6	2.3
FTSE EDHEC-Risk Efficient Developed Europe	530	270.96	-0.7	2.1	-3.0	404.21	-0.8	2.7

Aug 04 Sectors	No of stocks	US $ indices	Day %	Mth %	YTD %	Total retn	YTD %	Gr Div Yield
Oil & Gas	151	336.22	0.9	0.9	10.3	524.82	12.6	3.7
Oil & Gas Producers	110	313.10	0.9	0.9	9.7	497.65	12.1	3.8
Oil Equipment & Services	31	316.29	1.1	1.1	14.0	449.52	16.2	3.2
Basic Materials	256	394.54	-0.4	-0.4	12.3	588.97	14.4	2.8
Chemicals	125	586.96	-0.3	-0.3	-0.8	880.81	1.3	2.9
Forestry & Paper	16	207.09	-0.5	-0.5	5.6	341.36	8.4	3.7
Industrial Metals & Mining	62	321.27	-0.7	-0.7	24.9	478.72	26.4	2.3
Mining	53	505.32	-0.3	-0.3	56.2	751.41	58.5	2.8
Industrials	534	317.73	-0.4	-0.4	6.2	448.28	7.8	2.3
Construction & Materials	111	462.15	-0.6	-0.6	10.3	683.45	12.1	2.1
Aerospace & Defense	26	529.68	-0.3	-0.3	4.6	740.09	6.1	2.3
General Industrials	55	230.37	-0.1	-0.1	6.2	349.69	8.0	2.6
Electronic & Electrical Equipment	69	324.95	-0.8	-0.8	2.7	421.14	3.8	2.0
Industrial Engineering	104	585.04	-0.9	-0.9	9.2	814.05	11.1	2.5
Industrial Transportation	94	537.13	0.2	0.2	8.5	756.61	10.2	2.5
Support Services	75	283.81	-0.5	-0.5	2.9	384.01	4.2	2.0
Consumer Goods	423	430.59	-1.0	-1.0	3.4	622.14	5.0	2.5
Automobiles & Parts	103	343.25	-1.0	-1.0	-10.1	478.38	-8.3	3.1
Beverages	48	594.83	-0.6	-0.6	4.0	869.03	5.3	2.5
Food Producers	104	607.72	-0.9	-0.9	8.8	905.19	10.7	2.2
Household Goods & Home Construction	47	423.48	-0.8	-0.8	5.5	608.40	7.2	2.3
Leisure Goods	31	155.05	-1.2	-1.2	17.6	200.60	18.2	1.3
Personal Goods	79	614.58	-0.8	-0.8	2.8	843.65	4.1	2.0
Tobacco	11	1346.95	-1.8	-1.8	10.7	2685.58	12.9	3.5
Health Care	177	467.85	-0.5	-0.5	2.1	660.88	3.5	1.9
Health Care Equipment & Services	63	718.65	-0.3	-0.3	10.6	829.05	11.3	1.0
Pharmaceuticals & Biotechnology	114	345.60	-0.7	-0.7	-0.7	508.65	1.0	2.2
Consumer Services	391	397.13	-0.2	-0.2	1.9	521.74	3.0	1.8
Food & Drug Retailers	53	302.40	-0.1	-0.1	0.9	413.89	2.2	1.9
General Retailers	123	555.78	-0.3	-0.3	4.3	711.22	5.3	1.6
Media	84	296.86	0.3	0.3	2.6	391.39	3.9	2.0
Travel & Leisure	131	372.91	-0.8	-0.8	-2.2	494.97	-1.1	1.9
Telecommunication	91	170.65	-0.2	-0.2	8.4	308.44	11.3	3.9
Fixed Line Telecommuniations	42	146.04	-0.2	-0.2	10.2	289.59	13.6	4.3
Mobile Telecommunications	49	174.33	-0.3	-0.3	5.8	284.37	8.2	3.4
Utilities	164	263.61	-0.8	-0.8	11.1	495.07	13.9	3.7
Electricity	111	287.20	-0.9	-0.9	10.9	533.48	13.7	3.6
Gas Water & Multiutilities	53	280.55	-0.8	-0.8	11.4	540.55	14.3	3.8
Financials	690	190.69	-0.2	-0.2	-5.0	303.02	-2.8	3.3
Banks	246	160.65	0.0	0.0	-10.0	273.32	-7.5	4.0
Nonlife Insurance	68	209.73	0.1	0.1	-2.2	298.00	-0.2	2.6
Life Insurance	51	176.97	-0.1	-0.1	-10.7	274.75	-8.7	3.5
Financial Services	152	218.16	0.2	0.2	-1.9	294.63	-0.6	2.2
Technology	188	186.12	0.1	0.1	6.8	224.65	8.1	1.8
Software & Computer Services	92	331.05	0.1	0.1	6.7	382.45	7.4	1.1
Technology Hardware & Equipment	96	135.12	0.1	0.1	6.9	168.78	8.9	2.6
Alternative Energy	10	100.94	1.0	1.0	-2.4	135.29	-1.2	1.3
Real Estate Investment & Services	102	287.89	-2.3	-2.3	1.8	468.34	3.8	2.6

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 100 SUMMARY

FTSE 100	Closing Price	Day's Change	FTSE 100	Closing Price	Day's Change
3I Group PLC	624.50	9.00	Legal & General Group PLC	209.00	3.60
Admiral Group PLC	2194	20.00	Lloyds Banking Group PLC	51.95	-1.04
Anglo American PLC	845.00	9.60	London Stock Exchange Group PLC	2779	55.00
Antofagasta PLC	501.00	8.60	Marks And Spencer Group PLC	316.90	-2.00
Arm Holdings PLC	1687	-	Mediclinic International PLC	1072	13.00
Ashtead Group PLC	1176	24.00	Merlin Entertainments PLC	469.30	3.50
Associated British Foods PLC	2897	67.00	Mondi PLC	1547	13.00
Astrazeneca PLC	5153	137.00	Morrison (Wm) Supermarkets PLC	184.40	4.30
Aviva PLC	410.80	25.80	National Grid PLC	1081.5	20.00
Babcock International Group PLC	968.50	20.00	Next PLC	5200	-140.00
Bae Systems PLC	528.00	5.00	Old Mutual PLC	215.00	7.00
Barclays PLC	148.85	0.55	Paddy Power Betfair PLC	8830	315.00
Barratt Developments PLC	425.40	3.40	Pearson PLC	893.50	10.50
Berkeley Group Holdings (The) PLC	2582	44.00	Persimmon PLC	1672	36.00
Bhp Billiton PLC	982.90	34.30	Provident Financial PLC	2703	41.00
BP PLC	416.35	1.35	Prudential PLC	1350	41.00
British American Tobacco PLC	4812.5	109.50	Randgold Resources LD	8635	-345.00
British Land Company PLC	669.00	18.50	Reckitt Benckiser Group PLC	7390	63.00
Bt Group PLC	409.95	1.35	RELX PLC	1421	15.00
Bunzl PLC	2351	35.00	Rio Tinto PLC	2420.5	-2.50
Burberry Group PLC	1298	5.00	Rolls-Royce Holdings PLC	757.50	6.50
Capita PLC	955.00	15.00	Royal Bank Of Scotland Group PLC	192.00	1.40
Carnival PLC	3609	70.00	Royal Dutch Shell PLC	1969	64.00
Centrica PLC	235.40	4.90	Royal Dutch Shell PLC	1894.5	58.00
Coca-Cola Hbc AG	1552	33.00	Royal Mail PLC	510.00	8.00
Compass Group PLC	1449	24.00	Rsa Insurance Group PLC	505.00	6.80
Crh PLC	2265	35.00	Sabmiller PLC	4361	-44.50
Dcc PLC	6800	70.00	Sage Group PLC	715.50	15.00
Diageo PLC	2170.5	42.50	Sainsbury (J) PLC	226.80	4.30
Direct Line Insurance Group PLC	394.10	3.10	Schroders PLC	2613	33.00
Dixons Carphone PLC	342.80	4.70	Severn Trent PLC	2425	30.00
Easyjet PLC	1008	9.00	Shire PLC	5075	60.00
Experian PLC	1466	32.00	Sky PLC	909.50	14.50
Fresnillo PLC	1954	13.00	Smith & Nephew PLC	1252	19.00
Gkn PLC	293.20	-2.40	Smiths Group PLC	1271	29.00
Glaxosmithkline PLC	1699	26.50	Sse PLC	1539	30.00
Glencore PLC	188.50	4.10	St. James's Place PLC	924.00	16.50
Hammerson PLC	560.00	15.00	Standard Chartered PLC	646.00	31.70
Hargreaves Lansdown PLC	1281	1.00	Standard Life PLC	305.30	5.10
Hikma Pharmaceuticals PLC	2220	-448.00	Taylor Wimpey PLC	151.30	2.60
HSBC Holdings PLC	517.30	12.90	Tesco PLC	155.55	1.55
Imperial Brands PLC	4046.5	92.00	Travis Perkins PLC	1545	24.00
Informa PLC	715.50	10.00	Tui AG	964.00	-2.00
Intercontinental Hotels Group PLC	3118	31.00	Unilever PLC	3517	39.00
International Consolidated Airlines Group S.A.	390.20	2.00	United Utilities Group PLC	994.00	13.00
Intertek Group PLC	3478	31.00	Vodafone Group PLC	232.15	1.90
Intu Properties PLC	306.10	11.10	Whitbread PLC	3880	77.00
Itv PLC	197.40	2.40	Wolseley PLC	4175	31.00
Johnson Matthey PLC	3205	61.00	Worldpay Group PLC	297.90	4.10
Kingfisher PLC	345.90	8.00	WPP PLC	1700	23.00
Land Securities Group PLC	1094	20.00			

UK STOCK MARKET TRADING DATA

	Aug 04	Aug 03	Aug 02	Aug 01	Jul 29	Yr Ago
SEAQ Bargains	4555.00	6426.00	7920.00	5324.00	5324.00	5324.00
Order Book Turnover (m)	107.73	174.88	118.58	104.60	104.60	104.60
Order Book Bargains	991513.00	916281.00	862735.00	960374.00	960374.00	960374.00
Order Book Shares Traded (m)	1589.00	1467.00	1282.00	1630.00	1630.00	1630.00
Total Equity Turnover (£m)	8094.38	8854.11	4712.86	3991.30	3991.30	3991.30
Total Mkt Bargains	1087380.00	1026937.00	962618.00	1059652.00	1059652.00	1059652.00
Total Shares Traded (m)	4794.00	5270.00	5010.00	5422.00	5422.00	5422.00

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

UK COMPANY RESULTS

Company		Turnover		Pre-tax		EPS(p)		Div(p)		Pay day	Total	
Aviva	Int	**27422**	11279	**655**	510	**2.5**	12.8	**7.42**	6.75	Nov 17	**21.394**	19
Brammer	Int	**372.3**	365.6	**13.9L**	9.1	**12.1L**	5.2	**-**	3.6	-	**-**	10.7
Cobham	Int	**916.7**	1048.2	**38.4L**	4.3	**1.85L**	0.17L	**2.03**	2.59187	Nov 4	**8.901**	9.174
Communisis	Int	**174.942**	174.576	**4.41**	3.225	**1.62**	1.2	**0.81**	0.73	Oct 13	**2.272**	2.06
Hill & Smith Holdings	Int	**259.3**	233	**19.4**	7.1	**16.8**	5.6	**8.5**	7.1	Jan 5	**22.026**	18.7
Inmarsat	Int	**629**	616.2	**154.4**	165.9	**0.27**	0.29	**20.59**	19.938	Oct 21	**52.9**	50
Johnston Press	[illegible]											
Ladbrokes	[illegible]											
London Stock Exchange Group	[illegible]											
Mondi	[illegible]											
Portmeirion Group	[illegible]											
RSA Insurance Group	[illegible]											
Serco Group	[illegible]											
Woodford Patient Capital Trust	[illegible]											

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)
07/27	11.00		WDC	WideCells Group PLC	12.00	-0.08	13.00	11.00	648.7
07/26	151.00	AIM	SECG	SEC SpA	153.00	1.00	155.00	151.00	1870.0
07/08	161.00	AIM	DAR	Dorcaster PLC	162.50	-1.00	168.00	162.00	1625.0

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

MARKET DATA

FT500: THE WORLD'S LARGEST COMPANIES

Stock	Price	Day Chg	52 Week High	52 Week Low	Yld	P/E	MCap m
Australia (A$)							
ANZ	25.20	-0.03	33.03	21.86	9.46	12.30	56233.61
BHPBilltn	19.31	0.22	26.83	14.06	10.03	27.01	47276.13
CmwBkAu	75.66	-0.37	88.37	69.79	6.72	16.96	98921.85
CSL	114.75	-2.05	121.25	87.11	1.22	32.55	39930.42
NatAusBk	25.90	0.06	34.85	23.82	10.06	11.97	52456.41
Telstra	5.70	-	6.53	4.98	6.50	19.38	53121.82
Wesfarmers	42.58	0.03	44.12	36.65	5.70	22.89	36552.77
Westpc	30.11	0.05	35.15	27.57	8.15	13.46	76804.03
Woolworths	23.57	0.20	29.22	20.30	7.16	-326.24	22975.97
Belgium (€)							
AnBshInBv	111.60	0.70	124.20	87.73	3.13	53.42	199912.93
KBC Grp	46.20	0.76	66.00	39.35	4.04	14.05	21512.31
Brazil (R$)							
Ambev	18.79	0.15	20.46	15.99	2.26	25.74	91765.73
Bradesco	29.85	0.54	32.00	16.27	2.88	11.88	25754.66
Cielo	36.10	0.95	37.78	23.36	1.29	22.29	25395.27
ItauHldFin	30.87	0.71	31.03	21.49	1.96	8.66	29226.81
Petrobras	13.66	0.11	14.20	5.67	-	-5.74	31588.83
Vale	18.96	0.14	22.19	8.60	1.62	-3.96	18953.16
Canada (C$)							
BCE	62.42	0.61	63.41	51.56	3.88	21.43	41617.91
BkMontrl♦	82.03	-0.41	85.50	64.01	3.78	13.22	40535.78
BkNvaS	65.43	-0.19	67.40	51.17	3.99	12.62	60357.72
Brookfield	44.68	0.02	46.52	37.11	1.31	21.32	33824.34
CanadPcR	186.46	-6.03	211.15	140.02	0.82	19.32	21611.45
CanImp	98.24	0.28	104.65	82.19	4.31	11.55	29736.93
CanNatRs	39.44	0.01	41.85	21.27	2.15	-95.19	33212.09
CanNatRy	80.31	-1.00	85.43	66.62	1.69	17.98	47703.45
Enbridge	53.71	0.70	58.67	40.03	3.65	38.91	38270.7
GtWesLif	32.20	-1.56	37.50	30.42	3.79	13.00	24515.14
ImpOil	40.10	0.46	49.40	37.25	1.40	116.21	26062.97
Manulife	17.01	-0.91	23.65	15.32	3.76	15.40	25732.32
Potash	20.30	-0.37	36.52	19.93	8.77	19.57	13066.85
RylBkC♦	78.79	-	80.97	64.52	3.74	12.70	89777.65
Suncor En	34.71	0.15	40.35	27.32	3.30	-18.05	44299.28
ThmReut	54.00	-0.19	57.66	47.56	3.20	25.56	31072.23
TntoDom	56.08	-0.09	58.13	47.75	3.46	13.69	79720.73
TrnCan	60.50	0.12	61.44	40.58	3.54	-30.38	37084.65
ValeantPh	28.87	-0.34	347.84	24.32	-	-10.92	7593.96
China (HK$)							
AgricBkCh	2.89	0.02	3.56	2.50	7.00	4.89	11452.67
Bk China	3.22	-	4.31	2.83	6.56	5.35	34713.28
BkofComm	5.29	-	7.00	4.24	5.68	5.37	23877.74
BOE Tech	1.79	-0.01	2.90	1.55	1.00	34.01	45.91
Ch Coms Cons♦	8.66	0.04	11.78	5.77	2.17	8.15	4943.08
Ch Evrbrght	3.42	0.02	4.33	3.07	6.05	4.95	3028.49
Ch Rail Cons	9.27	-0.02	12.64	6.72	1.80	8.64	2481.38
Ch Rail Gp♦	5.73	-0.02	8.40	4.21	1.52	9.92	3108.08
ChConstBk	5.26	-0.01	6.48	4.31	6.36	5.28	163031.79
China Vanke	18.60	0.58	24.10	14.56	2.97	10.26	3153.17
ChinaCitic	4.94	0.03	5.64	4.00	-	5.12	9478
ChinaLife♦	17.34	0.02	31.15	16.00	2.53	16.32	16634.67
ChinaMBank♦	16.78	0.08	22.20	12.72	4.44	6.55	9931.45
ChinaMob	95.05	-0.50	103.80	79.00	2.64	16.86	250904.93
ChinaPcIns♦	27.40	0.20	34.25	23.70	1.94	13.14	9803.55
ChMinsheng	8.19	0.03	9.26	6.13	2.50	5.84	7320.89
ChMrchSecs RMB	16.48	0.06	24.95	13.45	4.37	11.02	11924.18
Chna Utd Coms RMB	4.28	0.02	8.11	3.75	1.47	37.67	13666.51
ChShenEgy	14.68	-	15.96	10.12	5.52	17.90	6432.02
ChShpbldng RMB	6.54	-0.01	17.20	5.66	0.54	-45.35	17692.26
ChStConEng RMB	5.84	-0.04	7.90	4.88	2.76	7.33	26345.29
ChUncHK	8.08	-0.07	11.36	7.70	2.75	22.50	24945.2
CNNC Intl RMB	6.71	0.01	12.72	6.58	-	29.34	4287.14
CSR♦	7.10	0.02	10.76	6.45	1.85	15.08	4001.01
Daqin RMB	6.12	-0.01	11.28	5.98	7.35	8.82	13706.29
Gree Elec Apl	0.18	0.00	0.30	0.16	-	-3.98	276.91
GuosenSec RMB	16.05	0.11	23.41	13.28	1.17	12.23	5307.26
HaitongSecs	12.74	0.06	15.50	10.00	2.18	9.69	5600.05
Hngzh HikVDT RMB	25.50	-	32.06	19.77	2.69	25.32	18079.41
Hunng Pwr♦	4.60	-0.12	9.89	4.43	9.14	4.94	2787.52
IM Baotou Stl RMB	2.83	-	5.15	2.66	-	-19.33	6711.14
In&CmBkCh♦	4.41	0.02	5.49	3.72	6.45	5.23	49345.89
IndstrlBk RMB	15.38	-0.07	17.63	11.90	3.47	6.14	44142.17
Kweichow RMB	306.30	-0.52	326.80	166.20	1.34	25.61	57963.53
Midea	1.74	0.02	2.19	1.64	5.12	11.39	48.24
New Ch Life Ins♦	27.95	0.30	37.50	22.00	0.81	9.52	3726.24
PetroChina	5.23	0.02	7.50	4.16	3.35	59.66	14226.14
PingAnIns	36.15	0.10	46.70	30.50	2.08	10.82	34709.36
PngAnBnk RMB	8.99	-0.19	11.15	7.75	1.51	7.28	19814.71
Pwr Cons Corp RMB	5.77	-0.03	11.45	5.40	1.62	16.02	8344.42
SaicMtr RMB	23.01	-0.04	24.36	14.00	5.30	8.94	38217.92
ShenwanHong	0.18	0.00	0.27	0.12	-	-0.26	122.76
ShgPdgBk RMB	15.59	-0.08	18.29	10.83	4.14	6.63	48189.06
Sinopec Corp	5.52	0.02	5.93	3.86	3.99	16.42	18156.38
Sinopec Oil RMB	3.89	-	11.58	3.60	-	-40.11	1045.03
Denmark (kr)							
DanskeBk	180.20	2.50	218.00	161.80	4.35	13.74	26545.63
MollerMrsk	8905	105.00	12940	7355	-	-57.83	13415.99
NovoB	368.20	1.60	415.00	305.10	1.62	29.37	110969.42
Finland (€)							
Nokia	4.88	-0.08	7.11	4.48	2.68	30.02	31732.48
SampoA	37.16	1.12	47.67	34.42	4.90	14.07	23129.03
France (€)							
Airbus Grpe	50.60	0.14	68.50	48.07	2.52	13.82	43548.64
AirLiquide	91.63	-0.44	123.65	88.25	2.42	20.69	35269.71
AXA	17.30	0.25	26.02	16.11	4.77	9.14	46713.77
BNP Parib	42.56	0.53	61.00	35.27	5.32	8.12	59085.26
ChristianDior	158.70	-0.60	195.35	133.75	1.75	21.38	32123.42
Cred Agr	7.80	0.20	13.65	6.79	4.19	7.50	24407.12
Danone	68.22	0.41	69.50	51.73	1.91	37.40	49839
EDF	11.58	0.14	22.11	9.13	13.79	197.01	25956.39
Engie SA	14.43	0.13	18.12	12.34	6.79	-7.59	39128.28
Esslr Intl	113.05	0.45	125.15	95.01	0.96	31.89	27462.78
Hermes Intl	382.55	0.10	388.00	281.20	0.67	47.59	44983.32
LOreal	170.60	1.25	178.95	140.40	1.37	33.64	106370.77
LVMH	149.85	-	176.60	130.55	2.32	20.85	84734.96
Orange	13.66	0.07	16.98	12.21	3.82	20.96	40458.32
PernodRic	101.55	1.15	111.45	88.00	1.54	32.39	30022.12
Renault	74.20	0.30	98.14	59.59	2.22	8.30	24440.67
Safran	60.36	-0.39	72.45	48.87	1.78	-68.14	28037.63
Sanofi	72.75	-0.67	101.10	62.50	3.94	23.40	104443.33
Sant Gbn	37.57	0.34	44.84	31.47	1.43	65.54	23217.87
Schneider	58.22	0.62	65.26	45.32	2.86	27.25	38372.2
SFR Group	20.24	0.26	52.18	19.51	-	-28.66	9932.85
SocGen	29.95	0.53	48.77	25.00	3.74	7.04	26938.49
Total	42.23	0.63	47.40	35.21	5.30	30.84	117727.58
UnibailR	244.35	2.85	257.85	212.05	3.89	9.75	27030.96
Vinci	67.23	0.14	68.30	51.11	2.31	21.12	44573.99
Vivendi	17.41	0.02	24.54	14.87	16.10	16.06	24950.13
Germany (€)							
Allianz	128.20	0.85	170.00	118.35	4.64	10.15	65257.36
BASF	68.93	-0.07	82.51	56.01	3.80	16.18	70518.42
Bayer	93.95	-0.42	137.80	83.45	2.61	18.03	86536.66
BMW	75.84	0.03	104.85	63.38	3.57	8.22	50853
Continental	183.55	0.75	231.90	162.05	2.00	12.85	40890.52
Daimler	59.34	-0.01	85.50	50.83	5.36	8.13	70711.58
Deut Bank	11.40	0.20	31.97	11.06	-	-1.98	17506.12
Deut Tlkm	15.23	0.03	17.57	13.39	3.07	13.36	79312.35
DeutsPost	27.30	-0.02	28.28	19.55	-	21.90	36877.41
E.ON	9.19	-0.02	12.36	7.08	1.42	-2.77	20476.05
Fresenius Med	82.54	0.92	83.79	63.10	0.85	29.27	28161.56
Fresenius SE	66.33	0.38	70.00	52.39	0.62	27.78	40320
HenkelKgaA	95.54	-0.20	98.50	75.76	1.26	22.47	27646.66
Linde	128.65	0.40	178.95	113.50	2.29	22.18	26614.88
MuenchRkv	148.60	0.20	193.65	140.90	4.87	9.54	26657.25
SAP	77.20	0.06	79.15	53.91	1.46	26.45	105637.76
Siemens	101.15	4.35	102.00	77.91	2.83	18.49	95765.72
Volkswgn	128.70	2.15	194.25	95.00	3.48	-31.59	42301.72
Hong Kong (HK$)							
AIA	48.10	-0.10	50.50	36.85	0.96	32.33	74720
BOC Hold	25.35	0.05	32.00	18.82	3.94	12.55	34553.33
Ch OSLnd&Inv	25.60	-0.20	28.25	20.45	1.91	7.96	32543.57
ChngKng	54.40	0.50	65.85	38.20	0.57	13.77	26969.59
Citic Ltd	11.74	0.10	15.28	10.02	2.28	8.39	44028.99
Citic Secs♦	16.52	0.12	22.55	12.82	1.90	10.08	4852.31
CK Hutchison	91.65	0.40	116.80	80.60	3.61	8.68	45604.38
CNOOC	9.12	0.27	10.38	6.41	5.38	18.92	52494.69
HangSeng	133.60	-1.50	162.10	121.10	4.19	17.18	32929.24
HK Exc&Clr	191.50	1.30	224.00	160.10	2.43	32.36	30055.55
MTR	43.20	0.70	44.50	33.10	2.17	21.84	32849.2
SandsCh	29.60	0.30	37.55	20.75	5.99	23.70	30796.12
SHK Props	107.70	1.60	119.40	79.00	1.99	11.59	40198.17
Tencent	182.60	1.10	189.80	124.00	0.17	50.64	222845.98
India (Rs)							
Bhartiartl	366.25	7.40	427.70	282.30	0.59	39.49	21869.42
HDFC Bk	1241	0.55	1258.95	928.00	0.75	26.34	47056.81
Hind Unilevr	918.05	4.25	951.45	766.40	1.56	52.73	29679.38
HsngDevFin	1320.15	-5.30	1410	1011.45	1.18	20.15	31197.94
ICICI Bk	240.35	-1.75	319.80	180.75	1.92	14.95	20885.22
Infosys	1071.8	-13.10	1279.3	1011.25	2.23	17.92	36774.45
ITC	252.10	-0.60	262.00	178.67	1.53	33.36	45490.51
L&T	1469.15	-9.45	1844.2	1016.05	0.92	30.27	20453.5
OilNatGas	219.85	1.10	284.70	187.75	3.98	10.85	28096.57
RelianceIn	993.00	-0.95	1089.75	818.00	0.91	12.19	48102.91
SBI NewA	225.65	-1.00	291.80	148.25	1.40	12.17	26165.84
SunPhrmInds	848.55	8.95	966.00	704.00	0.32	58.25	30505.64
Tata Cons	2652	-4.30	2770	2115	1.60	21.58	78057.73
Indonesia (Rp)							
Bk Cent Asia	15000	25.00	15050	11000	1.04	19.87	28150.35
Israel (ILS)							
TevaPha	201.80	-1.40	272.00	189.40	2.36	29.78	53719.34
Italy (€)							
Enel	4.04	0.02	4.41	3.33	3.24	18.03	45772.12
ENI	13.25	0.03	16.34	10.93	6.77	-5.63	53634.98
Generali	11.27	0.03	18.14	9.76	6.26	9.75	19581.3
IntSPaolo	1.82	0.00	3.52	1.52	3.59	12.74	32150.53
Luxottica	43.04	0.74	67.80	41.90	2.03	27.30	23197.4
Unicred	1.85	0.05	6.45	1.70	6.07	7.01	12709.44
Japan (¥)							
AstellasPh	1699.5	-29.50	2009	1358	1.55	23.09	36207.75
Bridgestne	3536	99.00	4805	3089	3.02	12.51	28439.88
Canon	2868.5	49.00	4096	2780	4.30	17.80	37844.6
CntJpRwy	17690	-85.00	22935	16840	0.58	12.56	36046.69
Denso	3951	199.00	6185	3317	2.49	15.66	34551.22
EastJpRwy	8816	-22.00	12815	8659	1.21	17.15	33958.35
Fanuc	16905	190.00	22790	15300	3.43	23.83	34124.83
FastRetail	35500	960.00	59960	25305	0.83	90.61	37248.28
Fuji Hvy Ind	3781	151.00	5223	3252	3.13	8.23	29279.54
Hitachi	457.00	14.40	792.70	400.00	2.16	11.73	21849.67
HondaMtr	2924.5	59.50	4499	2417	2.47	18.63	52401.44
JapanTob	3952	24.00	4850	3551	3.13	16.86	78183.88
KDDI	3203	-75.00	3446	2519	1.67	19.74	83025.3
Keyence	74410	1410	75820	50500	0.15	-	44752.67
MitsbCp	1930.5	87.00	2475	1565	2.51	-26.12	30363.95
MitsubEst	1895	21.00	2968	1724	0.69	38.37	26062.65
MitsubishiEle	1175	15.00	1409.5	947.00	2.22	11.58	24956.34
MitsuiFud	2116.5	23.00	3879	2031.5	1.09	21.64	20756.22
MitUFJFin	507.10	14.80	905.00	425.80	2.92	10.73	71071.96
Mizuho Fin	162.80	2.50	270.60	142.00	4.46	5.18	40453.9
Murata Mfg	12470	290.00	19820	10365	1.20	16.59	27786.11
NipponTT	4820	-81.00	5419	4005	1.48	20.16	99951.75
Nissan Mt	981.60	11.30	1321.5	893.10	4.14	8.34	42632.44
Nomura	438.60	29.40	890.80	338.80	2.87	15.32	16584.15
Nppn Stl	1904	75.50	2974	1773.5	1.94	14.60	17898.13
NTTDCMo	2709.5	-51.50	2946	1961	2.50	18.31	106094.97
Panasonic	960.70	25.20	1492.5	799.00	1.56	14.91	23311.22
Seven & I	4234	9.00	5998	4051	1.49	28.16	37125.43
ShnEtsuCh	7008	297.00	7643	5160	1.29	24.42	29954.04
Softbank	5842	-70.00	7800	4133	0.56	17.91	69382.84
Sony	3279	11.00	3568	2199	0.50	33.98	40952.83
SumitomoF	3219	70.00	5770	2766.5	4.51	5.99	45025.43
Takeda Ph	4734	12.00	6609	4098	3.12	56.66	37009.58
TokioMarine	3762	30.00	5504	3063	2.40	13.59	28189.39
Toyota	5691	102.00	8203	4917	3.03	9.42	187907.86
Mexico (Mex$)							
AmerMvl	10.77	-0.05	16.04	10.40	2.43	24.90	23950.58
FEMSA UBD	167.40	-0.65	180.47	133.52	1.32	38.03	-
WalMrtMex	43.95	0.71	47.44	35.50	1.28	28.77	40615.92
Netherlands (€)							
Altice	12.85	-0.05	40.37	9.98	-	-11.86	11753.92
ASML Hld	98.93	1.66	100.50	70.25	0.66	38.65	47750.12
Heineken♦	80.05	-0.04	86.95	64.54	1.28	27.93	51358.35
ING	10.33	0.16	15.77	8.30	3.03	8.62	44615.39
Unilever♦	40.71	0.13	42.84	32.86	2.95	24.03	77753.78
Norway (Kr)							
DNB	93.40	1.60	132.80	90.10	4.77	6.83	18025.61
Statoil	133.50	2.20	150.20	97.25	5.33	-195.58	50728.08
Telenor	140.30	1.10	182.30	116.80	5.29	146.07	24960.1
Qatar (QR)							
QatarNtBk	152.70	-1.80	163.17	122.50	2.13	12.10	35208.4
Russia (RUB)							
Gzprm neft	136.31	2.27	170.43	122.75	4.27	4.92	48731.45
Lukoil	2833	36.00	2910	2040.1	5.08	9.77	36389.17
MmcNrlskNckl	9728	68.00	11284	7840	15.03	13.54	23247.37
Novatek	653.90	8.90	683.70	535.10	2.10	11.88	29983.07
Rosneft	327.70	4.45	356.95	224.10	2.02	12.12	52447.73
Sberbank	137.16	1.43	142.00	66.75	0.29	16.90	44713.48
Surgutneftegas	30.51	0.21	41.16	30.02	-	2.97	16457.89
Saudi Arabia (SR)							
AlRajhiBnk	57.00	-0.25	64.25	44.70	2.44	13.08	24698.02
Natnlcombnk	37.30	-0.40	64.00	36.60	3.85	8.80	19891.74
SaudiBasic	80.25	-0.25	94.00	59.50	6.35	14.22	64194.87
SaudiTelec♦	60.50	0.50	69.75	52.75	6.13	14.28	32264.08
Singapore (S$)							
DBS	15.04	-0.05	20.35	13.01	3.63	9.17	28243.96
JardnMt US$	57.92	0.20	61.03	45.00	2.46	10.65	41193.72
JardnStr US$	30.81	0.21	32.20	25.24	0.91	7.88	34169.4
OCBC	8.31	-0.04	10.35	7.41	4.24	9.83	25887.16
SingTel♦	4.08	0.02	4.36	3.38	3.91	18.47	48439.78
UOB	17.96	0.02	21.72	16.80	3.82	9.45	21496
South Africa (R)							
Firstrand	48.48	-0.20	57.80	34.08	3.43	15.35	19742.14
MTN Grp	133.15	0.62	212.00	109.56	7.61	15.21	17824.69
Naspers N	2122.08	-13.67	2334.11	1521.98	0.19	78.64	67480.77
South Korea (KRW)							
HyundMobis	250500	-1000.00	272000	190500	1.24	14.99	21885.33
KoreaElePwr	61300	-1600.00	63700	45600	4.50	3.11	35318.97
SK Hynix	33650	100.00	38300	25650	1.32	8.51	21321.99
SmsungEl	1517000	-	1580000	1033000	1.10	13.42	192884.93
Spain (€)							
BBVA	4.96	0.12	9.39	4.50	6.97	15.24	35787.45
BcoSantdr	3.59	0.10	6.33	3.15	5.45	9.45	57751.54
CaixaBnk	2.19	0.07	4.08	1.82	5.37	17.61	14403.85
Iberdrola	6.00	0.04	6.71	4.80	0.49	16.30	41688.5
Inditex	30.85	0.28	35.38	26.00	1.32	35.86	107077.53
Repsol	11.35	0.38	15.39	7.95	6.54	-10.18	18520.74
Telefonica	8.63	0.14	14.31	7.45	8.46	-55.06	47813.01
Sweden (SKr)							
AtlasCpcoB	213.90	1.00	222.40	162.60	2.84	24.26	9806.02
Ericsson	61.05	-0.05	92.05	59.60	5.98	14.84	22014.66
H & M	248.60	-0.20	362.00	234.50	3.60	23.90	42660.63
Investor	285.00	1.10	340.00	256.80	3.46	-15.29	15250.77
Nordea Bk	74.90	0.55	109.30	66.30	7.57	10.19	35637.35
SEB	73.35	0.50	104.70	67.75	5.69	10.40	18699.82
SvnskaHn	103.60	1.70	131.70	90.25	4.28	12.50	23132.53
Swedbank	179.70	1.30	204.00	150.80	5.87	11.06	23898.47
Telia Co	38.71	0.17	52.80	35.56	3.82	16.08	19692.14
Volvo	87.25	0.05	106.00	72.20	3.30	12.69	16635.7
Switzerland (SFr)							
ABB	20.71	0.33	21.00	15.94	-	27.41	47120.74
CredSuisse	10.66	0.11	28.82	9.76	5.99	-4.59	22887.09
Nestle	77.55	0.85	77.70	65.70	2.46	30.98	247943.3
Novartis	80.50	0.50	101.80	67.00	2.99	32.58	217261.92
Richemont	57.00	0.10	86.75	55.75	2.60	18.86	30567.08
Roche	245.70	1.70	281.40	229.90	2.82	27.60	177336.82
Swiss Re	81.45	0.25	99.75	76.85	5.58	7.49	30129.35
Swisscom	475.70	2.80	572.00	445.00	4.29	19.31	25315.58
Syngent	384.00	-0.90	420.00	288.50	2.83	31.27	36521.48
UBS	12.82	0.19	22.57	12.44	-	10.54	50709.44
Zurich Fin	231.70	2.80	299.50	194.70	-	26.02	35831.02
Taiwan (NT$)							
Chunghwa Telecom♦	115.50	-	125.50	93.10	3.78	23.05	28261.85
Formosa PetChem	90.00	-	97.30	63.90	4.29	15.38	27042.77
HonHaiPrc	88.00	0.50	92.50	72.50	3.70	10.73	43408.13
MediaTek♦	242.50	-6.50	307.00	192.00	8.16	18.28	12021.23
TaiwanSem	174.50	2.00	182.00	112.50	2.32	17.43	142726.26
Thailand (THB)							
PTT Explor	332.00	11.00	342.00	197.00	2.73	51.79	27147.96
United Arab Emirates (Dhs)							
Emirtestele♦	19.90	0.05	20.20	11.40	4.01	19.48	47117.01
United Kingdom (p)							
AscBrFd	2897	67.00	3606	1910	1.17	40.60	30102.9
AstraZen	5153	137.00	5153	3680	3.92	39.36	85544.95
Aviva	410.80	25.80	537.50	290.00	4.63	18.42	21881.45
Barclays	148.85	0.55	287.60	121.10	4.37	-74.43	33047.4
BP♦	416.35	1.35	464.40	249.44	7.22	-19.49	102645.72
BrAmTob	4812.5	109.50	5135	3231.5	3.20	20.78	117763.05
BSkyB	909.50	14.50	1155.61	560.00	3.61	25.26	20520.7
BT	409.95	1.35	502.60	359.60	3.15	13.90	53417.4
Compass	1449	24.00	1479	963.00	2.03	26.35	31247.06
Diageo	2170.5	42.50	2218	1592.5	2.60	22.10	71732.57
GlaxoSmh	1699	26.50	1716.5	1227.5	4.71	145.21	108708.37
Glencore	188.50	4.10	206.75	66.67	6.48	-7.51	35614.6
HSBC	517.30	12.90	595.60	392.37	7.46	14.41	135279.01
Imperial Brands	4046.5	92.00	4146	2926	3.48	34.30	50919.09
LlydsBkg	51.95	-1.04	83.64	47.10	4.33	24.74	48667.61
Natl Grid♦	1081.5	20.00	1148	806.40	3.99	15.74	53220.7
Prudential	1350	41.00	1587	1045.99	2.82	13.38	45698.97
RBS	192.00	1.40	370.00	148.40	-	-5.68	29624.79
ReckittB	7390	63.00	7786	5403	1.88	34.09	68271.84
RELX	1421	15.00	1461	631.02	2.09	27.38	37459.02
RioTinto	2420.5	-2.50	2640.5	1557	6.46	829.79	43673.87
RollsRoyce	757.50	6.50	875.50	497.00	2.16	-6.78	18281.67
RylDShlA	1894.5	58.00	2127.4	1256	7.43	-31.27	107568.34
SABMill♦	4361	-44.50	4590.8	2773	1.83	37.76	92948.33
Shire	5075	60.00	5870	2707.19	0.36	32.44	59963.72
StandCh	646.00	31.70	1014	373.40	1.60	-6.83	27837.97
Tesco	155.55	1.55	221.90	137.00	-	56.36	16689.02
Vodafone	232.15	1.90	247.15	197.70	4.87	-15.39	81081.73
WPP	1700	23.00	1712	1204	2.50	19.23	28664.68
United States of America ($)							
21stC Fox A	25.77	-1.28	34.70	22.66	1.06	23.32	28231.38
3M	178.34	-0.04	182.27	134.00	2.35	23.17	107788.75
AbbottLb♦	44.94	-0.01	51.17	36.00	2.18	35.48	66023.69
Abbvie♦	66.30	-0.27	70.78	45.45	2.89	21.80	107230.88
Accenture	113.66	0.05	120.78	88.43	1.75	21.29	92628.17
Adobe	96.99	0.32	100.56	71.27	-	60.76	48329.23
AEP	69.00	0.55	71.32	52.29	2.89	22.54	33927.95
Aetna	116.15	-0.71	125.47	92.42	0.85	17.35	40745.42
Aflac	71.96	-0.01	74.14	51.41	2.03	12.96	29790.51
AirProd	149.32	1.11	152.69	114.64	2.20	22.80	32335.2
Alexion	136.06	-1.60	200.97	110.56	-	461.91	30511.18
Allegran	253.94	1.41	339.00	195.50	-	-46.19	100447.72
Allstate	69.00	0.37	70.38	54.12	1.63	18.47	25831.34
Alphabet	798.39	-0.53	810.35	593.09	-	36.80	234467.3
Altria	66.89	0.52	70.15	47.41	3.02	26.44	130693.33
Amazon	763.70	9.06	770.50	451.00	-	193.48	362049.96
AmerAir	33.29	-0.19	47.09	24.85	1.18	3.33	17640.82
AmerExpr♦	63.81	-0.02	81.66	50.27	1.66	13.97	58946.46
AmerIntGrp	57.73	-0.38	64.71	48.41	2.04	587.88	61803.85
AmerTower	116.56	0.83	118.26	83.07	1.68	73.73	49595.02
Amgen	172.72	-0.71	177.52	130.09	2.04	18.01	129256.9
Anadarko	53.08	0.40	78.59	28.16	1.18	-5.27	27095.08
Anthem	127.06	-0.81	155.95	115.63	1.97	14.87	33438.51
Aon Cp♦	109.75	0.04	111.60	83.83	1.10	21.17	29149.6
Apple♦	105.71	-0.08	123.82	89.47	1.80	12.83	569612.31
ArcherDan	43.63	-0.30	49.50	29.86	2.61	18.06	25382.33
AT&T	43.06	-0.08	43.89	30.97	4.03	20.07	265076.74
AutomData	88.59	0.40	96.00	64.29	2.10	30.50	40353.55
Avago Tech	166.12	2.01	167.60	100.00	0.94	1685.49	65703.55
BakerHu♦	47.44	0.48	59.01	37.58	1.41	-6.88	20299.64
BankAm	14.43	-0.05	18.09	10.99	1.27	12.44	147255.25
Baxter	48.16	0.04	48.76	32.18	1.64	7.98	26594.21
BB & T	37.14	-0.01	41.39	29.95	2.88	14.60	30246.47
BectonDick	168.08	-7.70	177.78	128.87	1.37	49.88	35667.13
BerkshHat	214750	-550.00	221985	186900	-	15.77	173229.81
Biogen	316.04	-5.30	338.51	223.02	-	21.26	69250.93
BkNYMeln♦	39.07	-0.15	45.45	32.20	1.59	15.47	42081.62
BlackRock	366.61	-1.55	369.33	275.00	2.20	21.27	59891.88
Boeing	131.61	-0.26	150.59	102.10	2.98	24.42	82101.73
BrisMySq	75.15	0.35	77.12	51.82	1.97	44.76	125565.02
CapOne♦	66.39	0.24	82.67	58.03	2.20	10.59	33598.42
CardinalHlth	83.85	-0.79	91.23	73.25	1.69	22.02	27319.61
Carnival	46.25	0.62	55.77	40.52	2.34	20.63	25478.72
Caterpillar♦	82.17	0.14	84.29	56.36	3.68	53.65	47978.37
CBS	52.08	-0.01	58.22	38.51	1.05	18.33	21190.04
Celgene	116.56	0.42	133.59	92.98	-	49.88	90347.37
CharlesSch	28.36	-0.03	35.72	21.51	0.77	28.23	37483.16
Charter Communications	237.73	0.62	244.51	156.13	-	-69.64	64282.19
ChevrnTx	100.82	0.21	107.58	69.58	3.88	160.00	190015.69
Chubb	125.51	0.04	131.00	96.00	1.95	18.23	58296.7
Cigna	128.51	3.91	149.86	121.87	0.03	16.98	32970.55
Cisco	30.86	0.14	31.15	22.46	2.58	17.05	155216.91
Citigroup	43.99	0.10	59.25	34.52	0.45	9.41	127792.88
CME Grp	103.33	0.06	103.91	81.87	1.86	29.78	34989.96
Coca-Cola	43.49	-0.15	47.13	36.56	3.07	25.46	187703.26
Cognizant	58.29	0.14	69.80	51.22	-	23.26	35316.14
ColgtPlm♦	75.05	0.97	75.34	50.84	1.85	54.07	66906.56
Comcast	67.12	0.28	68.36	50.01	1.39	22.27	161247.83
ConocPhil	40.42	0.11	57.24	31.05	4.81	-7.23	50060.38
Corning	22.49	0.29	22.62	15.42	2.01	70.35	23314.18
Costco	166.43	0.31	169.73	117.03	0.89	34.89	72905.06
CrownCstl	96.95	0.84	102.82	75.71	3.21	84.93	32726.41
CSX	28.10	-0.10	31.36	21.33	2.34	16.03	26582.35
CVS	96.62	-0.81	111.75	81.37	1.58	22.73	103017.69
Danaher	81.23	0.25	82.19	61.58	0.71	21.05	56092.44
Deere	77.97	-0.34	97.49	70.16	2.76	17.44	24502.77
Delphi	64.23	0.18	88.89	55.59	1.48	16.36	17533.32
Delta	36.36	-0.13	52.77	32.60	1.46	6.03	27226.54
Devon Energy	38.79	0.79	51.68	18.07	1.97	-1.36	20325.96
DiscFinServ♦	56.66	0.33	58.10	42.86	1.81	11.93	22869.51
Disney	95.08	-1.01	122.08	86.25	1.32	19.17	154261.66
DominRes	77.28	0.53	78.97	64.54	3.42	24.52	47621.35
DowChem	53.40	-0.03	57.10	35.11	3.01	11.42	60172.74
DukeEner	85.34	0.19	87.31	65.50	3.50	23.78	58791.05
DuPont	68.71	-0.20	75.72	47.11	2.17	28.33	60074.87
Eaton	64.84	0.60	65.51	46.19	3.39	16.31	29482.75
eBay	31.23	0.28	31.79	21.52	-	20.85	35259.26
Ecolab	122.56	1.15	123.41	98.62	1.01	40.42	35947.49
EMC	28.19	-0.01	28.77	22.66	1.49	30.26	55102.06
Emerson	53.43	0.52	56.82	41.25	3.48	19.30	34374.25
EOG Res	83.89	1.52	89.52	57.15	0.73	-10.39	46162.7
EquityResTP	66.49	0.48	82.39	61.90	2.97	6.26	24302.24
Exelon	36.72	0.15	37.70	25.09	3.08	20.83	32582.17
ExpScripts	75.77	-0.21	91.37	65.55	-	22.01	47751.69
ExxonMb	87.50	0.01	95.55	66.55	3.30	35.36	362807.76
Facebook	124.70	2.19	128.33	72.00	-	83.77	289672.95
Fedex	159.93	-0.68	173.00	119.71	0.56	47.04	42465.3
FordMtr♦	12.11	-0.03	15.84	10.44	4.87	5.82	47238.42
Franklin	35.36	-0.28	45.71	30.56	1.70	13.98	20371.65
GenDyn♦	148.04	0.23	153.76	121.61	2.17	17.47	45193.48
GenElectric	31.15	0.02	33.00	19.37	2.70	53.30	279142.41
GenMills	70.41	0.63	72.95	47.43	2.28	28.19	42036.3
GenMotors	30.36	0.12	36.88	24.62	4.39	5.02	47419.95
GileadSci	79.94	-0.16	120.37	77.92	1.96	7.49	106459.15
GoldmSchs	157.96	-0.38	207.78	138.20	1.50	19.48	65615.64
Halliburton	43.19	0.25	46.69	27.64	1.52	-16.59	37191.02
HCA Hold	75.24	-0.47	94.41	43.91	-	15.49	29422.9
Hew-Pack	14.17	-0.15	14.82	8.91	3.80	6.53	24230.74
HiltonWwde	22.92	0.09	26.71	16.16	1.20	14.06	22685.68
HomeDep	136.02	-1.04	139.00	92.17	1.62	26.68	169209.87
Honywell	116.38	0.37	120.02	87.00	1.94	18.75	88695
HumanaInc	172.60	-0.89	192.49	150.00	0.66	26.96	25722.98
IBM	161.04	0.37	163.60	116.90	2.95	13.31	153929.15
IllinoisTool	116.32	1.17	116.41	78.79	1.68	24.45	41800.52
Illumina	166.40	1.35	219.36	127.10	-	65.55	24394.24
Intcntl Exch	278.38	0.36	283.25	220.28	1.13	23.39	33139.93
Intel♦	34.54	0.29	35.93	24.87	2.59	16.16	163385.09
Intuit	110.29	0.46	116.97	79.63	0.93	44.71	28220.04
John&John	123.98	0.08	126.07	81.79	2.21	24.73	341024.88
JohnsonCn	44.97	-0.15	47.70	33.62	2.47	95.42	28680.07
JPMrgnCh	64.40	-0.26	69.42	50.07	2.74	11.12	235488.83
Kimb-Clark	130.15	1.26	138.87	103.04	2.72	24.59	46806.64
KinderM	20.16	0.03	34.81	11.20	6.09	1026.70	44988.17
Kraft Heinz	85.08	0.18	90.26	61.42	2.44	665.51	103453.47
Kroger	32.65	-0.56	42.75	27.32	1.12	17.03	30979.85
L Brands	73.41	0.89	101.11	60.00	2.56	20.96	21105.55
LasVegasSd	50.36	0.39	57.48	34.88	4.84	24.73	40022.04
LibertyGbl	32.31	-0.17	54.42	26.16	-	-36.51	8181.97
Lilly (E)	82.55	-0.17	92.85	67.88	2.40	36.24	91122.28
Lockheed	258.13	1.28	263.37	181.91	2.23	25.01	78187.56
Lowes	81.05	-0.97	83.65	62.62	1.24	30.19	71818.79
Lyondell	74.38	0.82	98.25	69.10	4.21	8.14	30921.39
Marathon Ptl	41.07	-0.15	59.99	29.24	3.06	11.52	21760.32
Marsh&M♦	66.56	0.39	68.69	50.81	2.09	24.29	34491.29
MasterCard	95.65	0.57	101.76	74.61	0.75	28.57	103058.15
McDonald's	118.13	0.61	131.96	87.50	2.69	24.92	103701.31
McKesson	194.26	-0.88	224.73	148.29	0.57	19.36	43845.31
Medtronic	86.64	-0.03	89.27	55.54	1.57	38.99	120839.57
Merck	57.83	0.18	60.07	45.69	2.87	38.85	160074.91
Metlife	39.43	-3.88	56.57	35.00	3.47	9.22	43314.93
Microsoft	57.27	0.30	57.29	39.72	2.38	27.78	446276.59
Mnstr Bvrg	157.88	0.11	162.77	113.08	-	48.02	32726.49
MondelezInt	42.67	-0.43	48.58	35.88	1.56	9.37	66374.68
Monsanto	106.04	1.68	114.26	81.22	1.83	35.74	46400.51
MorganStly	28.22	-0.20	39.35	21.16	2.09	13.18	54662.83
MylanNV	48.85	0.44	57.81	37.59	-	33.43	24833.76
Netflix	93.39	0.29	133.27	79.95	-	297.23	40038.66
NextEraE	127.95	-0.14	131.98	93.74	2.52	23.31	59109.44
Nike	55.02	0.27	68.20	47.25	1.02	28.25	74187.15
NorfolkS	87.08	-0.66	98.75	64.51	2.66	16.61	25562.31
Northrop	219.29	0.63	224.12	152.31	1.33	21.81	39159.64
NXP	84.31	1.16	99.47	61.61	-	20.89	29171.5
Occid Pet	74.68	0.30	78.31	58.22	3.94	-6.76	57036.21
Oracle	40.90	0.19	42.00	33.13	1.32	21.91	168619.66
Pepsico	108.44	0.40	110.94	76.48	2.37	33.93	156062.28
Perrigo	93.02	-1.23	198.42	84.85	0.45	110.67	13322.57
Pfizer♦	35.24	-0.05	37.39	28.25	2.95	31.63	213725.29
Phillips66	78.18	-0.48	94.12	69.79	2.90	13.85	40876.36
PhilMorris	99.23	0.20	104.20	76.54	4.04	24.18	153938.18
PNCFin	84.30	0.45	99.91	77.40	2.38	11.84	42092.99
PPG Inds	104.49	0.16	117.00	82.93	1.39	19.67	27800.97
Praxair	116.75	0.17	120.04	95.60	2.46	21.66	33300.79
Priceline	1349.73	-21.41	1476.52	954.02	-	29.23	66999.76
ProctGmbl♦	86.27	0.30	87.15	65.02	2.81	29.80	229637.96
Prudntl	72.81	-3.34	92.60	57.19	3.21	7.43	32182.02
PublStor	229.15	-4.30	277.60	196.61	2.71	40.28	39730.49
Qualcomm	61.08	0.07	64.82	42.24	3.17	18.14	90010.44
Raytheon	141.03	0.35	142.15	96.68	1.95	20.17	41617.25
Regen Pharm	419.84	-21.53	605.93	329.09	-	72.86	43312.99
ReynoldsAm	49.29	-0.07	54.48	35.70	3.11	14.26	70346.51
S&P Global	119.92	-0.59	122.75	78.55	1.03	31.19	31754.82
Salesforce	80.85	0.44	84.48	52.60	-	-4512.67	54775.88
Schlmbrg	80.23	0.61	85.12	59.60	2.45	-63.84	111575.34
Sempra Energy	111.26	0.91	114.66	86.72	2.34	24.86	27759.01
Shrwin-Will	300.62	-0.89	312.48	218.27	0.99	25.84	27723.69
SimonProp	219.70	-2.61	229.10	173.09	2.60	42.21	67977.12
SouthCpr	26.77	0.12	31.31	21.55	0.92	35.75	20712.46
Starbucks♦	55.77	-0.17	64.00	42.05	1.34	31.91	81790.82
StateSt	65.47	-0.38	79.80	50.60	1.90	16.41	25922.21
Stryker	115.19	0.37	123.55	86.68	1.27	27.67	43078.88
Sychrony Fin	27.88	0.01	35.50	23.25	-	10.84	23249.76
Target	73.95	-0.15	84.62	65.50	2.67	15.69	44071.89
TE Connect	58.42	0.12	67.99	51.70	2.29	13.62	20891.94
Tesla Mtrs	225.38	-0.41	271.57	141.05	-	-31.53	31972.32
TexasInstr♦	69.65	0.77	72.58	43.49	1.89	26.67	69939.38
TheTrvelers	118.09	0.11	119.30	95.21	2.08	11.62	34043.14
ThrmoFshr	156.95	0.95	160.68	117.10	0.35	34.52	61759.78
TimeWrnr	77.60	-0.24	88.14	55.53	1.71	17.20	61020.27
TJX Cos	81.22	0.51	82.07	63.53	0.93	26.59	53693.2
T-MobileUS	47.24	0.03	47.40	33.23	-	35.19	38866.24
UnionPac	92.88	0.01	98.28	67.06	2.16	19.01	77363.7
UPS B	108.04	-0.25	111.83	87.30	2.51	21.51	74596.35
USBancorp	42.11	-0.02	46.02	37.07	2.21	14.59	72698.83
UtdHlthcre	142.67	-0.21	144.48	95.00	1.46	22.74	135877.68
UtdTech	106.74	0.45	108.49	83.39	2.37	24.10	89333.58
ValeroEngy	53.94	-0.77	73.88	46.88	3.22	8.24	25341.15
Verizon	53.99	0.09	56.95	38.06	4.11	15.53	220079.54
VertexPharm	100.22	-0.22	143.45	75.90	-	-90.33	24832.38
VF Cp	60.89	0.23	77.36	52.21	2.07	23.88	25392.24
Viacom	43.87	-0.12	56.80	30.11	3.33	8.61	15199.04
Visa Inc	79.45	0.74	81.73	60.00	0.60	30.85	149877.17
Walgreen	80.05	0.45	97.30	71.50	1.62	31.25	86634.1
WalMartSto	72.92	-0.02	74.35	56.30	1.82	18.01	227265.88
WellsFargo	47.83	0.26	58.16	44.50	2.86	12.87	242809.8
Williams Cos	25.49	-0.18	55.42	10.22	8.99	-29.69	19134.26
Yahoo	38.91	0.52	39.42	26.15	-	-8.95	36957.93
Yum!Brnds♦	88.68	0.31	90.60	64.58	1.98	27.20	34575.19
Venezuela (VEF)							
Bco de Vnzla	106.00	1.00	137.00	85.00	-	-	600.03
Bco Provncl	2550	-50.00	4400	2200	-	0.37	426.77
Mrcntl Srvcs	4800	-	6200	4300	0.28	15.85	443.22

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 %
China Vanke	18.60	18.02	0.58	3.22	2.64	16.5	22.37
Williams Cos	25.49	25.67	-0.18	-0.70	2.41	10.4	24.09
Biogen	316.04	321.34	-5.30	-1.65	27.01	9.3	29.07
AscBrFd	2897.00	2830.00	67.00	2.37	211.00	7.9	6.40
Softbank	5842.00	5912.00	-70.00	-1.18	420.00	7.7	2.03
Marathon Ptl	41.07	41.22	-0.15	-0.36	2.90	7.6	4.46
Devon Energy	38.79	38.00	0.79	2.08	2.66	7.4	3.41
BOE Tech	1.79	1.80	-0.01	-0.56	0.12	7.2	-3.24
Aviva	410.80	385.00	25.80	6.70	25.90	6.7	2.84
StandCh	646.00	614.30	31.70	5.16	40.40	6.7	12.96
MitsbCp	1930.50	1843.50	87.00	4.72	115.00	6.3	7.46
ING	10.33	10.18	0.16	1.52	0.55	5.6	14.46
FastRetail	35500.00	34540.00	960.00	2.78	1870.00	5.6	29.77
HSBC	517.30	504.40	12.90	2.56	26.40	5.4	11.26
AmerIntGrp	57.73	58.10	-0.38	-0.65	2.94	5.4	9.11
Shire	5075.00	5015.00	60.00	1.20	257.00	5.3	5.86
EDF	11.58	11.44	0.14	1.22	0.58	5.2	2.89
EOG Res	83.89	82.37	1.52	1.85	3.99	5.0	-1.07
Intcntl Exch	278.38	278.02	0.36	0.13	13.12	4.9	10.14
Celgene	116.56	116.14	0.42	0.36	5.30	4.8	15.70

Based on the FT Global 500 companies in local currency

FT 500: BOTTOM 20

	Close price	Prev price	Day change	Day change %	Week change	Week change %	Month change %
Naspers N	2122.08	2135.75	-13.67	-0.64	-221883.92	-99.1	-3.49
MTN Grp	133.15	132.53	0.62	0.47	-13821.85	-99.0	-7.26
Firstrand	48.48	48.68	-0.20	-0.41	-4820.52	-99.0	12.20
Unicred	1.80	1.80	0.00	0.00	-0.27	-12.9	2.33
ICICI Bk	242.10	242.10	0.00	0.00	-28.50	-10.5	0.00
MitsuiFud	2116.50	2093.50	23.00	1.10	-226.50	-9.7	-8.18
RollsRoyce	757.50	751.00	6.50	0.87	-73.50	-8.8	7.31
MitsubishiEle	1175.00	1160.00	15.00	1.29	-110.00	-8.6	-3.81
Metlife	39.43	43.30	-3.88	-8.95	-3.66	-8.5	-0.46
AmerAir	33.29	33.48	-0.19	-0.57	-3.05	-8.4	13.40
L&T	1478.60	1478.60	0.00	0.00	-123.55	-7.7	-4.76
Delta	36.36	36.48	-0.13	-0.34	-3.01	-7.6	-1.13
DBS	15.04	15.09	-0.05	-0.33	-1.22	-7.5	-4.20
EastJpRwy	8816.00	8838.00	-22.00	-0.25	-704.00	-7.4	-6.87
Esslr Intl	113.05	112.60	0.45	0.40	-8.55	-7.0	-5.32
CntJpRwy	17690.00	17775.00	-85.00	-0.48	-1290.00	-6.8	-2.15
Statoil	131.30	131.30	0.00	0.00	-9.30	-6.6	-9.04
Fuji Hvy Ind	3781.00	3630.00	151.00	4.16	-257.00	-6.4	8.77
Nppn Stl	1904.00	1828.50	75.50	4.13	-128.00	-6.3	-2.48
CNOOC	9.12	8.85	0.27	3.05	-0.61	-6.3	-5.20

Based on the FT Global 500 companies in local currency

BONDS: HIGH YIELD & EMERGING MARKET

Aug 04	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
High Yield US$										
Navient Corporation	06/18	8.45	BB-	Ba3	BB	108.90	3.48	-0.01	-1.54	2.83
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	105.19	4.22	-0.02	-0.61	3.57
Russia	07/18	11.00	BB+	Ba1	BBB-	117.08	2.07	-0.01	0.35	1.42
Peru	03/19	7.13	BBB+	A3	BBB+	128.75	1.95	0.00	0.00	1.30
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	107.11	2.84	-0.02	0.13	1.81
Brazil	01/22	12.50	BB	Ba2	BB	107.06	10.72	-0.03	-0.52	9.69
Poland	03/22	5.00	BBB+	A2	A-	117.38	2.80	0.00	0.00	1.77
Turkey	09/22	6.25	-	Baa3	BBB-	109.84	4.45	-0.02	0.62	3.42
Turkey	10/26	4.88	-	Baa3	BBB-	101.84	4.70	-0.03	0.49	3.20
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	0.85
Mexico	02/20	5.50	BBB+	A3	BBB+	121.63	2.06	0.00	0.00	1.03
Bulgaria	09/25	5.75	BB+	-	BBB-	122.86	2.91	-0.02	-0.41	1.41

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.

BONDS: GLOBAL INVESTMENT GRADE

Aug 04	Red date	Coupon	Ratings S*	Ratings M*	Ratings F*	Bid price	Bid yield	Day's chge yield	Mth's chge yield	Spread vs US
US$										
Cummins Inc.	02/27	6.75	A+	A2	A	128.37	3.53	-0.03	0.25	2.04
Korea Electric Power Corporation	08/27	6.75	AA-	Aa2	AA-	106.25	6.05	-0.03	-0.03	4.56
Archer Daniels Midland Company	12/27	6.75	A	A2	A	126.76	3.86	-0.03	-0.03	2.36
E.I. du Pont de Nemours and Company	01/28	6.50	A-	A3	A	126.62	3.67	-0.02	0.34	-
FleetBoston Financial Corp.	01/28	6.88	BBB	Baa3	A-	126.04	4.05	-0.03	0.12	-
SunTrust Banks, Inc.	01/28	6.00	BBB+	Baa1	A-	120.32	3.83	-0.03	0.01	-
Euro										
Credit Agricole S.A.	03/27	2.63	BBB	Baa2	A-	103.79	2.22	-0.02	-0.32	0.72
Electricite de France (EDF)	03/27	4.13	A	A2	A-	122.21	1.91	0.00	0.00	0.41
Telia Company AB	09/27	3.00	A-	Baa1	A-	119.93	1.08	-0.05	-0.11	-0.42
Philip Morris Intl, Inc.	05/29	2.88	A	A2	A	122.08	1.02	-0.02	-0.19	-
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.

INTEREST RATES: OFFICIAL

Aug 04	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	0.25	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

Aug 04 (Libor: Aug 03)	Over night	Change Day	Change Week	Change Month	One month	Three month	Six month	One year
US$ Libor	0.41740	-0.001	-0.001	0.003	0.49690	0.77760	1.14420	1.45460
Euro Libor	-0.39857	0.001	0.000	0.000	-0.36857	-0.31443	-0.19200	-0.06429
£ Libor	0.47563	0.000	-0.003	-0.014	0.39413	0.48969	0.57769	0.80494
Swiss Fr Libor				0.004	-0.80200	-0.75200	-0.66220	-0.50860
Yen Libor				-0.004	-0.05343	-0.01450	0.01264	0.09671
Euro Euribor				0.000	-0.37100	-0.29900	-0.18300	-0.04700
Sterling CDs				-0.120	0.25000	0.35000	0.50500	
US$ CDs				0.000	0.46000	0.65000	0.91000	
Euro CDs				0.000	-0.42500	-0.32500	-0.23500	

Aug 04	Short term		7 Days notice		One month		Three month		Six month		One year	
Euro	-0.45	-0.35	-0.45	-0.35	-0.50	-0.35	-0.40	-0.25	-0.31	-0.16	-0.12	0.03
Sterling			0.38	0.48	0.35	0.45	0.43	0.53	0.50	0.65	0.68	0.83
Swiss Franc	-	-	-	-	-	-	-	-	-	-	-	-
Canadian Dollar	-	-	-	-	-	-	-	-	-	-	-	-
US Dollar	0.40	0.50	0.40	0.50	0.45	0.55	0.75	0.85	1.10	1.20	1.40	1.50
Japanese Yen	-0.40	-0.10	-0.40	-0.10	-0.35	-0.05	-0.35	-0.05	-0.25	0.05	-0.15	0.15

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

BOND INDICES

	Index	Day's change	Month's change	Year change	Return 1 month	Return 1 year
Markit IBoxx						
ABF Pan-Asia unhedged	187.42	-0.27	0.08	8.16	1.17	6.95
Corporates(£)	331.16	0.00	-0.82	12.19	3.54	11.74
Corporates($)	269.41	-0.33	-0.63	7.99	-0.63	7.99
Corporates(€)	223.10	-0.01	-0.29	5.59	1.25	5.20
Eurozone Sov(€)	238.82	-0.03	-0.50	6.00	0.09	6.76
Gilts(£)	325.01	0.19	-0.93	13.30	0.71	13.27
Global Inflation-Lkd	254.31	-0.07	-0.68	6.71	-0.21	2.20
Markit iBoxx £ Non-Gilts	328.16	0.05	-0.74	11.27	2.75	10.88
Overall ($)	239.21	-0.25	-0.47	6.31	-0.47	6.31
Overall(£)	323.01	0.15	-0.88	12.70	1.29	12.56
Overall(€)	232.69	-0.01	-0.40	5.44	0.36	5.87
Treasuries ($)	229.02	-0.23	-0.44	5.64	-0.44	5.64
FTSE						
Sterling Corporate (£)	121.57	1.84	-	-	4.04	8.57
Euro Corporate (€)	111.27	0.25	-	-	1.02	3.45
Euro Emerging Mkts (€)	835.66	13.42	-	-	-5.43	-2.45
Eurozone Govt Bond	119.10	0.43	-	-	0.30	4.67

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	259.14	-5.65	-1.31	-9.68	313.33	245.18
Nth Amer High Yld 5Y	407.80	-9.26	10.45	-17.63	476.69	387.41
Nth Amer Inv Grade 5Y	74.92	-1.84	1.48	-1.96	91.05	70.01

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

VOLATILITY INDICES

	Aug 04	Day Chng	Prev	52 wk high	52 wk low
VIX	12.27	-0.59	12.86	53.29	10.88
VXD	12.61	-0.18	12.79	56.32	10.30
VXN	14.59	-0.59	15.18	46.72	13.83
VDAX	17.92	-0.66	18.58	-	-

† 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	103.80	1.49	0.00	-0.02	-0.10	-0.52
	11/27	2.75	106.97	2.06	0.01	0.11	0.06	0.00
Austria	10/19	0.25	99.98	0.26	0.00	0.00	0.00	0.00
	10/26	0.75	106.82	0.08	-0.06	-0.01	-0.06	0.00
Belgium	06/18	0.75	99.92	0.80	0.01	0.04	0.03	0.67
	06/26	1.00	108.37	0.15	-0.06	-0.01	-0.03	0.00
Canada	08/18	0.50	99.93	0.54	-0.03	-0.06	0.08	0.00
	06/26	1.50	104.18	1.05	-0.05	-0.02	0.07	-0.58
Denmark	11/18	0.25	101.88	-0.57	0.00	0.00	0.00	0.00
	11/25	1.75	115.65	0.06	-0.06	0.00	0.01	-0.85
Finland	05/18	1.00	100.20	0.89	-0.01	-0.07	0.05	-0.30
	04/26	0.50	104.29	0.06	-0.04	0.00	-0.05	0.00
France	05/19	1.00	104.33	-0.54	0.00	0.00	0.00	0.00
	11/20	0.25	103.04	-0.45	0.00	0.00	0.00	0.00
	05/26	0.50	103.61	0.13	-0.06	-0.01	-0.01	0.00
	05/45	3.25	159.96	0.88	-0.05	0.01	-0.01	-1.15
Germany	04/19	0.50	103.12	-0.65	0.00	0.00	0.00	0.00
	10/20	0.25	103.66	-0.61	0.00	0.00	0.00	0.00
	02/26	0.50	106.25	-0.15	0.00	0.00	0.00	0.00
	08/46	2.50	159.69	0.39	-0.05	0.02	0.02	-1.09
Greece	04/19	4.75	89.91	9.13	0.01	0.15	0.03	-7.60
	02/26	3.00	70.35	8.23	-0.01	0.24	0.36	-3.24
Ireland	10/17	5.50	107.14	-0.45	0.00	0.00	0.00	0.00
	05/26	1.00	105.73	0.40	-0.07	-0.04	-0.07	0.00
Italy	04/19	0.10	100.34	-0.03	0.00	0.00	0.00	0.00
	06/21	0.45	100.95	0.25	-0.06	-0.06	-0.09	0.00
	12/26	1.25	100.56	1.20	-0.07	0.00	0.00	0.00
	03/47	2.70	113.49	2.11	-0.07	-0.09	-0.14	0.00
Japan	07/18	0.10	100.54	-0.18	0.00	0.00	0.00	0.00
	08/21	0.05	101.02	-0.15	0.00	0.00	0.00	0.00
	06/26	0.10	101.73	-0.07	0.00	0.00	0.00	0.00
	06/46	0.30	97.06	0.41	0.05	0.16	0.34	0.00
Netherlands	01/19	1.25	104.60	-0.62	0.00	0.00	0.00	0.00
	07/25	0.25	103.21	-0.11	0.00	0.00	0.00	0.00
New Zealand	03/19	5.00	108.08	1.81	0.00	-0.02	-0.19	-0.84
	04/27	4.50	121.54	2.22	0.02	0.01	-0.04	-1.16
Norway	05/19	4.50	111.05	0.50	0.02	0.02	0.07	-0.29
	02/26	1.50	104.45	1.01	-0.01	0.04	0.11	0.00
Portugal	06/19	4.75	110.82	0.89	-0.06	-0.12	-0.32	-0.01
	07/26	2.88	100.19	2.85	-0.07	-0.10	-0.21	0.00
Spain	01/19	0.25	100.83	-0.08	0.00	0.00	0.00	0.00
	10/26	1.30	102.00	1.09	-0.07	0.00	0.00	0.00
Sweden	10/18	1.00	100.23	0.90	-0.01	-0.05	0.04	0.00
	05/25	2.50	122.76	-0.09	0.00	0.00	0.00	0.00
Switzerland	05/19	3.00	111.12	-0.95	0.00	0.00	0.00	0.00
	05/26	1.25	117.82	-0.52	0.00	0.00	0.00	0.00
United Kingdom	07/18	1.25	102.22	0.12	-0.09	-0.01	-0.03	-0.94
	07/22	0.50	100.25	0.46	0.00	-0.01	0.00	0.00
	07/26	1.50	107.17	0.75	-0.17	-0.08	-0.15	0.00
	12/46	4.25	167.84	1.47	-0.14	-0.11	-0.12	-1.10
United States	07/18	0.75	100.20	0.65	-0.02	-0.06	0.00	0.00
	07/21	1.13	100.48	1.03	-0.04	-0.05	0.00	0.00
	05/26	1.63	101.16	1.50	-0.04	0.00	0.11	0.00
	05/46	2.50	105.41	2.25	-0.05	0.02	0.12	0.00

Data provided by SIX Financial Information & Tullett Prebon Information

GILTS: UK CASH MARKET

Aug 04	Price £	Red Yield	Change in Yield Day	Week	Month	Year	52 Week High	52 Week Low	Amnt £m
Tr 4pc '16	100.34	0.20	-4.76	-35.48	-35.48	-61.54	102.23	100.00	0.35
Tr 1.75pc '17	100.75	0.13	-27.78	-13.33	-31.58	-77.19	101.75	100.73	0.29
Tr 5pc '18	107.85	0.06	-53.85	0.00	0.00	-92.11	111.02	107.75	0.35
Tr 4.5pc '19	111.61	0.02	-77.78	-33.33	-80.00	-98.10	112.71	110.85	0.36
Tr 4.75pc '20	116.92	0.03	-84.21	-76.92	-85.71	-97.66	117.12	114.45	0.33
Tr 1.5pc '21	105.81	0.19	-45.71	-34.48	-50.00	-87.07	137.11	99.91	0.32
Tr 4pc '22	121.10	0.20	-45.95	-37.50	-48.72	-87.18	121.10	114.48	0.38
Tr 5pc '25	137.21	0.56	-21.13	-11.11	-24.32	-70.05	137.21	126.02	0.35
Tr 4.25pc '27	137.17	0.81	-16.49	-8.99	-20.59	-61.24	137.17	121.91	0.31
Tr 4.25pc '32	145.19	1.13	-13.08	-9.60	-16.91	-51.50	145.19	124.00	0.35
Tr 4.25pc '36	150.77	1.30	-11.56	-9.09	-15.03	-46.94	150.77	125.16	0.30
Tr 4.5pc '42	166.77	1.44	-9.43	-7.69	-11.66	-42.17	166.77	134.26	0.27
Tr 3.75pc '52	167.32	1.37	-9.27	-8.05	-9.27	-44.31	167.32	125.74	0.24
Tr 4pc '60	189.29	1.30	-10.34	-8.45	-9.09	-46.06	189.29	136.28	0.23

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	Aug 04	Day's chg %	Total Return	Return 1 month	Return 1 year	Yield
1 Up to 5 Years	99.41	0.31	2433.32	0.36	3.47	0.10
2 5 - 10 Years	192.08	1.05	3531.77	1.35	10.41	0.45
3 10 - 15 Years	229.29	1.74	4343.86	2.49	15.82	0.90
4 5 - 15 Years	201.32	1.27	3735.14	1.71	12.10	0.64
5 Over 15 Years	364.86	2.97	5394.84	3.48	25.74	1.36
7 All stocks	192.18	1.69	3667.57	2.04	14.58	1.16

Index Linked	Aug 04	Day's chg %	Month chg %	Year's chg %	Total Return	Return 1 month	Return 1 year
1 Up to 5 Years	313.73	0.41	0.36	1.20	2428.65	0.78	3.03
2 Over 5 years	671.05	2.36	1.85	15.09	4974.50	1.96	15.83
3 5-15 years	470.29	1.57	2.19	8.79	3605.78	2.50	10.05
4 Over 15 years	849.39	2.65	1.72	17.47	6169.53	1.76	18.01
5 All stocks	609.95	2.19	1.77	13.28	4585.17	1.92	14.19

Yield Indices	Aug 04	Aug 03	Yr ago		Aug 04	Aug 03	Yr ago
5 Yrs	0.13	0.28	1.34	20 Yrs	1.43	1.58	2.47
10 Yrs	0.74	0.91	1.98	45 Yrs	1.32	1.47	2.42
15 Yrs	1.21	1.38	2.32				

Real yield	inflation 0% Aug 04	Dur yrs	Previous	Yr ago	inflation 5% Aug 04	Dur yrs	Previous	Yr ago
Up to 5 yrs	-2.08	2.75	-1.93	-0.76	-2.59	2.75	-2.45	-1.43
Over 5 yrs	-1.46	24.68	-1.36	-0.88	-1.48	24.77	-1.39	-0.90
5-15 yrs	-1.71	9.19	-1.54	-0.76	-1.82	9.20	-1.66	-0.87
Over 15 yrs	-1.43	29.97	-1.34	-0.89	-1.45	30.01	-1.36	-0.91
All stocks	-1.46	22.85	-1.37	-0.87	-1.49	22.96	-1.40	-0.91

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

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COMMODITIES

www.ft.com/commodities

Energy		Price*	Change
Crude Oil†	Aug	40.74	-0.37
Brent Crude Oil‡		44.01	0.60
RBOB Gasoline†	Aug	1.33	-0.02
Heating Oil†	Aug	1.29	0.03
Natural Gas†	Aug	2.85	0.01
Ethanol♦		-	-
Uranium†	Aug	26.65	0.40
Carbon Emissions‡		-	-
Diesel†		-	-
Unleaded (95R)		-	-
Base Metals (♠ LME 3 Months)			
Aluminium		1625.00	-18.00
Aluminium Alloy		1565.00	40.00
Copper		4805.50	-63.00
Lead		1794.50	-13.50
Nickel		10515.00	-235.00
Tin		17875.00	-80.00
Zinc		2257.50	-22.50
Precious Metals (PM London Fix)			
Gold		1358.90	-4.85
Silver (US cents)		2016.00	-43.00
Platinum		1161.00	-14.00
Palladium		706.00	-14.00
Bulk Commodities			
Iron Ore (Platts)		59.70	-1.30
Iron Ore (The Steel Index)		58.90	-1.80
GlobalCOAL RB Index		65.85	-0.75
Baltic Dry Index		636.00	-5.00

Agricultural & Cattle Futures		Price*	Change
Corn♦	Sep	324.75	-1.00
Wheat♦	Sep	414.50	4.00
Soybeans♦	Aug	998.50	9.25
Soybeans Meal♦	Aug	334.00	3.60
Cocoa (ICE Liffe)✠	Sep	2401.00	22.00
Cocoa (ICE US)♥	Sep	2951.00	-45.00
Coffee(Robusta)✠	Sep	1818.00	-7.00
Coffee (Arabica)♥	Sep	139.25	-0.95
White Sugar✠		544.90	16.00
Sugar 11♥		18.91	-0.19
Cotton♥	Oct	74.45	0.63
Orange Juice♥	Sep	172.70	-0.60
Palm Oil♣		-	-
Live Cattle♣	Aug	116.70	0.00
Feeder Cattle♣	Aug	147.48	1.70
Lean Hogs♣	Aug	68.50	0.00

	Aug 03	% Chg Month	% Chg Year
S&P GSCI Spt	340.08	-9.73	-7.83
DJ UBS Spot	83.88	-6.52	-7.30
R/J CRB TR	181.97	-6.78	-8.97
Rogers RICIX TR	2252.65	-	-
M Lynch MLCX Ex. Rtn	231.14	-9.84	-33.05
UBS Bberg CMCI TR	12.92	-7.31	-6.70
LEBA EUA Carbon	5.83	0.00	-22.37
LEBA CER Carbon	0.39	0.00	-15.22
LEBA UK Power	3070.00	103.99	21.54

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

BONDS: INDEX-LINKED

	Price Aug 03	Yield Aug 03	Yield Prev	Month return	Value stock	Market	No of stocks
Can 4.25%' 21	124.46	-0.303	-0.349	-0.32	5.18	76065.34	7
Fr 2.25%' 20	113.27	-1.007	-1.012	-0.26	20.31	210227.66	14
Swe 0.25%' 22	113.47	-1.645	-1.645	0.06	29.10	225739.78	7
UK 2.5%' 20	369.05	-2.202	-2.195	-0.15	6.58	581426.34	27
UK 2.5%' 24	359.89	-1.681	-1.670	-0.51	6.82	581426.34	27
UK 2%' 35	255.71	-1.384	-1.370	-0.99	9.08	581426.34	27
US 0.625%' 21	104.51	-0.280	-0.240	-0.35	35.84	1186113.82	37
US 3.625%' 28	137.48	0.352	-0.240	-1.09	16.78	1186113.82	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	2.06	2.21	0.56	Italy	1.20	1.35	-0.30
Austria	0.08	0.23	-1.42	Japan	-0.07	0.08	-1.57
Belgium	0.15	0.30	-1.35	Netherlands	-0.11	0.04	-1.60
Canada	1.05	1.20	-0.45	Norway	1.01	1.16	-0.49
Denmark	0.06	0.21	-1.44	Portugal	2.85	3.00	1.36
Finland	0.06	0.21	-1.44	Spain	1.09	1.24	-0.40
France	0.13	0.28	-1.37	Switzerland	-0.52	-0.37	-2.01
Germany	-0.15	0.00	-1.65	United Kingdom	0.75	0.90	-0.75
Greece	8.23	8.38	6.73	United States	1.50	1.65	0.00
Ireland	0.40	0.55	-1.10				

Data provided by SIX Financial Information & Tullett Prebon Information

FINANCIAL TIMES SHARE SERVICE

Main Market

AIM

Investment Companies

	Price	+/-Chg	High	Low	Yld	NAV	Dis(-) or Pm
CrysAmber	153.50	7.00	173.96	140.00	1.6	169.4	-9.4
GLI Finance	27.50	-0.25	58.82	21.50	18.2	-	-
IndiaCap	65.63	-0.13	69.98	52.00	-	89.6	-26.8
Infra India	13.63	-	21.75	12.00	-	51.4	-73.5
MMP	2.13	0.13	3.73	1.75	-	-	-
Marwyn Val	152.50	-	243.65	146.25	-	-	-

Guide to FT Share Service

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All data is as of close of the previous business day. Company classifications are based on the ICB system used by FTSE (see www.icbenchmark.com). FTSE 100 constituent stocks are shown in bold.

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Trading volumes are end of day aggregated totals, rounded to the nearest 1,000 shares.

Net asset value per share (NAV) and split analytics are provided only as a guide. Discounts and premiums are calculated using the latest cum fair net asset value estimate and closing price. Discounts, premiums, gross redemption yield (GRY), and hurdle rate (HR) to share price (SP) and HR to wipe out (WO) are displayed as a percentage, NAV and terminal asset value per share (TAV) in pence.

- ✠ FT Global 500 company
- ♦ trading ex-dividend
- ■ trading ex-capital distribution
- # price at time of suspension from trading

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MANAGED FUNDS SERVICE

ACPI Global UCITS Funds Plc (IRL)
www.acpishard.com
Regulated

Fund	Bid	Offer	+/-	Yield
ACPI Emerging Mkts FI UCITS Fund USD A	$ 119.05	-	-0.43	0.00
ACPI Global Credit UCITS Funds USD A	$ 14.68	-	0.00	0.00
ACPI Global Fixed Income UCITS Fund USD A	$ 158.59	-	-0.05	0.00
Q ACPI India Fixed Income UCITS Fund USD A	$ 10.53	-	-0.05	0.00
ACPI India Fixed Income UCITS Fund USD A3	$ 89.87	-	-0.41	0.00
ACPI International Bond UCITS Fund USD A	$ 18.74	-	-0.01	0.00

ACPI Select UCITS Funds PLC (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
ACPI Balanced UCITS Fund USD Retail	$ 14.52	-	0.04	0.00
ACPI Balanced UCITS Fund EUR Retail	€ 10.85	-	0.03	0.00
ACPI Balanced UCITS Fund GBP Retail	£ 11.01	-	0.02	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	$ 13.06	-	-0.10	0.00

Abbey Life Assurance Company Limited (UK)
100 Holdenhurst Road, Bournemouth BH8 8AL 0345 9600 900
additional fund prices can be found @ www.abbeylife.co.uk
Insurances

Fund	Bid	Offer	+/-	Yield
Life Funds				
Prop. Acc. Ser 2	1384.40	1457.20	0.00	-
Selective Acc. Ser 2	1620.10	1705.40	2.70	-
American Ser. 4	1973.90	2077.80	15.40	-
Custodian Ser. 4	508.10	534.90	0.90	-
Equity Ser. 4	583.40	614.10	0.80	-
European Ser 4	610.60	642.80	3.20	-
Fixed Int. Ser. 4	971.00	1022.10	0.60	-
Intl Ser. 4	490.30	516.10	3.70	-
Japan Ser 4	416.70	438.70	7.20	-
Man. Ser. 4	1793.00	1887.30	7.00	-
Money Ser. 4	524.60	552.20	0.00	-
Prop. Ser. 4	1006.60	1059.50	0.00	-
Custodian Ser 5	487.10	512.70	0.90	-
International Ser 5	470.00	494.70	3.50	-
Managed Ser 5	1718.80	1809.20	6.80	-
Money Ser 5	513.70	540.70	0.00	-
Property Ser 5	964.90	1015.70	0.00	-
Pension Funds				
American	2341.80	2465.10	18.10	-
Equity	5147.90	5418.90	4.40	-
European	1244.00	1309.50	4.70	-
Fixed Int.	1812.70	1908.10	1.40	-
International	1060.10	1115.90	6.60	-
Japan	447.00	470.50	5.10	-
Managed	4720.40	4968.90	18.00	-
Property	2560.70	2695.50	0.00	-
Security	1479.40	1557.30	0.10	-
Selective	2076.30	2185.60	2.50	-
Formerly Hill Samuel Life Assurance Ltd				
100 Holdenhurst Road, Bournemouth, BH8 8AL 0345 6023 603				
Managed Ser A (Life)	1699.40	1798.30	-12.00	-
Managed Ser A (Pensions)	1144.00	1204.20	-10.00	-
Formerly Target Life Assurance Ltd				
100 Holdenhurst Road, Bournemouth, BH8 8AL 0345 6023 603				
Managed (Life)	1722.90	1813.60	-12.10	-
Managed Growth (Life)	541.00	569.50	-5.90	-
Managed (Pensions)	6866.50	7227.90	-60.60	-
Managed Growth (Pensions)	668.90	704.10	-8.70	-

additional fund prices can be found on our website

Algebris Investments (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Algebris Financial Credit Fund - Class I EUR	€ 136.37	-	-0.33	0.00
Algebris Financial Income Fund - Class I EUR	€ 110.17	-	0.51	0.00
Algebris Financial Equity Fund - Class B EUR	€ 83.93	-	1.43	0.00
Algebris Asset Allocation Fund - Class B EUR	€ 96.21	-	0.37	0.00

Amundi Funds (LUX)
5 Allee Scheffer L-2520 Luxembourg + 44 (0)20 7074 9332
www.amundi-funds.com
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Bd. Euro Corporate AE Class - R - EUR	€ 19.34	-	0.00	0.00
Bd. Global AU Class - R - USD	$ 27.63	-	-0.06	0.00
Eq. Emerging Europe AE Class - R - EUR	€ 26.83	-	-0.24	0.00
Eq. Emerging World AU Class - R - USD	$ 86.91	-	-0.63	0.00
Eq. Greater China AU Class - R - USD	$ 570.55	-	-7.96	0.00
Eq. Latin America AU Class - R - USD	$ 375.97	-	4.46	0.00
Gl. Macro Bds & Curr Low Vol AHG - GBP	£ 98.76	-	-0.01	0.00

The Antares European Fund Limited
Other International

Fund	Bid	Offer	+/-	Yield
AEF Ltd Usd (Est)	$ 582.90	-	-2.93	-
AEF Ltd Eur (Est)	€ 584.23	-	-3.04	0.00

Arisaig Partners
Other International Funds

Fund	Bid	Offer	+/-	Yield
Arisaig Africa Consumer Fund Limited	$ 12.43	-	-0.08	-
Arisaig Asia Consumer Fund Limited	$ 66.11	-	-0.79	0.00
Arisaig Global Emerging Markets Consumer Fund	$ 10.33	-	-0.10	0.00
Arisaig Global Emerging Markets Consumer UCITS	€ 11.96	-	-0.07	0.00
Arisaig Global Emerging Markets Consumer UCITS STG	£ 12.70	-	-0.14	0.00
Arisaig Latin America Consumer Fund	$ 24.19	-	-0.11	0.00

Artemis Fund Managers Ltd (1200)F (UK)
57 St. James's Street, London SW1A 1LD 0800 092 2051
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Artemis Capital R ACC	1221.28	1289.79	2.48	-
Artemis European Growth R Acc	262.39	276.92	0.56	1.22
Artemis European Opps R Acc	82.69	87.24	0.24	0.68
Artemis Global Emg Mkts I GBP Acc	100.76	-	1.14	-
Artemis Global Emg Mkts I GBP Dist	98.16	-	1.11	-
Artemis Global Energy R Acc	25.34	26.98	0.41	0.00
Artemis Global Growth R Acc	202.75	213.95	1.36	0.96
Artemis Global Income R Acc	103.04	108.96	0.88	3.79
Artemis Global Income R Inc	80.15	84.76	0.69	-
Artemis Global select R Acc	83.50	88.11	0.56	0.00
Artemis High Income R Inc	77.87	83.12	0.02	5.90
Artemis Income R Acc	362.06	383.59	1.04	-
Artemis Income R Inc	207.45	219.79	0.60	-
Artemis Monthly Dist R Inc	66.32	70.32	0.29	4.38
Artemis Pan-Euro Abs Ret GBP	111.41	-	0.53	-
Artemis Strategic Assets R Acc	74.96	79.35	0.28	0.00
Artemis Strategic Bond R M Acc	87.90	93.39	0.05	-
Artemis Strategic Bond R M Inc	55.30	58.75	0.03	-
Artemis Strategic Bond R Q Acc	87.99	93.48	0.06	-
Artemis Strategic Bond R Q Inc	55.39	58.85	0.03	-
Artemis UK Select Fund Class R Acc	416.14	441.02	1.47	-
Artemis UK Smaller Cos R Acc	1157.03	1246.82	2.56	0.96
Artemis UK Special Sits R Acc	536.47	569.95	2.72	-
Artemis US Abs Ret I Acc	107.63	-	-0.02	0.00
Artemis US Equity I Acc	133.76	-	0.97	0.37
Artemis US Ex Alpha I Acc	145.99	-	0.97	0.02
Artemis US Extended Alpha I Hedged Acc	£ 1.05	-	0.00	-
Artemis US Select I Acc	133.09	-	0.91	0.22
Artemis US Select I Hedged Acc	£ 1.02	-	0.00	-
Artemis US Select I Inc	118.64	-	0.81	0.18
Artemis US Smlr Cos I Acc	145.23	-	1.16	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

Fund	Bid	Offer	+/-	Yield
Artisan Partners Global Funds plc				
Artisan Global Equity Fund Class I USD Acc	$ 14.88	-	-0.06	0.00
Artisan Global Opportunities I USD Acc	$ 13.17	-	-0.03	0.00
Artisan Global Value Fund Class I USD Acc	$ 16.33	-	0.03	0.00
Artisan US Value Equity Fund Class I USD Acc	$ 12.08	-	0.11	0.00
Artisan Global Opportunities Class I EUR Acc	€ 17.76	-	0.08	0.00

Ashmore Sicav (LUX)
2 rue Albert Borschette L-1246 Luxembourg
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Ashmore SICAV Emerging Market Debt Fund	$ 99.32	-	-0.36	8.23
Ashmore SICAV Emerging Market Frontier Equity Fund	$ 147.22	-	-0.27	1.12
Ashmore SICAV Emerging Market Total Return Fund	$ 86.02	-	-0.40	6.31
Ashmore SICAV Global Small Cap Equity Fund	$ 133.68	-	-0.61	0.00
EM Mkts Corp.Debt USD F	$ 89.22	-	-0.25	8.12
EM Mkts Loc.Ccy Bd USD F	$ 82.89	-	-0.44	3.79

Aspect Capital Ltd (UK)
Other International Funds

Fund	Bid	Offer	+/-	Yield
Aspect Diversified USD	$ 425.96	-	3.89	0.00
Aspect Diversified EUR	€ 254.54	-	2.03	0.00
Aspect Diversified GBP	£ 132.08	-	1.19	0.00
Aspect Diversified CHF	SFr 120.96	-	0.89	0.00
Aspect Diversified Trends USD	$ 126.67	-	0.00	0.00
Aspect Diversified Trends EUR	€ 126.22	-	0.00	0.00
Aspect Diversified Trends GBP	£ 132.33	-	0.00	0.00

Atlantas Sicav (LUX)
Regulated

Fund	Bid	Offer	+/-	Yield
American Dynamic	$ 3633.30	-	21.99	0.00
American One	$ 3443.30	-	2.64	-
Bond Global	€ 1431.20	-	-13.84	0.00
Eurocroissance	€ 889.87	-	-4.50	0.00
Far East	$ 710.89	-	4.39	0.00

Bank of America Cap Mgmt (Ireland) Ltd (IRL)
Regulated

Fund	Bid	Offer	+/-	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

Fund	Bid	Offer	+/-	Yield
Bond Funds				
Sterling Bond F	£ 0.49	-	0.00	2.96

Baring Asset Management (UK)
Authorised Funds

Fund	Bid	Offer	+/-	Yield
UK Authorised Unit Trust				
Baring Eastern Trust	767.30	-	9.00	0.00
Baring Eastern Trust	752.90	-	8.80	0.00
Baring Europe Select Trust	3097.00	-	16.00	0.54
Baring European Growth Trust	1076.00	1135.00	9.00	0.87
Baring German Growth Trust	653.70	-	6.70	0.94
Baring German Growth Trust GBP	595.60	-	6.10	0.94
Baring Global Growth Trust	439.90	463.40	5.30	0.00
Baring Japan Growth Trust	162.70	171.40	1.50	0.01
Baring Korea Trust	306.60	324.90	3.80	0.00
Baring UK Growth Trust	253.10	267.80	1.10	1.35
Baring Strategic Bond Fund	116.60	122.60	0.00	0.49
Baring Dynamic Capital Growth Fund	684.20	722.90	-1.20	1.92
Baring Dynamic Capital Growth Fund	271.20	286.50	-0.50	1.96
UK Authorised Open-Ended Investment Company				
Baring Multi Asset Fund	160.80	-	0.10	1.25
Baring Multi Asset Fund	152.30	-	0.00	1.04
Common Investment Fund				
Baring Targeted Return Fund	150.60	151.20	-0.40	2.94
Baring Targeted Return Fund	113.70	114.10	-0.20	3.00

Barings (Luxembourg) (LUX)
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Russia A GBP Inc F	£ 33.69	-	-0.07	0.00

BlackRock (JER)
Regulated

Fund	Bid	Offer	+/-	Yield
BlackRock UK Property	£ 41.10	-	-0.98	3.16
Blackrock UK Long Lease	£ 1077.05	-	-1.88	0.00
BLK Intl Gold & General	$ 7.88	8.30	-0.12	0.00

BLI - Banque de Luxembourg Investments S.A.
FCA Recognised

Fund	Bid	Offer	+/-	Yield
BL-Equities Europe B	€ 6014.67	-	-18.04	0.00
BL-Equities America B	$ 5853.63	-	1.71	0.00
BL-Equities Japan B	¥ 14718.00	-	-65.00	0.00
BL-Emerging Markets B	€ 164.54	-	-0.34	0.00
BL-Global Equities B	€ 762.80	-	-0.99	0.00
BL-Global 30 B	€ 1437.13	-	-1.00	0.00
BL-Global 50 B	€ 1721.11	-	-1.41	0.00
BL-Global 75 B	€ 2330.42	-	-2.63	0.00
BL-Global Flexible EUR B	€ 155.40	-	-0.17	0.00

BONHOTE
Other International Funds

Fund	Bid	Offer	+/-	Yield
Bonhôte Alternative - Multi-Arbitrage (USD) Classe (EUR)	€ 6403.00	-	-54.00	1.97
Bonhôte Alternative - Multi-Performance (USD) Classe (EUR)	€ 9545.00	-	-1.00	0.84

CCLA Investment Management Ltd (UK)
Senator House 85 Queen Victoria Street London EC4V 4ET
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
The Public Sector Deposit Fund				
The Public Sector Deposit Fund-share class 1 ♦ F	100.00	-	0.00	0.46
The Public Sector Deposit Fund-share class 2 ♦ F	100.00	-	0.00	0.29
The Public Sector Deposit Fund-share class 3 ♦ F	100.00	-	0.00	0.34
The Public Sector Deposit Fund-share class 4 ♦ F	100.00	-	0.00	0.40
The Public Sector Deposit Fund-share class 5 ♦ F	100.00	-	0.00	0.29

CCLA Investment Management Ltd (UK)
Senator House 85 Queen Victoria Street London EC4V 4ET
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
CBF Church of England Funds				
Investment Inc	1441.88	1457.83	1.34	3.78
Investment Acc	3028.48	3061.98	2.81	-
Global Equity Inc	169.15	171.03	-0.02	4.31
Global Equity Acc	256.39	259.22	-0.03	-
UK Equity Inc	152.44	153.81	-0.49	4.05
UK Equity Acc	233.55	235.66	-0.76	-
Fixed Interest Inc	175.19	176.07	-0.63	3.96
Fixed Interest Acc	549.35	552.11	-1.97	-
Property Fund Inc	128.72	133.04	0.11	5.77

CCLA Fund Managers Ltd (UK)
Senator House 85 Queen Victoria Street London EC4V 4ET
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
COIF Charity Funds (UK)				
Investment Inc	1297.56	1311.91	-13.38	3.62
Investment Acc	12842.27	12984.31	-132.40	-
Ethical Invest Inc	199.21	201.41	-2.18	3.73
Ethical Invest Acc	264.17	267.09	-2.89	-
Global Equity Inc	156.71	158.44	-2.56	4.41
Global Equity Acc	240.31	242.97	-3.93	-
Fixed Interest Inc	143.22	143.94	-1.22	4.14
Fixed Interest Acc	846.57	850.82	-7.21	-
Property Inc	110.54	114.24	0.05	5.79
Local Authorities Property Fd (LAMIT) (UK)				
Property	279.20	302.74	-0.05	4.81

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	+/-	Yield
Capital Gearing Portfolio Fund Plc	£ 29056.66	29056.66	45.53	0.57
CG Portfolio Fund Plc				
Real Return Cls A	£ 198.44	198.44	-1.03	1.48
Dollar Fund Cls D	£ 152.84	152.84	0.10	1.39
Capital Value Fund Cls V	£ 141.20	141.20	0.20	0.25

Canada Life Investments (UK)
1-6 Lombard Street, EC3V 9JU. Dealing 0345 606 6180
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Asia Pacific B Acc	878.65	-	10.80	1.18
Balanced B Acc	160.75	-	0.66	1.78
Corporate Bond B Inc	218.37	-	0.02	3.85
European B Acc	271.71	-	2.05	1.57
Global Bond B Inc	109.87	-	0.44	2.58
Global Equity B Acc	694.87	-	7.06	1.12
Global Equity Income B Inc	140.35	-	0.77	3.29
Global High Yield Bond B Inc	97.14	-	0.00	-
Global Infrastructure B Acc	134.02	-	0.96	1.30
Global Resource B Acc	101.07	-	1.79	0.61
Japan B Acc	57.87	-	0.75	0.42
Portfolio III B Acc	115.68	-	0.11	1.87
Portfolio IV B Acc	116.77	-	0.17	2.23
Portfolio V B Acc	117.18	-	0.29	1.49
Portfolio VI B Acc	116.52	-	0.43	1.53
Portfolio VII B Acc	112.69	-	0.54	1.32
North American B Acc	1079.54	-	12.61	0.73
Strategic Return B Acc	113.43	-	0.71	0.00
Total Return B Acc	103.13	-	0.00	1.55
UK Equity B Acc	105.83	-	-0.46	1.91
UK Equity & Bond Income B Inc	240.05	-	0.12	4.99
UK Equity Income B Inc	425.93	-	0.12	-
UK Government Bond B Inc	51.29	-	-0.03	1.74

Capita Asset Services (UK)
40 Dukes Place, London EC3A 7NH
Order Desk and Enquiries: 0345 922 0044
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
CF Heartwood Cautious B Acc ✠	132.12	-	0.14	0.33
CF Heartwood Cautious Income B Inc ✠	110.54	-	-0.05	3.07
CF Heartwood Growth B Acc ✠	151.16	-	-0.18	0.72
CF Heartwood Balanced Income B Inc ✠	111.51	-	-0.05	3.83
CF Heartwood Balanced B Acc ✠	129.93	-	-0.21	0.56
CF Heartwood Defensive Multi Asset Fund B Accumulation	111.98	-	-0.06	0.03
CF Richmond Core ✠	196.17	-	2.42	0.00
CF Seneca Diversified Growth A ACC	222.53	-	-0.93	1.58
CF Seneca Diversified Growth B ACC	132.26	-	-0.55	2.44
CF Seneca Diversified Growth N ACC	130.73	-	-0.54	2.18
CF Seneca Diversified Income A INC	87.26	-	0.03	5.33
CF Seneca Diversified Income B INC	103.90	-	0.04	5.72
CF Seneca Diversified Income N INC	102.75	-	0.03	5.73
Investment Adviser - DSM Capital Partners				
The Westchester ✠	$ 28.03	-	0.15	0.00
The Westchester Class 1 GBP Acc	£ 22.92	-	0.28	0.00
The Westchester Class 2 GBP Acc	£ 22.99	-	0.28	0.00
Investment Adviser - Morant Wright Management Limited				
CF Morant Wright Japan A ✠	306.03	-	8.68	0.17
CF Morant Wright Japan A Inc ✠	300.96	-	8.53	0.17
CF Morant Wright Japan B ✠	326.75	-	9.27	0.72
CF Morant Wright Japan B Inc ✠	305.72	-	8.67	0.69
CF Morant Wright Nippon Yield ACC A ✠	319.16	-	8.37	2.19
CF Morant Wright Nippon Yield ACC B ✠	332.08	-	8.72	2.18
CF Morant Wright Nippon Yield Fund A Inc ✠	273.14	-	7.17	2.23
CF Morant Wright Nippon Yield Fund B Inc ✠	284.29	-	7.46	2.23

Cavendish Asset Management Limited (1200)F (UK)
Chelsea House, Westgate, London W5 1DR
IFA Enquiries 020 8810 8041 Admin/Dealing 0870 870 7502
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Cavendish Opportunities Fund B Class	1021.00	-	6.00	-
Cavendish Opportunities Fund C Acc	1069.00	-	6.00	1.50
Cavendish Worldwide Fund B Class	330.70	-	4.20	0.86
Cavendish Worldwide Fund C Acc	341.60	-	4.30	1.00
Cavendish AIM Fund B Class	169.30	-	0.60	0.69
Cavendish Asia Pacific Fund B Class	184.70	-	2.80	1.47
Cavendish Asia Pacific Fund C Acc	192.90	-	2.80	1.45
Cavendish European Fund B Class	154.30	-	1.00	1.02
Cavendish Japan Fund B Class	180.50	-	3.00	0.64
Cavendish North American Fund B Class	221.20	-	2.90	0.45
Cavendish Technology Fund B Class	338.80	-	3.80	0.02
Cavendish UK Balanced Income Fund B Class	137.50	-	0.50	4.68
Cavendish UK Select Fund B Class	142.90	-	0.60	-

Cedar Rock Capital Limited (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Cedar Rock Capital Fd Plc	$ 395.12	-	3.09	0.00
Cedar Rock Capital Fd Plc	£ 467.24	-	5.29	0.00
Cedar Rock Capital Fd Plc	€ 367.84	-	0.31	0.00

Charles Schwab Worldwide Funds Plc (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Schwab USD Liquid Assets Fd	$ 1.00	-	0.00	0.01

Chartered Asset Management Pte Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
CAM-GTF Limited	$ 295770.11	295770.11	-578.41	0.00
CAM GTi Limited	$ 752.80	-	79.40	0.00
Raffles-Asia Investment Company	$ 1.60	1.60	0.06	5.38

Cheyne Capital Management (UK) LLP (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Cheyne Convertibles Absolute Return Fund	€ 1350.78	-	1.33	0.00
Cheyne Global Credit Fund	€ 121.72	-	0.03	0.00
Cheyne European Mid Cap Fund	€ 1088.63	-	13.23	0.00

Cheyne Capital Management (UK) LLP
Other International Funds

Fund	Bid	Offer	+/-	Yield
Cheyne European Event Driven Fund	€ 126.80	-	-4.23	0.00
Cheyne Real Estate Credit Holdings Fund	£ 168.02	-	0.48	0.00
Cheyne Real Estate Credit Holdings Fund III	£ 110.98	-	0.60	0.00
Cheyne Real Estate Debt Fund Class A1	£ 130.05	-	-2.14	0.00
Cheyne Total Return Credit Fund - December 2017 Class	$ 192.37	-	5.63	0.00
Cheyne Total Return Credit Fund 2020	$ 104.83	-	0.58	-

Cohen & Steers SICAV (LUX)
Regulated

Fund	Bid	Offer	+/-	Yield
European Real Estate Securities	€ 23.0168	-	-0.1684	1.71
Europ.RealEstate Sec. IX	€ 31.3654	-	-0.2294	0.00
Gbl Listed Infrastructure I	$ 10.9188	-	-0.0304	-
Gbl Listed Infrastructure IX	$ 11.0464	-	-0.0308	-
Gbl RealEstate Sec. I	$ 11.6758	-	-0.1410	1.85
Gbl RealEstate Sec. IX	$ 14.0847	-	-0.1700	0.00

Consistent Unit Tst Mgt Co Ltd (1200)F (UK)
PO BOX 10117, Chelmsford, Essex, CM1 9JB
Dealing & Client Services 0845 0264281
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Consistent UT Inc	54.68	55.34	0.04	4.56
Consistent UT Acc	133.03	134.64	0.08	4.41
Practical Investment Inc	208.81	214.61	0.33	3.90
Practical Investment Acc	1032.08	1060.74	1.62	3.79

Crèdit Andorrà Asset Management (LUX)
www.creditandorra.com
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Crediinvest SICAV Money Market Eur I	€ 11.21	-	0.00	0.00
Crediinvest SICAV Money Market Usd A	$ 10.07	-	0.00	-
Crediinvest SICAV Fixed Income Eur	€ 10.88	-	-0.01	0.00
Crediinvest SICAV Fixed Income Usd	$ 10.75	-	0.00	0.00
Crediinvest SICAV Spanish Value	€ 245.20	-	0.16	-
Crediinvest SICAV International Value	€ 237.15	-	-0.13	-
Crediinvest SICAV Big Cap Value	€ 15.06	-	0.02	0.00
Crediinvest SICAV US American Value	$ 18.70	-	0.06	0.00
Crediinvest SICAV Sustainability	€ 15.31	-	-0.15	0.00

DAVIS Funds SICAV (LUX)
Regulated

Fund	Bid	Offer	+/-	Yield
Davis Value A	$ 40.90	-	0.26	0.00
Davis Global A	$ 29.12	-	0.15	0.00

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	+/-	Yield
Dodge & Cox Worldwide Funds plc - Global Bond Fund				
EUR Accumulating Class	€ 12.23	-	0.09	0.00
EUR Accumulating Class (H)	€ 9.68	-	0.01	0.00
EUR Distributing Class	€ 11.36	-	0.08	4.05
EUR Distributing Class (H)	€ 8.98	-	0.00	4.06
GBP Distributing Class	£ 11.58	-	0.04	3.66
GBP Distributing Class (H)	£ 9.11	-	0.01	4.11
USD Accumulating Class	$ 9.83	-	0.00	0.00
Dodge & Cox Worldwide Funds plc-Global Stock Fund				
USD Accumulating Share Class	$ 16.18	-	0.12	0.00
GBP Accumulating Share Class	£ 19.99	-	0.19	0.00
GBP Distributing Share class	£ 14.47	-	0.14	0.82
EUR Accumulating Share Class	€ 21.80	-	0.31	0.00
Dodge & Cox Worldwide Funds plc-International Stock Fund				
USD Accumulating Share Class	$ 13.19	-	0.05	0.00
EUR Accumulating Share Class	€ 13.92	-	0.14	0.00
Dodge & Cox Worldwide Funds plc-U.S. Stock Fund				
USD Accumulating Share Class	$ 18.90	-	0.20	0.00
GBP Accumulating Share Class	£ 22.08	-	0.28	0.00
GBP Distributing Share Class	£ 13.98	-	0.18	0.63
EUR Accumulating Share Class	€ 21.99	-	0.38	0.00

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	+/-	Yield
Vietnam Property Fund (VPF) NAV	$ 0.91	-	0.00	0.00
Vietnam Enterprise Inv. (VEIL) NAV	$ 4.11	-	-0.10	0.00

DSM Capital Partners Funds (LUX)
www.dsmsicav.com
Regulated

Fund	Bid	Offer	+/-	Yield
Global Growth I2 Acc	€ 136.86	-	0.53	0.00
Global Growth I1 Eur	€ 102.26	-	0.40	0.00
DSM US Large Cap Growth	$ 102.52	-	0.54	-

EdenTree Investment Management Ltd (UK)
PO Box 3733, Swindon, SN4 4BG, 0800 358 3010
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Amity UK Cls A Inc	211.20	-	0.30	-
Amity UK Cls B Inc	211.00	-	0.30	-
Higher Income Cls A Inc	127.50	-	0.50	4.80
Higher Income Cls B Inc	131.80	-	0.60	4.75
UK Equity Growth Cls A Inc	225.50	-	0.80	-
UK Equity Growth Cls B Inc	230.50	-	0.70	-
Amity Balanced For Charities A Inc	110.50	-	0.40	5.43
Amity European Fund Cls A Inc	213.20	-	1.60	-
Amity European Fund Cls B Inc	215.50	-	1.60	2.25
Amity Global Equity Inc for Charities A Inc	106.00	-	0.80	4.18
Amity International Cls A Inc	229.50	-	1.20	1.34
Amity International Cls B Inc	231.50	-	1.20	2.10
Amity Sterling Bond Fund A Inc	106.20	-	0.10	-
Amity Sterling Bond Fund B Inc	115.20	-	0.10	-

Edinburgh Partners Limited (IRL)
27-31 Melville Street, Edinburgh EH3 7JF
Tel: +353 1 434 5143 Dealing - Fax +353 1 434 5230
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Edinburgh Partners Opportunities Fund PLC				
Emerging Opportunities I USD $	$ 1.16	-	-0.01	0.88
European Opportunities I EUR	€ 2.18	-	-0.01	1.63
European Opportunities I GBP	£ 1.82	-	-0.02	1.59
European Opportunities I USD	$ 2.45	-	-0.01	1.74
European Opportunities A EUR	€ 2.14	-	0.00	1.05
Global Opportunities I USD	$ 1.57	-	-0.01	1.22
Global Opportunities I GBP	£ 1.18	-	0.00	1.29
Global Opportunities A GBP	£ 1.11	-	0.00	0.77
Pan European Opportunities I EUR	€ 1.31	-	0.01	-

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	+/-	Yield
The EFG-Hermes Egypt Fund	$ 29.93	-	-	0.00
EFG-Hermes Frontier Equity UCITS Fund Class I	$ 1027.41	-	6.91	-
EFG-Hermes MENA Equity UCITS Fund Class A	$ 997.67	-	1.04	-
Middle East & Developing Africa Fund (Final)	$ 19.81	-	-	0.00
Saudi Arabia Equity Fund	SR 11.47	-	-0.27	0.00

Electric & General (1000)F (UK)
Stuart House St.John's Street Peterborough PE1 5DD
Orders & Enquiries: 0845 850 0255
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Authorised Corporate Director - Carvetian Capital Management				
Electric&General Net Income A	170.50	-	-0.30	1.80

Ennismore Smaller Cos Plc (IRL)
5 Kensington Church St, London W8 4LD 020 7368 4220
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Ennismore European Smlr Cos NAV	£ 111.61	-	0.21	0.00
Ennismore European Smlr Cos NAV	€ 133.11	-	0.97	0.00

Ennismore European Smlr Cos Hedge Fd
Other International Funds

Fund	Bid	Offer	+/-	Yield
NAV	€ 478.29	-	-2.54	0.00

EnTrustPermal Ltd.
www.entrustpermal.com
Other International Funds

Fund	Bid	Offer	+/-	Yield
Offshore Fund Class A US $ Shares				
Investment Holdings N.V.	$ 4890.95	-	-164.01	0.00
Macro Holdings Ltd	$ 4156.68	-	62.08	0.00
Fixed Income Holdings N.V.	$ 329.87	-	-9.39	-
EnTrustPermal Absolute Return Fund	$ 153.10	-	-0.04	0.00

Equinox Fund Mgmt (Guernsey) Limited (GSY)
Regulated

Fund	Bid	Offer	+/-	Yield
Equinox Russian Opportunities Fund Limited	$ 116.66	-	5.99	0.00

Euronova Asset Management UK LLP (CYM)
Regulated

Fund	Bid	Offer	+/-	Yield
Smaller Cos Cls One Shares	€ 35.69	-	0.26	0.00
Smaller Cos Cls Two Shares	€ 24.84	-	0.16	0.00
Smaller Cos Cls Three Shares	€ 12.47	-	0.10	0.00
Smaller Cos Cls Four Shares	€ 16.08	-	0.11	0.00

Eurobank Fund Management Company (Luxembourg) S.A.
Regulated

Fund	Bid	Offer	+/-	Yield
(LF) Absolute Return	€ 1.31	-	-0.01	0.00
(LF) Eq Emerging Europe	€ 0.73	-	0.00	0.00
(LF) Eq Flexi Style Greece	€ 0.94	-	-0.05	0.00
(LF) Eq Mena Fund	€ 12.78	-	-0.01	0.00
(LF) Greek Government Bond	€ 19.07	-	-0.07	-
(LF) Greek Corporate Bond	€ 12.50	-	-0.01	-
(LF) FOF Dynamic Fixed Inc	€ 12.10	-	-0.01	0.00
(LF) FOF Real Estate	€ 17.74	-	-0.18	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	+/-	Yield
Unit Trust				
Cash Accum Units	186.58	186.58	0.00	0.00
Cash Fund	£ 1.00	1.00	0.00	0.17
Gross Accum Cash	£ 1.28	1.28	0.00	0.00
MoneyBuilder Global	£ 2.90	2.90	0.01	0.24
OEIC Funds				
Allocator World Fund N-ACC-GBP	£ 1.34	-	0.01	0.85
American Fund W-ACC-GBP	£ 31.68	-	0.28	0.00
American Special Sits W-ACC-GBP	£ 12.93	-	0.11	0.70
Asia Pacific Ops W-Acc	£ 1.48	-	0.02	-
Asian Dividend Fund W-ACC-GBP	£ 1.39	-	0.01	-
Asian Dividend Fund W-INC-GBP	£ 1.29	-	0.01	-
China Consumer Fund W-ACC-GBP	£ 1.89	-	0.02	1.01
Emerging Asia Fund W-ACC-GBP	£ 1.11	-	0.00	0.68
Emerging Eur Mid East and Africa W	£ 1.83	-	0.03	1.88
Enhanced Income Fund W-ACC-GBP	£ 1.39	-	0.01	-
Enhanced Income Fund W-INC-GBP	£ 1.08	-	0.00	-
European Fund W-ACC-GBP	£ 12.32	-	0.04	1.79
European Fund W-INC-GBP	£ 14.15	-	0.05	1.82
European Opportunities W-ACC-GBP	£ 3.78	-	0.02	-
Extra Income Fund Y-ACC-GBP	£ 1.18	-	0.01	3.84
Extra Income Fund Y-GACC-GBP	£ 1.20	-	0.00	3.81
Extra Income Fund Y-GINC-GBP	£ 1.26	-	0.01	4.04
Extra Income Fund Y-INC-GBP	£ 1.26	-	0.01	4.04
Global Dividend Fund W-ACC-GBP	£ 1.79	-	0.00	2.82
Global Dividend Fund W-INC-GBP	£ 1.61	-	0.00	2.92
Global Enhanced Income W-ACC-GBP	£ 1.48	-	0.00	3.80
Global Enhanced Income W-INC-GBP	£ 1.29	-	0.00	4.86
Global Focus Fund W-ACC-GBP	£ 16.83	-	0.16	0.57
Global High Yield Fund Y-ACC-GBP	£ 12.60	-	0.02	5.47
Global High Yield Fund Y-GACC-GBP	£ 13.20	-	0.02	5.42
Global High Yield Fund Y-GINC-GBP	£ 10.33	-	0.02	5.43
Global High Yield Fund Y-INC-GBP	£ 10.33	-	0.01	5.43
Global Property Fund W-ACC-GBP	£ 1.66	-	0.01	1.75
Global Property W Inc	£ 1.48	-	0.01	2.52
Global Special Sits W-ACC-GBP	£ 28.08	-	0.29	0.50
Index Emerging Markets P-Acc	£ 1.19	-	0.01	2.10
Index Emerging Markets P-Inc-GBP	£ 1.04	-	0.01	2.02
Index Europe ex UK Fund P-Inc-GBP	£ 1.09	-	0.01	2.44
Index Europe ex UK P-Acc	£ 1.11	-	0.00	2.52
Index Japan Fund P-Inc-GBP	£ 1.26	-	0.01	1.62
Index Japan P-Acc	£ 1.29	-	0.02	1.56
Index Pacific ex Japan P-Acc	£ 1.27	-	0.01	3.21
Index Pacific ex Japan P-INC-GBP	£ 1.05	-	0.01	3.14
Index UK Fund P-INC-GBP	£ 1.02	-	0.00	3.35
Index UK P-Acc	£ 1.09	-	0.00	3.43
Index US Fund P-Inc-GBP	£ 1.42	-	0.01	1.62
Index US P-Acc	£ 1.54	-	0.01	1.60
Index World Fund P-Inc-GBP	£ 1.27	-	0.01	1.88
Index World P-Acc	£ 1.37	-	0.01	1.88
Japan Fund W-ACC-GBP	£ 3.06	-	0.01	0.52
Japan Smaller Cos Fund W-ACC-GBP	£ 2.60	-	-0.01	0.24
MBuilder Inc Red Duration Y-ACC	£ 10.61	-	-0.01	2.72
MBuilder Inc Red Duration Y-GACC	£ 10.81	-	-0.01	2.71
MBuilder Inc Red Duration Y-GINC	£ 9.80	-	0.00	2.76
Mbuilder Inc Red Duration Y-INC	£ 9.79	-	-0.01	2.76
MoneyBuilder Balanced Y-ACC-GBP	£ 0.54	-	0.00	-
MoneyBuilder Balanced Y-INC-GBP	£ 0.61	-	0.00	4.13
MoneyBuilder Dividend Y-INC-GBP	£ 1.34	-	-0.01	-
MoneyBuilder Growth Fund Y-INC-GBP	£ 0.74	-	0.00	2.97
MoneyBuilder Income Fund Y-ACC-GBP	£ 12.50	-	0.00	3.40
MoneyBuilder Income Fund Y-GACC-GBP	£ 14.36	-	0.00	3.39
MoneyBuilder Income Fund Y-GINC-GBP	£ 1.26	-	0.00	3.46
MoneyBuilder Income Fund Y-INC-GBP	£ 1.26	-	0.00	3.46
Multi Asset Adventurous N-ACC-GBP	£ 1.23	-	0.01	1.09
Multi Asset Alloc Advent N-ACC-GBP	£ 1.20	-	0.01	1.06
Multi Asset Alloc Def N-ACC-GBP	£ 1.16	-	0.00	1.25
Multi Asset Alloc Def N-GACC-GBP	£ 1.17	-	0.00	1.24
Multi Asset Alloc Growth N-ACC-GBP	£ 1.16	-	0.01	1.06
Multi Asset Alloc Strat N-ACC-GBP	£ 1.17	-	0.01	1.18
Multi Asset Balanced Inc N-GINC-GBP	£ 1.10	-	0.00	3.59
Multi Asset Balanced Inc N-INC-GBP	£ 1.10	-	0.00	3.17
Multi Asset Defensive N-ACC-GBP	£ 1.17	-	0.00	0.93
Multi Asset Defensive N-GACC-GBP	£ 1.18	-	0.00	0.94
Multi Asset Growth Fund N-ACC-GBP	£ 1.20	-	0.01	1.00
Multi Asset Inc & Growth N-INC-GBP	£ 1.12	-	0.01	3.70
Multi Asset Income Fund N-GINC-GBP	£ 1.08	-	0.00	4.43
Multi Asset Income Fund N-INC-GBP	£ 1.07	-	0.00	4.46
Multi Asset Open Advent N-ACC-GBP	£ 1.14	-	0.00	0.63
Multi Asset Open Defen N-ACC-GBP	£ 1.14	-	0.00	1.33
Multi Asset Open Defen N-GACC-GBP	£ 1.15	-	-0.01	-
Multi Asset Open Growth N-ACC-GBP	£ 1.14	-	0.00	-
Multi Asset Open Strat N-ACC-GBP	£ 1.15	-	0.00	1.56
Multi Asset Strategic N-ACC-GBP	£ 1.20	-	0.00	0.89
Open World Fund N-ACC-GBP	£ 1.26	-	-0.01	0.19
South-East Asia Fund W-ACC-GBP	£ 9.69	-	0.08	1.02
Special Situations Fund W-ACC-GBP	£ 28.64	-	0.40	-
Sterling Core Plus Bond GMACC	£ 11.99	-	-0.01	-
Sterling Core Plus Red Dur	£ 10.50	-	-0.03	-
Strategic Bond Fund Y-ACC-GBP	£ 1.18	-	0.00	3.15
Strategic Bond Fund Y-GACC-GBP	£ 1.19	-	0.00	3.13
Strategic Bond Fund Y-GINC-GBP	£ 1.26	-	0.00	3.16
Strategic Bond Fund Y-INC-GBP	£ 1.26	-	0.00	3.16
Target 2020 A-ACC-GBP	£ 0.61	-	0.00	0.48
Target 2025 A-ACC-GBP	£ 1.43	-	0.01	0.30
Target 2030 A-ACC-GBP	£ 1.55	-	0.00	0.37
UK Invest Grade Long Credit GACC	£ 113.20	-	0.00	3.51
UK Opportunities Fund W-ACC-GBP	191.10	-	1.30	1.26
UK Opportunities Fund W-INC-GBP	109.50	-	0.70	1.31
UK Select Fund W-ACC-GBP	£ 2.51	-	0.01	-
UK Smaller Companies W-ACC-GBP	£ 1.91	-	0.01	1.50
WealthBuilder Fund N-ACC-GBP	£ 1.29	-	0.01	1.23
Fidelity PathFinder				
Fidelity PathFinder Focussed 1 Gross Acc (clean)	£ 1.19	-	0.00	-
Fidelity PathFinder Focussed 1 Acc (clean)	£ 1.18	-	0.00	-
Fidelity PathFinder Focused 2 Acc (Clean)	£ 1.22	-	0.00	-
Fidelity PathFinder Focussed 3 Acc (clean)	£ 1.23	-	-0.01	-
Fidelity PathFinder Focussed 4 Acc (clean)	£ 1.27	-	-0.01	-
Fidelity PathFinder Focussed 5 Acc (clean)	£ 1.30	-	-0.01	-
Fidelity PathFinder Freedom 1 Gross Acc (clean)	£ 1.15	-	0.00	-
Fidelity PathFinder Freedom 2 Acc (clean)	£ 1.16	-	0.00	-
Fidelity PathFinder Freedom 1 Acc (clean)	£ 1.14	-	0.00	-
Fidelity PathFinder Freedom 3 Acc (clean)	£ 1.17	-	0.00	-
Fidelity PathFinder Freedom 4 Acc (clean)	£ 1.14	-	0.01	-
Fidelity PathFinder Freedom 5 Acc (clean)	£ 1.25	-	0.01	-
Fidelity PathFinder Income 1 Income (clean)	£ 1.06	-	0.00	3.68
Fidelity PathFinder Income 1 Gross Income (clean)	£ 1.06	-	0.00	4.60
Fidelity PathFinder Income 2 Income (clean)	£ 1.08	-	-0.01	2.98
Fidelity PathFinder Income 2 Gross Income (clean)	£ 1.08	-	-0.01	3.69
Fidelity PathFinder Income 3 Income (clean)	£ 1.09	-	-0.01	3.50
Institutional OEIC Funds				
America	£ 4.75	-	0.04	0.63
Emerging Markets	£ 3.72	-	0.04	0.53
Europe (ex-UK) Fund ACC-GBP	£ 4.31	-	0.01	1.32
Fidelity Pre-Retirement Bond Fund	£ 134.10	-	0.00	2.75
Global Focus	£ 3.32	-	0.03	1.20
Index Linked Bond	£ 3.00	-	0.00	0.64
Index Linked Bond Gross	£ 3.64	-	0.00	0.64
Index-Linked Bond Fund Gross Inc	£ 14.13	-	0.01	0.63
Japan	£ 2.30	-	0.00	0.88
Long Bond	£ 0.60	-	0.00	-
Long Bond Gross	£ 1.00	-	0.00	-
Long Bond Fund Gross Inc	£ 13.31	-	-0.02	-
Pacific (Ex Japan)	£ 4.20	-	0.04	1.40
Pan European	£ 2.80	-	0.01	1.92
Reduced Duration UK Corporate Bond	£ 10.72	-	0.00	3.39
Reduced Duration UK Corp Bond Gross	£ 10.97	-	0.00	3.39
Reduced Duration UK Corp Bond Inc	£ 9.88	-	0.00	3.41
Reduced Dur UK Corp Bond Gross Inc	£ 9.88	-	-0.01	3.41
Select Emerging Markets Equities	£ 1.43	-	0.02	1.13
Select Global Equities	£ 3.43	-	0.03	1.05
South East Asia	£ 4.38	-	0.03	1.80
Sterling Core Plus Bond Gr Accum	£ 2.44	-	0.00	2.49
Sterling Core Plus Bond Inc	£ 1.55	-	0.00	2.55
UK	£ 3.73	-	0.01	-
UK Aggreg Bond Gr Accum	£ 2.01	-	0.00	4.08
UK Aggregate Bond Inc	£ 1.31	-	0.00	2.78
UK Corporate Bond	£ 1.29	-	0.00	3.43
UK Corporate Bond - Gross	£ 2.47	-	0.00	3.34
UK Corporate Bond Fund Gross Inc	£ 11.72	-	0.01	3.43
UK Gilt Fund Inc	£ 1.40	-	0.00	1.84
UK Gilt Gross	£ 2.26	-	-0.01	1.81
UK Long Corp Bond	£ 1.53	-	0.01	3.71
UK Long Corp Bond - Gross	£ 2.86	-	0.00	3.60
UK Long Corporate Bond - Gross Inc	£ 12.21	-	0.00	3.70
Retail Share Classes				
Emerging Markets - retail	£ 1.48	-	0.02	0.00

{*}CAR - Net income reinvested

Findlay Park Funds Plc (IRL)
30 Herbert Street, Dublin 2, Ireland Tel: 020 7968 4900
FCA Recognised

Fund	Bid	Offer	+/-	Yield
American Fund USD Class	$ 86.17	-	0.05	-
American Fund GBP Hedged	£ 46.77	-	0.03	0.00
American Fund GBP Unhedged	£ 64.85	-	0.19	0.00
Latin American Fund USD Class	$ 14.46	-	0.08	0.00
Latin American Fund GBP Unhedged	£ 11.03	-	0.08	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	+/-	Yield
TFI GCC Equity Opportunities Fund (Q)	QAR 1245.70	-	11.19	0.00

Foord Asset Management
Other International Funds

Fund	Bid	Offer	+/-	Yield
Foord International Trust	$ 35.20	-	-0.08	0.00
Foord Global Equity Fund_Class B	$ 12.60	-	-0.03	0.00

Franklin Templeton International Services Sarl (IRL)
JPMorgan House - International Financial Services Centre,Dublin 1, Ireland
Other International Funds

Fund	Bid	Offer	+/-	Yield
Franklin Emerging Market Debt Opportunities Fund Plc				
Franklin Emg Mkts Debt Opp CHF	SFr 17.49	-	0.28	8.75
Franklin Emg Mkts Debt Opp EUR	€ 12.38	-	0.21	6.72
Franklin Emg Mkts Debt Opp GBP	£ 10.78	-	0.23	6.58
Franklin Emg Mkts Debt Opp SGD	S$ 22.85	-	0.41	5.26
Franklin Emg Mkts Debt Opp USD	$ 17.64	-	0.33	6.73

Frontier Capital (Bermuda) Limited
Other International

Fund	Bid	Offer	+/-	Yield
Commercial Property-GBP Class	£ 71.42	-	-0.53	-
Global Real Estate-GBP C Class	£ 45.26	-	-0.50	-

Fundsmith LLP (1200)F (UK)
PO Box 10846, Chelmsford, Essex, CM99 2BW 0330 123 1815
www.fundsmith.co.uk, enquiries@fundsmith.co.uk
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Fundsmith Equity T Acc	284.64	-	0.54	0.79
Fundsmith Equity T Inc	266.53	-	0.51	0.80

GYS Investment Management Ltd (GSY)
Regulated

Fund	Bid	Offer	+/-	Yield
Taurus Emerging Fund Ltd	$ 168.91	172.35	12.46	0.00

Generali Worldwide
PO Box 613, Generali House, Hirzel Street, St Peter Port, Guernsey, GY1 4PA 01481 714108
International Insurances

Fund	Bid	Offer	+/-	Yield
Global Multi-Strategy Managed	$ 4.83	5.20	0.03	0.00
UK Multi-Strategy Managed	£ 5.02	5.41	0.05	0.00
EU Multi-Strategy Managed	€ 2.94	3.18	0.01	0.00
Global Bond USD	$ 3.57	3.85	0.00	0.00

Genesis Asset Managers LLP
Other International Funds

Fund	Bid	Offer	+/-	Yield
Emerging Mkts NAV	£ 6.42	-	-0.05	0.00

Guardian (UK)
Ballam Road, Lytham St Annes, Lancashire, FY8 4JZ 01253 733 151
Insurances

Fund	Bid	Offer	+/-	Yield
Guardian Assurance				
Equity S-GH Class B	£ 12.73	-	0.03	-
Managed Fund Bond	£ 25.32	26.37	-0.16	-
Choices Wth-Pfts Lg-tm	324.00	341.00	0.00	-
Choices Wth-Pfts St-tm	273.90	288.30	0.00	-
Choices Managed	674.16	709.64	-5.30	-
Choices Equity	724.06	762.17	-4.44	-
Freedom With Pfts Long-Tm	221.90	233.50	0.10	-
Freedom With Pfts Short-Tm	199.00	209.50	0.00	-
Freedom Managed	387.97	408.39	-2.53	-
Freedom Equity	423.05	445.31	-2.10	-
Corp Pens Mananged	237.99	237.99	-1.88	-
Corp Pens Equity	236.39	236.39	-1.45	-
Corp Pens Fixed Interest	329.39	329.39	0.18	-
Corp Pens Index Linked	334.16	334.16	-2.94	-
Corp Pens Deposit	191.64	191.64	0.01	-
Corp Pens Protector	436.39	436.39	1.51	-
Corp Pens UK Index Tracker	£ 2.04	2.04	-0.02	-
Guardian Linked Life Assurance Ltd				
Managed Acc	£ 19.61	20.64	-0.13	-
Equity Acc	£ 34.43	36.24	-0.17	-
Fixed Interest Acc	£ 18.52	19.49	0.01	-
International Acc	£ 15.20	16.00	-0.20	-
International S-NA Acc	£ 7.81	8.22	-0.10	-
International S-PA Acc	£ 4.71	4.96	-0.07	-
International S-EU Acc	£ 3.80	4.00	-0.05	-
Managed S-PR Acc	£ 7.45	7.84	-0.05	-
Fixed Interest S-IL Acc	£ 7.00	7.36	0.01	-
Deposit Accum	£ 4.43	4.66	0.00	-
Guardian Pensions Management Ltd				
Pens. Managed Acc.	£ 25.46	26.80	-0.20	-
Pens. Equity Acc.	£ 36.47	38.39	-0.22	-

HPB Assurance Ltd
Anglo Intl House, Bank Hill, Douglas, Isle of Man, IM1 4LN 01638 563490
International Insurances

Fund	Bid	Offer	+/-	Yield
Holiday Property Bond Ser 1	£ 0.53	-	0.02	0.00
Holiday Property Bond Ser 2	£ 0.63	-	0.02	0.00

Hargreaves Lansdown Fd Mgrs (1100)F (UK)
PO Box 55736, 50 Bank Street, Canary Wharf London E14 1BT
Enquiries 0117 90090000
www.hl.co.uk
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Hargreaves Lansdown Funds				
Unit Trust				
HL Multi-Manager Special Situations Trust A Acc	290.71	306.01	-2.66	0.51
HL Multi-Manager Special Situations Trust M Acc	290.71	306.01	-2.66	0.51
HL Multi-Manager Income & Growth Trust A Acc	169.72	178.59	-1.08	4.02
HL Multi-Manager Income & Growth Trust M Acc	169.73	178.59	-1.08	4.02
HL Multi-Manager Income & Growth Trust A Inc	99.27	104.47	-0.63	4.11
HL Multi-Manager Income & Growth Trust M Inc	99.26	104.46	-0.63	4.11
HL Multi-Manager Balanced Managed Trust A Acc	197.91	208.18	-1.57	1.04
HL Multi-Manager Balanced Managed Trust M Acc	197.92	208.20	-1.58	1.04
HL Multi-Manager Equity & Bond Trust A Inc	112.35	118.12	-0.66	2.28
HL Multi-Manager Equity & Bond Trust M Inc	112.37	118.13	-0.64	2.29
HL Multi-Manager Equity & Bond Trust A Acc	154.56	162.49	-0.90	2.25
HL Multi-Manager Equity & Bond Trust M Acc	154.58	162.50	-0.89	2.25
HL Multi-Manager Strategic Assets A Acc	108.46	111.78	-0.42	-
HL Multi-Manager Strategic Assets A Inc	108.46	111.78	-0.42	-
HL Multi-Manager Strategic Bond Trust A Acc	175.13	180.54	-0.16	1.78
HL Multi-Manager Strategic Bond Trust M Acc	175.12	180.53	-0.16	1.77
HL Multi-Manager Strategic Bond Trust A Inc	144.03	148.48	-0.14	1.80
HL Multi-Manager Strategic Bond Trust M Inc	144.02	148.47	-0.14	1.79
HL Multi Manager Emerging Markets A Acc	107.29	110.60	-1.46	0.47
HL Multi-Manager European A Acc	113.95	117.46	-1.73	0.57
HL Multi-Manager UK Growth A Acc	107.09	110.40	-0.18	1.89
HL Multi-Manager High Income A Inc	102.55	105.72	-0.62	-
HL Multi-Manager High Income A Acc	103.71	106.91	-0.63	-

Haussmann
Other International Funds

Fund	Bid	Offer	+/-	Yield
Haussmann Cls A	$ 2559.70	-	33.77	0.00
Haussmann Cls C	€ 2221.82	-	28.49	0.00
Haussmann Cls D	SFr 1170.93	-	14.26	0.00

Heartwood Wealth Management Limited (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Heartwood Caut Multi Asset B Acc	139.55	-	0.30	0.00

Henderson Global Investors (UK)
PO Box 9023, Chelmsford, CM99 2WB Enquiries: 0800 832 832
www.henderson.com
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Asia Pacific Capital Growth A Acc	867.20	-	8.70	0.13
Asian Dividend Income Inc	98.24	103.68	0.78	5.47
Cautious Managed A Acc	245.40	-	0.80	3.10
Cautious Managed A Inc	148.20	-	0.50	3.16
China Opportunities A Acc	962.10	-	8.20	0.58
Emerging Markets Opportunities A Acc	178.70	-	1.80	0.52
European Growth A Acc	191.60	-	1.00	-
European Selected Opportunities A Acc	1374.00	-	10.00	0.76
Fixed Interest Monthly Income A Inc	21.98	23.06	0.00	-
Global Care Growth A Inc	226.80	-	2.70	0.00
Global Equity Income A Inc	55.10	-	0.36	3.33
Global Growth Fund	2363.99	2470.67	18.98	0.00
Global Technology A Acc	1128.00	-	13.00	0.00
Multi-Manager Absolute Return A Acc	137.80	-	-0.40	0.33
Multi-Manager Active A Acc ▲	194.40	-	1.00	0.00
Multi-Manager Distribution A Inc	131.40	-	-1.00	3.34
Multi-Manager Diversified A Acc	80.74	-	-0.59	3.15
Multi-Manager Global Select Acc	197.40	-	-0.40	0.00
Multi-Manager Income & Growth A Acc	160.60	-	-1.00	2.27
Multi-Manager Income & Growth A Inc	145.90	-	-0.90	2.30
Multi-Manager Managed A Acc	246.80	-	1.00	0.20
Multi-Manager Managed A Inc	241.90	-	1.00	0.19
Sterling Bond Acc	213.67	223.26	-0.07	2.72
Sterling Bond Inc	65.10	68.01	-0.02	2.76
Strategic Bond A Inc	127.40	-	0.10	-
UK & Irish Smaller Companies A Acc	501.90	-	0.20	0.00
UK Absolute Return A Acc	152.40	-	0.20	0.00
UK Alpha A Acc ♦	115.50	-	0.80	-
UK Equity Income & Growth A Inc	582.40	-	3.10	-
UK Index A Acc	524.90	-	1.80	2.52
UK Property A Acc	193.08	203.24	0.05	4.04
UK Property A Inc	97.68	102.81	0.03	4.16
UK Tracker A Acc	237.50	-	0.80	2.61
US Growth A Acc	870.00	-	8.60	-

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	+/-	Yield
Hermes Abs Return Credit Fund Class F Acc £	£ 1.16	1.16	0.00	0.00
Hermes Abs Return Credit Fund Class R Acc €	€ 1.97	1.97	0.01	0.00
Hermes Asia Ex-Japan Equity Fund Class F Acc	£ 1.90	1.90	0.01	0.00
Hermes Asia Ex-Japan Equity Fund Class R Acc	€ 3.58	3.58	0.03	0.00
Hermes Global Emerging Markets Fund Class F Acc	£ 1.42	1.42	0.02	0.00
Hermes Global Emerging Markets Fund Class R Acc	€ 3.11	3.11	0.04	0.00
Hermes Global Equity Fund Class F Acc	£ 1.77	1.77	0.02	0.00
Hermes Global Equity Fund Class R Acc	€ 4.02	4.02	0.03	0.00
Hermes Global ESG Equity Fund Class F Acc	£ 1.34	1.34	0.02	0.00
Hermes Global High Yield Bond Fund Class F Acc	£ 1.29	1.29	0.00	0.00
Hermes Global High Yield Bond Fund Class R Acc	€ 2.91	2.91	0.00	0.00
Hermes Global Small Cap Fund Class F Acc £	£ 1.17	1.17	0.01	0.00
Hermes Global Small Cap Fund Class R Acc €	€ 1.99	1.99	0.02	0.00
Hermes Multi Asset Inflation Fund Class F GBP Acc	£ 1.01	1.01	0.00	0.00
Hermes Multi Strategy Credit Fund Class F Acc Hed	£ 1.08	1.08	0.00	0.00
Hermes Sourcecap EU Alpha Fund Class F Acc	£ 1.45	1.45	0.01	-
Hermes Sourcecap EU Alpha Fund Class F Dis	£ 1.38	1.38	0.00	1.32
Hermes Sourcecap EU Alpha Fund Class R Acc	€ 3.03	3.03	0.01	-
Hermes Sourcecap EX UK Fund Class F Acc	£ 1.55	1.55	0.01	0.00
Hermes Sourcecap EX UK Fund Class R Acc	€ 3.15	3.15	0.01	0.00
Hermes US All Cap Equity Class F Stg £ Acc	£ 1.20	1.20	0.01	0.00
Hermes US All Cap Equity Class R € Acc	€ 2.05	2.05	0.02	0.00
Hermes US SMID Equity Fund Class F Acc	£ 2.03	2.03	0.02	0.00
Hermes US SMID Equity Fund Class R Acc	€ 3.75	3.75	0.03	0.00

Hermes Property Unit Trust (UK)
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
Property	£ 5.92	6.29	-0.07	4.58

Hermes UK Residential Real Estate (UK)
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
VISTA UK Residential Real Estate	£ 1.02	1.06	0.03	-

INDIA VALUE INVESTMENTS LIMITED (INVIL)
www.invil.mu
Other International Funds

Fund	Bid	Offer	+/-	Yield
NAV	£ 9.06	-	-0.15	0.00

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	+/-	Yield
IVI European Fund EUR	€ 18.31	-	0.02	0.00
IVI European Fund GBP	£ 20.68	-	-0.10	0.56

Invesco Fund Managers Ltd (UK)
Perptual Park, Henley-On-Thames, Oxon, RG9 1HH
Dealing: 0800 085 8571
Investor Services: 0800 085 8677
www.invescoperpetual.co.uk
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
INVESCO PERPETUAL Funds				
Asian Acc ♦ F	541.69	-	8.56	0.48
Asian Inc ♦ F	483.88	-	7.65	-

MANAGED FUNDS SERVICE

Fund	Bid	Offer	+/-	Yield
Asian Equity Income Acc ♦ F	70.16	-	0.86	3.69
Asian Equity Income Inc ♦ F	57.26	-	0.70	3.82
Balanced Risk 6 Acc	54.39	-	0.18	0.00
Balanced Risk 8 Acc	56.53	-	0.23	0.00
Balanced Risk 10 Acc	58.75	-	0.30	0.00
Childrens Acc ♦ F	386.76	-	3.48	2.21
Corporate Bd Acc (Gross) ♦ F	218.30	-	0.09	3.40
Corporate Bd Inc (Gross) ♦ F	91.11	-	0.04	3.49
Corporate Bond Acc ♦ F	193.29	-	0.07	3.42
Corporate Bond Inc ♦ F	90.88	-	0.03	3.49
Distribution Acc ♦ F	111.23	-	0.02	4.99
Distribution Acc (Gross) ♦ F	128.33	-	0.03	4.96
Distribution Inc ♦ F	62.79	-	0.01	5.10
Distribution Inc (Gross) ♦ F	62.79	-	0.02	5.10
Emerging European Acc ♦ F	41.17	-	0.48	2.41
Emerging European Inc ♦ F	36.87	-	0.44	2.48
European Equity Acc ♦ F	889.70	-	13.03	1.42
European Equity Inc ♦ F	742.36	-	10.88	1.44
European Equity Income Acc ♦ F	76.10	-	0.96	3.50
European Equity Income Inc ♦ F	56.84	-	0.71	3.60
European High Income Acc ♦ F	86.80	-	0.48	3.96
European High Income Inc ♦ F	60.91	-	0.34	4.04
European Opportunities Inc ♦ F	87.47	-	0.47	1.05
European Opportunities Acc ♦ F	90.48	-	0.49	1.04
European Smlr Cos Acc ♦ F	203.75	-	0.73	0.21
Global Bd Acc (Gross) ♦ F	143.63	-	0.62	1.09
Global Bd Inc (Gross) ♦ F	87.91	-	0.37	1.09
Global Bond Acc ♦ F	134.71	-	0.56	1.08
Global Bond Inc ♦ F	87.83	-	0.37	1.09
Glbl Distribution Acc	54.17	-	0.11	5.19
Glbl Distribution Acc (Gross)	55.31	-	0.12	5.18
Glbl Distribution Inc	49.85	-	0.11	5.22
Glbl Distribution Inc (Gross)	49.85	-	0.11	5.23
Global Emerging Markets Acc ♦ F	286.87	-	3.21	0.82
Global Emerging Markets Inc ♦ F	257.06	-	2.87	0.83
Global Equity (acc) ♦ F	505.74	-	5.65	0.59
Global Equity (inc) ♦ F	458.48	-	5.12	0.60
Global Equity Income Acc ♦ F	132.67	-	1.36	3.46
Global Equity Income Inc ♦ F	106.54	-	1.09	3.57
Gbl Financial Capital Acc	81.80	-	0.47	4.86
Gbl Financial Capital Inc	67.16	-	0.39	5.04
Gbl Financial Cap Acc Gross	86.30	-	0.50	5.72
Gbl Financial Cap Inc Gross	67.45	-	0.39	5.97
Global Opportunities Acc ♦ F	106.63	-	1.36	0.42
Global Smaller Cos Acc ♦ F	1931.53	-	19.09	-
Global Smaller Cos Inc ♦ F	1841.44	-	18.20	-
Global Targeted Rets Acc	57.84	-	0.07	0.42
High Income Acc ♦ F	832.45	-	0.41	-
High Income Inc ♦ F	444.95	-	0.22	-
High Yield Fund Acc	107.28	-	0.14	5.65
High Yield Fund Acc (Gross)	126.31	-	0.17	5.60
High Yield Fund Inc	40.91	-	0.05	5.82
High Yield Fund Inc (Gross)	40.94	-	0.06	5.80
Hong Kong & China Acc ♦ F	539.40	-	3.51	0.67
Income & Growth Acc ♦ F	986.01	-	-0.33	3.84
Income & Growth Inc ♦ F	411.75	-	-0.14	3.95
Income Acc ♦ F	3182.84	-	2.83	-
Income Inc ♦ F	1742.01	-	1.54	-
Japan Acc ♦ F	353.12	-	4.84	0.26
Japanese Smlr Cos Acc ♦ F	97.39	-	-1.36	0.00
Latin America Acc ♦ F	135.02	-	2.80	0.88
Latin America Inc ♦ F	112.39	-	2.33	0.89
Managed Growth Acc ♦ F	177.46	-	1.96	0.53
Managed Growth Inc ♦ F	146.88	-	1.62	0.53
Managed Income Acc ♦ F	171.50	-	1.17	2.64
Managed Income Inc ♦ F	103.08	-	0.70	2.69
Money Acc ♦ F	90.36	-	0.00	0.27
Money Acc (Gross) ♦ F	95.53	-	-0.01	0.26
Monthly Income Plus Acc ♦ F	300.59	-	0.24	5.37
Monthly Income Plus Acc (Gross) ♦ F	356.37	-	0.31	5.34
Monthly Income Plus Inc ♦ F	107.07	-	0.08	5.49
Monthly Income Plus Inc (Gross) ♦ F	107.20	-	0.09	5.49
Pacific Acc ♦ F	1147.86	-	14.59	0.35
Pacific Inc ♦ F	1050.42	-	13.35	0.35
Tactical Bond Acc ♦ F	70.13	-	0.07	-
Tactical Bond Inc ♦ F	60.41	-	0.06	-
Tactical Bond Acc (Gross) ♦ F	72.95	-	0.08	-
Tactical Bond Inc (Gross) ♦ F	60.51	-	0.06	-
UK Focus Acc F	198.83	-	2.02	2.03
UK Focus Inc F	162.45	-	1.66	2.07
UK Growth Acc ♦ F	538.81	-	4.98	2.25
UK Growth Inc ♦ F	334.72	-	3.09	2.30
UK Smaller Cos Equity Acc ♦ F	874.87	-	2.71	0.78
UK Smaller Cos Equity Inc ♦ F	666.75	-	2.07	0.78
UK Strategic Income Acc ♦ F	184.24	-	-0.14	3.39
UK Strategic Income Inc ♦ F	133.59	-	-0.10	3.48
US Equity Acc ♦ F	629.75	-	7.78	0.00

Invesco Perpetual Funds (No Trail)

Fund	Bid	Offer	+/-	Yield
Asian (No Trail) Acc ♦ F	227.83	-	3.60	-
Asian (No Trail) Inc ♦ F	204.94	-	3.24	-
Asian Equity Income (No Trail) Acc ♦ F	144.14	-	1.76	-
Asian Equity Income (No Trail) Inc	117.67	-	1.44	-
Balanced Risk 6 No Trail Acc	111.17	-	0.36	0.01
Balanced Risk 8 No Trail Acc	115.51	-	0.47	0.19
Balanced Risk 10 No Trail Acc	120.07	-	0.61	0.27
Corporate Bond (No Trail) Acc ♦ F	172.27	-	0.06	3.65
Corporate Bond (No Trail) Inc ♦ F	120.17	-	0.05	3.74
Distribution (No Trail) Acc ♦ F	171.27	-	0.03	4.98
Distribution (No Trail) Inc ♦ F	110.06	-	0.02	5.09
Emerging European (No Trail) Acc ♦ F	85.96	-	1.01	2.88
Emerging European (No Trail) Inc ♦ F	74.30	-	0.88	2.98
European Equity (No Trail) Acc ♦ F	157.67	-	2.32	1.93
European Equity (No Trail) Inc ♦ F	130.67	-	1.91	1.97
European Equity Income (No Trail) Acc ♦ F	157.35	-	1.99	3.49
European Equity Income (No Trail) Inc ♦ F	117.56	-	1.48	-
European ex UK Enhanced Index (No Trail) Acc ♦ F	98.30	-	0.86	-
European ex UK Enhanced Index (No Trail) Inc ♦ F	98.30	-	0.86	-
European High Income (No Trail) Acc ♦ F	179.36	-	0.99	3.95
European High Income (No Trail) Inc ♦ F	125.86	-	0.69	4.03
European Opportunities (No Trail) Acc ♦ F	190.11	-	1.02	1.53
European Opportunities (No Trail) Inc ♦ F	177.74	-	0.96	1.55
European Smaller Companies (No Trail) Acc ♦ F	251.13	-	0.89	0.67
Global Balanced Index (No Trail) Acc ♦ F	170.92	-	0.92	1.89
Global Bond (No Trail) Acc ♦ F	151.61	-	0.64	1.31
Global Bond (No Trail) Inc ♦ F	136.29	-	0.57	1.33
Glbl Distribution Acc (No Trail)	109.54	-	0.23	4.27
Glbl Distribution Inc (No Trail)	100.80	-	0.21	4.37
Gbl Emerging Markets (No Trail) Acc ♦ F	188.71	-	2.11	1.31
Gbl Emerging Markets (No Trail) Inc ♦ F	173.52	-	1.94	1.32
Global Equity (No Trail) acc ♦ F	224.06	-	2.50	1.10
Global Equity (No Trail) inc ♦ F	207.31	-	2.32	1.12
Global Equity Income (No Trail) Acc ♦ F	275.45	-	2.83	3.45
Global Equity Income (No Trail) Inc ♦ F	221.20	-	2.27	3.55
Global ex UK Core Equity Index (No Trail) Acc ♦ F	203.99	-	2.66	1.33
Global ex UK Enhanced Index (No Trail) Acc ♦ F	235.94	-	2.61	1.76
Global ex UK Enhanced Index (No Trail) Inc ♦ F	99.05	-	1.09	-
Gbl Fin Cap No Trail Acc	167.31	-	0.96	4.85
Gbl Fin Cap No Trail Inc	137.38	-	0.79	5.02
Global Opportunities (No Trail) Acc ♦ F	275.39	-	3.51	0.90
Global Smaller Companies (No Trail) Acc ♦ F	283.22	-	2.81	-
Global Smaller Companies (No Trail) Inc ♦ F	269.01	-	2.67	-
Global Targeted Rets (No Trail) Acc	117.22	-	0.15	0.87
High Income (No Trail) Acc ♦ F	178.65	-	0.09	-
High Income (No Trail) Inc ♦ F	127.27	-	0.06	-
High Yield Fund (No Trail) Acc	223.14	-	0.29	5.63
High Yield Fund (No Trail) Inc	158.52	-	0.21	5.79
Hong Kong & China (No Trail) Acc ♦ F	214.70	-	1.40	1.16
Income & Growth (No Trail) Acc ♦ F	232.96	-	-0.08	-
Income & Growth (No Trail) Inc ♦ F	177.52	-	-0.05	-
Income (No Trail) Acc ♦ F	175.54	-	0.16	-
Income (No Trail) Inc ♦ F	126.47	-	0.11	-
Japan (No Trail) Acc ♦ F	168.40	-	2.31	0.73
Japanese Smaller Companies (No Trail) Acc ♦ F	248.98	-	-3.47	0.00
Latin American (No Trail) Acc ♦ F	131.02	-	2.72	1.42
Latin American (No Trail) Inc ♦ F	117.67	-	2.45	1.45
Managed Growth (No Trail) Acc ♦ F	215.82	-	2.39	0.94
Managed Growth (No Trail) Inc ♦ F	196.41	-	2.17	0.96
Managed Income (No Trail) Acc ♦ F	206.13	-	1.40	2.63
Managed Income (No Trail) Inc ♦ F	166.17	-	1.13	2.68
Monthly Income Plus (No Trail) Acc ♦ F	174.01	-	0.14	5.35
Monthly Income Plus (No Trail) Inc ♦ F	105.92	-	0.09	5.48
Pacific (No Trail) Acc ♦ F	213.71	-	2.72	0.78
Pacific (No Trail) Inc ♦ F	201.06	-	2.56	0.88
Tactical Bond (No Trail) Acc ♦ F	143.96	-	0.15	-
Tactical Bond (No Trail) Inc ♦ F	121.00	-	0.12	-
UK Focus (No Trail) Acc F	164.17	-	1.67	2.59
UK Focus (No Trail) Inc F	134.79	-	1.38	2.66
UK Enhanced Index (No Trail) Acc ♦ F	424.13	-	1.74	3.46
UK Enhanced Index (No Trail) Inc ♦ F	259.86	-	1.06	3.56
UK Growth (No Trail) Acc ♦ F	143.03	-	1.33	2.82
UK Growth (No Trail) Inc ♦ F	113.97	-	1.05	2.90
UK Smaller Companies Equity (No Trail) Acc ♦ F	285.87	-	0.89	1.26
UK Smaller Companies Equity (No Trail) Inc ♦ F	261.15	-	0.81	1.28
UK Strategic Income (No Trail) Acc ♦ F	734.47	-	-0.55	3.38
UK Strategic Income (No Trail) Inc ♦ F	532.63	-	-0.39	3.47
US Enhanced Index (No Trail) Acc ♦ F	99.07	-	1.08	-
US Enhanced Index (No Trail) Inc ♦ F	99.07	-	1.08	-
US Equity (No Trail) Acc ♦ F	263.20	-	3.26	0.09

Invesco (LUX)
Dublin 00 353 1 439 8100 Hong Kong 00852 3191 8282
FCA Recognised
Invesco Management SA

Fund	Bid	Offer	+/-	Yield
Invesco Active Multi-Sector Credit Fund A	€ 3.02	-	0.00	0.00
Invesco Asia Balanced A dist	$ 14.45	-	0.01	3.56
Invesco Asia Consumer Demand Fund A income	$ 12.90	-	0.03	0.23
Invesco Asia Infrastructure (A)	$ 13.23	-	0.05	0.73
Invesco Asia Opportunities Equity A	$ 109.10	-	0.33	0.00
Invesco Balanced Risk Allocation Fund A	€ 15.86	-	0.05	0.00
Invesco Emerging Europe Equity Fund A	$ 8.34	-	0.04	0.00
Invesco Emerging Local Currencies Debt A Inc	$ 7.11	-	0.02	6.08
Invesco Emerging Mkt Quant.Eq. A	$ 10.19	-	0.07	0.00
Invesco Energy A	$ 17.45	-	0.38	0.00
Invesco Euro Corporate Bond Fund (A)	€ 17.66	-	0.01	0.00
Invesco Euro Inflation Linked Bond A	€ 15.99	-	0.02	0.00
Invesco Euro Reserve A	€ 322.18	-	-0.01	0.00
Invesco Euro Bond A	€ 7.44	-	0.01	0.00
Invesco European Growth Equity A	€ 23.41	-	0.11	0.00
Invesco Global Absolute Return Fund A Class	€ 10.99	-	0.03	0.00
Invesco Global Bond A Inc	$ 5.57	-	0.01	0.59
Invesco Global Conservative Fund 90 (EUR) A	€ 11.73	-	-0.01	0.00
Invesco Global Equity Income Fund A	$ 57.35	-	0.06	0.00
Invesco Global Inc Real Estate Sec A dist	$ 9.79	-	-0.01	2.18
Invesco Global Inv Grd Corp Bond A Dist	$ 12.33	-	-0.01	2.98
Invesco Global Leisure A	$ 39.00	-	0.25	0.00
Invesco Global Smaller Comp Eq Fd A	$ 58.17	-	0.36	-
Invesco Global Structured Equity A	$ 46.34	-	-0.07	1.13
Invesco Global Total Ret.(EUR) Bond Fund A	€ 13.37	-	0.00	0.00
Invesco Gold & Precious Metals A	$ 7.07	-	-0.08	0.00
Invesco Greater China Equity A	$ 47.44	-	0.01	-
Invesco India Equity A	$ 56.76	-	0.13	0.00
Invesco Japanese Equity Adv Fd A	¥ 3373.00	-	17.00	0.00
Invesco Japanese Value Eq Fd A	¥ 1102.00	-	5.00	0.00
Invesco Latin American Equity A	$ 6.79	-	0.07	0.00
Invesco Nippon Small/Mid Cap Equity A	¥ 1104.00	-	-22.00	-
Invesco Pan European Equity A EUR Cap NAV	€ 16.39	-	0.14	0.00
Invesco Pan European High Income Fd A	€ 13.79	-	0.03	2.74
Invesco Pan European Small Cap Equity A	€ 20.27	-	0.05	0.00
Invesco Pan European Structured Equity A	€ 16.65	-	0.00	0.00
Invesco UK Eqty Income A	£ 31.83	-	0.03	-
Invesco UK Investment Grade Bond A	£ 1.07	-	-0.01	2.40
Invesco US Structured Equity A	$ 22.96	-	0.01	0.00
Invesco US Value Eq Fd A	$ 31.39	-	0.31	0.00
Invesco USD Reserve A	$ 87.09	-	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	+/-	Yield
Invesco Stlg Bd A QD F	£ 2.69	-	0.00	3.50
Invesco Asian Equity A	$ 6.69	-	0.01	0.00
Invesco ASEAN Equity A	$ 98.41	-	0.56	0.26
Invesco Bond A	$ 28.44	-	-0.06	1.95
Invesco Continental Eurp Small Cap Eqty A	$ 197.77	-	-0.38	0.00
Invesco Emerging Markets Equity A	$ 37.70	-	0.15	0.00
Invesco Emerging Markets Bond A	$ 21.84	-	-0.02	4.70
Invesco Continental European Equity A	€ 7.69	-	0.07	1.23
Invesco Gilt A	£ 16.66	-	-0.01	1.16
Invesco Global Small Cap Equity A NAV	$ 121.56	-	0.31	0.00
Invesco Global High Income A NAV	$ 12.21	-	0.01	6.29
Invesco Gbl R/Est Secs A GBP F F	£ 9.68	-	0.05	0.78
Invesco Global Health Care A	$ 123.97	-	0.24	0.00
Invesco Global Select Equity A	$ 12.36	-	0.05	0.07
Invesco Jap Eqty Core A	$ 1.81	-	0.01	0.09
Invesco Japanese Equity A	$ 19.31	-	0.06	0.00
Invesco Korean Equity A	$ 30.28	-	0.25	0.00
Invesco PRC Equity A	$ 51.69	-	0.00	0.00
Invesco Pacific Equity A	$ 49.12	-	0.26	0.07
Invesco Global Technology A	$ 15.80	-	0.06	0.00
Invesco UK Eqty A	£ 7.77	-	0.07	1.51

Invest AD
Client services: +971 2 692 6101 clientservices@InvestAD.com
Other International Funds

Fund	Bid	Offer	+/-	Yield
Invest AD - Emerging Africa Fund	$ 866.22	-	-0.80	0.00
Invest AD - GCC Focus Fund	$ 1390.79	-	-2.29	0.00

JPMorgan Asset Mgmt (1200)F (UK)
60 Victoria Embankment, London EC4Y 0JP
Brokerline: 0800 727 770, Clients: 0800 20 40 20
Authorised Inv Funds
JPM Retail OEIC (A class unless stated)

Fund	Bid	Offer	+/-	Yield
America Equity Acc	71.38	-	1.02	0.00
America Equity Inc	71.37	-	1.01	0.00
Asia Acc	144.70	-	1.40	0.37
Asia Inc	79.97	-	0.74	0.37
Cautious Managed Rt Acc	70.77	-	-0.15	0.35
Cautious Managed Rt Inc	62.06	-	-0.14	0.35
Diversified Real Ret Acc	56.75	-	0.12	0.96
Diversified Real Ret Inc	54.57	-	0.11	0.98
Emerging Mkts Acc	173.40	-	1.90	0.68
Emerging Mkts Inc	74.01	-	0.83	0.70
Emrg Eur Eq Acc	159.40	-	2.00	3.01
Emrg Eur Eq Inc	36.59	-	0.47	3.11
Emrg Mkts Inc Acc... C	61.06	-	0.55	4.64
Emrg Mkts Inc Inc... C	51.20	-	0.46	4.78
Europe Acc	1141.00	-	3.00	1.15
Europe Inc	64.93	-	0.22	1.16
Eur Dynamic exUK Acc	175.60	-	0.90	0.62
Eur Dynamic exUK £ hdg Acc	174.50	-	1.30	0.74
Eur Dynamic exUK Inc	80.12	-	0.43	0.63
Eur Smaller Cos Acc	582.40	-	2.70	0.03
Eur Smaller Cos Inc	75.73	-	0.36	0.02
Global Allocation Acc	54.38	-	0.16	0.91
Global Allocation Inc	53.54	-	0.15	0.92
Global Bond exUK Acc	267.10	-	-0.10	0.56
Global Bond exUK Inc	208.80	-	-0.10	0.56
Global Bond Opport. Acc	51.70	-	0.01	2.83
Global Bond Opport. Inc	49.61	-	0.00	2.92
Global Eq Income £ hdg Acc... C	70.37	-	0.02	2.82
Global Eq Income £ hdg Inc ... C	49.11	-	0.01	2.87
Global Eq Income Acc... C	82.61	-	0.21	2.72
Global Eq Income Inc ... C	69.84	-	0.18	2.76
Global Financials Acc	740.50	-	12.20	1.05
Global Financials Inc	41.66	-	0.69	1.07
Global High Yield Bd Mth Inc C	36.91	-	0.05	7.32
Global High Yield Bd Acc C	101.60	-	0.10	7.26
Global High Yield Bd Inc C	36.90	-	0.05	7.35
Global Macro Opp. A Net Acc	66.77	-	-0.41	0.00
Global Macro Opp. A Net Inc	66.76	-	-0.41	0.00
Global Property Secs Acc	62.71	-	-0.04	0.92
Global Property Secs Inc	53.51	-	-0.03	0.93
Global Unconstrained Eq. Acc	1107.00	-	16.00	0.07
Global Unconstrained Eq. Inc	82.21	-	1.15	0.07
Income Acc ... C	51.37	-	-0.01	6.41
Income Inc ... C	45.96	-	-0.01	6.43
Japan Acc	364.60	-	-6.60	0.00
Japan Inc	87.79	-	-1.58	0.00
Multi-Asset Inc Mth Inc ... C	63.92	-	0.05	3.73
Multi-Asset Inc Acc... C	87.85	-	0.07	3.65
Multi-Asset Inc Inc... C	63.93	-	0.04	3.73
Multi-Manager Growth Acc	774.30	-	1.30	0.65
Multi-Manager Growth Inc	717.70	-	1.10	0.66
Natural Resources Acc	490.20	-	3.30	0.40
Natural Resources Inc	34.53	-	0.23	0.39
Portfolio Acc	214.30	-	0.00	1.18
Sterling Corporate Bond Acc	90.97	-	0.00	2.13
Sterling Corporate Bond Inc	56.09	-	0.00	2.14
Strategic Bond Acc	70.64	-	-0.02	2.96
Strategic Bond Inc	57.57	-	-0.01	2.98
UK Dynamic Acc	160.70	-	0.70	1.48
UK Dynamic Inc	129.30	-	0.60	1.46
UK Eq & Bond Inc Acc ... C	146.10	-	0.40	3.37
UK Eq & Bond Inc Inc ... C	82.85	-	0.21	3.47
UK Equity Blue Chip Acc	67.69	-	0.24	2.49
UK Equity Blue Chip Inc	55.61	-	0.19	2.53
UK Equity Core Acc	296.20	-	1.00	3.26
UK Equity Core Inc	53.97	-	0.19	3.37
UK Equity Growth Acc	119.20	-	0.00	1.40
UK Equity Growth Inc	109.60	-	-0.10	1.42
UK Higher Inc Acc ... C	908.50	-	3.40	4.32
UK Higher Inc Inc ... C	503.30	-	1.90	4.47
UK Smaller Cos Acc	352.80	-	0.70	0.29
UK Smaller Cos Inc	68.33	-	0.14	0.29
UK Strategic Eq Inc Acc ... C	149.00	-	0.90	3.89
UK Strategic Eq Inc Inc ... C	93.71	-	0.55	3.99
US Acc	825.20	-	8.10	0.00
US Inc	114.20	-	1.10	0.00
US Equity Income Acc ... C	146.10	-	1.10	2.13
US Equity Income £ hdg Inc ... C	102.10	-	0.20	2.27
US Equity Income Inc ... C	121.80	-	0.80	2.17
US Select Acc	131.50	-	1.40	0.00
US Select Inc	129.80	-	1.30	0.00
US Smaller Cos Acc	438.40	-	7.60	0.00
US Smaller Cos Inc	114.80	-	2.00	0.00

JPMorgan Charity Funds (UK)
60 Victoria Embankment, London EC4Y 0JP 020 7742 9175
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
UK Equity Fund for Charities I...C	£ 2.802232	-	0.010388	3.71
Bond Fund for Charities	£ 1.463249	-	-1.328695	3.55

GAM
funds@gam.com, www.jbfundnet.com
Regulated

Fund	Bid	Offer	+/-	Yield
Ms EF Special Val. EUR/A	€ 143.32	-	0.34	1.08
Strategy Balanced-CHF/B	SFr 151.84	-	0.20	0.00
Strategy Balanced-EUR	€ 157.09	-	0.10	0.00
Strategy Balanced-USD/B	$ 133.10	-	-0.06	0.00
Strategy Growth-CHF/B	SFr 93.21	-	0.21	0.00
Strategy Growth-EUR	€ 117.08	-	0.13	0.00
Strategy Inc-CHF/B	SFr 120.75	-	0.11	0.00
Strategy Inc-EUR/B	€ 162.12	-	0.08	0.00
Strategy Inc-USD/B	$ 150.70	-	-0.03	0.00

Kames Capital ICVC (UK)
Kames House, 3 Lochside Crescent, Edinburgh, EH12 9SA
0800 45 44 22 www.kamescapital.com
Authorised Funds

Fund	Bid	Offer	+/-	Yield
Diversified Monthly Inc B Acc	120.24	-	0.41	0.00
Diversified Monthly Inc B Inc	105.52	-	0.36	0.00
Diversified Growth B Acc	£ 1.46	-	0.00	2.81
Ethical Cautious Managed B Acc	£ 1.25	-	0.01	2.15
Ethical Cautious Managed B Inc	£ 1.16	-	0.00	-
Ethical Corporate Bond B Acc	£ 1.83	-	0.00	3.34
Ethical Corporate Bond B Inc	£ 1.04	-	0.00	3.40
Ethical Equity B Acc	£ 1.97	-	0.01	-
High Yield Bond B Acc	£ 2.53	-	0.00	-
High Yield Bond B Inc	£ 0.98	-	0.00	-
Investment Grade Bond B Acc	171.49	-	0.32	1.50
Investment Grade Bond B Inc	£ 1.23	-	0.00	3.27
Sterling Corporate Bond B Acc	£ 0.80	-	0.01	3.15
Sterling Corporate Bond B Inc	£ 0.33	-	0.00	3.21
Strategic Bond B Acc	£ 1.16	-	0.00	2.61
Strategic Bond B Inc	£ 1.19	-	0.00	2.66
UK Equity B Acc	£ 2.69	-	0.01	2.30
UK Equity Absolute Return B Acc	£ 1.20	-	0.00	0.00
UK Equity Income B Acc	£ 2.26	-	0.01	-
UK Equity Income B Inc	£ 1.69	-	0.00	4.30
UK Opportunities B Acc	£ 1.76	-	0.01	-
UK Smaller Companies B Acc	£ 2.78	-	0.01	1.52

Kames Capital Investment Portfolios ICVC (UK)
Kames House, 3 Lochside Crescent, Edinburgh EH12 9SA
0800 45 44 22 www.kamescapital.com
Authorised Funds

Fund	Bid	Offer	+/-	Yield
Property Income B Acc	108.05	110.76	0.00	4.74
Property Income B Inc	97.07	99.50	0.00	4.85

Kames Capital VCIC (IRL)
1 North Wall Quay, Dublin 1, Ireland +35 3162 24493
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Absolute Return Bond B GBP Acc	1092.77	-	0.31	1.64
Eq Market Neutral B Acc	992.01	-	-1.92	-
Eq Market Neutral Plus B Acc	964.03	-	-4.42	-
High Yield Global Bond A GBP Inc	524.59	-	0.92	4.05
High Yield Global Bond B GBP Inc	1093.43	-	1.92	4.59
Investment Grade Global Bd A GBP Inc	582.63	-	0.35	2.37
Kames Global Equity Income B GBP Acc	1360.96	-	9.48	-
Kames Global Equity Income B GBP Inc	1263.16	-	8.79	-
Strategic Global Bond A GBP Inc	1114.30	-	-3.62	0.60
Strategic Global Bond B GBP Inc	632.31	-	-2.07	1.07

Kleinwort Benson Bank (UK)
14 St. George Street, Mayfair, London W1S1FE
Dealing and enquiries: 0800 024 2400
Authorised Inv Funds
Unit Trust Manager/ACD - Host Capital

Fund	Bid	Offer	+/-	Yield
HC KB Capital Growth A Acc	183.92	-	-0.14	1.36
HC KB Capital Growth A Inc	170.35	-	-0.13	1.38
HC KB Enterprise Equity Income A Inc	106.23	-	-0.70	3.06
HC KB Enterprise Equity Income A Acc	163.23	-	-1.08	3.69
HC KB Endeavour Multi Asset Balanced A Acc	141.24	-	-0.51	0.81
HC KB Endeavour Multi Asset Balanced A Inc	133.49	-	-0.48	0.81
HC KB Enterprise Fixed Income A Acc	129.18	-	0.02	3.44
HC KB Enterprise Fixed Income A Inc	112.97	-	0.01	3.44

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	+/-	Yield
Lloydstrust Gilt	£ 13.2400xd	-	0.0000	2.04
Lloyds Investment Funds Limited				
Euro High Income	€ 1.6780xd	-	0.0000	2.65
European	£ 8.2850	-	0.0050	1.15
High Income	£ 0.9083xd	-	0.0002	4.69
International	£ 4.7400	-	0.0460	0.59
North American	£ 18.4300	-	0.1500	0.00
Sterling Bond	£ 1.5680xd	-	0.0000	3.30
UK	£ 7.0070	-	0.0280	1.40
Lloyds Gilt Fund Limited				
Lloyds Gilt Fund Quarterly Share	£ 1.3810xd	-	0.0000	1.53
Monthly Share	£ 1.3280xd	-	0.0000	1.53
Lloyds Money Fund Limited				
Sterling Class	£ 52.6540	-	0.0010	0.12
Lloyds Multi Strategy Fund Limited				
Conservative Strategy	£ 1.1710	-	-0.0020	1.67
Growth Strategy	£ 1.5950	-	-0.0070	1.22
Aggressive Strategy	£ 1.9980	-	-0.0070	0.00
Global USD Growth Strategy	$ 1.4090	-	-0.0020	0.00

Dealing Daily

Lothbury Property Trust (UK)
155 Bishopsgate, London EC2M 3TQ +44(0) 20 3551 4900
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
Lothbury Property Trust GBP	£ 1800.42	1941.58	-25.65	3.28

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	+/-	Yield
Charifund Inc	1462.43	-	5.54	4.74
Charifund Acc	20846.14	-	78.89	4.53
M&G Corporate Bond A Acc	68.38xd	-	0.29	2.84
M&G Corporate Bond A Inc	42.17xd	-	0.18	3.98
M&G Dividend A Inc	59.37xd	-	0.09	4.78
M&G Dividend A Acc	623.97xd	-	1.01	4.60
M&G Episode Income A Acc	144.57xd	-	1.10	3.69
M&G Episode Income A Inc	116.97xd	-	0.89	3.83
M&G Episode Growth A Inc	50.37	-	0.44	2.05
M&G Extra Income A Inc	747.54	-	1.06	4.44
M&G Extra Income A Acc	6353.27	-	9.07	4.30
M&G Global Basics A Inc	759.97	-	6.37	0.49
M&G Global Basics A Acc	1154.77	-	9.68	0.46
M&G Global Dividend Fund A Acc	223.30xd	-	2.99	3.05
M&G Global Dividend Fund A Inc	171.38xd	-	2.30	3.12
M&G Glbl Emrgng Mkts A Acc	230.45	-	3.61	0.68
M&G Glbl Emrgng Mkts A Inc	220.66	-	3.47	0.68
M&G Global High Yield Bond A Inc	50.00	-	0.08	4.09
M&G Global High Yield Bond A Acc	121.22	-	0.19	4.08
M&G Global Macro Bond Fund A Acc	126.67xd	-	0.89	1.03
M&G Global Macro Bond Fund A Inc	86.96xd	-	0.61	1.03
M&G Managed Growth A Inc	87.34	-	1.00	0.35
M&G Optimal Income A Inc	145.41	-	0.39	2.14
M&G Optimal Income A Acc	193.87	-	0.53	2.14
M&G Recovery GBP A Inc	117.07xd	-	0.99	1.10
M&G Recovery GBP A Acc	265.87xd	-	2.25	1.09
M&G Strategic Corp Bond A Inc	76.79	-	0.30	2.49
M&G Strategic Corp Bond A Acc	112.05	-	0.43	2.49
M&G UK Inflation Lnkd Corp Bnd A Acc	113.53	-	0.26	0.93
M&G UK Inflation Lnkd Corp Bnd A Inc	111.91	-	0.26	0.93

M & G Securities Ltd (UK)
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
Charibond	131.85xd	-	0.85	3.48
(Accum Units)	4010.94xd	-	26.15	3.45
NAACIF	78.75xd	-	0.50	4.44
(Accum Units)	7297.69xd	-	46.36	4.25
M&G Property Portfolio A Acc **	118.27	124.49	0.01	3.43
M&G Property Portfolio A Inc **	106.34	111.93	0.01	3.52

** the price shown is a valuation price and not a traded price

M & G (Guernsey) Ltd (GSY)
Regulated
The M&G Offshore Fund Range

Fund	Bid	Offer	+/-	Yield
Corporate Bond A	1403.84	1447.26	5.99	3.98
Global Basics X	2805.34	2892.10	23.48	0.19
Global Dividend A	133.34	138.89	1.79	2.87
Global Leaders A	3811.34	3970.14	27.39	0.94
Global High Yield Bond X	983.24	1013.64	1.57	4.06
Global Macro Bond A	13012.99	13415.45	91.30	1.03
North American Dividend A	187.12	194.92	2.22	2.07
Optimal Income A	144.08	148.54	0.38	2.14
Recovery A	10145.49	10568.21	85.52	0.80
Strategic Corproate Bond A	139.41	145.21	0.55	2.49
UK Inf Lkd Corp Bd A Inc	107.80	111.13	0.25	0.92
UK Select A	1440.13	1500.14	7.05	1.15

MFS Investment Funds (LUX)
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Blend.Research Gb.Eq.Fd.	€ 102.93	-	0.69	0.00
Blend.Research Gb.Eq.Fd.	£ 115.95	-	0.14	0.00
Blend.Research Gb.Eq.Fd.	$ 101.52	-	0.21	0.00
Blend.Research U.S.Core Eq.Fd.	€ 106.99	-	1.00	-
Blend.Research U.S.Core Eq.Fd.	£ 114.86	-	0.45	-
Blend.Research U.S.Core Eq.Fd.	¥ 9030.00	-	71.00	0.00
Blend.Research U.S.Core Eq.Fd.	$ 105.63	-	0.50	-
Em.Mk.Eq.Fund Euro	€ 114.75	-	-0.16	0.00
Em.Mk.Eq.Fund Sterling	£ 113.12	-	-0.78	0.00
Em.Mk.Eq.Fd.US Dollar	$ 97.92	-	-0.58	0.00
Gb.Conc.Eq.Fd.Euro	€ 292.69	-	1.73	0.00
Gb.Conc.Eq.Fd.Sterl.UK T	£ 205.35	-	0.10	0.00
Gb.Conc.Eq.Fd.Sterling	£ 310.75	-	0.15	0.00
Gb.Conc.Eq.Fd.US	$ 207.05	-	0.28	0.00
Gb.Eq.Hdg.Fd.Euro IRE T	€ 190.69	-	0.51	0.00
Gb.Eq.Euro Hdg Fd.	€ 270.16	-	0.71	0.00
Gb.Eq.Fund Euro	€ 291.95	-	1.42	0.00
Gb.Eq. Fd Euro IRE T	€ 184.74	-	0.89	0.00
Gb.Eq.Fd.Sterling UK T	£ 247.72	-	-0.14	0.00
Gb.Eq.Fd.US Dollar	$ 326.04	-	0.10	0.00
Gb.Eq.Fund Sterling	£ 244.85	-	-0.14	0.00
Gb.Val.Ex-Jap.Fd.USD	$ 126.19	-	-0.12	0.00
Gb.Val.Ex-Japan Fd.Yen	¥ 12570.00	-	29.00	0.00
Gb.Val.Fd. Euro	€ 140.19	-	0.55	0.00
Gb.Val.Fd.Sterling	£ 142.88	-	-0.21	0.00
Gb.Val.Fd.USD	$ 112.68	-	-0.07	0.00
Low Volatility Gb.Eq.Fd.Euro	€ 111.70	-	0.22	0.00
Low Volatility Gb.Eq.Fd.Sterl	£ 125.89	-	-0.43	0.00
Low Volatility Gb.Eq.Fd.USD	$ 110.24	-	-0.29	0.00
Low Volatility Gb.Eq.Fd.Yen	¥ 8709.00	-	5.00	0.00

MMIP Investment Management Limited (GSY)
Regulated
Multi-Manager Investment Programmes PCC Limited

Fund	Bid	Offer	+/-	Yield
UK Equity Fd Cl A Series 01	£ 2263.07	2289.04	-80.26	0.00
Diversified Absolute Rtn Fd USD Cl AF2	$ 1495.98	-	-47.16	0.00
Diversified Absolute Return Stlg Cell AF2	£ 1509.55	-	-51.81	0.00
Global Equity Fund A Lead Series	£ 1127.80	1131.76	73.01	-

Manek Investment Mgmt Ltd (1000)F (UK)
P.O.Box 100, Swindon SN1 1WR 0844 800 9401
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Growth Fd Acc	56.07	59.26	-0.27	-

Marlborough Fd Managers Ltd (1200)F (UK)
Marlborough House, 59 Chorley New Road, Bolton, BL1 4QP 0808 145 2500
www.marlboroughfunds.com
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Balanced	168.08	177.15	-0.34	0.60
Bond Income	51.97	54.99	0.13	4.71
Cash	50.09	50.09	0.01	0.32
Cautious Inc	87.32	92.03	-0.53	1.01
Defensive A Inc	111.99	111.99	-0.03	0.19
Emerging Markets	262.05	262.05	1.95	1.28
ETF Global Growth A	164.76	164.76	1.05	0.00
ETF Commodity A	74.58	74.58	0.87	0.00
European Multi-Cap	345.20	345.20	0.02	0.24
Extra Income	79.23	83.84	0.01	4.26
Far East Growth A Inc	180.42	180.42	0.82	1.67
Global	203.83	215.15	-2.52	0.00
Global Bond Inc	153.36	162.29	0.26	2.84
High Yield Fixed Interest	72.72	77.16	-0.02	5.72
Multi Cap Income A Inc	141.25	141.25	0.09	5.15
Nano-Cap Growth A Acc	104.2473	115.4900	-174.9371	0.00
Special Situations A Acc	1199.27	1269.07	1.52	0.40
UK Multi-Cap Growth A Inc	257.33	272.31	0.66	0.62
UK Micro Cap Growth A	490.19	518.72	-0.27	0.00
US Multi-Cap Income	381.65	381.65	1.29	0.53
MFM - Third Party Funds				
Junior Oils	68.58	72.57	0.38	0.00
Junior Gold C Acc	61.15	61.15	-0.55	0.00
MFM Artorius Fund	145.90	145.90	-0.20	-
MFM Bowland	174.10	188.22	1.05	1.46
MFM Hathaway Inc	113.58	118.93	-1.63	1.33
MFM Techinvest Special Situations Acc	141.87	141.87	0.83	0.00
MFM Techinvest Technology Acc	385.93	385.93	-12.15	0.00
MFM UK Primary Opportunities A Inc	329.73	329.73	1.57	1.32
Slater Investments Ltd - Investment Adviser				
MFM Slater Growth	385.00	408.49	0.87	0.12
MFM Slater Income A Inc	146.46	146.46	0.11	4.64
MFM Slater Recovery	164.83	174.89	-0.10	0.33

Marlborough International Management Limited (GSY)
Tudor House, Le Bordage, St Peter Port, Guernsey, CI, GY1 1DB +44 1481 71520
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Marlborough North American Fund Ltd	£ 39.13	41.69	-0.21	0.00
Marlborough Tiger Fund Ltd F	£ 28.30	30.15	-0.27	0.00

Marwyn Asset Management Limited (CYM)
Regulated

Fund	Bid	Offer	+/-	Yield
Marwyn Value Investors	£ 409.28	-	-27.96	0.00

McInroy & Wood Portfolios Limited (UK)
Easter Alderston, Haddington, EH41 3SF 01620 825867
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Balanced Fund Personal Class Units	4549.20	-	20.80	1.60
Income Fund Personal Class Units	2616.50xd	-	17.20	2.70
Emerging Markets Fund Personal Class Units	1981.80	-	15.40	1.71
Smaller Companies Fund Personal Class Units	4123.40xd	-	21.90	1.43

Meridian Fund Managers Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
Global Gold & Resources Fund	$ 224.00	-	-10.18	-
Global Energy & Resources Fund	$ 31.95	-	0.00	-

Ministry of Justice Common Investment Funds (UK)
Property & Other UK Unit Trusts

Fund	Bid	Offer	+/-	Yield
The Equity Idx Tracker Fd Inc	1457.00	1457.00	0.00	2.76

Distribution Units

Mirabaud Asset Management (LUX)
www.mirabaud.com, marketing@mirabaud.com
Regulated

Fund	Bid	Offer	+/-	Yield
Mir. - Conv. Bds Eur A EUR	€ 132.18	-	-0.04	0.00
Mir. - Conv. Bds Glb A USD	$ 111.81	-	-0.12	0.00
Mir. - Eq Asia ex Jap A	$ 177.88	-	0.83	0.00
Mir.- EqEurope ExUK Sm&Mid	£ 121.24	-	-1.45	-
Mir. - Eq Glb Emrg Mkt A USD	$ 93.80	-	0.77	0.00
Mir. - Eq Global Focus A USD	$ 96.69	-	-0.42	0.00
Mir. - EqPanEuropeSm&Mid	€ 114.17	-	-0.46	0.00
Mir. - Eq Spain A	€ 24.13	-	0.07	0.00
Mir. - Eq Swiss Sm/Mid A	SFr 348.40	-	-0.84	0.00
Mir. - Glb High Yield Bds A	$ 112.50	-	-0.01	-
Mir. - Glb Eq High Income A USD	$ 99.02	-	0.06	0.00
Mir. - Glb Strat. Bd A USD	$ 108.44	-	-0.06	0.00
Mir. - US Shrt Term Credit Fd	$ 102.43	-	-0.01	-

MW Japan Fund Plc (IRL)
FCA Recognised

Fund	Bid	Offer	+/-	Yield
MW Japan Fund PLC A	$ 24.69	-	0.47	0.00
MW Japan Fund PLC B	$ 24.81	-	0.47	0.00
MW Japan Fund PLC C	$ 79.64	-	1.57	0.00

Morant Wright Funds (Ireland) PLC (IRL)
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Morant Wright Fuji Yield EUR Acc Hedged	€ 9.87	-	0.16	-
Morant Wright Fuji Yield EUR Dist Hedged	€ 8.88	-	0.14	2.78
Morant Wright Fuji Yield GBP Acc Hedged	£ 9.29	-	0.15	0.00
Morant Wright Fuji Yield GBP Dist Hedged	£ 8.53	-	0.13	7.00
Morant Wright Fuji Yield USD Acc Hedged	$ 9.13	-	0.15	0.00
Morant Wright Fuji Yield USD Dist Hedged	$ 9.03	-	0.15	2.73
Morant Wright Fuji Yield YEN Acc	¥ 951.36	-	15.02	0.00
Morant Wright Fuji Yield B YEN Acc	¥ 840.63	-	13.28	0.00
Morant Wright Fuji Yield YEN Dist	¥ 917.75	-	14.49	2.75
Morant Wright Sakura Fund Sterling Acc Hedged	£ 11.18	-	0.23	0.00
Morant Wright Sakura Fund Euro Acc Hedged	€ 11.27	-	0.23	0.00
Morant Wright Sakura Fund Yen Acc Unhedged	¥ 1167.87	-	24.53	0.00
Morant Wright Sakura Fund Dollar Acc Hedged	$ 11.22	-	0.24	0.00
Morant Wright Sakura Fund Swiss Franc Acc Hedged	SFr 11.10	-	0.23	0.00

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	+/-	Yield
US Advantage A F	$ 60.73	-	0.16	0.00
Asian Equity A F	$ 43.05	-	0.16	0.00
Asian Property A F	$ 18.90	-	0.21	0.00
Diversified Alpha Plus A F	€ 27.22	27.22	0.00	0.00
Emerg Europ, Mid-East & Africa Eq A F	€ 69.53	-	0.59	0.00
Emerging Markets Debt A F	$ 83.06	-	-0.22	0.00
Emerging Markets Domestic Debt AX F	£ 12.64	12.64	0.22	4.25
Emerging Markets Equity A F	$ 35.88	35.88	0.24	0.00
Euro Bond A F	€ 16.55	16.55	0.03	0.00
Euro Corporate Bond AX F	£ 26.30	26.30	0.35	-
Euro Strategic Bond A F	€ 45.67	45.67	0.03	-
European Currencies High Yield Bd A F	€ 22.78	22.78	0.18	0.00
European Equity Alpha A F	€ 39.88	-	0.22	0.00
European Property A F	€ 34.00	34.00	0.17	0.00
Eurozone Equity Alpha A F	€ 10.71	10.71	0.07	0.00
Global Bond A F	$ 41.49	41.49	0.07	0.00
Global Brands A F	$ 103.93	-	-0.03	0.00
Global Convertible Bond A F	$ 41.68	-	0.19	0.00
Global Property A F	$ 29.36	-	0.10	0.00
Indian Equity A F	$ 37.87	-	0.09	0.00
Latin American Equity A F	$ 46.69	-	1.09	0.00
Short Maturity Euro Bond A F	€ 20.41	20.41	-0.02	0.00
US Dollar Liquidity A F	$ 13.03	-	0.00	-
US Growth A F	$ 69.99	-	0.09	-
US Growth AH F	€ 48.16	48.16	0.06	0.00
US Growth AX F	£ 53.33	53.33	0.82	-
US Property A F	$ 77.13	-	-0.26	0.00

Morgens Waterfall Vintiadis.co Inc
Other International Funds

Fund	Bid	Offer	+/-	Yield
Phaeton Intl (BVI) Ltd (Est)	$ 366.89	-	-3.52	0.00

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	+/-	Yield
Harris Global Equity R/A (USD)	$ 235.16	235.16	0.09	0.00
Harris US Equity Fund R/A (USD)	$ 214.00	214.00	1.89	0.00
Harris Concentrated US Equity R/A (USD)	$ 161.99	161.99	2.02	0.00
Loomis Sayles Strategic Alpha R/A (USD)	$ 112.26	112.26	0.05	0.00

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	+/-	Yield
Loomis Sayles Global Opportunistic Bond R/D (USD)	$ 13.33	13.33	-0.03	1.27
Loomis Sayles High Income R/D (USD)	$ 8.53	8.53	0.01	10.68
Loomis Sayles Multisector Income R/D (GBP)	$ 12.48	12.48	-0.02	5.43

Natixis International Funds (UK)
Cannon Bridge House, 25 Dowgate Hill, London, EC4R 2YA 0044 20 3216 9000
Authorised Funds

Fund	Bid	Offer	+/-	Yield
H2O MultiReturns Fund N/A (GBP)	£ 1.23	-	0.00	1.65
Harris Associates Global Concentrated Equity Fund N/A (GBP)	£ 1.19	-	0.03	1.19
Loomis Sayles Strategic Income N/D (GBP)	£ 1.14	-	0.01	3.77
Loomis Sayles Strategic Income H-N/D (GBP)	£ 0.96	-	0.00	4.25
Loomis Sayles US Equity Leaders N/A (GBP)	£ 1.85	-	0.02	0.23
Seeyond Factor Plus Europe Ex U.K Equity Fund N/A (GBP)	£ 1.06	-	0.01	2.20
Seeyond Factor Plus U.K Equity Fund N/A (GBP)	£ 1.01	-	0.01	3.19

NatWest (2230)F (UK)
PO Box 23873, Edinburgh EH7 5WJ**
Enquiries: 0800 085 5588
Authorised Inv Funds
Series 1(Minimum initial investment 16375,000)

Fund	Bid	Offer	+/-	Yield
United Kingdom Equity Index Fund	£ 12.94	-	-0.03	1.44
UK Specialist Equity Inc	£ 19.35	-	-0.07	0.81
Contl Europe Spec Equity	£ 16.71	-	-0.25	0.00
US Spec Equity Fund	£ 16.32	-	-0.03	0.00
Japan Specialist Fund ✠	£ 11.14	-	-0.17	0.00
Pacific Basin Specialist Equity Fund	£ 26.00	-	0.20	0.77
UK Sovereign Bd Index Fund	£ 11.96	-	0.02	2.30
UK Specialist Equity Income Fund	£ 9.35	-	-0.05	1.95
Global Spec Inv Grade Bd Fund GBP	£ 10.20	-	-0.02	2.72
Global Emerg Mkts Equity Fund ✠	£ 13.02	-	0.11	0.07
Series 2 (Investment Management customers only)				
United Kingdom Equity Index Fund	£ 12.95	-	-0.02	1.75
UK Specialist Equity Inc	£ 19.59	-	-0.07	1.46
Contl Europe Spec Equity	£ 17.58	-	-0.27	1.12
US Spec Equity Fund	£ 17.18	-	-0.03	0.32
Japan Specialist Fund ✠	£ 11.92	-	-0.17	0.57
Pacific Basin Specialist Equity Fund	£ 25.89	-	0.20	1.59
UK Sovereign Bd Index Fund	£ 12.20	-	0.03	2.30
UK Specialist Equity Income Fund	£ 10.24	-	-0.05	1.93
Global Spec Inv Grade Bd Fund GBP	£ 10.41	-	-0.03	2.72
Global Emerg Mkts Equity Fund ✠	£ 12.57	-	0.11	0.76

The initial charge you will pay will depend on the amount you invest
**Address and Telephone number for series 1 only

New Capital Fund Management Ltd (IRL)
Leconfield House, Curzon Street, London, W1J 5JB
FCA Recognised
New Capital UCITS Funds

Fund	Bid	Offer	+/-	Yield
Asia Pac Bd USD Inst Inc	$ 95.88	-	-0.33	3.28
Asia Pac Bd USD Ord Inc	$ 97.95	-	-0.33	2.60
Asia Pac Eq EUR Ord Inc	€ 89.95	-	-0.92	2.76
Asia Pac Eq GBP Ord Inc	£ 93.12	-	-0.96	3.40
Asia Pac Eq USD Ord Inc	$ 94.87	-	-0.98	2.72
Asia Pac Eq USD Inst Acc	$ 104.26	-	-1.07	0.00
Asia Pac Eq USD Inst Inc	$ 105.79	-	-1.09	3.29
Dyn Europ Eq EUR Ord Inc	€ 163.62	-	-0.66	1.09
Dyn Europ Eq GBP Ord Inc	£ 171.98	-	-0.68	1.58
Dyn Europ Eq USD Ord Inc	$ 164.32	-	-0.65	1.03
China Equity EUR Ord Acc	€ 122.19	-	-0.13	0.00
China Equity GBP Ord Acc	£ 127.72	-	-0.14	0.00
China Equity USD Ord Acc	$ 125.30	-	-0.14	0.00
China Equity USD Inst Acc	$ 129.51	-	-0.14	0.00
Europ. Equity Fd EUR	€ 98.97	-	-0.39	-
Europ. Equity Fd GBP	£ 96.78	-	-0.38	-
Europ. Equity Fd USD	$ 98.31	-	-0.39	-
Global Val.Cr.Fd GBP Ord Inc	£ 111.95	-	-0.18	3.61
Global Val.Cr.Fd USD Inst Acc	$ 128.69	-	-0.20	0.00
Global Val.Cr.Fd GBP Ord Acc	£ 184.95	-	-0.30	0.00
Global Val.Cr.Fd USD Ord Acc	$ 173.66	-	-0.28	0.00
Global Val.Cr.Fd EUR Ord Acc	€ 160.47	-	-0.26	0.00
Swiss Select Equity Inst Acc	SFr 118.34	-	0.20	0.00
Swiss Select Equity Ord Acc	SFr 116.52	-	0.20	0.00
US Growth USD Ord Acc	$ 204.23	-	0.89	0.00
US Growth EUR Ord Acc	€ 193.70	-	0.85	0.00
US Growth GBP Ord Acc	£ 203.93	-	0.88	0.00
US Growth USD Inst Acc	$ 189.55	-	0.83	0.00
Wealthy Nat Bd EUR Inst Inc	€ 113.59	-	-0.19	3.28
Wealthy Nat Bd GBP Inst Inc	£ 118.48	-	-0.21	3.41
Wealthy Nat Bd EUR Ord Inc	€ 112.89	-	-0.19	3.01
Wealthy Nat Bd GBP Ord Inc	£ 119.31	-	-0.22	3.16
Wealthy Nat Bd USD Ord Inc	$ 116.67	-	-0.20	2.97
New Capital Alternative Strategies				
All Weather Fd USD Cls	$ 114.06	-	-1.24	0.00
All Weather Fd EUR Cls	€ 101.95	-	-1.24	0.00
All Weather Fd GBP Cls	£ 110.01	-	-1.27	0.00
Tactical Opps USD Cls	$ 140.30	-	2.12	0.00
Tactical Opps EUR Cls	€ 117.11	-	1.70	0.00
Tactical Opps GBP Cls	£ 131.17	-	1.94	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	+/-	Yield
Northwest $ class	$ 2326.27	-	87.41	0.00

Oasis Crescent Management Company Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
Oasis Crescent Equity Fund	R 10.13	-	0.00	0.00

Oasis Global Mgmt Co (Ireland) Ltd (IRL)
Regulated
Oasis Global Investment (Ireland) Plc

Fund	Bid	Offer	+/-	Yield
Oasis Crescent Global Short Term Income Fund	$ 0.99	-	0.00	1.14
Oasis Global Equity	$ 27.77	-	0.00	0.33
Oasis Crescent Global Investment Fund (Ireland) plc				
Oasis Crescent Global Equity Fund	$ 28.64	-	-0.01	0.11
Oasis Crescent Variable Balanced Fund	£ 10.47	-	-0.05	1.39
OasisCresGl Income Class A	$ 10.81	-	0.00	2.52
OasisCresGl LowBal D ($) Dist	$ 11.94	-	0.00	0.00
OasisCresGl Med Eq Bal A ($) Dist	$ 12.19	-	0.01	0.60
Oasis Crescent Gbl Property Eqty	$ 10.02	-	-0.05	1.60

Odey Asset Management LLP (UK)
40 Dukes Place, London, EC3A 7NH
Order Desk and Enquiries: 0345 300 2106
Authorised Corporate Director - Capita Financial Managers
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
CF Odey Continental European GBP R Acc	772.68	-	3.14	0.03
CF Odey Opus GBP R Inc	3736.83	-	8.00	0.00
CF Odey Absolute Return GBP R	313.00	-	-1.53	0.00
CF Odey Portfolio Fund GBP R Inc	146.62	-	-0.03	0.11

Odey Asset Management LLP (CYM)
Regulated

Fund	Bid	Offer	+/-	Yield
OEI Mac Inc GBP A	£ 256.20	-	2.83	0.00
OEI Mac Inc GBP B	£ 152.16	-	2.22	0.00
OEI MAC Inc USD	$ 1342.71	-	14.85	0.00
Odey European Inc EUR	€ 592.63	-	6.55	0.00
Odey European Inc GBP A	£ 233.60	-	2.72	0.00
Odey European Inc GBP B	£ 132.52	-	1.54	0.00
Odey European Inc USD	$ 275.18	-	3.22	0.00
Giano Capital EUR Inc	€ 4398.20	-	4.97	0.00

Odey Asset Management LLP (IRL)
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Odey Pan European EUR R	€ 288.93	-	0.11	0.00
Odey Absolute Return Focus Fund	$ 95.67	-	-1.76	-
Odey Allegra European EUR O	€ 251.57	-	-0.89	0.00
Odey Allegra International EUR O	€ 155.77	-	-0.07	0.00
Odey Allegra Developed Markets USD I	$ 129.94	-	-0.23	0.00
Odey European Focus Fund	€ 16.54	-	0.01	0.00
Odey Giano European Fund EUR R	€ 115.20	-	-0.32	0.00
Odey Naver Fund EUR I	€ 114.60	-	-0.59	0.00
Odey Odyssey USD I	$ 124.57	-	-0.18	0.00
Odey Swan Fund EUR I	€ 70.36	-	-0.43	0.00
Odey European Absolute Return GBP S	£ 92.46	-	-0.43	0.00

Odey Wealth Management (CI) Ltd (IRL)
www.odey.com/prices
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Odey Opportunity EUR I	€ 217.55	-	0.35	0.00

Omnia Fund Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
Estimated NAV	$ 859.63	-	13.57	0.00

Optima Fund Management
Other International Funds

Fund	Bid	Offer	+/-	Yield
Cuttyhunk Fund II Limited	$ 1364.32	-	6.49	0.00
JENOP Global Healthcare Fund Ltd	$ 12.31	-	0.04	0.00
OPTIKA Fund Limited - Cl A	$ 93.05	-	1.42	0.00
Optima Fd NAV (Est)	$ 84.23	-	0.36	0.00
Optima Discretionary Macro Fund Limited	$ 84.94	-	-0.23	0.00
The Dorset Energy Fd Ltd NAV	$ 33.64	-	-0.26	0.00
Platinum Fd Ltd	$ 84.28	-	0.19	0.00
Platinum Fd Ltd EUR	€ 16.16	-	0.04	0.00
Platinum Japan Fd Ltd	$ 54.46	-	0.25	0.00
Optima Partners Global Fd	$ 13.80	-	0.06	0.00
Optima Partners Focus Fund A	$ 14.84	-	-0.02	0.00

Oryx International Growth Fund Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
NAV (Fully Diluted)	£ 6.92	-	-0.25	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	+/-	Yield
Pictet-Absl Rtn Fix Inc-HI EUR	€ 108.46	-	0.01	0.00
Pictet-Agriculture-I EUR F	€ 185.85	-	0.39	0.00
Pictet-Asian Equities Ex Japan-I USD F	$ 219.12	-	0.57	0.00
Pictet-Asian Local Currency Debt-I USD F	$ 165.23	-	0.66	-
Pictet-Biotech-I USD F	$ 734.65	-	6.26	0.00
Pictet-CHF Bonds I CHF	SFr 513.75	-	-0.10	0.00
Pictet-China Index I USD	$ 102.73	-	-1.29	0.00
Pictet-Clean Energy-I USD F	$ 78.75	-	0.37	0.00
Pictet-Digital Communication-I USD F	$ 285.59	-	0.42	0.00
Pictet-Em Lcl Ccy Dbt-I USD F	$ 170.65	-	-0.27	0.00
Pictet-Emerging Europe-I EUR F	€ 284.03	-	-2.35	0.00
Pictet-Emerging Markets-I USD F	$ 524.00	-	3.69	0.00
Pictet-Emerging Markets Index-I USD F	$ 228.67	-	-2.25	0.00
Pictet-Emerging Corporate Bonds I USD	$ 115.92	-	-0.11	0.00
Pictet-Emerging Markets High Dividend I USD	$ 101.96	-	0.28	0.00
Pictet-Emerging Markets Sust Eq I USD	$ 91.84	-	-0.86	0.00
Pictet-EUR Bonds-I F	€ 590.67	-	-0.90	0.00
Pictet-EUR Corporate Bonds Ex Fin i EUR	€ 151.60	-	-0.02	0.00
Pictet-EUR Corporate Bonds-I F	€ 209.54	-	-0.02	0.00
Pictet-EUR Government Bonds I EUR	€ 167.44	-	-0.02	0.00
Pictet-EUR High Yield-I F	€ 250.58	-	-0.16	0.00
Pictet-EUR Short Mid-Term Bonds-I F	€ 137.48	-	0.00	0.00
Pictet-EUR Short Term HY I EUR	€ 123.75	-	0.00	0.00
Pictet-EUR Sov.Sht.Mon.Mkt EUR I	€ 102.67	-	0.00	0.00
Pictet-Euroland Index IS EUR	€ 122.76	-	-0.14	0.00
Pictet-Europe Index-I EUR F	€ 159.95	-	0.10	0.00
Pictet-European Equity Selection-I EUR F	€ 594.50	-	-0.28	0.00
Pictet-European Sust Eq-I EUR F	€ 235.17	-	-0.69	0.00
Pictet-Global Bds Fundamental I USD	$ 126.44	-	-0.41	0.00
Pictet-Global Bonds-I EUR	€ 179.18	-	0.29	0.00
Pictet-Global Emerging Currencies-I USD F	$ 101.08	-	-0.41	0.00
Pictet-Global Emerging Debt-I USD F	$ 392.02	-	-1.33	0.00
Pictet-Global Env.Opport-I EUR	€ 166.85	-	0.63	0.00
Pictet-Global Megatrend Selection-I USD F	$ 228.49	-	-0.14	0.00
Pictet-Greater China-I USD F	$ 450.05	-	2.38	0.00
Pictet-Health-I USD	$ 275.01	-	-0.56	0.00
Pictet-High Dividend Sel I EUR F	€ 163.05	-	0.05	0.00
Pictet-India Index I USD	$ 101.67	-	-1.39	0.00
Pictet-Indian Equities-I USD F	$ 476.55	-	2.67	0.00
Pictet-Japan Index-I JPY F	¥ 13581.05	-	138.26	0.00
Pictet-Japanese Equities Opp-I JPY F	¥ 8162.70	-	129.14	0.00
Pictet-Japanese Equity Selection-I JPY F	¥ 11804.98	-	234.56	0.00
Pictet-LATAM Lc Ccy Dbt-I USD F	$ 123.55	-	-0.99	0.00
Pictet-Multi Asset Global Opportunities-I EUR	€ 118.28	-	0.10	0.00
Pictet-Pacific Ex Japan Index-I USD F	$ 354.96	-	-6.55	0.00
Pictet-Premium Brands-I EUR F	€ 141.07	-	0.42	0.00

MANAGED FUNDS SERVICE

Fund	Bid	Offer	+/-	Yield
Pictet-Quality Global Equities I USD	$ 145.27	-	-0.41	0.00
Pictet-Russia Index I USD	$ 54.28	-	-0.05	0.00
Pictet-Russian Equities-I USD F	$ 51.85	-	-0.10	0.00
Pictet-Security-I USD F	$ 208.52	-	-0.74	0.00
Pictet-Select-Callisto I EUR	€ 103.24	-	0.03	0.00
Pictet-Small Cap Europe-I EUR F	€ 1057.11	-	-2.38	0.00
Pictet-ST.MoneyMkt-I	€ 140.28	-	0.00	0.00
Pictet-ST.MoneyMkt JPY I USD	¥ 101423.00	-	-3.87	0.00
Pictet-ST.MoneyMkt-ICHF	SFr 123.62	-	0.00	0.00
Pictet-ST.MoneyMkt-IUSD	$ 135.90	-	0.00	0.00
Pictet-Timber-I USD F	$ 147.50	-	-0.15	0.00
Pictet Total Ret-Agora I EUR	€ 115.38	-	-0.25	0.00
Pictet Total Ret-Corto Europe I EUR	€ 135.70	-	-0.25	0.00
Pictet Total Ret-Divers Alpha I EUR	€ 105.47	-	-0.15	0.00
Pictet Total Ret-Kosmos I EUR	€ 110.36	-	-0.04	0.00
Pictet Total Ret-Mandarin I USD	$ 116.44	-	-0.10	0.00
Pictet-US Equity Selection-I USD	$ 193.32	-	1.28	0.00
Pictet-US High Yield-I USD F	$ 148.29	-	-0.49	0.00
Pictet-USA Index-I USD F	$ 192.66	-	0.64	0.00
Pictet-USD Government Bonds-I F	$ 669.18	-	-0.19	0.00
Pictet-USD Short Mid-Term Bonds-I F	$ 131.65	-	-0.06	0.00
Pictet-USD Sov.ST.Mon.Mkt-I	$ 102.96	-	0.00	-
Pictet-Water-I EUR F	€ 296.74	-	0.12	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	+/-	Yield
Capital Securities Inst Acc	$ 15.22	-	-0.03	0.00
Commodity Real Return Fund Inst Acc	$ 6.19	-	0.06	0.00
Credit Absolute Return Fund Inst Acc	$ 11.43	-	0.00	0.00
Diversified Income - Inst Acc	$ 21.08	-	-0.02	0.00
Diversified Income Durat Hdg Fund Inst Acc	$ 11.78	-	-0.01	0.00
Emerging Asia Bond Fund Inst Acc	$ 10.49	-	-0.03	0.00
Emerging Local Bond - Inst Acc	$ 11.93	-	-0.07	0.00
Emerging Markets Bond - Inst Acc	$ 42.38	-	-0.11	0.00
Emerging Markets Corp.Bd Fund Inst Acc F	$ 13.67	-	-0.02	0.00
Emerging Markets Short-Term Local Currency Fund	$ 12.45	-	-0.05	0.00
Euro Bond - Inst Acc	€ 23.80	-	0.01	0.00
Euro Credit - Inst Acc	€ 15.53	-	0.01	-
Euro Income Bond - Inst Acc F	€ 13.64	-	0.00	0.00
Euro Long Average Duration - Inst Acc	€ 25.70	-	-0.02	0.00
Euro Low Duration Fund Inst Acc	€ 11.37	-	0.00	0.00
Euro Real Return - Inst Acc	€ 13.93	-	-0.01	0.00
Euro Short-Term Inst Acc	€ 12.26	-	0.00	0.00
Euro Ultra Long Duration - Inst Acc	€ 34.86	-	0.02	0.00
Global Advantage - Inst Acc	$ 12.92	-	-0.03	0.00
Global Advantage Real Return Fund Inst Acc	$ 8.95	-	-0.04	0.00
Global Bond - Inst Acc	$ 29.52	-	0.01	0.00
Global Bond Ex-US - Inst Acc	$ 20.82	-	0.01	0.00
Global High Yield Bond - Inst Acc	$ 21.21	-	0.01	0.00
Global Investment Grade Credit - Inst Income	$ 12.64	-	0.00	3.86
Global Investment Grade Credit Fund Inst Acc €	€ 12.33	-	0.04	0.00
Global Investment Grade Credit Fund Inst Acc $	$ 17.82	-	0.00	-
Global Multi-Asset - Inst Acc	$ 14.65	-	-0.03	0.00
Global Real Return - Inst Acc	$ 19.28	-	0.04	0.00
Income Fund Inst Acc	$ 12.93	-	0.01	0.00
Inflation Strategy Fund Inst Acc	$ 9.41	-	-0.04	0.00
Low Average Duration - Inst Acc	$ 15.00	-	0.01	0.00
PIMCO RAE Fundam.PLUS Em.Mkts Inst Acc	$ 9.74	-	-0.03	-
PIMCO RAE Fundam.PLUS Gl.Dev.Inst Acc	$ 11.16	-	0.03	0.00
PIMCO RAE Fundam.PLUS US Inst Acc	$ 13.12	-	0.08	0.00
Socially Resp.Emerg.Mkts Bd Fd Inst Acc F	$ 13.96	-	-0.01	0.00
StocksPLUS{TM} - Inst Acc	$ 24.81	-	0.09	0.00
Total Return Bond - Inst Acc	$ 28.35	-	0.01	0.00
UK Corporate Bond - Inst Acc	£ 19.05	-	0.01	0.00
UK Long Term Corp. Bnd Inst-Inst Acc	£ 22.09	-	0.01	0.00
UK Low Duration - Inst Acc	£ 14.30	-	0.00	0.00
UK Real Return - Inst Acc	£ 22.94	-	-0.04	0.00
UK Sterling Long Average Duration - Inst Acc	£ 23.19	-	0.00	-
Unconstrained Bond - Inst Acc	$ 12.18	-	0.01	0.00
US High Yield Bond Fund Inst Acc	$ 29.48	-	0.02	0.00

Platinum Capital Management Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
Platinum All Star Fund - A (Est)	$ 117.72	-	-	-
Platinum Global Dividend Fund - A (Est)	$ 49.89	-	-	-
Platinum Maverick Enhanced Fund Limited (Est)	$ 92.91	-	-	0.00

Polar Capital Funds Plc (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Asian Financials I USD	$ 311.67	311.67	1.01	-
Biotechnology I USD	$ 17.16	17.16	0.15	0.00
European Income Acc EUR	€ 10.83	10.83	0.03	0.00
European Ex UK Inc EUR Acc	€ 9.45	9.45	0.04	0.00
Financial Opps I USD	$ 10.67	-	0.01	1.80
GEM Growth I USD	$ 9.13	-	-0.07	0.00
GEM Income I USD	$ 10.10	-	-0.12	0.00
Global Alpha I USD	$ 12.95	12.95	-0.05	0.00
Global Convertible I USD	$ 11.49	11.49	-0.04	0.00
Global Insurance I GBP	£ 4.82	-	-0.01	0.00
Global Technology I USD	$ 25.91	-	0.00	0.00
Healthcare Blue Chip Fund I USD Acc	$ 11.09	11.09	-0.04	0.00
Healthcare Opps I USD	$ 37.57	-	0.04	0.00
Income Opportunities B2 I GBP Acc	£ 1.75	1.75	0.00	0.00
Japan Alpha I JPY	¥ 162.60	162.60	3.93	0.00
Japan I JPY	¥ 1580.49	-	39.19	1.25
North American I USD	$ 18.11	18.11	0.06	0.00
UK Absolute Equity I GBP	£ 14.73	14.73	-0.12	0.00

Polar Capital LLP (CYM)
Regulated

Fund	Bid	Offer	+/-	Yield
ALVA Convertible A USD	$ 128.67	-	-0.14	0.00
European Conviction A EUR	€ 139.35	-	-6.19	0.00
European Forager A EUR	€ 158.47	-	-12.95	0.00

Private Fund Mgrs (Guernsey) Ltd (GSY)
Regulated

Fund	Bid	Offer	+/-	Yield
Monument Growth 02/08/2016	£ 491.15	496.35	-2.58	1.22

Prusik Investment Management LLP (IRL)
Enquiries - 0207 493 1331
Regulated

Fund	Bid	Offer	+/-	Yield
Prusik Asian Equity Income B Dist	$ 174.73	-	0.93	-
Prusik Asia A	$ 197.94	-	0.36	0.00
Prusik Asian Smaller Cos A	$ 153.92	-	0.98	0.00

Purisima Investment Fds (UK) (1200)F (UK)
40 Dukes Place, London EC3A 7NH
Order Desk and Enquiries: 0345 922 0044
Authorised Inv Funds
Authorised Corporate Director - Capita Financial Managers

Fund	Bid	Offer	+/-	Yield
Global Total Fd PCG A	192.06	-	1.49	0.43
Global Total Fd PCG B	190.47	-	1.47	0.22
Global Total Fd PCG INT	188.13	-	1.46	0.00

Purisima Investment Fds (CI) Ltd (JER)
Regulated

Fund	Bid	Offer	+/-	Yield
PCG B ✠	168.25	-	-3.02	0.00
PCG C ✠	165.73	-	-2.98	0.00

Putnam Investments (Ireland) Ltd (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Putnam New Flag Euro High Yield Plc - E	€ 1006.41	-	-1.25	3.72

Ram Active Investments SA
Tél. +41 22 816 87 30
www.ram-ai.com
Other International Funds

Fund	Bid	Offer	+/-	Yield
RAM Systematic Emerg Markets Core Eq	$ 84.82	-	-0.61	-
RAM Systematic Emerg Markets Eq	$ 154.70	-	-1.40	-
RAM Systematic European Eq	€ 376.93	-	-0.85	-
RAM Systematic Global Shareholder Yield Eq	$ 103.85	-	-0.36	0.00
RAM Systematic Long/Short Emerg Markets Eq	$ 120.17	-	-0.32	-
RAM Systematic Long/Short European Eq	€ 147.56	-	-0.29	-
RAM Systematic North American Eq	$ 248.64	-	0.57	-
RAM Tactical Convertibles Europe	€ 141.76	-	0.01	-
RAM Tactical Global Bond Total Return	€ 144.25	-	-0.01	-
RAM Tactical II Asia Bond Total Return	$ 134.89	-	-0.19	-

Rathbone Unit Trust Mgmt (1200)F (UK)
PO Box 9948, Chelmsford, CM99 2AG
Order Desk: 0845 300 2101, Enquiries: 0207 399 0399
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Blue Chip Income Inc	153.90	159.10	0.10	3.95
Blue Chip Income Acc	238.73	246.49	0.16	3.82
Ethical Bond Inc	92.42	94.59	0.10	5.40
Ethical Bond Acc	181.38	185.21	0.20	5.27
Global Opportunities Acc	158.01	162.97	0.71	0.00
Income Inc	873.50	904.09	0.61	3.86
Income Acc	1377.63	1423.96	0.95	3.70
Multi Asset Enhanced Growth Acc	135.74	-	-0.03	0.07
Multi Asset Strategic Growth inc	157.44	-	-0.03	1.58
Multi Asset Strategic Growth acc	168.99	-	-0.03	1.57
Multi Asset Total Return inc	129.62	-	0.04	1.96
Multi Asset Total Return acc	144.71	-	0.05	1.94
Recovery Inc	418.52	435.46	1.61	-
Recovery Acc	509.19	529.19	1.95	-
Strategic Bond I-Class Acc	131.79	132.74	0.03	4.01
Strategic Bond I-Class Inc	112.55	113.45	0.03	4.10

Robeco Asset Management (LUX)
Weena 850, 3014 DA Rotterdam, The Netherlands
www.robeco.com/contact
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Asia-Pacific Equities (EUR)	€ 133.14	-	0.79	0.00
Chinese Equities (EUR)	€ 72.21	-	0.03	0.00
Em Stars Equities (EUR)	€ 175.91	-	-0.28	0.00
Emerging Markets Equities (EUR)	€ 150.68	-	0.43	0.00
Flex-o-Rente (EUR)	€ 108.99	-	-0.01	0.00
Glob.Consumer Trends Equities (EUR)	€ 150.99	-	0.53	0.00
High Yield Bonds (EUR)	€ 134.46	-	0.02	0.00
Lux -O- Rente (EUR)	€ 148.59	-	-0.05	0.00
New World Financials (EUR)	€ 47.74	-	0.52	0.00
US Premium Equities (EUR)	€ 188.64	-	1.34	0.00
US Premium Equities (USD)	$ 212.32	-	1.53	0.00

Royal Bank of Scotland (2230)F (UK)
PO Box 23873, Edinburgh EH7 5WJ 0800 917 7072
Authorised Inv Funds
Series 5 (Minumum Initial Investment £75,000)

Fund	Bid	Offer	+/-	Yield
United Kingdom Equity Index Fund	£ 16.19	-	-0.03	1.44
UK Specialist Equity Inc	£ 19.36	-	-0.07	0.81
Contl Europe Specialist Fund	£ 24.68	-	-0.38	0.00
Japan Specialist Fund ✠	£ 16.87	-	-0.25	0.00
US Spec Equity Fund	£ 22.06	-	-0.04	0.00
Pacific Basin Specialist Equity Fund	£ 45.85	-	0.35	0.76
UK Sovereign Bd Index Fund	£ 11.72	-	0.02	2.30
UK Specialist Equity Income Fund	£ 9.33	-	-0.05	1.95
Global Emerg Mkts Equity Fund ✠	£ 12.58	-	0.11	0.06
Global Spec Inv Grade Bd Fund GBP	£ 10.05	-	-0.02	2.72
Series 6 (Investment Management Customers Only)				
United Kingdom Equity Index Fund	£ 15.99	-	-0.03	1.75
UK Specialist Equity	£ 19.59	-	-0.08	1.46
Contl Europe Specialist Fund	£ 25.73	-	-0.39	1.12
Japan Specialist Fund ✠	£ 17.90	-	-0.26	0.57
US Spec Equity Fund	£ 23.26	-	-0.04	0.32
Pacific Basin Specialist Equity Fund	£ 45.67	-	0.34	1.59
UK Sovereign Bd Index Fund	£ 11.89	-	0.02	2.30
UK Specialist Equity Income Fund	£ 10.24	-	-0.05	1.93
Global Spec Inv Grade Bd Fund GBP	£ 10.40	-	-0.02	2.72
Global Emerg Mkts Equity Fund ✠	£ 12.57	-	0.11	0.76

Address and telephone number for Series 5 only

Royal London Unit Managers Ltd. (1200) F (UK)
5th Floor, Churchgate House, 56 Oxford Street, Manchester M1 6EU 03456 057777
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Royal London Sustainable Diversified A Inc	£ 1.70	-	0.00	1.87
Royal London Sustainable World A Inc	192.20	-	-0.10	0.81
Royal London Corporate Bond Mth Income	92.79	94.20	0.04	3.98
Royal London European Growth Trust	118.60	120.40	-0.30	0.07
Royal London Sustainable Leaders A Inc	489.80	-	-1.20	-
Royal London UK Growth Trust	500.00	507.60	-0.10	-
Royal London UK Income With Growth Trust	223.80	227.20	-0.10	4.53
Royal London US Growth Trust	174.70	177.40	1.70	0.00

Additional Funds Available
Please see www.royallondon.com for details

Ruffer LLP (1000)F (UK)
40 Dukes Place, London EC3A 7NH
Order Desk and Enquiries: 0345 601 9610
Authorised Inv Funds
Authorised Corporate Director - Capita Financial Managers
CF Ruffer Investment Funds

Fund	Bid	Offer	+/-	Yield
CF Ruffer Gold Fund C Acc	182.38	-	4.06	0.23
CF Ruffer Gold Fund O Acc	180.15	-	4.00	0.14
Equity & General C Acc	379.75	-	-1.69	0.06
Equity & General C Inc	350.26	-	-1.56	0.06
Equity & General O Inc	348.19	-	-1.56	0.00
Equity & General O Acc	375.24	-	-1.69	0.00
European C Acc	510.34	-	-5.19	0.26
European O Acc	504.29	-	-5.15	0.00
Japanese Fund C Acc	174.55	-	-6.79	0.10
Japanese Fund O Acc ✠	172.26	-	-6.71	0.00
Pacific C Acc	330.12	-	-3.03	0.51
Pacific O Acc	325.90	-	-3.00	0.23
Total Return C Acc	416.01	-	-3.47	1.28
Total Return C Inc	286.92	-	-2.39	1.29
Total Return O Inc	283.36	-	-2.37	1.29
Total Return O Acc	411.02	-	-3.44	1.28

S W Mitchell Capital LLP (CYM)
Regulated

Fund	Bid	Offer	+/-	Yield
S W Mitchell European Fund Class A EUR	€ 237.47	-	-46.61	-
S W Mitchell Small Cap European Fund Class A EUR	€ 201.02	-	-17.42	-
The Charlemagne Fund EUR	€ 254.81	-	4.13	-

S W Mitchell Capital LLP (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
SWMC European Fund B EUR	€ 12789.60	-	-65.69	0.00
SWMC UK Fund B	£ 11233.25	-	-33.08	0.00
SWMC Small Cap European Fund B EUR	€ 12041.90	-	-10.22	0.00
SWMC Emerging European Fund B EUR	€ 9542.83	-	-21.93	0.00

RobecoSAM (LUX)
Tel. +41 44 653 10 10 http://www.robecosam.com/
Regulated

Fund	Bid	Offer	+/-	Yield
RobecoSAM Sm.Energy/A	£ 12.93	-	-0.05	1.44
RobecoSAM Sm.Energy/N	€ 11.74	-	0.02	0.00
RobecoSAM Sm.Materials/A	£ 143.72	-	-1.18	1.21
RobecoSAM Sm.Materials/N	€ 148.34	-	-0.41	0.00
RobecoSAM Sm.Materials/Na	€ 102.40	-	-0.28	0.00
RobecoSAM Gl.Small Cap Eq/A	£ 89.14	-	0.01	1.12
RobecoSAM Gl.Small Cap Eq/N	€ 159.32	-	0.89	0.00
RobecoSAM Sustainable Gl.Eq/B	€ 179.31	-	1.00	0.00
RobecoSAM Sustainable Gl.Eq/N	€ 155.43	-	0.87	0.00
RobecoSAM S.HealthyLiv/B	€ 183.58	-	0.34	0.00
RobecoSAM S.HealthyLiv/N	€ 171.88	-	0.32	0.00
RobecoSAM S.HealthyLiv/Na	£ 125.71	-	-0.45	-
RobecoSAM S.Water/A	£ 206.10	-	-1.15	0.98
RobecoSAM S.Water/N	€ 177.75	-	-0.02	0.00

Santander Asset Management UK Limited (1200)F (UK)
287 St Vincent Street, Glasgow G2 5NB, 0845 6000 181
Authorised Funds
Santander Atlas Range

Fund	Bid	Offer	+/-	Yield
Santander Atlas Inc Port Acc Inst	314.60	-	-0.90	-
Santander Atlas Inc Port Inc Inst	234.20	-	-0.60	-
Santander Atlas Port 3 Acc Ret	155.50	-	0.00	-
Santander Atlas Port 3 Inc Ret	106.30	-	0.00	-
Santander Atlas Port 3 Acc Inst	171.30	-	0.00	-
Santander Atlas Port 4 Acc Ret	191.50	-	-0.20	-
Santander Atlas Port 4 Inc Ret	135.70	-	-0.10	-
Santander Atlas Port 4 Acc Inst	174.20	-	-0.20	-
Santander Atlas Port 5 Acc Ret	202.70	-	-0.60	-
Santander Atlas Port 5 Acc Inst	172.20	-	-0.60	-
Santander Atlas Port 6 Acc Ret	281.10	-	-1.10	-
Santander Atlas Port 6 Acc X	200.70	-	-0.70	-
Santander Atlas Port 6 Acc Inst	173.60	-	-0.60	-
Santander Atlas Port 7 Acc Ret	220.00	-	-0.90	-
Santander Atlas Port 7 Acc Inst	174.80	-	-0.80	-
Authorised Inv Funds				
Max 70% Shs Acc Ret	178.60	-	0.40	-
Max 70% Shs Inc Ret	148.90	-	0.40	-
Investments Inc Acc Ret	170.10	-	0.00	-
Investments Inc Inc Ret	110.60	-	0.00	-
Equity Inc Inc Inst	244.00	-	0.60	-
Equity Inc Inc Ret	208.40	-	0.50	-
Equity Inc Acc Inst	150.80	-	0.40	-
N&P UK Gwth Inc Ret	161.30	-	0.30	-
Stckmkt 100 Track Gwth Acc Inst	97.74	-	0.24	-
Stckmkt 100 Track Gwth Acc Ret	182.90	-	0.40	-
UK Growth Acc Inst	289.50	-	0.50	-
UK Growth Acc Ret	334.60	-	0.60	-
UK Growth Inc Ret	218.20	-	0.40	-
Managed OEIC				
Glob Em Shs Port Acc Ret	186.30	-	-1.60	-
Max 70% Shs Port Acc Ret	272.50	-	-0.80	-
Max 70% Shs Port Acc X	195.70	-	-0.60	-
Max 70% Shs Port Acc S	158.40	-	-0.50	-
Investment Port Acc Ret	251.80	-	-0.10	-
Investment Port Acc X	178.50	-	-0.10	-
Max 50% Shs Port Acc Ret	262.50	-	-0.70	-
Max 50% Shs Port Inc Ret	230.70	-	-0.60	-
Max 50% Shs Port Acc X	190.00	-	-0.50	-
Max 50% Shs Port Acc S	159.20	-	-0.40	-
Max 100% Shs Port Acc Ret	324.50	-	-1.50	-
Max 100% Shs Port Acc X	232.90	-	-1.10	-
Max 100% Shs Port Acc S	170.10	-	-0.80	-
Enhanced Inc Inc Ins	205.10	-	0.40	-
Enhanced Inc Inc Ret	192.60	-	0.40	-
Enhanced Inc Inc X	164.10	-	0.30	-
Enhanced Inc Acc Inst	159.40	-	0.30	-
Managed Investments OEIC				
Max 30% Shs Port Acc Ret	164.50	-	-0.10	-
Max 30% Shs Port Acc X	164.40	-	-0.10	-
Max 30% Shs Port Acc S	158.00	-	-0.10	-
Max 30% Shs Inc Port Inc Ret	159.50	-	0.00	-
Max 30% Shs Inc Port Inc X	159.60	-	0.00	-
Max 30% Shs Inc Port Inc S	153.30	-	0.00	-
Max 60% Shs Port Acc Ret	282.10	-	-0.40	-
Max 60% Shs Port Inc Ret	217.00	-	-0.30	-
Max 60% Shs Port Inc X	168.10	-	-0.20	-
Max 60% Shs Port Inc S	148.70	-	-0.20	-
Managed Investments OEIC 2				
Investments Inc Port Inc Ret	175.90	-	0.00	-
Investments Inc Port Inc X	159.30	-	-0.10	-
£ Gov Bond Inc Inst (gross)	195.00	-	-0.10	-
£ Gov Bond Inc Inst	160.30	-	-0.10	-
£ Gov Bond Acc Inst	163.90	-	-0.10	-
Strat Bond Inc Inst (gross)	182.70	-	0.00	-
Strat Bond Inc Inst	150.30	-	0.00	-
Strat Bond Acc Inst	156.30	-	0.00	3.94
Managed Investments OEIC 3				
Div Inc Port Inc Ret	167.80	-	0.40	-
Corp Bond Acc Inst (gross)	234.30	-	-0.10	-
Corp Bond Inc Inst	151.80	-	-0.10	3.65
Corp Bond Acc Inst	158.30	-	0.00	-
SMI03 Santander Multi Index Fund 1	162.50	-	0.10	-
SMI03 Santander Multi Index Fund 2	162.90	-	0.20	-
SMI03 Santander Multi Index Fund 3	163.00	-	0.30	-
Multi-Manager OEIC				
Bal Intl Track Acc Ret	290.10	-	-1.30	-
Bond Mthly Inc Acc Ret	155.40	-	-0.10	-
Bond Mthly Inc Inc Ret	97.84	-	-0.05	-

Santander Asset Management UK Limited (1200)F (UK)
287 St Vincent Street, Glasgow G2 5NB 0845 605 4400
Authorised Inv Funds
Santander Premium Fund (OEIC)

Fund	Bid	Offer	+/-	Yield
A Shares				
Europe (ex-UK)	297.60	-	0.80	-
Japan Equities	172.60	-	1.40	-
Pacific Bas (ex-Japan)	616.40	-	2.60	-
Sterling Bonds	288.40	-	-0.10	-
UK Equities	270.50	-	0.60	-
US Equities	318.90	-	2.10	-
B Shares				
Pacific Bas (ex-Japan)	615.50	-	2.60	-

Saracen Fund Managers Ltd (1000)F (UK)
19 Rutland Square, Edinburgh EH1 2BB
Dealing: 00 353 1 603 9921
Saracen Investment Funds ICVC (OEIC) Enq. 0131 202 9100
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Saracen Growth Fd Alpha Acc	£ 3.50	-	0.02	-
Saracen Growth Fd Beta Acc	£ 5.61	-	0.03	1.75
Saracen Global Income & Growth Fund A - Acc	£ 1.32	-	0.01	0.69
Saracen Global Income & Growth Fund A - Dist	£ 1.19	-	0.01	5.95
Saracen Global Income and Growth Fund -Acc #	£ 1.64	-	0.01	-
Saracen Global Income and Growth Fund -Dist #	£ 1.40	-	0.01	2.99
Saracen UK Income Fund - Acc	£ 0.92	-	0.01	2.83
Saracen UK Income Fund - Dist	£ 0.87	-	0.01	6.55

For Save & Prosper please see Countrywide Assured

Schroder Property Managers (Jersey) Ltd
Other International Funds

Fund	Bid	Offer	+/-	Yield
Indirect Real Estate SIRE	£ 124.85	136.44	-0.57	3.00

Scottish Friendly Asset Managers Ltd (UK)
Scottish Friendly Hse, 16 Blythswood Sq, Glasgow G2 4HJ 0141 275 5000
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
Managed Growth ♦	244.90	-	-0.40	0.00
UK Growth ♦	263.50	-	-0.60	-

SIA (SIA Funds AG) (CH)
Other International Fds

Fund	Bid	Offer	+/-	Yield
LTIF Stability Growth	SFr 181.80	-	-5.70	-
LTIF Stability Inc Plus	SFr 156.00	-	-4.90	0.56

Smith & Williamson Investment Management (1200)F (UK)
25 Moorgate, London, EC2R 6AY 020 7131 8100
www.sandwfunds.com
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
European Equity Fund A Class	539.50	-	0.00	0.66
Far Eastern Income and Growth Fund A Class	529.60	-	-1.60	1.93
Fixed Interest Fund A Class	127.10xd	-	0.00	-
Global Gold and Resources Fund A Class	307.10	-	-3.40	0.00
MM Endurance Balanced Fund A Class	214.40	-	-1.20	1.38
MM Global Investment Fund A Class	2144.00	-	4.00	1.82
North American Fund A Class	1969.00	-	16.00	0.06
Oriental Growth Fund A Class	191.10	-	1.00	0.29
UK Equity Growth Fund A Class	406.60	-	1.90	-
UK Equity Income Fund A Class	226.50	-	0.10	-

Smith & Williamson Fd Admin Ltd (1200)F (UK)
25 Moorgate, London, EC2R 6AY 0141 222 1150
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
S&W Deucalion Fd (OEIC)	2067.00	-	-12.00	0.24
S & W Magnum	401.70	424.90	-0.40	1.75
S & W Marathon Trust	193.50	204.70	0.20	1.70

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	+/-	Yield
Bridge Fund	£ 1.7287	-	0.0088	2.07
Diversified Assets Fund	£ 1.2183	-	0.0015	3.37
Global Equity Fund	£ 2.0879	-	0.0157	1.42
Global Balanced Fund - Income Units	£ 1.4828	-	0.0069	2.43
Global Balanced Fund - Accumulations Units	£ 1.7658	-	0.0083	2.38
Global Fixed Interest Fund	£ 1.0258	-	0.0000	4.46
Sterling Fixed Interest Fund	£ 0.8985	-	0.0000	3.72
UK Equity Fund	£ 1.9245	-	0.0091	2.96

Stenham Asset Management Inc
www.stenhamassetmanagement.com
Other International Funds

Fund	Bid	Offer	+/-	Yield
Stenham Asia USD	$ 119.94	-	-2.88	0.00
Stenham Credit Opportunities A Class USD	$ 100.36	-	-0.97	0.00
Stenham Equity UCITS USD	$ 138.61	-	-0.06	0.00
Stenham Growth USD	$ 197.69	-	-4.68	-
Stenham Healthcare USD	$ 164.97	-	-3.57	0.00
Stenham Managed Fund USD	$ 106.81	-	-1.81	0.00
Stenham Macro UCITS USD	$ 97.60	-	0.35	0.00
Stenham Multi Strategy USD	$ 107.79	-	-1.69	-
Stenham Quadrant USD A	$ 399.12	-	-0.39	-
Stenham Trading Inc USD	$ 115.57	-	-0.11	-
Stenham Universal USD	$ 406.71	-	-6.46	-
Stenham Universal II USD	$ 150.23	-	-2.45	0.00

Stratton Street Capital (CI) Limited (GSY)
Regulated

Fund	Bid	Offer	+/-	Yield
Japan Synthetic Warrant Yen Class	¥ 942.37	-	-413.68	0.00
Japan Synthetic Warrant GBP Hedged Class	£ 98.05	-	-45.95	0.00
Japan Synthetic Warrant USD Class	$ 16.47	-	1.79	0.00
Japan Synthetic Warrant USD Hedged Class	$ 99.12	-	-45.07	0.00
Renminbi Bond Fund AUD Cls A	A$ 127.32	-	0.10	3.21
Renminbi Bond Fund AUD Cls B	A$ 129.29	-	0.10	3.00
Renminbi Bond Fund CHF Cls A	SFr 121.53	-	0.08	3.34
Renminbi Bond Fund CHF Cls B	SFr 121.35	-	0.07	3.10
Renminbi Bond Fund CNH Cls A	CNH 136.89	-	-0.27	3.09
Renminbi Bond Fund CNH Cls B	CNH 136.63	-	-0.27	2.87
Renminbi Bond Fund Euro Cls B	€ 123.75	-	0.08	3.02
Renminbi Bond Fund GBP Cls B	£ 126.71	-	0.09	3.07
Renminbi Bond Fund SGD Cls B	S$ 126.40	-	0.10	2.99
Renminbi Bond Fund USD Cls B	$ 126.53	-	0.10	2.86
Renminbi Bond Fund YEN Cls B	¥ 14250.53	-	8.21	0.00
Renminbi Bond Fund USD Cls A	$ 174.38	-	0.14	3.10
Renminbi Bond Fund GBP Cls A	£ 168.82	-	0.13	3.31
Renminbi Bond Fund SGD Cls A	S$ 167.36	-	0.14	3.23
Renminbi Bond Fund YEN Cls A	¥ 21091.00	-	13.00	0.00
Renminbi Bond Fund EUR Cls A	€ 113.76	-	0.08	3.26

E.I. Sturdza Strategic Management Limited (GSY)
Regulated

Fund	Bid	Offer	+/-	Yield
Nippon Growth Fund Limited	¥ 79897.00	-	-3075.00	0.00
Strat Evarich Japan Fd Ltd JPY	¥ 64955.00	-	-3097.00	0.00
Strat Evarich Japan Fd Ltd USD	$ 634.03	-	-31.42	0.00

E.I. Sturdza Funds PLC (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Nippon Growth (UCITS Fund Euro Hedged Class EUR)	€ 837.66	-	-26.73	0.00
Nippon Growth (UCITS Fund Euro Hedged Institutional Class EUR)	€ 989.14	-	-31.54	0.00
Nippon Growth (UCITS) Fund JPY Class A shares	¥ 78941.00	-	-2499.00	0.00
Nippon Growth (UCITS) Fund JPY Class B Acc shares	¥ 66228.00	-	-2097.00	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)	¥ 43042.00	-	-1359.00	0.00
Strategic China Panda Fund USD	$ 2147.32	-	17.96	0.00
Strategic China Panda Fund Hedged EURO	€ 2073.50	-	17.13	0.00
Strategic China Panda Fund Hedged Sterling	£ 2106.06	-	17.49	0.00
Strategic Euro Bond Accumulating Class CHF	SFr 990.66	-	-0.70	0.00
Strategic Euro Bond Institutional Class EUR	€ 1025.65	-	-0.48	0.00
Strategic Euro Bond Fund Accumulating Class Shares	€ 1147.77	-	-0.57	0.00
Strategic Euro Bond Fund Distributing Class Shares	€ 1036.48	-	-0.52	0.00
Strategic European Smaller Companies Fund EUR Class	€ 1024.25	-	25.72	0.00
Strategic Global Bond RMB Acc	$ 1083.01	-	-4.20	0.00
Strategic Global Bond USD Acc	$ 1076.20	-	-5.50	0.00
Strategic US Momentum and Value Fund	$ 739.28	-	-1.61	0.00
Strategic US Momentum & Value Fund USD I Class	$ 492.65	-	-1.05	0.00
Strategic US Momentum and Value EUR Hedged Class EUR	€ 512.43	-	-1.16	0.00
Strategic US Momentum and Value CHF Hedged Class CHF	SFr 507.67	-	-1.25	0.00

Taube Hodson Stonex Ptnrs UT (1200)F (UK)
50 Bank Street, Canary Wharf, London E14 5NT
Admin: 50 Bank Street, Canary Wharf, London E14 5NT
Dealing & Enquiries: 0870 870 8433
Authorised Inv Funds
THS Growth & Value Funds

Fund	Bid	Offer	+/-	Yield
International				
IGV - Inc A	341.00	-	4.20	1.77
IGV - Inc B	340.90	-	4.20	1.10
IGV - Acc X	422.80	-	5.20	1.32
IGV - Acc Y	454.90	-	5.60	1.74
IGV - Acc Z	419.00	-	5.20	1.06
European				
EGV - Acc S	285.30	-	2.60	0.00
EGV - Acc Z	285.30	-	2.60	1.45
Continental				
CGV Acc S	119.10	-	1.30	1.56
CGV Acc X	117.40	-	1.30	0.00
CGV Inc A	117.10	-	1.30	1.55
CGV Inc B	117.10	-	1.30	0.00

The Hartford International Funds (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
Gbl Govt Bond (Ex Japan) Index (GBP)	£ 1903.34	-	-5.93	0.00
UK Corporate Bond	£ 1731.59	-	1.42	0.00
Gilt	£ 1763.32	-	-0.19	-
Global Eq (Ex Japan) Index Fund	¥ 1.42	-	0.00	0.00
Global Eq (ex Japan) Class HJ4	¥ 1.48	-	0.00	0.00
Global Eq (ex Japan) Class JP5	¥ 1.35	-	0.01	0.00
Global Eq Ex Japan Index Fund (Hedge)	¥ 1.23	-	0.00	0.00
Gbl Govt Bond (Ex Japan) Index	¥ 1.18	-	0.00	-
Gbl Govt Bond (ex Japan) Class JP4	¥ 1.16	-	0.00	-
Japan Equity Index Fund	¥ 0.89	-	0.00	0.00
Japan Equity Class JP3	¥ 1.08	-	0.01	0.00

Thesis Unit Trust Management Limited (UK)
Exchange Building, St Johns Street, Chichester, West Sussex, PO19 1UP
Authorised Funds

Fund	Bid	Offer	+/-	Yield
TM New Court Fund A 2011 Inc	£ 13.20	-	-0.05	0.00
TM New Court Fund - A 2014 Acc	£ 13.24	-	0.01	0.00
TM New Court Equity Growth Fund - Inc	£ 13.34	-	-0.07	0.00

Toscafund Asset Management LLP (UK)
www.toscafund.com
Authorised Funds

Fund	Bid	Offer	+/-	Yield
Aptus Global Financials B Acc	£ 2.81	-	0.03	5.11
Aptus Global Financials B Inc	£ 2.37	-	0.03	5.34

Toscafund Asset Management LLP
www.toscafund.com
Other International Funds

Fund	Bid	Offer	+/-	Yield
Tosca A USD	$ 241.71	-	-41.64	-
Tosca Mid Cap GBP	£ 257.15	-	-10.41	0.00
Tosca Opportunity B USD	$ 355.38	-	-12.94	0.00
Pegasus Fund Ltd A-1 GBP	£ 58.86	-	0.26	0.00

TreeTop Asset Management S.A. (LUX)
Regulated
TreeTop Convertible Sicav

Fund	Bid	Offer	+/-	Yield
International A	€ 274.40	-	-0.32	0.00
International B	$ 356.05	-	-0.50	0.00
International C	£ 116.83	-	-0.23	3.36
International D	€ 246.79	-	-0.29	3.18
TreeTop Global Sicav				
Global Opp.A	€ 138.13	-	1.22	0.00
Global Opp.B	$ 139.67	-	0.98	0.00
Global Opp.C	£ 193.61	-	1.20	2.78
Sequoia Equity A	€ 136.32	-	0.60	0.00
Sequoia Equity B	$ 142.74	-	0.30	0.00
Sequoia Equity C	£ 177.56	-	0.22	-

Troy Asset Mgt Ltd (UK)
40 Dukes Place, London EC3A 7NH
Order Desk and Enquiries: 0345 608 0950
Authorised Inv Funds
ACD Capita Financial Mgrs
Trojan Investment Funds

Fund	Bid	Offer	+/-	Yield
Spectrum Fund O Acc ♦	187.63	-	-1.04	0.42
Spectrum Fund O Inc ♦	182.03	-	-1.01	0.43
Spectrum Income Fund O Acc	104.26	-	-0.94	2.18
Spectrum Income Fund O Inc	100.68	-	-0.91	2.19
Trojan Ethical Income O Acc	106.99	-	-0.13	-
Trojan Ethical Income O Inc	105.48	-	-0.12	-
Trojan Fund O Acc ♦	292.53	-	0.09	0.41
Trojan Fund O Inc ♦	241.66	-	0.07	0.41
Trojan Global Equity O Acc	259.26	-	0.46	0.90
Trojan Global Equity O Inc	218.81	-	0.38	0.90
Trojan Income O Acc ♦	301.22	-	-0.39	3.59
Trojan Income O Inc ♦	183.74	-	-0.23	3.70

UBS Asset Management (UK)
21 Lombard Street, London, EC3V 9AH
Client Services 0800 358 3012, Client Dealing 0800 587 2112
www.ubs.com/retailfunds
Authorised Inv Funds
OEIC

Fund	Bid	Offer	+/-	Yield
UBS Global Emerging Markets Equity C Acc	£ 0.58	-	0.01	1.39
UBS Global Optimal C Acc	£ 0.77	-	0.01	1.04
UBS UK Opportunities C Acc	£ 0.67	-	0.00	3.26
UBS US Equity C Acc	£ 0.94	-	0.01	0.47
UBS S&P 500 Index C Acc	£ 0.65	-	0.00	1.58
UBS Targeted Return C Acc	£ 12.10	-	0.00	1.71
UBS Sterling Corporate Bond Indexed C Acc	£ 0.61	-	0.00	2.93
UBS Multi Asset Income C Inc Net	£ 0.50	-	0.00	3.10
UBS UK Equity Income C Inc Net	£ 0.58	-	0.01	4.43
UBS Corporate Bond UK Plus C Inc Net	£ 0.54	-	0.00	3.75
UBS Global Allocation (UK) C Acc	£ 0.68	-	0.01	2.24
UBS Global Enhanced Equity Income C Inc	£ 0.45	-	0.00	10.75
UBS US Growth C Acc	£ 0.97	-	0.00	-
UBS Emerging Markets Equity Income C Inc	£ 0.44	-	0.01	4.89
UBS FTSE RAFI Developed 1000 Index Fund	£ 113.75	-	-0.25	1.65
UBS MSCI World Minimum Volatility Index Fund	£ 135.44	-	-1.00	1.50

Unicapital Investments (LUX)
Regulated

Fund	Bid	Offer	+/-	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	-

Unicorn Asset Management Ltd (UK)
PO Box 10602, Chelmsford, Essex, CM1 9PD 0845 026 4287
Authorised Inv Funds

Fund	Bid	Offer	+/-	Yield
UK Growth A Inc	418.06	-	0.95	0.00
Mastertrust A Inc ✠ F	391.27	-	0.26	0.07
UK Growth B Inc	421.39	-	0.95	0.56
Mastertrust B Inc ✠ F	352.30	-	0.24	0.83
Outstanding British Cos A Acc ✠ F	268.28	-	0.66	-
Outstanding British Cos B Acc ✠ F	281.66	-	0.70	-
UK Smaller Cos A Inc ✠ F	420.20	-	1.37	-
UK Smaller Cos B Inc ✠ F	412.85	-	1.35	1.28
UK Income A Acc ✠ F	249.73	-	0.47	4.72
UK Income A Inc ✠ F	216.49	-	0.41	4.86
UK Income B Acc ✠ F	266.56	-	0.51	4.71
UK Income B Inc ✠ F	231.18	-	0.44	4.84

Value Partners Hong Kong Limited (IRL)
www.valuepartners.net, fis@vp.com.hk
Regulated

Fund	Bid	Offer	+/-	Yield
Value Partners Asia Dividend Stocks Fund	$ 9.00	-	0.04	0.00
Value Partners Classic Equity Fund USD Z Unhedged	$ 11.01	-	0.03	0.00
Value Partners Classic Equity Fund CHF Hedged	SFr 11.35	-	0.03	0.00
Value Partners Classic Equity Fund EUR Hedged	€ 11.51	-	0.03	0.00
Value Partners Classic Equity Fund GBP Hedged	£ 11.82	-	0.03	0.00
Value Partners Classic Equity Fund GBP Unhedged	£ 13.72	-	-0.14	0.00
Value Partners Classic Equity USD Hedged	$ 13.50	-	0.04	0.00
Value Partners Greater China Equity Fund	$ 8.40	-	0.01	0.00
Value Partners Health Care Fund RMB Class Z Unhedged	CNH 10.10	-	-0.07	0.00
Value Partners Health Care Fund HKD Class A Unhedged	HK$ 9.37	-	-0.03	0.00
Value Partners Health Care Fund USD Class A Unhedged	$ 9.40	-	-0.02	0.00

Waverton Investment Funds Plc (1600)F (IRL)
waverton.investments@citi.com
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Waverton Asia Pacific A USD	$ 18.79	-	0.04	5.45
Waverton Global Equity Fund A GBP	£ 16.00	-	0.07	0.45
Waverton Global Strategic Bond Fund A USD	$ 8.53	-	0.01	5.06
Waverton UK Fund A GBP	£ 13.48	-	0.04	1.70
Waverton Equity Fund A GBP	£ 15.81	-	-0.06	0.33
Waverton Sterling Bond Fund A GBP	£ 9.59	-	0.03	5.06

WA Fixed Income Fund Plc (IRL)
Regulated

Fund	Bid	Offer	+/-	Yield
European Multi-Sector	€ 122.38	-	0.03	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	+/-	Yield
Private Sector Bonds and Bills Fund	TRY 0.014690	-	0.000010	-
Eurobond (Dollar) Bonds and Bills Fund	TRY 0.081380	-	-0.000030	-
Fourth Variable Fund	TRY 0.011590	-	-0.000010	-
Koc Affiliate and Eq. Fund (Eq. Intense Fund)	TRY 0.760400	-	-0.007500	-
Istanbul Hedge Fund	TRY 0.021280	-	-	-

Yuki International Limited (IRL)
Tel +44-20-7269-0207 www.yukifunds.com
Regulated
Yuki Mizuho Umbrella Fund

Fund	Bid	Offer	+/-	Yield
Yuki Mizuho Japan Dynamic Growth	¥ 6901.00	-	3.00	0.00
Yuki Japan Low Price	¥ 25476.00	-	-147.00	0.00
Yuki Japan Value Select	¥ 12900.00	-	-83.00	-
YMR Umbrella Fund				
YMR N Growth	¥ 10931.83	-	-2753.17	-
Yuki Asia Umbrella Fund				
Yuki Japan Rebounding Growth Fund JPY Class	¥ 22489.00	-	-125.00	0.00
Yuki Japan Rebounding Growth Fund USD Hedged Class	$ 867.05	-	-4.82	-

Zadig Gestion (Memnon Fund) (LUX)
FCA Recognised

Fund	Bid	Offer	+/-	Yield
Memnon European Fund I GBP	£ 127.92	-	-0.76	0.00

Money Market Trusts and Bank Accounts

	Gross	Net	Gross AER	Int Cr
CCLA Investment Management Ltd				
Senator House 85 Queen Victoria Street, London EC4V 4ET				
CBF Church of England Deposit Fund	0.50	-	0.50	Qtr
CCLA Fund Managers Ltd				
Senator House 85 Queen Victoria Street, London EC4V 4ET				
COIF Charities Deposit Fund	0.45	-	0.45	Qtr

Data Provided by

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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.

Commodities

Refined products glut pushes crude back into bear territory

After almost doubling since January, oil prices have fallen by a fifth in a matter of weeks, **writes Saad Rahim of Trafigura.**

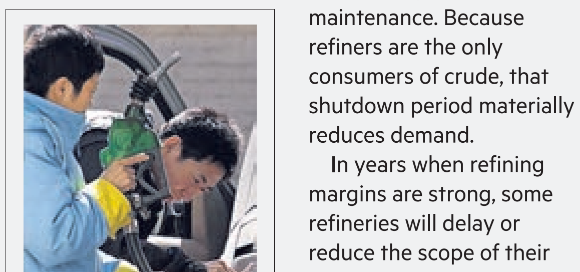
The sharp drop comes in spite of record demand and supply declines in Nigeria, Venezuela and the US.

So why is oil back in a bear market? Last year's sell-off was the result of an excess of crude supply; this year the issue has been an excess of refined product, which the world has been unable to absorb.

Outsiders would be forgiven for thinking that the oil market is just about crude. In reality it is a complex balancing act between crude and the various products produced by refineries. These include petrol, diesel, naphtha, jet fuel and fuel oil.

Knowing how much of each product to make, and when, is a challenge for refiners, and this year has proved more challenging than most.

In 2008 record petrol prices forced many Americans to trade in their gas-guzzling sports utility vehicles. In the years that followed, industry analysts described the pre-financial crisis years as the era of "peak demand", suggesting that high oil prices, rising efficiency requirements and changes in consumer behaviour would lead to lower consumption.



As petrol demand has grown in China, refineries have exported unwanted diesel, produced as a byproduct — making the global oversupply worse

Fast-forward to 2016, and petrol demand in the US has never been higher. SUVs and light trucks have gone from making up half of vehicle sales in 2013 to almost 60 per cent, and overall vehicle sales have increased markedly.

This shift matters to oil markets. Almost one out of every nine barrels of oil produced in the world is consumed in the tank of an American driver, so larger cars mean higher demand. China and India have also seen strong demand growth, driven by markedly higher vehicle sales, particularly SUVs and two-wheelers.

Refiners produced as much petrol as possible to meet the wave of demand. Lower crude prices — and therefore better margins — provided further encouragement.

But record demand has been met with record supply and inventories. Summer is normally peak driving season in the US, which means that petrol inventories should be declining; instead they have barely budged, and in some weeks they have increased.

Diesel margins have not been strong enough to support a shift in the output mix, as weak industrial demand and seasonality issues have hit demand. However, to produce petrol, refiners also have to produce significant amounts of diesel, leading to rising inventories.

China has been an example of the "diesel as byproduct" phenomenon. Rapidly rising petrol consumption has forced companies to export excess diesel as local demand has been unable to keep up.

Adding to the downward pressure on crude prices is the fact that we are heading into the time of year when refineries traditionally close for maintenance. Because refiners are the only consumers of crude, that shutdown period materially reduces demand.

In years when refining margins are strong, some refineries will delay or reduce the scope of their maintenance. This year, by contrast, the maintenance programme is expected is expected to be extensive.

Margins are falling to the point where some refineries are considering curtailing production runs above and beyond what will be taken out during maintenance. Given the amounts building up globally, this seems like the next logical step, but it seems no one wants to be the first to move.

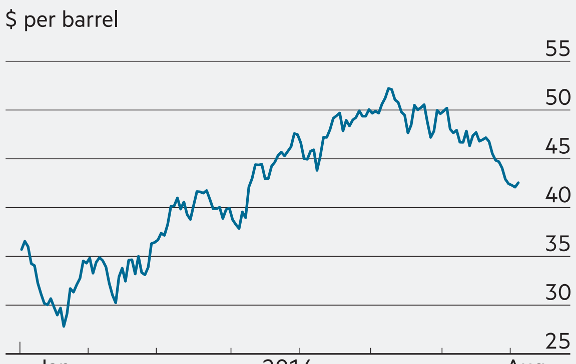
Products continue to build up, with onshore storage reaching capacity in many locations, and companies looking to floating storage to handle the excess.

So it is that while a stronger US dollar, a soft macroeconomic environment and robust supplies from the Opec group of producer countries have all contributed to the slide in crude prices, the real story is one of a glut of refined products.

An increase in demand is therefore needed to support any rebound in crude prices.

Saad Rahim is group economist and head of analysis at Trafigura, one of the world's biggest commodity traders

Brent crude
$ per barrel



Source: Thomson Reuters Datastream

Oil recovery pushes up assets to $235bn

Fresh investment and rising prices drive fund inflows in first half of year

NEIL HUME AND HENRY SANDERSON

Investors have pumped more than $50bn into commodities this year, chasing a recovery in oil prices while falling interest rates have increased the attraction of haven assets such as gold.

The inflows mark the best start to a year since 2009, when commodity assets were at the start of a three-year boom, according to figures compiled by Barclays.

The new money combined with rising prices, have pushed total commodity assets under management to $235bn, up from a low of $161bn reached at the end of 2015.

While that appears to be a vote of confidence in commodities, most of the gains have been driven by investors looking for exposure to oil and gold.

Oil prices have rallied sharply from January lows as the market has started to slowly rebalance, while gold has shone in the wake of shocks such as the Brexit vote and uncertainty about the outcome of the US presidential election.

"Much of the investor demand this year has been tactical and, unless the asset class continues to generate strong returns in the second half then outflows could resume," said Barclays analyst Kevin Norrish.

"Our price forecasts for key commodities like copper and oil suggest a flat to negative second half of the year, which is likely to encourage some net liquidation."

Commodities were the best-performing major asset class in the first half of the year, outpacing global bonds and equities. Total returns from the Bloomberg Commodity Index were over 14 per cent in the six months to June.

The index pushed higher thanks to strong gains for key components such as oil, which almost doubled from its January lows, soybeans, zinc, oil and gold.

Since the start of July, the BCI has fallen 6.5 per cent, mainly because of decline in oil prices. Brent, the international crude marker, has fallen 16 per cent from its recent high to about $44 a barrel with sentiment suffering from a persistent glut of refined products such as gasoline and diesel.

Barclays estimates that precious metals — mainly gold — have captured about 60 per cent of all commodity inflows this year and reckons 2016 could be the best year on record for gold-backed exchange traded funds.

$50bn
Amount that investors have poured into commodities this year

14%
Total returns from the Bloomberg Commodity Index in first half, outpacing global bonds

Traders say gold's 28 per cent price rise this year to $1,363 an ounce has largely been driven by investors ploughing money into ETFs, with holdings of the metal up 16 per cent in 2016, at a three-year high of 56.8m ounces.

Oil-backed ETF's had also proved popular with investors until the recent reversal in prices that tipped Brent and West Texas Intermediate briefly into bear market territory.

In contrast commodity index swaps, which reflect longer-term asset allocation to commodities by large institutional investors such as pension funds, saw net outflows of $2bn in June and July, according to Barclays.

"We would not be surprised to see some paring back of the net inflow figure of $50.8bn in the year to date, though not enough to turn it negative for a year as a whole," said Mr Norrish.

Analysis. Currencies

Hack exposes vulnerability of bitcoin economy

Bitfinex attack shows that the digital currency has not transcended the need for trust

IZABELLA KAMINSKA

What happened?

The Bitfinex exchange in Hong Kong was hacked this week in a security breach that drained 119,756 bitcoins from customer accounts — 0.8 per cent of all those in circulation, and a significant proportion of the exchange's assets. Trading and accounts in the exchange remain suspended.

Bitcoin had fallen sharply in the days before Tuesday's incident — from $650 to about $600 — prompting suspicions that knowledge of a forthcoming attack might have been leaked.

After Bitfinex confirmed the hack, bitcoin prices fell a further 20 per cent.

Wasn't bitcoin supposed to be unhackable?

The bitcoin blockchain has proved extremely robust when it comes to preventing double spending attacks or the forging of coins.

Unfortunately the same cannot be said of the wider bitcoin economy, where hacking is commonplace. This is the second time Bitfinex has been hacked in less than two years. The previous incident, in May 2015, involved the loss of 1,500 coins.

Online lists curated by community members suggest that as many as 60 high-profile hacking incidents have hit bitcoin exchanges since the asset class was created in 2009. The true scale of the problem, however, is difficult to estimate.

Many exchanges do not publicise hacks for fear of losing business or for reputational reasons. They do so only if the attacks are too obvious to conceal from the public.

For the same reason they resist public audit or the sharing of information about the size and scope of their reserves, ensuring that no one can be sure if losses are caused by hacks or poor internal risk mismanagement.

Why is the system insecure?

Bitcoin balances are only as safe as the keys that control them. These supposedly private keys take the shape of complicated strings of numbers, and so can be forgotten or lost if not stored securely.

For convenience many bitcoin users store their keys on easily accessible computer hard drives or internet-connected devices.

Security experts the use of cold storage — putting keys on offline hard drives or on paper, especially if these are stored in safety deposit boxes or vaults.

But while cold storage defends against hacking, it also makes bitcoin more cumbersome to use and limits its commercial and retail appeal.

Accessibility trade-off: many less technically minded retail users put security at risk by relying on third-party agents to manage their accounts — Philippe Lopez /AFP/Getty Images

How come retail customers say bitcoin is easy to use?

In a bid to make bitcoin more accessible to less technically minded users, many third-party businesses — including exchanges — offer services that manage keys on users' behalf.

In such arrangements, clients are provided with accounts that track their balances but the underlying bitcoins are managed by third parties. In effect customers of these services do not hold bitcoins directly but rather the liabilities of the third-party agents.

Isn't that ironic for a system that is supposed to be 'trustless'?

There does appear to be a trade-off between accessibility and security in bitcoin.

By trusting third parties a user can benefit from their greater expertise in keeping keys safe. If and when passwords are lost, for example, they can be reset by the corporations.

At the same time, having to trust third parties also defeats the point of using a currency that was supposed to solve the trust problem.

Furthermore, given that the asset class is still cutting its teeth with respect to legal precedent, the obligations and liabilities of these corporations towards their users in the event of lost funds are still unclear.

Many third parties pool customer funds in cold storage to reduce the risk, though this structure once again hinders user accessibility.

To manage daily liquidity needs, exchanges often keep some portion of reserves in online liquid reserves known as "hot wallets". But while this can improve accessibility, it also heightens hacking risk.

The distinction between balances that are kept readily available, at greater risk, and those requiring redemption warnings in cold storage is not dissimilar to the distinction between traditional current accounts and savings accounts.

Was it a 'hot wallet' that was attacked?

No. Bitfinex abandoned the cold and hot wallet set-up in 2015 after the first hack, and switched to something known as a multi-signature system.

In the new set-up — which is akin to a conventional segregated account system — clients retain control of their keys and thus can track funds at all times by cross-checking balances against the public ledger.

Multi-signature accounts have been growing in popularity since the sector's most high-profile security breach when Japan-based Mt Gox collapsed in February 2014 after client funds were mismanaged.

Bitcoin price
$ per bitcoin

Recent prominent thefts from bitcoin exchanges

Jan 2015	Bitstamp	20,000 bitcoins worth $5m
Mar 2015	Coinapult	150 worth $43,000
May 2015	Bitfinex	1,500 worth $3.9m
Jun 2015	Scrypt.CC	undisclosed sum stolen
Aug 2016	Bitfinex	119,756 worth $70m

Sources: Bitstamp; FT Research

How does the new system work?

In a multi-signature system at least two out of three parties must sign off on any transfer, decreasing need for trust in a single institution.

Keys are usually split between the user, the exchange and a neutral third party — in this case a specialist co-signer called BitGo.

The system is supposed to ensure that clients control funds, without reducing accessibility, because no one can transfer funds without one other sign-off.

However, in June the Commodity Futures Trading Commission fined Bitfinex $75,000 for inadequate account segregation. The US regulator claimed that in many circumstances the exchange had retained private keys, compromising customer control. An example of when Bitfinex might have done this is in margin-trading services — where customers allow an exchange to lend balances to short traders.

As yet it is unclear how the hacker compromised the multi-signature system, though some in the community suggest that the co-signing process may have been overly dependent on automated sign-offs on transactions below a certain value threshold.

Some experts say Bitfinex's overall customer liability is likely to have been reduced because the funds were technically segregated.

Commodities

Corn and wheat lead July's fallers as food prices drop for the first time in 6 months

EMIKO TERAZONO

Food prices fell for the first time in six months during July after a sharp decline in grain markets outweighed firmer dairy and meat prices.

The UN Food and Agricultural Organisation's food index slipped 0.8 per cent from the previous month on weak corn and wheat prices.

Bumper crops and weak demand have been depressing food prices for the past few years, with the index hitting a seven-year low at the start of 2016.

However, prices started to rebound in the first half of this year on rising grains and sugar markets, supported by adverse weather in South America and a weakening dollar.

Prices coming off levels below the cost of production have been positive for farmers, although agricultural markets remain at low levels.

Abdolreza Abbassian, senior grains economist at the FAO, said: "The market remains subdued on the back of good supply prospects and continued upgrading of this year's harvests."

Cereal prices recorded the largest monthly fall, with the July cereal index down 5.6 per cent from June and 11 per cent from the same time last year.

Prices were depressed by lower corn prices in the face of favourable weather conditions in important US growing areas, and plentiful wheat supplies, particularly from the Black Sea region.

Rice, however, firmed, helped by the dwindling availability of basmati and long-grain varieties. "We are looking at nearby short supplies of high-quality rice," said Mr Abbassian.

A slide in palm oil weighed on vegetable oil prices, which fell 2.8 per cent.

The declines for grains and vegetable oils masked rises in dairy and meat prices. The FAO dairy index climbed 3.2 per cent, pushed up by a 14 per cent rise in EU butter prices, on the back of slowing milk production in the region.

The EU has been looking to reduce milk output. Last month the commissioner for agriculture and rural development announced a package of farmer support measures, including incentives to cut milk output.

Meat prices rose 1.3 per cent in the face of solid demand, as purchases by China recovered and imports by Asian countries remained steady. A shortage of pigs for slaughter in the EU supported pork prices, while mutton and lamb were also firm.

The sugar market was helped by the strengthening of the Brazilian real, which slowed the flow of exports from the world's largest producer.

The FAO sugar index ticked up 1 per cent as Brazilian millers favoured turning their cane into ethanol for the domestic market over producing sugar for exports.

MARKETS & INVESTING

TRADING POST

Michael Hunter

"Black gold" is more than just another name for oil — the phrase can also be a reminder of the relationship between the prices of both commodities.

Their mutual denomination in the US dollar tends to set that trend, with both prices moving in the opposite direction to that of the currency. But as the forces behind global markets have become more nuanced — with economic growth faltering while uncertainty stokes demand for haven assets at a time when sovereign debt yields are at record lows — the oil and gold price correlation is faltering, according to analysis from UBS.

"The recent weakness in oil prices, in spite of peak summer driving season, somewhat that reflects concerns about the health of the global economy.

"Weaker oil prices have weighed on credit markets in the US. This scenario, which highlights the persistence of macro risks, has likely also reinforced gold's appeal," says Joni Teves, a UBS strategist.

"We think this has been triggered by the depressed yield environment and the expectations that this is likely to remain in place for some time."

But investors seeking to spot the point at which the gold/oil correlation will become re-established should be careful.

UBS concludes that the relationship between the two will "remain complicated", normalising only when "the benefit to consumers from cheaper oil prices becomes greater than the negative impact on the energy sector and the risks it creates in credit markets".

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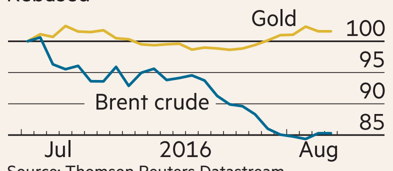
Gold and oil prices
Rebased



Source: Thomson Reuters Datastream

Global overview

Carney's easing sparks 'knee-jerk drop in sterling' and bond yields

Stocks and EM currencies edge higher after BoE delivers a 'central bank-induced bounty' of stimulus measures

DAVE SHELLOCK

Jung Yeon-Je/AFP/Getty

Microsoft sells $20bn of bonds: FT.com/video
The FT's Eric Platt explains why Microsoft is joining Apple, Verizon and other top-tier issuers in raising large sums

The Bank of England's response to the Brexit vote was the main focus for the markets as its comprehensive package of economic stimulus measures drove UK government bond prices sharply higher and pushed sterling to the bottom of its recent trading ranges.

European equities gained ground across the board but their US counterparts had a more cautious session ahead of the release today of the July non-farm payrolls report. Volatile trading in oil markets added to the uncertain mood.

In a bid to mitigate the risks posed by the UK's vote to quit the EU, the UK Monetary Policy Committee cut interest rates by 25 basis points to 0.25 per cent — and made clear that a further reduction towards zero by the end of the year was likely — as it warned that the economic outlook had "weakened markedly".

It also launched a new £70bn bond-buying programme, which will include both government and corporate debt, and introduced a "term funding scheme" for banks to provide up to £100bn from central reserves.

The response from the markets was both swift and sharp. The yield on the benchmark 10-year gilt, which moves inversely to its price, touched a record low of 0.639 per cent before edging back up to close at 0.65 per cent, down 15bp on the day. The two-year yield fell 8bp to 0.12 per cent.

Sterling, meanwhile, was down 1.4 per cent against the dollar at $1.3136 and 1.3 per cent versus the euro at €1.1798. Since falling from about $1.50 on the day of the vote, the pound has broadly held within a range of $1.30-to $1.33.

"This package of rate cuts, asset purchases, and forward guidance represents a more assertive response to Brexit than the FX market was anticipating and the subsequent knee-jerk drop in sterling looks both appropriate and proportionate," said Paul Meggyesi, FX strategist at JPMorgan.

But Esther Reichelt, currency analyst at Commerzbank, said there was no reason to expect increased downward pressure on sterling because of possible further easing measures from the BoE.

"On the contrary, the BoE is now much closer to its lower interest rate threshold — in particular as governor Mark Carney has rejected negative interest rates quite clearly — and experience from Japan and the eurozone illustrates that the quantitative easing tool also wears off sooner or later."

Alan Ruskin, strategist at Deutsche Bank, highlighted that the BoE's latest asset purchase programme, extended at an annualised pace, worked out to about 7 per cent of UK GDP.

"This compares with about 16 per cent of GDP from the Bank of Japan, and some 9 per cent of GDP from the ECB [European Central Bank]," he said. "The BoE scheme is sizeable but not particularly so, relative to the BoJ and ECB that have had the 'advantage' of being progressively scaled up over time.

"Nonetheless, this all fits with enormous global central bank balance sheet expansion. For now, risky assets will gratefully receive this 'central bank-induced bounty', as QE trumps early-year fears of quantitative tightening, but again diminishing returns to these actions will quickly apply."

And there was indeed a firmer tone to risker assets such as **equities** and emerging market currencies.

In the UK, a 1.6 per cent rise for the FTSE 100 share index was no doubt further bolstered by sterling's retreat, although the more UK-centric FTSE Mid 250 index rose 1.5 per cent.

The pan-European Stoxx 600 index rose 0.7 per cent, although on Wall Street the S&P 500 was up a more muted 0.1 per cent at 2,166.

The MSCI **Emerging Markets** equity index was up 0.8 per cent following a two-day fall of 1.6 per cent — further helped by fresh gains for **oil** prices.

Brent crude recovered from an early bout of weakness to stand 2.1 per cent higher at 43.99 a barrel, while US West Texas Intermediate was up 2.3 per cent at $41.76 — having dipped below $40 earlier this week for the first time since April.

Meanwhile, EM **currencies** were broadly higher, with the dollar down 1 per cent versus the Brazilian real and 1.6 per cent against the South African rand — the latter further helped by encouraging local election results.

The dollar remained within sight of a recent three-week low against the yen as it dipped 0.2 per cent to ¥101.04, while the euro was 0.1 per cent softer against the US unit at $1.1132.

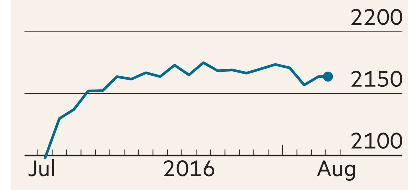
US and German **government bonds** took their cue from the big rise in UK gilt prices.

The yield on the 10-year Treasury was down 5bp at 1.49 per cent, while that on the 10-year Bund fell 6bp to minus 0.09 per cent.

Gold was up $5 at $1,363 an ounce.

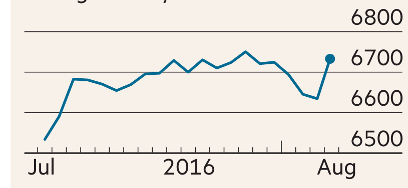
Markets update

S&P 500 index
Change on day ▲ 0.18%



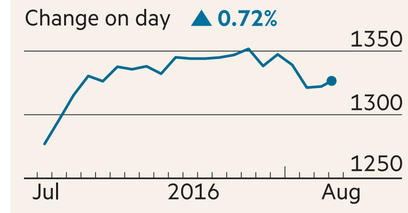
US equities Wall Street continued to struggle in the wake of the S&P 500's recent rise to record highs, as caution set in ahead of today's closely watched non-farm payrolls report

FTSE 100 index
Change on day ▲ 1.59%



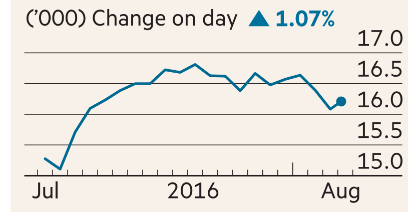
UK equities The FTSE 100 bounced off an early three-week intraday low although Hikma sank 16.8 per cent after the pharmaceutical group warned on profits from its generics unit

Eurofirst 300 index
Change on day ▲ 0.72%

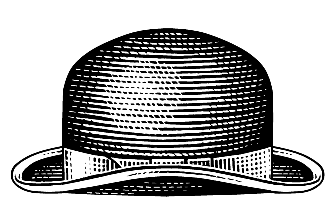


European equities Gains for industrial and financial stocks helped lift the region's markets as sentiment got a boost from the Bank of England's package of policy easing measures

Nikkei 225 index
('000) Change on day ▲ 1.07%



Japanese equities The Nikkei finished higher for the first time in three days after a choppy session, as participants keenly awaited today's US jobs report



London

HSBC climbs on speculation of $20bn investor bonanza

Bryce Elder

HSBC hit a six-month high yesterday on speculation that its new policy of returning capital could see as much as $20bn given back to shareholders.

HSBC this week surprised investors with its first ever share buyback, outlining a $2.5bn return funded by the sale of its Brazilian unit. Another $2bn return should follow next year, said Merrill Lynch, as cash from HSBC's disposals of US businesses in 2012 and 2013 has only recently been freed from regulatory constraints.

The bigger payout could come if HSBC's policy shift leads it to sell its minority stake in Bank of Communications (BoComm), the number-five Chinese bank, which it acquired more than a decade ago.

Investing in BoComm gave HSBC a foothold in mainland China but its capital consumption has been a material drag on returns, said Merrill. And with BoComm likely to drop out of HSBC's profit-and-loss statement this year, a sale could fund $15bn of cash returns with no loss of earnings, it said.

"Capital freed up from (already completed and potential) disposals are set to carry it through to the point US dollar rates finally start to normalise, even if that is into 2018," said Merrill. The US bank set a 570p target on HSBC, which closed 2.6 per cent higher at 517.3p.

The wider market rallied for the first day in four as the Bank of England cut interest rates and a stimulus package dragged on sterling.

The FTSE 100 rose 1.6 per cent, up 105.76 points at 6,740.16, largely led by blue-chip risers. such as insurer **Aviva** after interim results showed a return to inflows and a stronger solvency ratio.

Aviva, up 6.7 per cent to 410.8p, is "very well placed" to benefit from the BoE rate cut as its solvency is the least sensitive among peers to interest rates and 42 per cent of its earnings arrive in currencies other than sterling, said JPMorgan Cazenove.

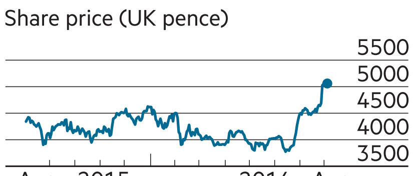
AstraZeneca hit a record high, up 2.7 per cent to £51.53. Shares have risen since Citi last month argued that Novartis should be looking for acquisitions and that AstraZeneca is its most attractive target.

A profit warning sent **Hikma Pharmaceuticals** tumbling 16.8 per cent to £22.20, with the drugmaker cutting profit margin guidance for its US generics business to reflect approval delays and litigation costs.

Serco, the outsourcing group, jumped 10.5 per cent to 131.2p after raising earnings guidance for the third time in three months.

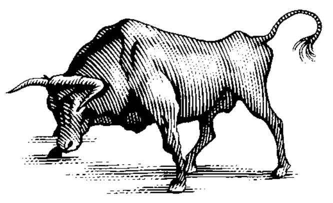
Troubled satellite operator **Avanti Communications** rose 44.4 per cent to 35.5p on word that Inmarsat had made two indicative takeover offers, the latter said to be at a substantial premium, before dropping its interest earlier this week.

AstraZeneca
Share price (UK pence)



Source: Thomson Reuters Datastream

Indices	Close	Day's change
FTSE 100	6740.16	105.76
FTSE 250	17244.32	247.19
FTSE 350	3717.00	57.50
FTSE All-Share	3659.12	55.16
FTSE All-Share Yield	3.54	-
FTSE 100 Futures	6689.50	106.50
10 yr Gilt Yield	0.75	-0.17
20yr Gilt All-Share Ratio	0.45	-



Wall Street

MetLife leads insurance sell-off as global interest rate fears gain traction

Pan Kwan Yuk

Financial stocks were on the defensive yesterday after the Bank of England became the latest major central bank to unveil aggressive stimulus measures aimed at shoring up the economy.

Overall, financial stocks were the biggest losers on the S&P 500 as lenders, insurers and asset managers are increasingly challenged by rock bottom interest rates.

The dilemma facing the sector was underscored by **MetLife**. The US's largest life insurer saw its shares tumble more than 9 per cent to $39.35 after it was forced to announce $1bn — or 11 per cent — in cuts to costs as low rates continued to squeeze earnings.

News of the cost cutting came just a day after the company delivered a 90 per cent drop in second-quarter profit and weighed on the shares of rival insurers. **Prudential Financial** fell 4.3 per cent to $72.91, Canada-based, US-listed **Manulife Financial** dropped 5 per cent to $13.90 and **American International Group** retreated 0.4 per cent to $57.84.

Big banks also sold off, continuing their dreadful run this year. **Morgan Stanley** fell 1.3 per cent to $28.07, **JPMorgan Chase** dropped 0.4 per cent to $64.41 and **Goldman Sachs** declined 0.5 per cent to $157.50.

Financials dropped 0.4 per cent as the broader S&P 500 edged up 0.1 per cent at 2,166 by midday in New York. The Dow Jones Industrial Average was flat, with the Nasdaq Composite 0.2 per cent firmer.

Elsewhere, **SeaWorld Entertainment** slumped more than 15 per cent to a record low of $12.58 after the theme park operator slashed earnings guidance for the year after a sharp drop in attendance in the second quarter.

The company, which has been struggling to turn round its performance in the wake of the negative publicity generated by the 2013 documentary *Blackfish*, blamed weakness in its key Florida market for the revisions.

Investors took a dim view on the latest writedown announced by **Chesapeake Energy**. Shares in the US natural gas producer fell 3.2 per cent to $5.12 after the company reported a bigger than expected loss for the second quarter and wrote down the value of its oil and gas fields by another $1.04bn.

The Oklahoma City-based company has already taken an $18.2bn impairment charge last year on its assets amid the protracted slump in energy prices.

Ford Motor was down 0.5 per cent after it announced a recall of 830,000 vehicles, at a cost of about $270m, as a result of a door latching issue that poses risk of injury.

Among the gainers, **Kellogg**, the world's largest cereal company, rose 1.9 per cent to $82.59 after raising its full-year guidance.

Markets & Investing
FINANCIAL TIMES

INSIGHT

Dan McCrum

Fire up the printing presses for a useful jolt to the economy

Among Ronald Reagan's many laurels as a president, one achievement as a candidate is perhaps overlooked: he popularised the idea that, in the hands of a central bank, a printing press can be dangerous.

Running against incumbent Jimmy Carter, he told a meeting of the International Business Council: "We must first recognise that the problem with the US economy is swollen, inefficient government, needless regulation, too much taxation, too much printing-press money."

The message was designed to highlight the effect on American families of what he dubbed "Carter's inflation". It may be that Mr Reagan is better remembered for a claimed dislike of taxes and spending thanks to the Federal Reserve's eventual success in taming consumer price rises, under a chairman appointed by his predecessor.

Still, with few references in newsprint archives before 1980, Mr Reagan's warning was a succinct metaphor for a school of economics obsessed with the changes to the amount of money in the system, less than a decade after the US abandoned the gold standard.

It has lived on in the background hum of anxiety about power wielded by policymakers. In the past decade a whirring of printing machines is shorthand for the innovations of monetary policy, buying government debt and other securities in programmes of so-called quantitative easing.

Yet a good slogan can always be repurposed. The shift has been slow, but appreciable, as official bond buying in the US, Europe and Japan has failed to return inflation to targeted levels, much less spark destabilising price rises.

> Official bond buying has failed to return inflation to targeted levels

Large holdings of sovereign debt within central banks has prompted consideration of the nature of money, and what it means for the part of government that provides goods and services to owe money to the part of government that oversees the financial and monetary system.

For instance, four years ago M&G bond investor Jim Leaviss asked who would be unhappy if the Bank of England simply cancelled the £350bn of gilts it had acquired. Had it done so, it would have cut national debt as a proportion of economic output from 63 per cent to 41 per cent, and the UK's annual interest bill from £50bn to £32bn.

More recently attention has returned to the experience of Japan in the 1930s, whose economy rebounded while much of the world was caught in the mire of the Great Depression. Helped by the boost to trade from a collapse in the value of the yen after abandoning the gold standard, veteran finance minister Korekiyo Takahashi also told the Bank of Japan to underwrite sales of public debt in order to help fund a dramatic expansion of government spending.

Japan did end up with an inflation problem, among other results of a rapid militarisation, but there is debate about whether the monetary consequences might have been avoided were Mr Takahashi not assassinated in 1936 after he tried to slow spending.

A country not in thrall to its army, with respected monetary institutions, should be able to turn the printing machines off. Note too the question is no longer academic with the BoJ set to buy up the entire stock of debt early next decade, if open-ended bond buying continues.

Employed in much of the discussion though is a different metaphor, of money dropped from helicopters. Putting aside technical distinctions of the various approaches to airborne scattering, it might be better to embrace the idea of the printing press. Even if not yet rehabilitated as a concept, fear of machines spinning out notes — or computers magicking money into accounts — could be put to good use due to the way it tends to cause spluttering about hyperinflation in the Weimar Republic and Zimbabwe.

The reason is that to shift expectations about inflation, and change the behaviour of consumers and businesses, the threat from rising prices and policymaker actions must be credible. Quantitative easing has been successful in preventing deflation, but market interest rates have already collapsed, and the policy is now ordinary. Stasis and conservatism are becoming default assumptions.

Turning on the presses, however, could be a useful jolt. To paraphrase a more famous saying of The Gipper: I'm from the central bank, and I'm here to help.

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Analysis. Monetary policy

BoE stimulus triggers swift reaction

Gilts fall to record low and pound drops as central bank uses 'all tools thought possible'

ELAINE MOORE AND DAN MCCRUM

Yesterday, the Bank of England surprised investors — by meeting every possible expectation.

Policymakers announced a broad package of monetary stimulus that encompassed every option market participants had considered — including a rate cut, quantitative easing, and corporate bond buying designed to encourage lending by lowering borrowing costs for banks and companies.

Reaction was swift. Gilt yields fell to a record low, while equities rose and sterling weakened.

The bank used all the tools investors thought possible, says Mike Amey, head of sterling portfolios at Pimco, who called the resulting market moves "justified by what is certainly a comprehensive programme".

With the door open to further stimulus, investors in equity, currency and bonds are now focused on what the BoE's move will mean for the rest of the year.

Gilts

A new £60bn programme of government bond buying and the first interest rate cut in seven years has renewed interest in whether the BoE could follow Japan and Europe and cut rates below zero.

Yields on benchmark 10-year gilts fell 14 basis points to an all-time low of 0.63 per cent, while short-dated two-year gilts renewed their path towards zero — falling to just 0.06 per cent.

Mark Carney's repeated claim that there is no plan to introduce negative rates should put an effective floor below UK bond yields for now, ensuring they trade at higher levels than securities in both Japan and Europe. The governor's assurance should also shore up demand from overseas investors who own around one-third of outstanding gilts.

However, investors think there may be more stimulus to come.

"We fully expect the Bank of England to remain accommodative and the potential for further interest rate cuts and additional quantitative easing remains a major positive for fixed income sentiment," says Ian Spreadbury, portfolio manager at Fidelity.

In the sterling debt market, the BoE's £10bn corporate bond buying scheme "will have a reasonable significant impact", says David Riley, credit strategist for the asset manager BlueBay.

The risk premium, or spread, over gilts yields for a bond sold by Vodafone in late July has narrowed significantly since issuance and bond buying is likely to shrink corporate borrowing costs.

Bank debt, which is not eligible for the BoE's new bond-buying programme, also gained following the announcement of a Term Funding Scheme to provide low-cost funding.

Pound

Shortly after the BoE's stimulus was announced, sterling fell against all major currencies, dropping 1.5 per cent against the dollar at $1.3130 and reversing a rise from post-Brexit vote lows.

"There is every chance that sterling will keep falling," says John Wraith at UBS.

Stocks

The BoE's action further boosted a recent rally in UK stocks.

Housing and bank stocks, which have been hit hardest by the Brexit result, remain under pressure but received a lift from the BoE's announcement.

However, sterling's continued weakness means the performance of both the FTSE 100 and 250 in dollar and euro terms remains down since the referendum and in spite of the rise, some investors say they are worried the feel-good bounce in asset prices might not last.

Hence the importance being attached to the upcoming Autumn Statement on fiscal policy from the UK government.

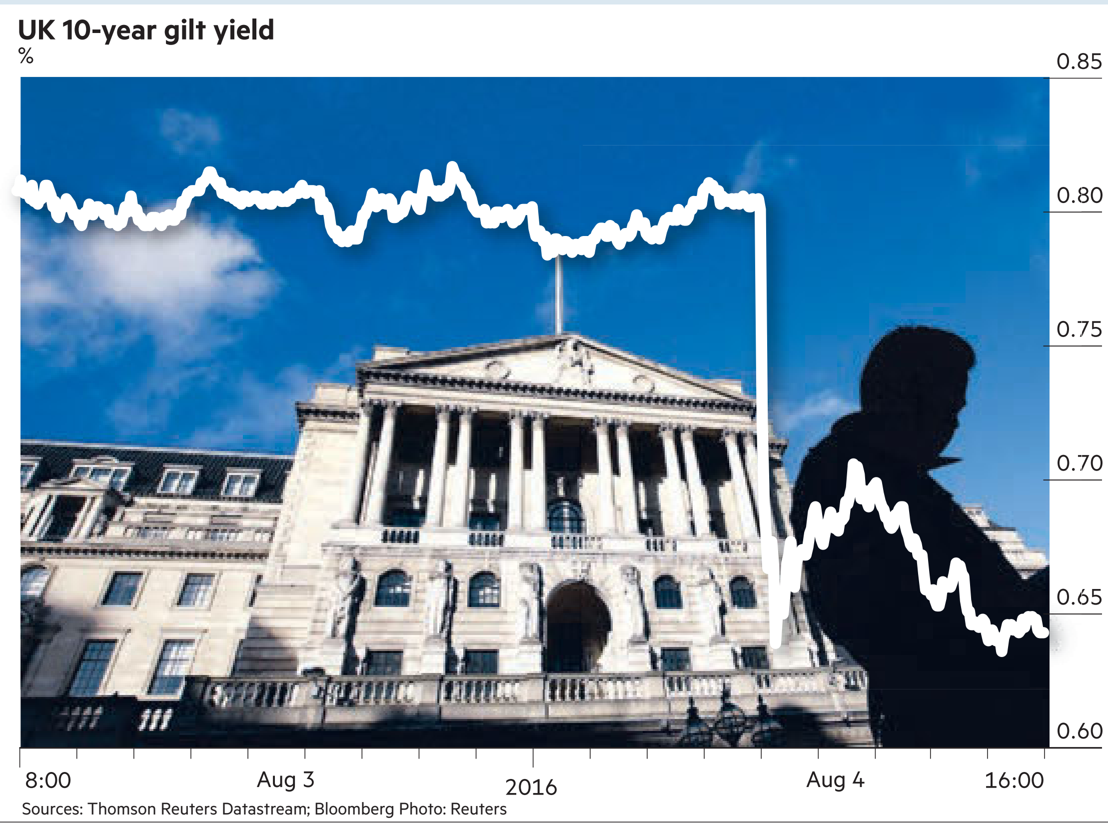
"You will probably see fiscal policy being used alongside monetary policy rather than a switch from one to the other," says Roger Webb, a fund manager at Aberdeen Asset Management.

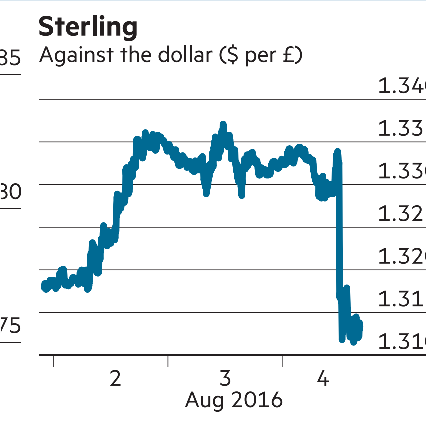
"Most of us are of the view that monetary policy will remain very easy, but bond markets are starting to think much more in terms of where and when fiscal measures are going to be used alongside."

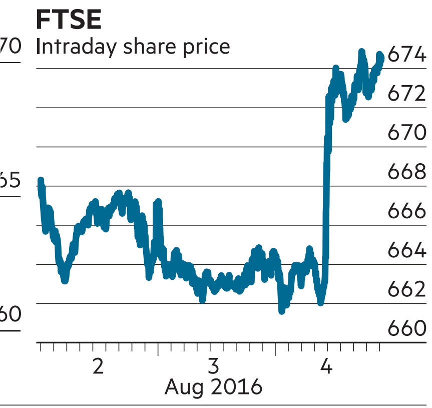
Additional reporting by Thomas Hale

> 'Most of us are of the view that monetary policy will remain very easy'

Buying bonds







Sources: Thomson Reuters Datastream; Bloomberg Photo: Reuters

Capital markets

India utility issues 'green' masala bond

JENNIFER HUGHES
HONG KONG
SIMON MUNDY — MUMBAI

India's largest power group has raised Rs20bn ($299m) in masala bonds and added a twist to what is only the second deal in the sector by designating the issuance "green" — a particularly hot label this year.

State-backed NTPC, which originally looked to raise Rs10bn, sold five-year bonds to yield 7.48 per cent, attracting demand totalling Rs29bn.

Sixty investors were involved, up from the 40 that participated in HDFC's three-year deal.

Masala bonds, or rupee-denominated offshore debt, have been touted by bankers as well as by New Delhi as a new funding channel for Indian business.

However, their higher borrowing costs — a result of Indian tax laws — had deterred issuers until Housing Development Finance Corporation broke the ice last month.

"It is a very new market and the deal was checking a box by extending market tenor to five years," said Ashish Malhotra, global head of bond syndicate at Standard Chartered, who said Indian companies were increasingly weighing the feasibility of the masala market.

"We're also seeing secondary market liquidity emerging — that had been a concern among investors," he added.

The deal's green credentials will not have hurt. The label means the proceeds will be invested in "green" areas — in this case, renewable energy development.

Borrowing via green bonds globally has already reached $41bn this year, according to Dealogic — surpassing last year's full-year total.

Growth in issuance from emerging markets borrowers accounted for $21.8bn of that — more than four times last year's total.

For Indian borrowers, NTPC's deal is particularly important in light of the country's small, illiquid domestic market.

Outstanding corporate bonds in India amounted to less than one-tenth of gross domestic product in 2014, compared with 46 per cent in China and 88 per cent in South Korea, according to the International Organisation of Securities Commissions.

Investor concerns about currency risk attached to masala bonds have been mitigated by India's improved economic fundamentals in the past two years: inflation has been much lower and less volatile, and both fiscal and current account deficits have narrowed.

This was reflected by strong demand for the HDFC deal, which was oversubscribed 4.3 times. Rating agencies consider HDFC one of India's most secure financial institutions.

"Now investors have confidence in the rupee," said Deepak Parekh, chairman of HDFC. "Our currency is not going to collapse."

Senior figures in Mumbai's financial industry said HDFC's bond would set a benchmark for future issuers. Piyush Goyal, the power minister, has said several state-owned energy companies will issue masala bonds in the UK this year.